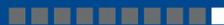




# An Oral History Of Neuropsychopharmacology

The First Fifty Years  
*Peer Interviews*

SERIES EDITED BY: Thomas A. Ban



Volume Ten:  
**HISTORY OF THE ACNP**

EDITED BY: Martin M. Katz

American College of Neuropsychopharmacology

**AN ORAL HISTORY OF  
NEUROPSYCHOPHARMACOLOGY  
THE FIRST FIFTY YEARS**

**Peer Interviews**

**Volume Ten: History of the ACNP**

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Thomas A. Ban (series editor)  
AN ORAL HISTORY OF NEUROPSYCHOPHARMACOLOGY

Martin M. Katz (volume editor)  
VOLUME 10: HISTORY OF THE ACNP

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AMERICAN COLLEGE OF NEUROPSYCHOPHARMACOLOGY

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VOLUME 10

HISTORY OF THE ACNP  
&  
POSTSCRIPT

ACNP  
2011



VOLUME 10

**Martin M. Katz**

HISTORY OF THE ACNP

Preface  
Thomas A. Ban



Dedicated to the Memory of J. Richard Wittenborn, President ACNP, 1973



## PREFACE

**Thomas A. Ban**

In the first nine volumes of this series the development of different areas of research in neuro - psychopharmacology is told in the biographic interviews of those who contributed to this development. In this last volume, the story of the American College of Neuropsychopharmacology (ACNP) is pieced together from extracts of those interviews.

Developments which lead to the birth of ACNP began in the mid-1950s with the recognition that progress in neuropsychopharmacology depends on a continuous dialogue between clinicians and basic scientists. To start the dialogue, Silvio Garattini, a young pharmacologist in the Department of Pharmacology of the University of Milan, organized the first international symposium on *Psychotropic Drugs* in May 1957 in Milan.<sup>1</sup> (See, Garattini, Volume 3). During this symposium - chaired by Emilio Trabucchi, the head of the Department - a special meeting was convened at which Wolfgang de Boor, a German psychiatrist who in 1956 authored a monograph on *Pharmacopsychology and Psychopathology*,<sup>2</sup> and Corneille Radouco-Thomas, a Roumanian born pharmacologist working in Switzerland,<sup>3</sup> proposed the founding of an "international association" that was to become the Collegium Internationale Neuro-Psychopharmacologicum (CINP).

CINP, the first neuropsychopharmacology organization, was inaugurated during the Second World Congress of Psychiatry in Zurich, on September 2, 1957, at a dinner meeting, hosted by Ernst Rothlin. Rothlin, a former director of Sandoz, a major Swiss pharmaceutical company at the time, was elected president and his 32 invited guests, including four Americans - Henry Brill, Deputy Commissioner for Research, Department of Mental Hygiene, New York State; Bernard B. Brodie, Chief, Chemical Pharmacology Laboratory, US National Institutes of Health; Herman C. B. Denber, Director of Psychiatric Research, Manhattan State Hospital, New York; and Nathan S. Kline, Director of Research, Rockland State Hospital - became the founders of CINP.<sup>4,5,6</sup> Two years later, in 1959, two other neuropsychopharmacology organizations were founded: the Scandinavian College of Neuropsychopharmacology and the Czechoslovakian Psychopharmacology Society.<sup>7,8</sup> The American College, chronologically the fourth organization founded, was born in 1961.

By the time of the founding of ACNP, American behavioral pharmacological research was intensively involved in the pharmacological screening for psychotropic drugs (see, Volume 1); Bernard Brodie and his school reported on the first correlations between biochemical changes in the brain and behavioral

effects (see, Volume 3); and Jonathan Cole's early clinical drug evaluation unit (ECDEU) network, was ready to embark in exploring the therapeutic effects of a rapidly growing number of new substances in different mental diseases. (See, Volume 4). While pharmacologists recognized without delay the perspective opened by the introduction of psychotropic drugs for the study of the relationship between neuronal and mental events, academic psychiatry, dominated by a psychoanalytic establishment, resisted to accept even the obviously effective new treatments.<sup>9</sup>

The chain of events which culminated in the founding of ACNP began with the organization of a Conference for the Advancement of Neuropsychopharmacology by Theodore Rothman, a psychiatrist and psychoanalyst from Los Angeles.\* The conference, supported by the US branch of Geigy, a Swiss pharmaceutical company, took place in New York at the Barbizon Plaza Hotel, on November 12-13, 1960. It was chaired by Paul Hoch, Commissioner State of New York Department of Mental Hygiene, who was President of CINP at the time. During this conference Rothman proposed the founding of an American association of neuropsychopharmacology that would be an affiliate of the international college which, by that time, held two congresses, one in Rome and another in Basle. After discussing the pros and cons of being an affiliate of CINP or an independent organization, Hoch put forward the motion to establish an organization of neuropsychopharmacology that is a "purely American affair". It was carried by 37 votes for and one against. Then, Frank Ayd, a psychiatrist from Baltimore put forward the motion, "That this organization, make an effort to become affiliated with the International Collegium and that the final decision, would be left at the discretion of the officers of this organization when they are duly constituted". (See, Ayd, Volumes 1, 9 & 10.) The motion was seconded by Douglas Goldman, a psychiatrist from Cincinnati, and carried by thirty-seven votes, with one abstaining. Finally, Sidney Malitz, a psychiatrist, at the time senior research scientist at the New York Psychiatric Institute, put forward the motion that an organizing committee to be formed with Theodore Rothman as chairman, Paul Hoch, Frank Ayd, Jonathan Cole and Paul Feldman (a psychiatrist and psychoanalyst from New York), as members, and with Bernard Brodie,

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\* The 38 participants of the Conference for the Advancement of Neuropsychopharmacology at the Barbizon Plaza Hotel: Frank J. Ayd Jr., Henry Brill, Bernard B. Brodie, Eugene Caffey, Carpenter, Jonathan O. Cole, Erminio Costa, Wilfred Dorfman, Edwin Dunlap, Joel Elkes, Falmonic, Paul Feldman, James Ferguson, Daniel Freedman, Bernard Glueck, Douglas Goldman, Milton Greenblatt, Paul Hoch, Abram Hoffer, Leo E. Hollister, John Kinross-Wright, Nathan S. Kline, Louis Lasagna, Joseph Lazerte, Heinz E. Lehmann, Nolan Lewis, Sidney Malitz, Sidney Merlis, Theodore Rothman, Anthony Sainz, Jack Saunders, Arnold Scheibel, Joseph Tobin, James Toman, William Turner, Klaus Unna, Von Munger and Joseph Zubin. The one, who voted against the founding, was Jack Saunders.

as basic science consultant. (See, Cole, Volumes 4, 9 & 10.) The motion was seconded by Wilfred Dorfman, President Academy of Psychosomatic Medicine at the time, and carried with 37 of the 38 votes in favor.<sup>10</sup>

In the 11 months that followed, the Organizing Committee devoted itself to “inquiring, studying and readying plans for an organizational meeting of interested individuals drawn from neuropsychopharmacology with the set purpose of creating a permanent Society for the Advancement of Neuropsychopharmacology” They debated issues such as the name of the organization, the nature of the organization, and criteria of membership. The Committee prepared a draft Constitution and By-Laws and delegated Frank Ayd to take the necessary steps to form a non-profit, scientific research corporation in the State of Maryland.<sup>11</sup>

The First Organizational Meeting of the association was held at the Woodner Hotel in Washington, DC, on October 7-8, 1961 with participants from twenty-two states and two Canadian provinces, representing psychiatry, pharmacology, neurophysiology, psychology and biochemistry.<sup>12</sup> The 104 participants of this meeting became the Founders of ACNP. Founders approved the name, American College of Neuropsychopharmacology for the society, suggested by Joel Elkes and agreed that the term “American”, in the name should imply North America and not just the United States. (See, Elkes, Volumes 3 & 10.) The Constitution and By Laws, drafted by the organizers, was also approved. Membership was limited to “experienced investigators whose work is considered of merit” and duration of presidency restricted to one year. Joel Elkes was elected as the first president, with Paul Hoch, as president-elect, Klaus Unna, vice-president, Theodore Rothman, secretary-treasurer, Milton Greenblatt, assistant secretary-treasurer, and Frank Ayd, Bernard Brodie, Jonathan Cole, Heinz Lehmann, Joseph Toman and Joseph Zubin, as councilors. (See, Lehmann, Volume 1.) The Council was mandated to structure the work of the college through committees. Then, to start with operations, nine constitutional committees were established: Credentials, chaired by Fritz Freyhan, Nominating, chaired by Max Rinkel, Finance and Budget, chaired by Paul Hoch, Program and Scientific Communication, chaired by Jonathan O. Cole, Publication, chaired by Theodore Rothman, Liaison with Learned Societies, chaired by Ralph Gerard, Ethical Matters, chaired by Nolan Lewis, Education and Training, chaired by Klaus Unna, and Liaison with Governmental Agencies and Industry, chaired by Henry Brill.<sup>11</sup>

To ensure that the membership of the new association would remain restricted to those actively involved in research, it was decided that “new” members should be elected by the nomination of two “old” members of the College.<sup>12</sup> Initially, ACNP consisted of 123 charter fellows whose credentials were checked out by Freyhan; in 1965 it was extended to a maximum of 160

members/fellows. This upper limit was strictly adhered to; a qualified candidate could only be elected to membership if an old member died or moved into emeritus status. As time passed, this severe restriction on membership was lifted by allowing an increase in the total number, first by no more than ten, then no more than fifteen and ultimately in 1994, no more than 20 new members a year.<sup>11,12</sup> In spite of all restrictions, membership steadily grew and broadened to include researchers from psychiatric epidemiology to molecular genetics. Today, based on a number count of June 29, 2010, ACNP has a total of 930 members. It includes 445 members (46 emeritus inclusive), 265 fellows (62 emeritus inclusive), 81 associate members, 75 life fellows (48 emeritus inclusive), 49 foreign corresponding fellows (19 emeritus inclusive), 9 administrative members, 4 emeritus life members, and 2 honorary fellows (1 emeritus inclusive). Throughout the years more individuals were nominated to membership than slots to be filled but only rarely have all the slots filled.<sup>12</sup>

In the center of ACNP's activities is the annual meeting, which provides a platform for interaction between clinical and basic researchers in the scientific program. The site of these meetings is selected to provide a suitable environment for informal interaction between academia, industry and Government. The first three annual meetings of the organization (1962, 1963 & 1964) were held in Washington, DC. Then, the primary site of the meeting moved to Puerto Rico. From 1965 to 1996, of every four meetings, three were held in San Juan, and one on the mainland, e.g., Washington, San Diego, Palm Springs and Las Vegas. Subsequently, annual meetings were held in Arizona, Florida, Hawaii, Mexico and also in Puerto Rico. The meetings are usually scheduled for mid-December.

ACNPs annual meetings are "closed", and restricted to members and their invited (one) guest. One of the important features of the meetings is the discussion in the Study Groups, initiated by Joel Elkes, with the participation of members engaged in different areas of research.<sup>11,13</sup> For many years, annual meetings were opened with a one half day plenary session followed by study groups, panel sessions, and poster sessions with a business meeting on the third day. In 1975 the opening plenary session became the "President's Plenary", followed, from 1996 by a "Distinguished Lecture" before regular activities began. In 1991 a teaching day was introduced and scheduled for (Sunday) the day before the President's Plenary officially opened the meeting (Monday). As time passed the program of annual meetings came to accommodate a variety of activities: in 1993 an ACNP-Corporate Panel was introduced; in 1994 a plenary on current topics; in 1996, a legislative workshop; in 2002 a memorial symposium and a history lecture. The College also established several awards, presented at the business meeting. They include the Paul Hoch Distinguished Service Award, first presented to Jonathan O. Cole in 1965; the Daniel H. Efron

Research Award, first presented to Solomon H. Snyder in 1974; the Joel Elkes Research Award, first presented to Kenneth L. Davis in 1986; the ACNP Media Award, first presented to Ellen Levine (Chief, Good Housekeeping Magazine) in 2002; and the Julius Axelrod Mentorship Award, first presented to George Heninger in 2004. (See, Snyder, Volume 3; Kenneth Davis, Volume 8; Heninger, Volume 8.) In 1980, Mead Johnson, an American drug company, established Travel Awards for Young Investigators to assist their attendance at annual meetings. Some other drug companies followed suit like Marion Merrell Dow in 1991. In 1990 Minority Travel Awards and the Upjohn Summer Fellowship Award Program were introduced; in 1996, the Glaxo Wellcome Fellowship in Clinical Neuropsychopharmacology, and in 1997 the Council approved the establishment of the ACNP Memorial Travel Awards. Today there are Memorial Travel Awards in the names of Louis Lasagna, Marion Weinbaum Fischman, Arnold Friedhoff, Leo E. Hollister, Seymour S. Kety, Heinz E. Lehmann, Jerry Sepinwall, Menek Goldstein, Daniel X. Freedman and Gerald Klerman. (See, Lasagna, Volume 1; Friedhoff, Volume 5; Hollister, Volumes 1 & 9; Kety, Volume 2.) Furthermore, in 1991, a Mentorship Program was introduced for Travel Awardees at the Annual Meetings.<sup>14,15</sup>

At the time ACNP had its first annual meeting in 1962, the US Congress passed the Kefauver-Harris Amendment to the Food and Drug Act which mandated proof of efficacy, in addition to safety, for marketing approval for a new drug. There was a need for guidance concerning clinical methodologies and developing standards of drug efficacy. The information in *Psychopharmacology Problems in Evaluation*, a volume based on the proceedings of a conference sponsored by the National Institute of Mental Health (NIMH), the National Academy of Sciences - National Research Council in 1956, no longer sufficed.<sup>16</sup> To address this issue, ACNP's Liaison Committee with Government and Industry developed, in 1969, a collaborative effort with NIMH. It led to the publication of *Principles and Problems in Establishing Efficacy of Psychotropic Drugs*, edited by Jerome Levine, Burtrum Schiele and Lorraine Bouthilet, in 1971.<sup>17,18</sup> (See, Levine, Volumes 4 & 9.) In addition, after discussions with the FDA and the Pharmaceutical Manufacturers Association, the ACNP signed a contract with the FDA, in 1972 to develop guidelines for clinical investigations with psychotropic drugs. The Task Force was chaired by Richard Wittenborn with Gerald Klerman and E. H. Uhlenhuth guiding the groups working on guidelines for clinical investigations with drugs in the treatment of depressive and anxiety disorders, respectively.<sup>13</sup> (See, Uhlenhuth, Volume 4.) In the years that followed, regulation for drug approval as well as the methodology of clinical investigations, was further refined and another collaborative effort between ACNP and NIMH, was undertaken. It led to the publication of *Clinical Evaluation*

of *Psychotropic Drugs: Principles and Guidelines*, edited by Robert F. Prien and Donald S. Robinson in 1994.<sup>19,20</sup> (See, Robinson, Volume 5.)

In the first two decades of ACNP's operation (1960s and '70s) educational material in neuropsychopharmacology was still scarce, and communication of information, slow. To create educational material the ACNP was encouraged to publish the proceedings of some of its annual meeting symposia; moreover, to that end, special symposia between meetings were to generate additional such material. The first two books which appeared under the imprimatur of the College was *Prediction of Response to Pharmacotherapy*, edited by Richard Wittenborn and Philip May,<sup>21</sup> and *Pharmacotherapy of Depression*, edited by Jonathan Cole and Richard Wittenborn.<sup>22</sup> It was followed by *Drug Abuse*,<sup>23</sup> edited by Cole and Wittenborn, and published in 1969. From 1971 to 1980 there were nine publications under the imprimatur of ACNP. In 1971, *The Psychopharmacology of the Normal Human*,<sup>24</sup> edited by Wayne Evans and Nathan Kline, *Psychotropic Drugs in the Year 2000*,<sup>25</sup> edited also by Wayne Evans and Nathan Kline, and *Scientific Models and Psychopathology*,<sup>26</sup> edited by Seymour Fisher, were published; in 1972, *L-Dopa and Behavior*,<sup>27</sup> edited by Sidney Malitz; in 1973, *Opiate Addiction: Origins and Treatment*,<sup>28</sup> edited by Seymour Fisher and Alfred Freedman; in 1975, *Neurotransmitter Balance Regulating Behavior*,<sup>29</sup> edited by Edward Domino and John Davis; in 1976, *Pharmacokinetics of Psychoactive Drugs: Blood Levels and Clinical Response*,<sup>30</sup> edited by Louis Gottschalk and Sidney Merlis; in 1978, *Legal and Ethical Issues in Human Research and Treatment: Psychopharmacologic Considerations*,<sup>31</sup> edited by Donald Gallant and Robert Force; in 1979, *Pharmacokinetics of Psychoactive Drugs: Further Studies*,<sup>32</sup> edited by Louis Gottschalk; and in 1980, *Tardive Dyskinesia: Research and Treatment*,<sup>33</sup> edited by Edward Fann, Robert Smith, John Davis and Edward Domino. (See, Freedman, Volume 1; Domino, Volume 1; John Davis, Volume 3; Gottschalk, Volumes 1 & 9; Gallant, Volume 3.)

ACNP's educational activities received strong impetus in 1984 from the development of a Model Psychopharmacology Curriculum. A lecture series in clinical psychopharmacology was initiated in 1993, and regional meetings on practical clinical psychopharmacology in 1995.<sup>14</sup>

In 1968, the proceedings of the Sixth Annual Meeting (San Juan, Puerto Rico, from September 12 to 15, 1967), edited by Daniel Efron - and co-edited by Jonathan Cole, Jerome Levine and Richard Wittenborn - were published under the title, *Psychopharmacology A Review of Progress 1957-1967*.<sup>34</sup> Its success stimulated interest in similar publications reviewing the development of the field. The series, called the "Generation of Progress" series, includes *Psychopharmacology: A Generation of Progress*, co-edited by Morris Lipton, Albert DiMascio and Keith Killam, published in 1978;<sup>35</sup> *The Third Generation of*

*Progress*, edited by Herbert Meltzer, published in 1987;<sup>36</sup> *The Fourth Generation of Progress*, co-edited by David Kupfer and Floyd Bloom, published in 1995;<sup>37</sup> and *The Fifth Generation of Progress*, co-edited by Kenneth Davis, Dennis Charney, Joseph Coyle and Charles Nemeroff, published in 2002.<sup>38</sup> (See, Keith Killam, Volume 2; Meltzer, Volumes 5 & 9; Kupfer, Volume 7; Bloom, Volume 2; Charney, Volume 8; Coyle, Volume 8; Nemeroff, Volume 8). *The Fifth Generation of Progress* was the first volume that was published simultaneously in print and electronic format.

After the publication of the fifth volume, *Generation of Progress* was replaced with *Neuropsychopharmacology Reviews*, an annual collection of review articles, published each January in the first issue of *Neuropsychopharmacology*. The inaugural issue of the new series was edited by Peter Kalivas and Husseini Manji in 2008.<sup>39</sup>

*Neuropsychopharmacology*, ACNP's journal, was launched in December 1987, with Christian Gillin, as the first editor. (See, Gillin, Volume 2.) In 1994 the editorial tasks were passed to Herbert Meltzer (clinical) and Roland Ciaranello (basic) and when Ciaranello died (in the same year) his position was filled by H.Christian Fibiger.<sup>12</sup> (See, Fibiger, Volume 3.) In 1998 the dual editorship was replaced by the appointment of a single editor, Robert Lenox. He was succeeded in 2002 by Charles Nemeroff, who served through December 2006. In 2007, James H. Meador-Woodruff was appointed editor, with Ariel Deutsch and Stephen R. Marder, as deputy editors.

By the 1990s the pioneering generation was fading away, and with the death of each pioneer a piece in the history of the field was lost. To prevent the silent erosion of this history in 1993, on the initiative of Oakley Ray, at the time Secretary of ACNP, a project of "videotaping interviews with elders of neuropsychopharmacology" began. It was complemented in 1995 with the creation of a History Task Force, and in 1996, with the establishment of the *ACNP-Solvay International Archives in Neuropsychopharmacology* at Vanderbilt University Medical Center in Nashville, Tennessee.<sup>14</sup> The "videotaping of interviews" has grown into the oral history project that provided the transcripts for this series. The History Task Force was enlarged and converted into a constitutional committee. The ACNP-Solvay International Archives was renamed, as *ACNP's International Archives in Neuropsychopharmacology*, after the funds received from Solvay Pharmaceuticals were depleted, and in 2008, the Archives was transferred to the University of Los Angeles in California.

ACNP activities have extended over the years to an agenda based on the premise that "Scientific research is good for the country, and only through research can we ever hope to reduce the high social and economic cost of mental illness and addictive behavior".<sup>12</sup> The first President of the College who actively embarked on this agenda was Donald Klein. (See, Donald Klein, Volumes

3 & 9.) He started a program in 1981 in which officers and council members of the College visited with policy makers at the Food and Drug Administration and senators in Washington DC, one to three times a year. The program continued for thirteen years. Then, in 1994, Thomas Detre (see, Detre, Volumes 1 & 10), launched another program based on a “grass roots” approach.<sup>12</sup> Opinions differ on whether ACNP has ever lobbied; but since the time of its inception in one or another way the organization has always fought for adequate funding of research.<sup>12</sup>

Availability of grant support is an essential prerequisite for the research of ACNP’s membership. Stephen Koslow has suggested that changes in NIMH’s funding priorities in the early 1980s has played a role in the shift of focus from clinical to basic research in the programs of annual meetings. (See, Koslow, Volume 8.) By the 1980s the excitement at early meetings about developing a clinical methodology to translate the mode of action of psychotropic drugs in the brain was gone. It was replaced by fascination about the detection of changes affected in signal transduction and molecular genetic mechanisms by centrally acting drugs. To communicate findings about the clinical use of new psychotropic drugs, in 1992, two ACNP members, Paul Wender and Donald Klein, spearheaded the founding of the American Society of Clinical Psychopharmacology. (See, Wender, Volume 7.)

To facilitate these expanding activities several new constitutional committees were established. They include the Committee on Relationships with Advocacy Groups, the Committee on the Use of Animals in Neuropsychopharmacology, the Honorific Awards Committee, the Constitution and Rules Committee, the History Committee and the Human Research Committee.<sup>15</sup> All but one of the original committees, the Committee for Liaison with Learned Societies, has continued to-date.

In 1984 the College officially recognized and began to correspond with neuropsychopharmacology organizations outside the United States. In 1989, invited members of the European College of Neuropsychopharmacology (ECNP) and in 1990, invited members of the Canadian College of Neuropsychopharmacology (CCNP) to attend its annual meetings. It also introduced a Symposium Exchange Program with ECNP in 1989.<sup>14</sup>

ACNP has never affiliated with CINP, as some of the prospective founders of the College proposed, but the annual meeting in 1966 included a joint plenary session and a colloquium that involved both ACNP and CINP members. Furthermore, five of ACNP’s presidents (Paul Hoch, Heinz Lehmann, Leo Hollister, William Bunney, Jr. and Herbert Meltzer), served also as presidents of CINP, and about one-third of CINP members are ACNP members. (See, William Bunney, Volume 5.)

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In 1964, Ruchard Wittenborn, ACNP's Secretary/Treasurer at the time, estimated that, to cover the expense of expanding activities, the College needed around \$ 20,000 per year. Since the available sources for supplementing income were industry or Government, concerns were raised that reliance heavily in one source could give an impression that the policy or recommendations of the College reflected the influence of that primary source.<sup>13</sup> To overcome the difficulties in cash flow, it was suggested that the ten pharmaceutical houses paying annual corporate membership at the time, provide a one-time contribution of \$ 10,000. The idea was to create an interest bearing endowment fund of \$ 100,000 that would supplement other sources of income sufficiently to assure that the College could continue with its operations uncompromised. The recommendation was accepted but only one company, Sandoz, was willing to subscribe for the endowment fund. The only other contribution towards this endowment fund was a \$25,000 donation from Jack Dreyfus, on the encouragement of William Turner, in recognition of the value of the College "as a forum in which untested issues might be explored and illuminating investigations might be instigated". (See, Turner, Volume 1.) Nevertheless, the College has survived and during the years the number of supporting corporations has grown from 10 in 1965 to 20 in 2010. The organization which in the 1960s struggled for establishing a \$ 100,000 endowment fund, operates today with an annual over three million dollars budgeted income (2009: \$ 3,264,003; 2010: \$ 3,357,664) against an over two and a half million budgeted expense (2009: \$ 2,655,247; 2010: \$ 2,505,448). In 2010, 27% of revenue that supports ACNP operations came from the drug industry, and another 13% of its total revenue came in from grants from the drug industry supporting specific programs such as travel awards for young scientists, the annual meeting, and other special projects.

ACNP's chief executive officer is the President, who is also the chairperson of the Council. Yet, since the President is elected for a term of one year and is not eligible for re-election to that office, whereas the Secretary/Treasurer, or later Secretary and Treasurer are elected for five years with possible re-election for another five years, from 1962 to 1979 it was the secretary/treasurer - Rothman: 1962-1964; Wittenborn: 1965-1971; DiMascio: 1972- 1978 - and from 1980 to 1999 it was the Secretary, Oakley Ray, who provided for the continuity of operations. During Ray's tenure ACNP entered the electronic age by acquiring its e-mail address in 1995, establishing its Home Page on Worldwide Web in 1996, and appointing James Meador-Woodruff as its scientific website editor in 1999.

In 1999 the administration of ACNP was consolidated with the appointment of Ronnie Wilkins as Executive Director. Wilkins relieved the Secretary from attending ACNP's day to day business, including supervision of staff,

coordination of activities and organization of meetings. He converted the central office into an executive office and in 2010, moved it into the organization's own property, which was purchased in Brentwood, Tennessee.

This outline of ACNP's history provides the background to Volume 10 in which excerpts, relevant to this history, from the interviews in the series are presented. From the 238 interviews with 213 interviewees, reference to the ACNP was made in only 154 interviews by 133 interviewees. These references were extracted from the transcripts and presented under five headings: (1) Founders and Founding; (2) Presidents and the Story of ACNP; (3) The Membership and The Story of ACNP; and the Mission of the ACNP as viewed from the vantage point of two groups: (4) Basic and Trans-disciplinary Scientists and (5) Clinical Scientists. The transcripts of six interviews (not presented elsewhere), are also included in Volume 10. Five of these interviews were done specially in preparation for the 50 Years Anniversary Celebrations of the College in 2011.

Martin M Katz, the editor of Volume 10, has had a distinguished career in psychopharmacology. (See, Katz, Volumes 4, 9 & 10.) He was a member of Jonathan Cole's team at NIMH's Psychopharmacology Service Center in the late 1950s and served as Executive Secretary of the first Advisory Committee on Psychopharmacology to the National Institutes of Health. In his Introduction to the Volume and his resumes of extracts included under the five headings unfolds the story of ACNP.

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## ABBREVIATIONS

ACNP	American College of Neuropsychopharmacology
ADHD	Attention Deficit Hyperactivity Disorder
AMA	American Medical Association
APA	American Psychiatric Association
ASCP	American Society of Clinical Phramacology
CANTAB	computerized neuropsychological test battery (T. Robbins)
CCNP	Canadian College of Neuropsychopharmacology
CINP	Collegium Internationale Neuro-Psychopharmacologicum
CME	continuous medical education
CPDD	College of Problems of Drug Dependence
CRO	Clinical Research Organization
CV	curriculum vita
CVA	cerebrovascular accident
DMI	desmethyylimipramine
ECDEU	Early Clinical Drug Evaluation Units
ECNP	European College of Neuropsychopharmacology
ECT	electroconvulsive therapy
EEG	electroencephalography
FDA	Food and Drug Administration
GI Bill	Serviceman's Readjustment Act
ICGP	International College of Geriatric Neuropsychopharmacology
IV	intravenous
JAMA	Journal of the American Medical Association
MHRI	Mental Health Research Institute
NCDEU	New Clinical Drug Evaluation Units
NIAA	National Institute of Alcohol Addiction
NIDA	National Institute of Drug Abuse
NIH	National Institutes of Health
NIMH	National Institute of Mental Health
PhD	doctor of philosophy
PSC	Psychopharmacology Service Center
R01	NIH research grant application
UCLA	University of California Los Angeles
UCSD	University of California San Diego
TV	television
UK	United Kingdom
VA	Veterans Administration
WHO	World Health Organization



## **INTRODUCTION**

**Martin M. Katz**

This volume explores the history of the ACNP beginning with its founding in 1961. The narrative is divided into two parts. Part 1 consists of transcripts of specially prepared interviews for the 50<sup>th</sup> anniversary of the College with three of the key Founders of the College and with two very close observers of its history. In addition, one transcript provides a perspective, in a group interview with foreign corresponding members, on the impact of the College, internationally. Part 2 is based on excerpts from the interviews presented in this series. The founding of the College is described in the excerpts from the Founders and the chronicling of events that defined the College over the succeeding 50 years is described through excerpts from the comments of the Presidents, chronologically ordered. Then, the critical issue of the "mission" of the College, as originally formulated by the founders, and how it has evolved over this period, is elaborated. To sharpen the nature of the views expressed on this issue for the reader, the excerpts are separated into those expressed by the basic and transdisciplinary scientists and those reflecting the views of the College's mission by the clinicians and clinical scientists. The reader will learn that the mission, as part of the story of the College, will continue to unfold, and is by no means, completely resolved.

The excerpts in Part 2 relating to the overall mission of the ACNP bring us from the early days of the College in 1961 to the present scene in the history of neuropsychopharmacology. The early organizers were quite clear on what they wished to accomplish in founding this new unique scientific institution. The founding group consisted, in great part, of the psychiatrists who had witnessed the impact of this revolution in treatment on their discipline and on their patients. These were the "treaters", key figures such as Frank Ayd, Heinz Lehmann and Nathan Kline, the administrators of large clinical organizations, such as Paul Hoch and Henry Brill, and the clinical scientists in positions of governmental authority, e.g., Jonathan Cole. The neuroscience "transdisciplinaryians", Joel Elkes, Bernard Brodie and Seymour Kety, envisioned a new science in psychiatry and psychobiology.

The field's first challenge was to make the remarkable advances of the 1950s in treatment by making drugs credible to the clinicians, and encouraging their use. The main task was, however, to frame the problems of the new science in a way that would bring scientists from several disciplines, pharmacology, neurochemistry, psychology together with clinical practitioners.

The key figures were aware that the disciplines represented different “cultures”, that their representatives employed different languages, and arrived with different backgrounds of experience and training. The central issue facing this small group of professionals constructing this new College’s framework was creating a language that was understandable to all the disciplines to facilitate the interaction and identify critical problems.

In Part 1 of this volume, interviews with several of the founders, Jonathan Cole, Frank Ayd, and Joel Elkes, a leading figure of the psychiatric establishment, Thomas Detre, and myself, are presented. I was at that time, Executive Secretary of the first National Institutes of Health Advisory Committee on Psychopharmacology. The interviews in Part 1 express the hopes of the founding group for the future role of the College in development of the science and in advancing the clinical impact of neuropsychopharmacology. In addition, there is a recorded group interview in Part 1, conducted by Alan Frazer, current (2011) secretary of the College with leading psychopharmacologists from other countries, commenting on the impact of the College internationally.

The College is 50 years old this year and this is probably an excellent point in time in the historical development of neuropsychopharmacology to consider whether the College is progressing in directions that are productive and as satisfying as they were when it was first established. To meet this goal I have screened the more than 200 interviews of ACNP members to select comments that speak directly to their experience with the College and separated the comments of the Founders from the comments of the Past Presidents and the comments of the rest of the membership. I also separated, as indicated before, the comments which deal with the College’s mission.

Certain aspects of the overall concept of the College held by the founding members have not changed over five decades. The originators viewed the College as a place to bring together scientists and clinicians from the academic and clinical worlds, from the laboratories and hospitals, who would represent the broad range of disciplines that were engaged in developing the new field of neuropsychopharmacology. The new drugs created a revolution in the treatment of the severe mental disorders. It would, therefore, have a major impact on the ways in which psychiatrists would be trained. Thus, it would require modifications in the academic setting, and in the management of clinics and hospitals. It would require changes in emphasis in training in regard to the various disciplines that participate in the scientific education of psychiatrists, changes, e.g., in the roles of neurochemistry, pharmacology.

The College brought to the fore new issues and problems that clinicians and scientists would have to confront, such as the reliability of the then current psychiatric diagnostic system, the effective utilization of the new drugs, their applicability and dosage specifications in the treatment of specific classes of

disorders. And at the basic science level, questions arose about then unknown neurobehavioral mechanisms underlying the efficacy of these drugs, how to develop more effective drugs with fewer side effects and ones applicable to still untreatable conditions. To deal with such problems the College would have to assemble, in addition to the working clinicians, scientists representing various disciplines.

### ***The History***

In his Part One interview Jonathan Cole provides a narrative on the founding of the College, the primary players, its original composition and its goals. Further details are provided by Frank Ayd who describes the climate at the time, in the world of psychiatric practice. Tom Detre describes later, how the leaders in psychiatry would structure their University departments and educate the new psychiatrists, and how they would meld the new neurosciences and clinical practice. Joel Elkes, the founder of the first Department of Experimental Psychiatry, describes the scientific events that led to the creation of psychopharmacology as a discipline and its conception for linking brain function to behavior. Thus, he set the theoretical foundation for the establishment of the College.

Others outline the early makeup of the College, its aspirations to link basic and clinical science and the selection of the content and the structure for its early meetings. In that group we find such early figures as Heinz Lehmann, Karl Rickels, William Turner, Tom Ban, Albert Kurland, Erminio Costa and Leo Hollister. So that a reading of the excerpts from the interviews in Part 2 of this Volume provides a relatively complete description of the early days citing the important figures in the several sciences who helped construct and establish the College.

The comments also bring out the cast of people who conceived the College and were instrumental in its establishment, but who have since passed away, and were not available for interviews. Among them, most prominent were: Theodore Rothman, who was ironically, a psychoanalyst practicing in Los Angeles, Paul Hoch, the Commissioner of Mental Health in New York who was identified as the initial leader of the effort, Bernard Brodie, renowned for heading the NIH Laboratory where a number of distinguished figures began their studies, including Nobel laureates, Julian Axelrod and Arvid Carlsson, basic investigators, Erminio Costa and others who generated early work on the neurochemical mechanisms underlying drug effects. Later, in 1964, J. Richard

Wittenborn, an academic and clinical methodologist in psychology, became the Executive Secretary of the new College.\*

Paul Hoch for reasons of protocol, rejected Puerto Rico as a meeting place. Hoch died, however, before the planning of the first annual meeting was completed and his successors thought better of that rejection and decided to hold the meeting in San Juan.

The quality of the group that founded the College, was of course, outstanding. The current members owe to this small group, the concept of crossing of the several sciences with clinical practice, setting high qualification standards for entering new members and designing the informal “study group” at the annual meetings. The “study group”, with its attention to identifying critical problems that required input from more than one discipline, created the social and scientific atmosphere that would foster collegiality and communication.

Fortunately, much of what these dedicated pioneers had hoped would endure in the structure of the College and in the quality of the interchange, has in fact, stood the passage of time. But, as with all organizations, the advances in the sciences and how the membership evolves over the years, result in major changes in the scope of knowledge and consequently, in the nature of the organization itself. The organization becomes steadily larger, more difficult to structure in a manner satisfactory to all groups, and with the advances in knowledge and technology, more complex. Yet as the comments clearly display, the majority of members still view the College as unique in its capacity to bring together the brain scientists and the clinical practitioners. Due to the high quality of the meeting presentations and the congeniality of the setting, members continue to view the annual meeting as the “highlight of the year”. The participants view their membership in the ACNP as by far, their most coveted affiliation.

Nevertheless, the changes in the science, the content of the programs and the composition of the membership have resulted in islands of discontent that seemed to have increased in magnitude over the years. These are most notable within the clinical science group. The burgeoning of neurosciences, the increase, as well as the importance of molecular biology and genetics have inspired the progress of science in this area. Yet these advances have not, in the eyes of many, been matched by developments in the clinical science of mental disorder, e.g., in further advances in the basic psychopathology of the disorders. This has resulted in an imbalance and a decline in the role of the clinical scientist. Consequently, there has been a decrease in the acceptance

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\* He was to be followed in this role by Alberto DiMascio (1973-1978) and then, by Oakley S.Ray (1979-2005) whose outstanding presence and impact on the College is well recognized by the entire membership.

of clinicians into the College, and in the clinical content of the annual meeting program.

Leading senior figures in the College have spoken openly about this imbalance, pointing out that it was the clinical discoveries that ignited neuroscience and at its beginning, was the center of the College's concern. Ways to deal with this issue are adumbrated in the excerpts of John Davis, Max Fink, Fred Goodwin and Carl Salzman in Part 2.

### ***The Founders' Mission and its Evolution During its 50 Years***

In this section we deal directly in the excerpts with the mission of the College and how it has evolved over several decades. The excerpts are from members who entered the College as early as the 1960s. These excerpts are intended to display how the mission was envisioned over the years by the various members and how the general concept of the College's mission managed to maintain itself over the decades. I start with quotes from Joel Elkes and Heinz Lehmann, whose eloquence on issues like these is well known. We then move to current conceptions of the College. The reader can then consider what can be done about fixing current (2011) problems.

To fully understand how and why the College was established it is useful to read in their entirety, the interviews in this volume, of the several figures who were around at its birth. *Frank Ayd* representing the "practitioners", when introducing the revolutionary new treatments for the mental disorders to his peers felt: "*I think aside from looking at the drugs and being persistent, I was sort of a St. John the Baptist in the wilderness preaching the gospel of the psychopharmaceuticals and their potential value for people*".

*Joel Elkes*, an academic, was one of the neuroscientists who provided the conceptual framework for the new science of psychopharmacology, and later, the theoretical foundation for the College.

*Jonathan Cole*, a scientist administrator and clinical investigator, established NIH's first grants program in psychopharmacology for support of basic and clinical science. He saw at the outset, the need to provide the resources for the early clinical investigators who uncovered the first drugs: "*we d been working with people who did early clinical drug studies and I decided they were going from little study to little study and they didn t have any enduring support and it would be a good idea to have some kind of grant program to carry them along and allow some things on their own that were not drug company directed*".

Later, through an NIH supported collaborative program, Cole led the conduct of the first definitive, randomized controlled study of the efficacy of the phenothiazines for acute schizophrenia. He, thus, provided a model in the

1960s for the scientific evaluation of new treatments in psychiatry, a model that did not exist before the drugs entered the scene.

*Thomas Detre*, a University Department Chairman, entered the College somewhat later but helped to lead the way in altering the structure of University departments and their approach to educating psychiatrists. The academics must lead in this new era by providing the neuroscientific foundation for training in clinical practice. In his words: *I felt time has come to establish a department of psychiatry which would first and foremost concentrate on translational and strictly clinical research to improve the management of the patients .*

This volume editor, *Martin Katz*, was the executive secretary of NIH's first Advisory Committee on Psychopharmacology and as a psychological investigator observed the beginnings of the College and the contributions of the multiple disciplines. He sketches the role of each faction in the College's organization: *"The NIH Advisory Committee made up of ten to twelve members, representing the several basic and clinical sciences, really established the backbone in a way for the field of psychopharmacology. Soon after this cross-national clinical drug study program got started, the investigators began to act on the need for a national association, a scientific college"*.

Finally, we consider what has changed in the mission, structure or content of its annual program and the composition of its membership. Have the changes been good or have they worked against the early aims and accomplishments of the College? Have they fostered, facilitated progress in the sciences and the creation of drugs or have they retarded, blocked progress? If the latter, what future changes should be considered to retrieve, fortify the central goals of the College.

The members confronted the immediate, early issue of why, as Leo Hollister put it, was it necessary to establish another scientific society. The group had to define the new discipline and indicate how it was distinguished from the several scientific and professional societies that apparently, covered the same territory. In so doing they defined its mission, its conceptual base, the mix of sciences and clinical practice that would be represented in its membership. The design of the annual meetings was dedicated to dealing with unique problems created by the new drugs and to encourage communication across disciplinary lines. On the rise of the new sciences, no one defined the mission of the College more eloquently than Joel Elkes: *"...there was a lot of fluidity and mobility in the field, and crossing over into disciplines there was an emerging understanding that there are four footings of the new discipline: neurochemistry, which was maturing so to speak because we did not have anything more in neurochemistry than written in Thudichum, electrophysiology, animal behavior and clinical trials. These were the four footings, which I saw as essential elements of any psychopharmacological enterprise worth its name .* And, then, Elkes continues: *"For*

*example, the whole question of communication in the nervous system cries out for collaboration between neurophysiologists and psychologists, education experts, communication engineers, language-translation specialists and so on. And they don't know what we know! And we don't know what they know! And the knowledge has to come together by work at the bench and common new languages will evolve as we work together. So, we need alliances and alliances, even with strange fields; to be trans-disciplinarians; make it evident that this is a science like no other is, it has special characteristics of its own and will in time have earmarks by which it is known. It is not only molecular biology; it is not only electrophysiology; it is not only animal behavior; it is not only clinical syndromes. It is the conversation and the interaction between these areas, which matters and we must do all we can to enhance the conversation. This is what the College can do like no other organization nationally and internationally”.*

How do you promote interdisciplinary dialogue? How do you solve problems and overcome obstacles to scientific discovery when the solutions require the interaction of scientists from different backgrounds of training and language, on the one side, and interpreters of the clinical phenomena that define the mental disorder, on the other? Here again, Elkes defines the function of the innovative sessions he introduced at the annual meeting, the “study groups”: *The idea was to select people from different disciplines into small groups and give them the opportunity to talk to each other. That's very simple and it developed very, very well. Study groups led to a sense of scholarship identity, of owning certain areas of psychopharmacology. And, it worked .*

### **The Core Issue of Maintaining Balance**

The mission, the composition of the membership, the design of the program at the annual meeting and the central research and clinical problems on which the new organization was focussed, have all changed, evolved over the decades. But the essence of the College hopefully, remains the same. The members in their interviews discuss all these issues and provide their own perspectives on how the College will fare in the future. Most notable, however, among the statements, most of which are laudatory concerning its evolution, is one change which a significant group of founders and early members deplore and believe have to be attended to soon in a positive way. That is the “decline in the role of clinical issues” generally in the College’s overall conception and mission goals. Its effects are reflected, in the decrease in the selection of clinical scientists for membership, the increasing majority of basic scientists, the dominance of molecular biology and genetics in its focus, as reflected in the apparent near monopoly of content in the annual meeting program, as well as

in the contents of the College's Journal. This group includes John Davis, Max Fink, Jonathan Cole, Fred Goodwin, Walter Brown, Turan Itil, and Carl Salzman.

The members recall that it was the discoveries by clinicians of the potency of the new drugs in patients that ignited this revolution in treatment, and served, if indirectly, to initiate a new area of neuroscience. The new society was then aimed at both facilitating the development of more effective drugs, and advancing neuroscience. This disquiet is most clearly expressed by John Davis: *"I think they (the early years) were very exciting. Since then the ACNP has changed tremendously and I don't think it's changed in the good direction. Back in the early days there were about a third of basic scientists, maybe a third were psychologists, and a third, psychiatrists. But some of the psychiatrists were involved also in basic science. There was pretty much of a mixture, clinicians may have been in the minority, but there were plenty of clinicians attending. Now it's changed; mostly basic scientists are attending. My feeling is that unless they make an effort to involve more clinicians, ACNP is going to change to a basic science organization"*. And from another vantage, Frederick Goodwin says: *I get uncomfortable when people say that basic science is the source of everything. In fact, much of what we understand about the synaptic connections of the central nervous system, as you know, came out of efforts to understand how imipramine worked. And it seems to me that it was the effort to understand psychoactive drugs that created functional neuroscience*. They see the failure to continually reinforce and expand the clinical side of this venture as, in part, responsible for the lag in the development of new classes of drugs. They are concerned as Leo Hollister expressed it that the College is fast *becoming a secondary society of (the large world of) neuroscience*, rather than the truly multidisciplinary organization the Founders had envisioned. The critiques extend to the method of selecting new members, and to the design of the annual program. More time needs to be devoted to clinical issues, there has to be more use of the original "study group" concept and the Journal Editor has to be more active in soliciting clinical study papers for Neuropsychopharmacology.

By contrast, the basic scientists are more satisfied with the evolution of the College. They are more pleased with the advances in science and technology during the past five decades and are satisfied with the current balance. They view the evolution of a greater focus on molecular biology, neuroimaging and genetics as a natural direction for the field to follow and are less concerned about the lag in clinical science and the introduction of novel treatments.

Floyd Bloom analyzed the problem of "imbalance", however, as the consequence of the difficulties for clinicians *"in keeping up with the wave of new knowledge in the neurosciences and for the basic scientists, keeping up with the modifications of the classification and diagnostic systems for the mental*

*disorders* . This interferes with achieving integration of basic and clinical scientific developments, or as he put it, with “*the cohesive element, which was the intermingling between basic scientists and clinical scientists.*” In this volume, the excerpts of interviews of the group relevant to these concerns are recorded and can be read directly in the section that consists of “Mission Statements: Clinical Scientists”.

### ***Other Issues: Industry, the International Perspective***

On the role of Industry in the affairs of the College and on its future, the members express a wide range of opinions. To some, Industry has been generally supportive of the College’s overall aims in enhancing its annual program and in helping to fund important educational objectives. To others, its influence has not always been positive, as seen in Industry’s tardiness to provide data from failed clinical trials of new compounds. In this respect, Industry has significantly impaired the trust that clinicians and investigators have in the results of clinical trials. George Simpson said “*that’s true that the sponsorship of the trial seems to dictate what the results are going to be. I don’t think people cheat, but I think you are unlikely to design a study that could possibly go against what you would like to see* . Those who work in the clinical trials field are also acutely aware that except for several drugs with minor variations in mechanisms from the established ones, no new classes of antidepressants have been introduced since the SSRIs in the 1980s. To rectify problems in this area, the College is urged to provide continued vigilance regarding the participation of the pharmaceutical Industry in its affairs, e.g., in planning its annual program. The College might want to encourage NIMH to enlarge its own role, i.e., to return to its place as the major financial source for testing new drugs, to encourage investigators to apply for NIMH grants in this area and to pursue, both within and without Industry, the development of new drugs for the entire range of mental and substance abuse disorders.

There are other concerns about the structure of the annual program. For the most part, however, the membership as a whole is quite pleased with the directions in which the College had progressed. They see a sound future as the science advances on the national and international scenes and as clinical practice increasingly improves. This optimism about the future and the breadth of the College’s impact is brought home in the interchange of the Foreign Corresponding Members led by Alan Frazer. The international members see the informal nature of the interactions at the College’s annual meeting as very different from what they are accustomed to, as stimulating new ideas, new collaborative arrangements, and providing a model for their own European College. We can look forward, as Joseph Zohar points out, to the further development

of “*personalized medicine*” based on advances in genetics. Then, according to Arvid Carlsson, the introduction of “*an entirely new diagnostic system*”, a paradigm shift, one created from the new knowledge of brain circuits and imaging technology, reminds us that “*drugs don t care about the boundaries between one diagnosis and another* .

The concerns that remain for the field are how to rebalance neuroscience and the clinical sphere, how to maintain the vitality of the organization, the vibrance of its program and the stimulating, interdisciplinary dialogue, How can the College, a continuing “work in progress”, be helped in reaching its goals in achieving effective treatments for all of the mental disorders and in making them available as rapidly as possible to the treating clinicians.

The excerpts from the interviews of the Founders and Members carry within them the historical picture of development over these past five decades and offer the planners of today (2011), a blueprint for future success in this critical area of the health sciences.

# **PART ONE**

## ***Interviews***



Part One includes the transcripts of the six interviews, five individual (Ayd, Cole, Detre, Elkes and Katz) and one group, from which four of the individual interviews (Cole, Detre, Elkes and Katz) and the group interview were specially prepared for the 50 year anniversary celebration of the College. The group interview was conducted with five foreign corresponding fellows (Robert H. Belmaker, Arvid Carlsson, Salomon Z. Langer, Trevor R. Robbins and Joseph Zohar) by Alan Frazer, Secretary of the College.

All but two interviewees of the group interview (Robbins and Zohar) had one or more prior interviews with biographic information that was included in Volume 1 (Ayd, Detre and Elkes), Volume 3 (Carlsson and Langer), Volume 4 (Katz), Volume 5 (Belmaker) and Volume 9 (Ayd, Cole, and Katz). Trevor W. Robbins was born in November 26, 1949 in London, England. He received his PhD at Cambridge University in Experimental Psychology in 1975. Robbins was appointed in 1997 as the Professor of Cognitive Neuroscience at the University of Cambridge and was elected to the Chair of Experimental Psychology (and Head of the Department) in 2002. His research interests span the areas of cognitive neuroscience, behavioral neuroscience and psychopharmacology. He is co-inventor of the CANTAB, a computerized neuropsychological test battery used for the assessment of cognitive function in adults. Robbins was President of the European Behavioral Pharmacological Society from 1992 to 1994 and of the British Association of Psychopharmacology from 1996 to 1997. He was elected a foreign corresponding fellow of the ACNP in 1994.

Joseph Zohar was born on April 18, 1948 in Tel Aviv, Israel. He received his MD at the Sackler School of Medicine in Tel Aviv in 1973. Zohar was appointed Professor of Psychiatry at the Tel Aviv University Medical Center in 2004 and is currently Director of Psychiatry, Department A, at the Chaim Sheba Medical Center, Tel-Hashomer, Israel. His research interests span depressive, anxiety and obsessive-compulsive disorders. In 1995, Zohar was the Chairperson of the 7<sup>th</sup> Congress of the European College of Neuropsychopharmacology. He was elected a foreign corresponding fellow of ACNP in 2006.

The three Founders (Ayd, Cole and Elkes) whose transcripts are included in Part 1, present different vantages on the founding and on the thinking that led up to the establishment of the College. Frank Ayd represented the profession of clinical psychiatry and the general practitioner, Jonathan Cole, a clinical scientist, was the government official charged by the US Congress with the mission of developing the new science, and Joel Elkes, an academic, was the theoretician who would define the conceptual basis for the College. The three provide views on how the multidisciplinary group was assembled, the early discussions that defined the mission of the College, and the background in the field at that time, against which the first meeting of the College was held. One of the two other interviews are with Martin Katz who reports on the role of

academia and Government in the founding, and the other with Thomas Detre, who reflects on the importance of the College in shaping the education of psychiatrists over the next several decades.

In the group interview, interviewees describe the influence the College has had on their own work, on the development of the science internationally, and on the creation of the European College of Neuropsychopharmacology.

## ***Special Interviews***



## **FRANK J. AYD, Jr.**

**Interviewed by Thomas A. Ban  
Washington, DC, July 19, 2001**

TB: This will be an interview with Dr. Frank Ayd, Jr., one of the pioneers of neuropsychopharmacology, for the Archives of the American College of Neuropsychopharmacology. We are in Washington, DC, at the Biltmore InterContinental Hotel. It is July 19, 2001. I am Thomas Ban

TB: Frank, we've known each other for a long time.

FA: That's correct.

TB: I've followed your work since I started my residency in psychiatry at McGill in the late 1950s. What I would like to do now is go through your life and achievements. Let's start from the very beginning: Tell us where you were born, brought up and something about your education and early interests.

FA: Well, Tom, I was born in Baltimore, Maryland, and I'm the son of a doctor. I had two doctors before me in our family. My father was a doctor, and, my grandfather, who was first a pharmacist but became later a physician. He was very interested in pharmacology. My father, originally, was a general practitioner but, ultimately, became a pediatrician and was fairly well known for his work in that area. My father had quite an influence on me. He was a very kind, soft-spoken man. I became an avid reader, partly, from his example and by his encouragement. I'm the oldest of five children. I have a brother, who became a Jesuit Priest, and as a Jesuit, ultimately, became president of one of the Jesuit schools and universities in Pennsylvania. I have another brother, who became an assistant to the mayor of the city of Baltimore. I have two sisters, who married and had families; they're in the real estate business. So, you get an idea of the family. It's a strong family. We all see each other fairly regularly, because we all live in Baltimore. I went to grammar school, a Catholic grammar school, in Baltimore, a Jesuit high school in Baltimore, and a Jesuit college in Baltimore. I also went to medical school in Baltimore. So, every bit of my education was in the city of Baltimore. I graduated from the University of Maryland when World War II was on. And, when I graduated from medical school, I, like all graduates, was given time, before called on active duty, to get some training in medicine. So I did an internship in a Catholic hospital in the city of Baltimore. And, when I finished that internship, I had applied for a residency in pediatrics. Now, you see my father's influence, his example. And, the Navy gave me time to do all these before I started on active duty.

TB: Can we go back a little?

FA: Sure.

TB: What year did you enter college?

FA: Let's see. I entered Loyola College in 1938 in Baltimore.

TB: What did you major in?

FA: Well, actually, I took a Bachelor of Arts degree, after I took science courses in biology and chemistry. At that time, I was not sure about whether I was ever going to go to medical school. I just wasn't sure then. Truthfully, I was toying with idea that I might become a Jesuit Priest, and it was not an easy decision to make. I did make it, anyway.

TB: What made you decide to enter medical school?

FA: Well, I guess, in part, was the example of my father and the other doctors I had met through my father. I also had a conviction that I didn't have a real vocation for the priesthood that has proven to be correct. I made my decision while at a Jesuit retreat house with my class before graduation. The retreat conductor or master was a priest from England, a very well known British philosopher. He looked somewhat like my concept of Ichabod Crane, physically. And, he started that retreat with an opening statement, which I have never forgotten. The statement was, "Gentlemen, there are two things in this world, God and yourself. Everything else is extraneous matter to be used by you for your salvation or your condemnation." That was his opening remark of a two and a half day meditation on what your vocation would be. That convinced me that I really didn't have a religious vocation. It was good for me. So, I immediately applied for medical school. The war was on. They needed more doctors. So, I was admitted.

TB: By the time you entered medical school you were married, weren't you?

FA: My wife was a freshman a year after me, when I was a sophomore. And, I fell in love with her and she fell in love with me and we got married after two and a half years, because we couldn't get any time off from school. And that was the beginning of the marriage that has lasted now fifty-seven, going on fifty-eight years. As you well know, it has been a very fruitful marriage; if you thought, there are twelve children. We now have thirty-two grandchildren and sixteen great grandchildren and two more on the way. And, we are all still staying together. Raising those kids, educating them was a challenge to work hard, get the money to pay tuitions and everything else. But, I have no regrets about that.

TB: I saw somewhere that you were active in the student body while in College. Is this correct?

FA: Oh, yes. I was very active in the student body and became in my senior year, the president of the student council at Loyola. That got me involved in the relationship between students and faculty and gave me some training in negotiating. It was worth the time and effort I put into it.

TB: Then, after College you entered medical school.

FA: Yes, I got to medical school.

TB: When did you graduate from medical school?

FA: 1945.

TB: And, what did you do after graduation?

FA: Well, I did my internship in St. Joseph's Hospital and then I started my pediatric residency at the University of Maryland's university hospital. But, then I was called up to active duty, because they needed more men. I, initially, was assigned to surgery in the Bethesda Naval Hospital. It was a big mistake; I have no manual dexterity, whatsoever. And, I said, "Oh, my Lord." Fortunately, the commanding officer of the hospital was Admiral Hogan, who was Catholic. I'd met him on retreats down at the retreat house of the Jesuits, so I had no hesitancy going to his office and asking if I could see him. It was my first real introduction to how the military protects their big officers when his secretary said, "Well, who are you"? And, I said who I was. And she said, "Well, I don't know. The Admiral is pretty busy. I don't know if he'd have time to see you or not." And, I said, "Well, just tell him it is Frank Ayd from Loyola." She, begrudgingly, said "all right". About fifteen minutes later, she came out and said, "follow me." I went into Admiral Hogan's office, and, we exchanged greetings. Then, he said, "What's your problem"? And after I told him he said, "Well, we don't have any pediatric services in the Navy right now. We have, what some people might call babies, but those are psychiatric patients." Then, he said, "I'm going to send you up to Bainbridge". Bainbridge was a naval base very close to the VA Hospital at Perry Point that was understaffed. This was at the time when the nationwide program started in which doctors were being sent to military bases and then loaned by the army or by the Navy to VA hospitals. It was a great experience, Tom, because there were about two thousand psychiatric patients and only eight doctors in the whole hospital that included the superintendent, the assistant superintendent, an internist, a surgeon, a dentist and a radiologist. So, you could figure out, that left two "psychiatrists" to take care of the psychiatric patients. You were pretty much on your own but you were given every opportunity to learn and practice. When I went there, Tom, to be perfectly honest, I had no ambition to become a psychiatrist. But, after six months there, I began to realize that there's something very intriguing about psychiatric patients. Let me give you one of my experiences. It was a bitter cold winter night, and as you might know, Perry Point chucks out into the Chesapeake Bay. I was the officer of the day and I got a call from someone from one of the wards, telling me that a patient had escaped from the shower. My immediate response was, "I wouldn't worry about him. It's so

damn cold. He'll be back in another fifteen minutes." All of those attendants, actually, were farmers and when they couldn't farm, they worked at the hospital. And, he said, "Doc, you don't know these people. If we don't find him, he's going to be an icicle." So, we started the search and found him. He was pretty blue and pretty hypothermic, but he revived and that was it. He could have died. And, you would think that the pain that was caused by the cold would make him come indoors. It didn't. So, I began to wonder about what makes these people so different.

TB: It was a real learning experience, much more than anyone could convey in a class.

FA: Oh, yes. I had another patient who stuffed herself with newspapers and then ignited the papers. I got called over, and, when I arrived she was just sitting there responding to his hallucinations, and was not complaining of any pain or anything else. He had, I guess, twenty percent of his body badly burned; second and third degree burns. And, I didn't have to give her opioids or anything else for pain. He never complained of pain. So, I learned that schizophrenics have decreased pain sensitivity. That was for me a very important observation. So, I began to become extremely interested in schizophrenia.

TB: Did you decide by that time that you would become a psychiatrist?

FA: Yes, I did decide by that time.

TB: Can you remember the different treatments you used in those days?

FA: Oh, yes. Bromide was still used and we had patients get bromism from being overdosed with bromides. Barbiturates were used a lot. Paraldehyde was also used a lot. I hated the smell of it. We used in those days insulin as well. We had our share of fatalities with insulin. If you had experience with insulin coma therapy you know that you have to be extremely careful because you can easily induce severe, perhaps, irreversible hypoglycemia.

TB: So, you became involved in treating psychiatric patients with drugs and insulin coma?

FA: That's right. And, then, of course, I got involved with ECT. I tell you, Tom I was convinced that ECT was a great treatment. When I was doing my internship I had seen some patients who got ECT and I saw the kind of "awakening" that Oliver Sachs described with L-DOPA in Parkinsonism after three or four treatments with ECT. And, at Perry Point, I seized the opportunity to get experience at administering ECT.

TB: Was ECT at the time still administered without muscle relaxants?

FA: What you needed was a couple of strong men to hold the patient down and a very firm pad under the back to arch it to reduce the risk of spinal compression. You, also, needed a rubber mouthpiece to keep the cheeks

from being damaged or the jaw dislocated. We didn't have at the time a safe, short acting barbiturate that could rapidly induce anesthesia. That was introduced after I was out of Perry Point. I was already in practice when I was asked by a company to take a look at an IV anesthetic, which they said, on the basis of animals studies, was of short duration and rapidly induced anesthesia. It was sodium barbital. I administered it to a series of patients prior to ECT, and it seemed to work.

TB: Are we talking about the early 1950s?

FA: That's correct, yes.

TB: What did you do after Perry Point?

FA: Well, Tom, by this time, I had children. I had to get out and get more money than the Navy was paying me. That was for sure. To increase my income, I went into practice. But it takes a couple of years to start a practice; to become known by your colleagues and get referrals. So, I, also, had some GI Bill of Rights for education I could capitalize on. So, I went back to the University of Maryland. It happened that I liked, very much John Kranz, the pharmacologist there. And, I took the course, John Wagner, a pathologist was offering in neuropathology. It was a one-year course and I used to go down to attend the course during the day and see patients in my office at nights.

TB: So, by 1951, you had opened your practice?

FA: That's correct.

TB: Did you also have an academic appointment?

FA: Oh, yes. Even while I was at Perry Point, I taught psychology at the Catholic University in Washington, DC. Then, my alma mater, also, asked me if I would head up a small department in psychology. And I did that for about two or three years, I think, until they got a full time man with a PhD in clinical psychology.

TB: Didn't you present your first paper in those years?

FA: Yes, it was around that time. My first paper in a medical journal was my first report on chlorpromazine. I presented it at the Southern Medical Association's annual meeting, which happened to be in St. Louis that year. It was the first paper on chlorpromazine in this country presented at a national meeting.

TB: Didn't you publish a couple of articles prior to your paper on chlorpromazine?

FA: Oh, yes. I had already published before in one of those throwaway magazines. They were commentaries, on topics, as for example, "The Lack of Pain Sensitivity in Schizophrenics," and things of that sort.

TB: Didn't you get involved in the care of psychiatric patients in a general hospital setting in those years??

FA: Oh, yes, absolutely.

TB: Weren't you one of the first in the United States who practiced psychiatry in general hospital setting?

FA: That's correct, Tom. That is correct. And, again, I was very fortunate that the first hospital, a general hospital, that allowed me to have psychiatric patients admitted to my service, was St. Joseph's in Baltimore, where I had done my internship. My father had been on the staff at that hospital, I don't know for how many years, he was probably for forty years there. So, the nuns were very gracious and the chief of medicine, of course, trained me during my rotating internship. And I started doing ECT there and admitting inpatients. That was feasible. In those early days when chlorpromazine came along I had to train the nurses and the interns, and, also, had to educate everybody about that psychiatric patients are not as dangerous as people might think they are. It worked. There was only one suicide I had over ten years on my service at St. Joseph's, Bon Secour's, St. Agnes', and, Mercy Hospitals. All these were Catholic hospitals, where I had admitting privileges. And, one also learns fast. I had a patient, a very cunning patient whom I had on suicide watch. I had a nurse assigned to the patient to watch her, constantly. Well, when it was quiet on the ward, as night began to set in, she asked for a drink of water. The nurse gave it to her and then she dropped the glass on the floor. The nurse went out to get a mop. When she came back in, the woman had gone out the window, and she died. Most of the patients who were admitted were depressed patients, who were not seriously suicidal. If they were, we had extra precautions taken for them. Many of them, I gave ECT, because I was convinced of the value of ECT, particularly, in suicidal patients.

TB: So, you used ECT extensively? Weren't you a member of an ECT Society in those years?

FA: Oh, yes. It was called the Electroshock Research Association. It had many very fine people. I who met in that Association. Lothar Kalinowsky and David Impastato from New York, Howard Fabing from Cincinnati, George Ulett from St. Louis. I, actually, went to Howard Fabing and Doug Goldman in Cincinnati to spend with them a week. As you know, Doug Goldman, was a board certified internist, psychiatrist, and electroencephalographer. These were wonderful people to be literally tutored by. I'd stayed in their home; they opened their door and welcomed me in. So did Lothar Kalinowsky who couldn't have been kinder to me.

TB: So, you were taught ECT by Kalinowsky?

FA: Oh, yes. I watched him and he taught me different techniques with respect to electrode placement and so on.

TB: I suppose this happened before he wrote his classic text on ECT.

FA: Yes, a few years before that. . It became clear to me that administration of a muscle relaxant was very desirable, because you could avoid fractures. And it was also clear that it was preferable to administer it with a short acting rapidly metabolized anesthetic. As I mentioned it before I did a clinical study with sodium barbital before, and, I presented the results of that study at an annual meeting of the Electroshock Research Association. It was well received. I got one of the two prizes of the Association for my paper.

TB: How did you get to the idea of giving a muscle a relaxant prior to ECT?

FA: Well, I had met Bennett later at an APA meeting in San Francisco, and we ended up becoming friends. He had just started his pioneering work with succinylcholine around that time and, I watched him administer the substance a couple of times. He had me do it under his supervision. It was marvelous to see how it worked. If you gave it too quick, the patient would stop breathing on you, and, that could be frightening. So you have to be very prudent in the administration of it. But, it mixed very well with barbital sodium. It focused my attention on drug-drug interactions, because if you didn't do it right, instead of helping you could harm the patient and scare yourself. That's for sure. I felt it was important that patients get this combined treatment prior to be given ECT. I took sort of interest in this treatment and went out, talked and wrote about it.

TB: How did you get involved in psychopharmacology?

FA: Well, I was in private practice, OK? And, in private practice, you make a commitment to a patient that you are going to provide the best possible care you can provide that will offer them alleviation from the suffering that is so concomitant with psychiatric disorders. We had a definite effective treatment for depressed patient in ECT. So, I thought if we could use succinylcholine with barbiturates we could make ECT an even safer treatment. As it was why not to try other drugs in the treatment of psychiatric patients. It so happened, that a Squibb representative, who used to call on my father, came to see me. I was using my father's office at the time, because I didn't have enough money coming in to pay the rent for somebody else's office. We started chatting and he asked me what I was doing. I told him what I was doing, and about my interest in using medication in treatment. So, a couple of weeks later, I got a phone call from Squibb, from a doctor at Squibb, who wanted to come down to see me. That sounded interesting. He came to see me with a product he called mephenesine that had muscle relaxing properties. He was looking for someone who would be willing to explore it, as a possibility of using it as an anxiolytic, muscle relaxant in the treatment of neurosis. So, I

thought, well that sounds interesting. And after reading the information they had on the animal data they had, and found that it looked reasonably safe, I said, OK. I did a study with the substance, and, found that it was practically a dud. It had some sedative properties, but did nothing really in alleviating the kind of tension that the severely ill psychiatric patient has. So, I gave a narrative report on my findings to the company that was never published. They told me right off the bat that based on my report, plus of one other person's report, they had decided that there was no market for this compound. But, that identified me as someone who is interested in working with new drugs. It's amazing how the word gets around in the industry. And, the next drug that I ever agreed to do a study on was chlorpromazine. I got a phone call from a Dr. Bill Long. Bill Long's Jesuit brother was a principal at the high school that I attended and he mentioned to Bill Long my interest in drugs. And, Bill called me that he had a drug from Rhône-Poulenc in Paris and would like talk to me about it. So he came to Baltimore, and, I'll never forget it, he had samples of 10 mg. tablets of chlorpromazine with him. You'd have to give a full bottle to get some effects from it. But, I tried the drug and had initially some unhappy experiences with it. The first patient I gave chlorpromazine was in a general hospital. He was a very tense, obsessive-compulsive guy. I put him on a relatively low dose but still in two days he got jaundice. The nurses called and said, "Your patient is yellow". I went in to see him right away. I was never convinced that, actually, chlorpromazine was responsible for his jaundice because when we admitted him to the hospital for his obsessive-compulsive disorder, he, also, had fever, and some malaise. So, we just withdrew the chlorpromazine and waited until the storm blew over. It cleared up spontaneously. . But, then, I had a patient, whom I had been seeing by then for about two years, and ten days after I put her on chlorpromazine when she came back to my office, Tom, she was as jaundiced as she could be. So, I said, "Oh, Mary, how long have you been like this"? And, she said, "Oh, it's almost ten days, doctor". I said, "You stopped the medicine, didn't you"? And she replied, "Oh, no, no, it's helping me and you've been so kind trying to help me, I just kept taking it". I learned one thing right off that you don't necessarily have to discontinue chlorpromazine when a patient gets jaundiced. In fact, I kept her on it because she had some very imminent relief. I had known her for long enough that I could see definite changes in her condition. And, she agreed to continue on the medication. The family also agreed. We never altered the dose, and the jaundice went away. She continued to improve, and, then, finally, the chlorpromazine was stopped.

- TB: So, you got your chlorpromazine directly from Rhône Poulenc. Most investigators in the United States got it from Smith, Kline & French. It seems that the first patients you treated with chlorpromazine were not schizophrenics.
- FA: They weren't. You don't see that many schizophrenics in private practice. I had at the time just gotten admitting privileges at Taylor Manor hospital, a private psychiatric hospital. Most of the private patients don't go to be treated in private hospitals for schizophrenia, unless they are very wealthy, because they would need to stay there a long time. Most of the patients admitted to private hospitals are bipolar, hypomanic or manic patients. Schizophrenic patients are admitted mainly for a short time to control their agitation and aggressive behavior, or that sort of things.
- TB: When was your first paper on chlorpromazine published?
- FA: It was in 1955.
- TB: By the time you published your paper on chlorpromazine you probably started your studies with reserpine?
- FA: Yes.
- TB: Where did you get the reserpine from?
- FA: I got it from CIBA.
- TB: From CIBA?
- FA: Yes.
- TB: By that time, of course, they knew that you were interested in drugs?
- FA: Oh, yes, yes. I'm trying to think, now, who contacted me first. I believe it was Jack Saunders. But it could have been someone else from the medical department of CIBA. Saunders, ultimately, left them and went to Rockland State Hospital to work with Nathan Kline. Reserpine was not as dramatic a drug as chlorpromazine. It took time to take effect. It, also, frequently caused unpleasant side effects, gastrointestinal disturbances, vomiting and, so forth. Many patients just wouldn't take it, consistently. Yet, if you had a patient, who tolerated it and took it faithfully, it was very definitely a positive drug. It was nowhere near as positive as chlorpromazine, in terms of antipsychotic effects.
- TB: You were among the few who reported on both, chlorpromazine and reserpine. You might have been the only one in the USA who reported on both.
- FA: Nate Kline had reported on both as well. So did Al Kurland at Spring Grove State Hospital in Baltimore. Al did a study on chlorpromazine about the same time I was doing mine but he did not get on the program in St. Louis where the first chlorpromazine studies in the United States were discussed. And, then, outside of Maryland, Doug Goldman was doing a study with chlorpromazine in Cincinnati. As a matter of fact,

Doug attended the meeting in St. Louis and in a discussion of my paper, he got up and asked me if I'd had encountered any agranulocytosis with the drug. And, I said, "No, I've heard that that it occurred in Europe, but I've not had any trouble with it". It turned out that he had two cases. I had some patients who developed agranulocytosis on chlorpromazine as time went on. Doug was a very astute observer.

TB: You were among the first to publish on chlorpromazine in North America. The first, I think, was Heinz Lehmann.

FA: Yes, it was Heinz's paper from Canada the first, and, subsequently, I presented my paper. Then, a paper was published in the JAMA. It was written by someone in Texas, I can't remember his name now. He got published first, but my presentation preceded his publication. And, of course, Fritz Freyhan, at Delaware State Hospital, and Bertrum Schiele were working with the drug also. In a very short period of time there were many people working with chlorpromazine. It really exploded.

TB: There were much less people involved with reserpine than with chlorpromazine.

FA: Very few people did much with reserpine, because there was a big controversy over whether or not it produces depression. . I mean, there were lots of people who did become depressed on reserpine but this didn't alarm me, because I was never sure that it was really drug induced. In my office, of course, I was concerned whether it would be safe to give ECT to depressed patients whose hypertension was treated with reserpine. That's when I called on Lothar Kalinowsky and David Impastato in New York, and Leo Alexander in Boston. What became evident to me was that depression often carries with it hypertension, and as soon as the depression goes away, the hypertension disappears without any particular treatment for it. As a matter of fact, I did a follow up study on a large number of patients, who allegedly had reserpine induced depression and the follow up showed that there was no substance to that. There were many people who took reserpine as a prophylactic medication even though they were well, and did not become depressed again. There was a long hiatus after they stopped taking reserpine before their next depression started. So, they were having cyclic episodes of depression. On the other hand, if the patient is vulnerable to depression, it's possible, that reserpine could bring vulnerability for depression to a reality. The results of treatment with reserpine were not sufficiently good to justify the risk of using it. So, it fell by the wayside, as you know. However, it's still on the market after fifty years as an antihypertensive. And, if you look into the data, it did not cause an unusually high incidence of depression among

the people who were treated with it. So, it's not a bad drug, but it's not a desirable drug.

TB: Did you use yourself reserpine in low dose in hypertensive patients in your practice?

FA: Yes, and it worked. I never had any problem with depression in my patients treated with reserpine.

TB: You used to report adverse effects with psychotropic drugs before anyone else but had no trouble with reserpine. .

FA: Correct. Nate Kline gave me the name, "Dr. Side Effect".

TB: Oh, did he?

FA: Instead of "Dear Friend", he used to write me, "Dear Side Effect, I've just read your latest report. Is that all you've got to do is to look for side effects"?

TB: You published a couple of reports on the side effects of chlorpromazine?

FA: Yes. I reported on jaundice with chlorpromazine. I also reported on the gastrointestinal and vascular side effects of reserpine.

TB: I think you also reported on fever in chlorpromazine treated patients.

FA: Oh, yes. I tried to report, honestly, everything I saw. In fairness to the patients, you have to make these things known, so the other doctors can say, "Look, there is a risk with this, and, get their informed consent for treatment"

TB: You also reported on generalized hypersensitivity to chlorpromazine.

FA: And, of course, I reported very early on extrapyramidal symptoms with the drug. I had one patient, a young woman with bipolar disorder, who was put on chlorpromazine for her euphoria, agitation and irritability, and developed a very acute dystonic reaction. I filmed her. You can't convince people about some of these reactions, without showing them. I filmed this patient and sent my film to Smith Kline & French. They looked at it and sent it to their consultants, but none of them had seen this reaction before. They got all kinds of opinions that it was hysteria, some kind of toxicity, and what not. And, then, Smith Kline arranged for me to go to the annual meeting of The American Academy in Neurology in Atlantic City, and to present the film there to a committee of five expert neurologists. They agreed that it was a dyskinetic reaction, but they didn't know what caused it. But, even after that many people thought that it was a hysterical reaction in a neurotic woman.

TB: In the late 1950s, in addition to your practice were you not also the acting director of a psychiatric service in a general hospital?

FA: Yes, I became Chief of Psychiatry at Franklin Square Hospital.

TB: Your work in those years was recognized nationally.

FA: I think that's correct.

TB: You received a distinguished service award....

FA: Oh, yes, I had gotten that.

TB: You were recognized as the Outstanding Young Man of the Year.

FA: Yes. Well, it so happened, that I was nominated for it. It started with a newspaper report after a presentation I had made in Atlantic City at an APA meeting. The Associated Press covered the event. Then, the executive director of the Mental Health Society in the United States, a former newspaper man from Oklahoma, contacted Nate Kline, Henry Brill and myself about testifying in Washington, at a congressional hearing, on psychiatric illnesses and their treatment. I agreed, and the three of us went to Washington and testified. I got a lot of publicity because I took the position that if one wants to save money in patient care one would need to use chlorpromazine. I pointed out that successful use of chlorpromazine costs so many cents a day whereas untreated illness costs so many dollars more a day. I, also, made a plea for the coordination of activities in drug treatment. I felt that the government should collect, analyze and summarize the data on drug treatment and the findings should be taken into consideration in handling the problems of the psychiatrically ill. We do that for diabetics and we do that for epileptics. Why can't we do it for psychiatric patients? To make a long story short, they appropriated the money that was needed for the establishment of the Psychopharmacology Service Center. And, then, Jonathan Cole was appointed as the first director of PSC.

TB: You had been involved in studying many drugs including methylphenidate. Could you tell us something about your research with them?

FA: Well, in so far as methylphenidate is concerned, my dad was a pediatrician, and like all pediatricians, he had his share of ADHD kids. And he did what most pediatrician did, treated them either with a sedative drug, like liquid diphenhydramine, or methylphenidate. Regarding diphenhydramine, I often wondered how much of its effect was due to its alcohol content, and how much was to the sedative effects of the drug. In so far as methylphenidate was concerned I was contacted because people knew that I was interested in working with drugs, and also because they thought that I could get patients from my father. So, I did a study with methylphenidate and showed that it was effective not only in children and adolescents but also in some adults. As you know, there are adults who have ADHD. I had some among my patients. In appropriate doses methylphenidate is clearly an effective drug, even if not for all, but for a substantial proportion of ADHD patients.

TB: Did it create for you any problem in working with children?

FA: You know, I did a residency in pediatrics.

TB: Yes.

FA: And beside that I also saw pediatric patients with my father. He did house calls. He was a real old time family doctor who was a specialist in pediatrics. And, then, I saw my share. When I started to work with methylphenidate, I had no trouble getting patients, because a lot of the pediatric guys in town knew me as a resident in pediatrics before the Navy called me up. And, I just called a couple of them and said, "You know, I need some patients and there will be no charge for the medication and for my service". Well, you know what that meant; I got a lot of referrals. It didn't take very long to see that methylphenidate helps. I also recognized soon that it has less risk for abuse and dependency than amphetamines. I became very convinced about that. You might remember, some years later; I think you were with WHO at that time, Sweden raised concerns about the dangers of methylphenidate. I remember the meeting held in Geneva that dealt with the Swedish concerns. Leo Hollister was there, representing the United States, along with, I think Sid Cohen.

TB: Yes. Then you also did some research with meprobamate in the 1950s.

FA: Yes, I did. I used meprobamate primarily in epileptic children. I was asked to study whether meprobamate has anticonvulsant effects. So I did a study and found that it has some anticonvulsant effects in epileptic children. The seizure rate would go down, but it would depend on the type of seizures the kid had. It was not a very potent drug for severe and frequent grand mal seizures, but, for minor epileptic episodes, it could be beneficial. I say, could be, because some of these children can go for weeks without having a darn thing even if they're taking a placebo. Meprobamate so, in my judgment, is an effective drug and has helped lots of people. I'm not talking now just about epileptics; I'm talking about people with anxiety states or co-morbid anxiety and so on; it would alleviate anxiety. Unfortunately dependency on meprobamate became a real problem because doctors used it like candy. You can't do that with the kind of drug meprobamate is. The limitations of meprobamate became more and more apparent with the advent of chlordiazepoxide. When Librium (chlordiazepoxide) was released for clinical use, it was quite clear that it would be a real competitor Miltown (meprobamate). Nevertheless my first paper on chlordiazepoxide was a report on my negative findings with the drug although it was effective in controlling some of the symptoms of my patients.

TB: So you had a practice that allowed you to study drugs in all kinds of psychiatric populations.

FA: Yes, I had a practice in psychiatry that was kind of a general practice in psychiatry. I had some training in pediatrics, so I wasn't too concerned

about children. I, also, had enough sense to know that if something was out of my area of expertise.

TB: There were very few people in those years studying drugs in children.

FA: That's true. There were very, very few people doing it, very, very few. I never identified myself, deliberately, as a psychopharmacologist in pediatrics; although, I've done my share of it and I'm still doing some work in children.

TB: And, you, also, did some early work with perphenazine in the aged, right?

FA: Oh, yes, yes, that's right. My first paper on perphenazine was on its' value in the elderly. Perphenazine was an interesting compound. So, was thioridazine, which on a milligram for milligram basis was a very weak drug but it didn't cause much extrapyramidal signs. It is not true that it is totally free of EPS. If you gave the right dose, you could make patients stiff as a board. So, on the other hand, chlorpromazine had more sedative effects than thioridazine, caused more EPS, weight gain, hypotension. And what was the difference between those two drugs? It was a difference in the structure of the side chain. Thioridazine was introduced before perphenazine. Another phenothiazine introduced before perphenazine was Compazine, a very good antipsychotic drug.

TB: Prochlorperazine?

FA: Yes, prochlorperazine.

TB: In Canada it was available as Stemetil.

FA: Stemetil, that's right. So, at any rate, then along came perphenazine. It had all the assets of chlorpromazine but did not have as much anticholinergic and sedative effects. Unless you gave a fairly high dose, you didn't get much in the way of EPS and so on. It looked as a substance that is going to be a good drug for the elderly, because you're not going to get the cardiovascular side effects that you would get with with the other phenothiazines available at the time. And, it was compatible with medications that elderly people took for co-morbid medical illnesses, such as diabetes, hypertension, cardiovascular disease, etc. After doing the original work I suggested to Schering, the company that had perphenazine, that we put together a team to study it. And with their authorization I put together the team. I called Nate Kline, and got him involved, and I got also Bert Schiele involved. It was the three of us. I gathered enough data for submission to the FDA. Then we had a meeting in New York and we presented all the data we had. Perphenazine differed from the other phenothiazines by its side chain and became a very widely used drug. But still, it didn't have quite the kick for the schizophrenic patient or the severe manic. So, that led chemists to twist things further around, and with a fluoride atom added, to synthesize fluphenazine.

- TB: So, you were much aware of structure activity relationships and tried to translate even minor molecular changes into clinical effects.
- FA: Right. And, I gave a paper at the 1st CINP congress in Rome on Structure Activity Relationships with Antipsychotics. I covered twenty-three different antipsychotic drugs.
- TB: Did you work with all available phenothiazines for clinical studies at the time?
- FA: Oh, yes, with all the available ones that could be studied.
- TB: In 1956, you went overseas to visit some European centers in psychopharmacology. How was that arranged?
- FA: There were seminars organized by European pharmaceutical companies, like May & Baker in England, Rhône Poulenc in France, and CIBA, Geigy, Roche, and Sandoz in Switzerland and they invited experts from the USA to participate. I was invited to meet also with their personnel and I met with personnel from each one of the companies. These were pharmacologists, physicians, who were dealing with other doctors and getting them involved in clinical investigations and what not. We were advising them as to possible clinical applications of compounds based on animal data. I was convinced, Tom, that there was a dire need for better communications between psychiatrists in the world, not just in the United States. You were in Canada. You know, that sometimes, what you call schizophrenia would have been called mania in the United States or vice versa. And, as a matter of fact, there was a study done involving patients in London and in New York, which showed that there was good reason for saying that this is a problem. And, in the course of having lunch with these people at these different companies, I brought up this concern of mine. There has to be some kind of an international organization so that when a guy in Switzerland says, "This is schizophrenia", and presents his criteria, it's comparable to the criteria that we might be using in Baltimore, Maryland, and so forth. Because, to read an article that says, this drug is good for schizophrenia, to me, meant nothing, because there were no real criteria for the diagnosis of schizophrenia. After I finished my stay in Europe, I came back home, and, subsequently, I got a phone call from Switzerland about having a symposium in Milan, to discuss the possibility of establishing a college in the field. I was honored for being invited and I attended it. It was a very good meeting. Out of that meeting came the CINP.
- TB: So this symposium took place about a year after you returned from your trip in Europe attending seminars organized by drug companies? Am I correct?
- FA: You are correct.

TB: You already met on your first trip many people from different European centers.

FA: That's correct. I got to know, pretty much, the leading people in Europe.

TB: Can you mention a few by name?

FA: Well, Paul Kielholz, Jules Angst and many others. I talked with these people, had dinner with them, so I was learning about what they did and returned home optimistic about what was going on.

TB: If I remember correctly you went to Milan, on your second trip to Europe, with you family.

FA: We went to Rome, first.

TB: You went to Rome, first?

FA: That's correct.

TB: Could you tell us more about that second trip?

FA: Yes, I'm proud of it, Tom When the invitation came for the Milan meeting I realized that the date of the symposium was just around the time when one of my daughters, Theresa was supposed to have her First Holy Communion. So I told my wife, Rita, I don't know whether I can accept the invitation. Then I got a date for the Holy Communion that did not conflict and I accepted the invitation to attend. Well, that was in the fall, and this was to be the next spring. On Christmas Eve, the pastor of my parish had a heart attack and died. So, my wife said, "What are we going to do"? I said, "We'll wait until the new pastor is appointed and see what happens". So, the new pastor was appointed and I went down to see him and asked him when he thought the First Holy Communion was going to be and he said, "Don't ask me. I don't expect to be here more than six weeks. I'm a temporary pastor, as far as the Cardinal, or the Archbishop is concerned". Sure enough, about six weeks later, the new pastor was officially appointed. I went down to see him and he was going to change nothing, so the Holy Communion was going to be on a date that would conflict with the symposium. So, after I came home and told that to my wife she asked, "What are you going to do"? I said, "I'm going to write a letter to the Holy Father". She said, "What are you going to do that for"? And, I said, "Well, he's the Bishop of Rome and he would be the one who would have to authorize her First Holy Communion in Rome". So, my wife said, "You think he's going to answer"? I said, "All he can do is say, 'No'". Well, weeks go by and no answer and it is Holy Week, now it is three weeks before the meeting in Milan. I was in Los Angeles addressing pediatricians on the use of psychotropic drugs for behavior disturbances in children, when I was handed a message, "urgent call, call your wife immediately". So, I stopped the lecture and went out and called my wife and she said, "We've heard from the Pope". We should be in Rome on

Good Friday. This was Tuesday before, and I was in Los Angeles. And I said to her, "Meet me in New York. I'll change my ticket and we'll go over". We arrived there, Good Friday, as requested. And, of course, you don't do anything on Good Friday, but Holy Saturday morning, we went to the Vatican. I presented the credentials that had been sent over by the Apostolic Delegate from the Swiss guards, and we met the man from the Secretary of State's office, who is now one of my closest friends, and he told us of the arrangements. Now, that the Pope agreed to my daughter making her First Holy Communion in Rome, we are to be his guests for a week. For Easter Sunday, we had special seats up in the left cannonade there and our daughter was to make her First Holy Communion on Wednesday. It would be in St. Peter's at the altar of St. Pius X, who's the patron saint of first communicants, and mass would be held by the Carmelite Fathers, since Theresa was a Carmelite. Everything was carefully thought out. Before the First Communion we were to have an audience with Pius XII, but the night before, we got a phone call from his secretary saying, "Have to cancel for tomorrow, because Prince Rainier and Grace Kelly are coming". And, of course, heads of states are given priority. So, we were brushed aside. Two days later, we, then, had a proud audience with Pius XII and he gave my daughter his zucchetto, his little white hat. He had tremendous interest in medicine, Tom. He wrote more on medicine than any Pope in the history of the church. And, I told him I was going to Milan, and wanted this First Holy Communion in Rome. And, so, he was interested in what's this meeting about in Milan, and I told him. Well, he said, "Once over, let me know what's happened". So, I said, "OK". So, before we got to Milan we got an invitation to his birthday party. We had a great time. And the next day we got off to Milan for the meeting. I'm human, Tom. To me, that was the most exciting thing that had ever happened to me and, obviously, I told people about it.

TB: So, you went from the Pope to the psychopharmacology symposium organized by Garattini that lead to the founding of the CINP. But wasn't there also another meeting, independent of the one in Milan, where the need for an international organization was discussed?

FA: Well, yes, there was one that was supported by CIBA. The one organized by Garattini was a scientific symposium where I gave a paper on the Use of Antidepressants in Children.

TB: Can you tell us something about the other meeting, the one sponsored by CIBA?

FA: It was organized by people in Europe, who were active in the field of psychopharmacology. Paul Kielholz played a big role in it. I don't know

whether Jules Angst was there. I think he was, but I'm not sure. And the professor from Vienna, what is his name, was also there.

TB: Hans Hoff

FA: Yes, Hans Hoff, from Vienna.

TB: What about Otto Arnold?

FA: Yes, Arnold was there.

TB: Frank Fish?

FA: Yes, Frank Fish from Liverpool was there.

TB: Michael Sheppard?

FA: Oh, yes, Mike Shepherd was there. Many of the leading psychiatrists of Europe were there. Still, it was not a scientific meeting but a meeting to discuss whether to have an organization that would set up standards in the new field, etc, a kind of organization as the ACNP here is now. It was decided that there is a need for such an organization and, what is his name, was asked to help setting it up.

TB: Ernst Rothlin?

FA: Yes, Rothlin. There was then, another, meeting that was held in Switzerland during the time of a congress...

TA: The 2nd World Congress of Psychiatry.

FA: That's it. You got it. The founding meeting of the CINP was held in a restaurant at the railroad station.

TB: The dinner, at the Zurich railway station, was organized by Rothlin. He hand picked a number of people and invited them to attend.

FA: Exactly. I give a major paper at the Congress, and attended Kuhn's historical paper on imipramine, but was not invited.

TB: Did you attend Nate Kline's psychopharmacology symposium at the Congress?

FA: Yes. People by that time were beginning to realize that we could not go ahead in a haphazard way any longer in psychopharmacology. It was worse than the Tower of Babel. And that was not good.

TB: So, you participated in the 2nd World Congress of Psychiatry in 1957, listened to Kuhn's first paper on imipramine and attended Nate Kline's symposium at the Congress, but were not invited to attend the founding meeting of CINP.

FA: And, Heinz Lehmann, Fritz Freyhan, Doug Goldman were not invited either.

TB: But then you attended the 1st Congress of the CINP in Rome.

FA: Oh, absolutely, in Rome.

TB: I'm sure you remember, very well, the meeting in Rome, because it had important...

FA: Well, it was very important because the Pope addressed the Congress, and, in a sense, strongly endorsed psychopharmacotherapy. He strongly endorsed the concept that psychiatric patients are ill. That mental illness is not imaginary, etc. To have a world leader, with his influence, say these things was very, very important.

TB: How did the Pope get invited? Did you have anything to do with that?

FA: How did he get invited?

TB: Yes, how did he get invited?

FA: Exactly who invited him, I don't know, because I was not at that meeting in Switzerland at the railroad station, you see. However, I knew he was going to address the Congress because I had my own contacts at the Vatican. The Holy Father had a policy of writing his own speeches. He seldom used a speechwriter. He was a very educated man. To a certain extent, he had some obsessive features. And, I was asked to provide reprints of some of the better articles in the field, so that he would have a picture of what psychopharmacotherapy was all about. I provided those. He wrote his paper. He gave his paper in French. So, I couldn't follow him very well, but it didn't take more than a couple of hours to have an English translation. After that, I saw the Holy Father a couple of times. At one of my audiences with him, he asked me if I'd be interested in working at the Vatican. And I asked, "What am I going to do as a psychiatrist there?" To make a long story short, the answer was, "Well, I want the Vatican to be looked upon as a place that knows what's going on in the medical world, in the scientific world, that people see that we are not sitting up somewhere. I would like you to teach for us; we have the Vatican radio and you could broadcast on the Vatican radio." So, I said, "Well, your Holiness, you know, my wife and I are expecting another child". He said, "I understand. You talk to your wife and let me know what your decision is". So, I prayed about it, talked about it and made a decision that I would take the job. Now, it was not a full time job in the sense of ten hours a day or anything like that. The programs were taped often in advance. And, so, classes were set up. I taught on Mondays and sometimes on Wednesdays. Then, I would leave Thursday and Friday and go off to anywhere from Sweden to Greece, Turkey and what not. I still had a lot of expenses to take care of and I was, also, invited to lecture at almost every medical school in Europe, Tom.

TB: Weren't you also a professor at the University of the Vatican?

FA: Yes, I was the first layman appointed to the faculty of the Pontifical Gregorian University in Rome. The University was founded 400 or 500 years ago by Pope Gregory, and that's why it's named Gregorian University. The students there come from all over the world. There are

seventy-two languages spoken, including the different dialects, in the student's body. It's quite a place. The students are either ordained priests working on getting their doctorate in Canon Law or Moral Theology, or seminarians, personally selected by their Bishop, who pays their tuition, pays their travel and their room and board. You get the best education and it costs you nothing. And, they are very carefully selected. They're men with a vocation.

TB: What did you teach?

FA: I taught two courses. One was called Modern Medical Moral Problems, and the other one was Pastoral Psychology. Now, the men, getting their doctorate in Canon Law, for example, are basically becoming religious lawyers. OK, they're going to uphold the law of the church and so forth. For example, the Vatican has a marriage court, so that people who want to have their vows annulled can appeal to their Bishop and from their Bishop, it can go on to Rome and the marriage court reviews all the data and they make a decision. Obviously, the question is often, was the person capable of making a valid contract? And, so, what are the criteria for a valid contract, whether it's marriage or whatever? So, that was basically the kind of thing that I had taught.

TB: So, this is how you got involved in law?

FA: Yes.

TB: Didn't you get a doctorate in law later on?

FA: I have four honorary doctors of law and one honorary doctor of science degree.

TB: Is this how you got the one in law?

FA: That's right. I don't think anybody would have given me an honorary doctor in law, before I started doing this work. The whole issue, Tom, was, that these men needed to know, pretty much, what psychiatry was thinking about in certain areas. As you know, in the United States, for example, there were conflicts between psychoanalysts, represented by a known Catholic priest, who protested a sermon by the Bishop, and complained to the Cardinal. What happened was that the guy said to the Cardinal that he wanted the Bishop to stop what he was doing or otherwise he was going to leave. Now, the rumor is, that at that point, the Cardinal said, "I just accepted your resignation". And, these were the kinds of things. I was, also, there at a time when the Vatican Council was going on and I ended up consulting to Council Fathers on issues that interested them. The purpose, Tom, of the Vatican radio program was to let the world know that the Vatican is keeping abreast of developments in medicine. For example, on the 100th anniversary of the Red Cross, I did four 15 minutes programs, on the history of the Red Cross. At the

end of each program, listeners were urged to make a donation to the Red Cross. During that period, the United Nations put out a series of postage stamps for the world to unite “against malaria”. Every member of the United Nation countries issued a postage stamp for the world to unite “against malaria”, and I was asked to do a series of programs on malaria. I’ll never forget that, Tom, when Father Thomas O’Donnell, an Irish priest, who was head of the Vatican radio, called me into his office and said, “Frank, I want you to do four programs on malaria”. I said, “Father, that’s impossible. I know a mosquito is involved and I know that we can treat it with a few things, but that’s about all; I could say it in five minutes”. He says, “You’re going to do four fifteen minute programs”. That’s the way he managed it. So that turned out to be a Godsend for me, because I had to go looking into the history of it. Surprisingly, the American library had nothing in their bookshelves that was worth anything on the subject but in the British library I came across a book written by a British historian that was called “The Fever Bark Tree” that was a story of quinine and how the Jesuits brought it back from South America to Rome. Of course, in that period of history, malaria was very common in Rome and threatened many people on the Vatican Council and many religious men. It was an interesting and very informative book. These are the kinds of things that I learned from that book. Thomas Sydenham gave quinine to a couple of members of a family who had fever, thinking that it was, perhaps malaria. Well, they never got any better. He wrote the most scathing denunciation of the drug that I’ve ever read in my life. He really blistered it, you know. At the time I was in the Vatican the birth control issue was on. People from Planned Parenthood were lobbying at the Vatican Council, and there were a great number of press people there. Well, as a member of the American Association of Science Writers, I had my press credentials and was able to attend a good number of cocktail parties, and, ended up becoming involved in birth control. I wrote a book on oral contraceptives, in which I showed that’s it’s really not a contraceptive, but a pill that aborts the fetus. Since the Pope had to make a decision about what is going to be the official position of the Catholic Church in that matter, prominent obstetricians and psychiatrists, including Lopez-Ibor from Madrid, were consulted.

TB: Lopez-Ibor?

FA: He was one of the psychiatrists. There were a couple of psychiatrists from England. But anyhow, the church didn’t sit back doing nothing. They did something and, as you know, the Encyclical was finally publicized. I served on a committee for that, along with a Jesuit theologian from Massachusetts, a lady theologian from Maryland, and another well-known

Jesuit, whose brother is a well-known internist in the United States, who spent his priestly life just with medical moral problems. The four of us were on a committee, reviewing and commenting, “This is good; this is not quite clear” and what not. In a sense we were proofreaders or peer reviewers. It was very educational. So, I can tell you one thing, which is the absolute truth, I was never bored in the three years I was there.

TB: You were also involved in publishing a journal.

FA: Well, it was not a journal; it was a newsletter.

TB: Newsletter?

FA: Medical Moral Newsletter.

TB: But wasn't there also a Magazine?

FA: Oh, yes, but I didn't start that. I wrote articles for the Magazine of the Palatine Fathers, a religious group that started in Italy and are now all over the world.

TB: So, you started the Medical Moral Newsletter.

FA: Yes, the Medical Moral Newsletter.

TB: That was in 1964, right?

FA: That's correct.

TB: And, I think you continued with it until quite recently.

FA: That's correct. About three years ago, I stopped it. I got to the point I couldn't handle it.

TB: Could you tell us something about that newsletter?

FA: Well, it was, originally called The Medical Moral Newsletter for Religious. You know, there were so many changes going on from heart transplants to in vitro fertilization. In fact, right now, stem cell research is becoming the “in thing” in this country, and believe me there are many theologians looking into that. Well, anyway. I started that because, in the interval, between sessions of the Council, the priests would go back to their diocese, and some of them asked me to keep them informed if anything comes up in the medical field while they were away. And, I said “sure”. So, I sort of started sending them mimeographed information. And, they liked it very much. So, I thought, well, why don't I just start this The Medical Moral Newsletter for Religious. Many dioceses bought it for their archives or for a library that they would maintain for priests. Surprisingly, I had a number of divinity schools and seminaries from various religious denominations, the Protestants, the Episcopalians and so forth that bought subscriptions. And, I covered everything you would want to cover in that kind of thing. I liked to write something stimulating, occasionally. I did an issue on the intrauterine devices, how they work, and on the first page, I had all the different devices. Some of them looked like the Bishop's cruiser. And, that got a big sale. It was a very enjoyable life. It was great for my family.

I brought my wife and the twelve kids over to the Vatican and we all went over on the same plane. We were the first family that was that size to fly on the same plane across the Atlantic. Pan Am arranged for all kinds of photographs taken of us, leaving Baltimore, arriving in Italy and so forth.

TB: Were all the twelve kids born between the mid-1940s and the end of the 1950s?

FA: Yes, the youngest was three years old at the time we arrived. I carried her around on my shoulder most of the time.

TB: We talked about the birth of the CINP. We talked about your life in the Vatican. We also talked about the congressional hearings in the United States which led to the establishment of the Psychopharmacology Service Center, but we have not talked yet about the founding of the ACNP, an organization you had been involved with very much.

FA: I was very much involved in the founding of the ACNP. The idea came from Ted Rothman, who was instrumental in organizing the first meeting. He was a psychoanalyst and not a psychopharmacologist, but he was seeing patients who were given all these drugs and felt that there was a need for knowing a little bit more about them. I'll give you an illustration how some psychanalysts felt about the new drugs in those years. At the New York Academy of Sciences, I gave a paper on chlorpromazine and my experiences with it. The discussant of my paper was a past president of APA who used to be at Yale. He thought that my paper was very erudite, interesting and informative. And, then, he got to the punch line, and said, "I have one word of advice to you people in the audience. Hurry up and prescribe this stuff while it still works". At any rate, the idea behind the founding of ACNP was to get better communication between psychiatrists, pharmacologists, industry, and physicians, in general. I played a role, also, in the founding of the British College of Psychopharmacology. It was acknowledged in one of the books of David Healy.

TB: It's interesting that Rothman, a psychoanalyst, was the one who got the idea of founding a society that was to become ACNP.

FA: Rothman had a very good relationship with the medical director of Geigy, and he got those people to put up the money to pay for the travel and foot the bills for the hotel and meals of the organizing group at a weekend meeting. From the very beginning, so, there were a few psychopharmacologists involved. Nate Kline was there; I was there; Heinz Lehmann was there, and other leaders in the field. But we had very few pharmacologists and I thought that we should have more of them. So, lo and behold, at the next meeting, we had Brodie there. What a mind that man had! At that time he was working on determining the presence of drugs in plasma and serum, and he told us, "We've got to work on determining drugs

in the blood because otherwise we don't know whether the drug is in the body". He championed that area of research, and, we established a sub-committee that consisted of Jonathan Cole, Brodie and myself, that focused on that issue. So, before long, we were getting into such issues as hormonal kinetics and pharmacokinetics, and so on. And, that, to me, was the important thing. The College should be a College, a source of information, a source of stimulation. That was my position.

TB: During those years, you had been intensively involved in educational activities, weren't you?

FA: Yes, I was.

TB: You made a film, sometimes in the late 1950's on physical therapies?

FA: Well, I did a couple of films, Tom. I think the one, you may be referring to, was the series on Medical Horizons. It was sponsored by CIBA Pharmaceuticals and was on prime time television on Sundays. It covered, initially, medicine and surgery, and not psychiatry. All the programs came from hospitals. I was contacted by CIBA to do a program on psychiatry because they didn't want to be criticized for boycotting psychiatry. But, they, also, had run into people who told them, "No, you can't do this on television because of confidentiality and so on". A physician from CIBA came to Baltimore to see me and we talked it over. I thought it will be a wonderful opportunity to educate the public, so I agreed to do it out of my office. Now, my wife will tell you, she didn't think that was a good idea, mainly, because they had to set up all the equipment in the living room. My office was a wing to my house. And, we had the children running around, you know. And, the kids always brought their friends in. Actually, to do it, they had us build a special tower about a mile and a half up the road on a hill, so they could beam it off better. And, they had all this equipment and the kids were just fascinated. But we ended up that the whole front of my house had to be redone after the program was over. My office had punched holes in the wall to get the cameras and little microphones through. I had no idea how much was involved in a national TV show. They had these huge trucks in my driveway to beam the stuff up to the tower on the hill, which beamed it out to the rest of the United States. I had, beside myself, two psychologists working for me, then. I had also two trained internists, who had interest in psychiatry, and two psychiatrists working part-time working for me. In one segment we had the mother interviewed first and, then, the child, then, the psychologist giving the child some tests and so forth. Then, I had a big job, doing the first ECT on television anywhere in the world. And, that took some courage, because, first of all, I had to give the patient some succinylcholine. Well, that's, as you know, tricky. I did it deliberately in an elderly patient

because elderly people were considered to be not good candidates for ECT. Then, of course, I used amobarbital sodium to induce anesthesia. Patient was interviewed before treatment, and then again before going home to show that it can be done in the office. And, finally, we had a patient who had had lobotomy; a very intelligent, attractive woman, who came in and talked to the neurosurgeon. The neurosurgeon explained how it was done and so forth and so on. Then there was an interview with me on who should be seeing a psychiatrist and why. The attitude toward psychiatrists, like myself, who were doing physical methods of treatment was not good in those years. After the film was completed CIBA invited to dinner a large number of psychiatrists and not one showed up. Then people watching the film noted that the patient did not have a grand mal seizure after given ECT. I got phone calls and nasty letters that I'm a fake, and that I faked this stuff. And I wrote back and said, you have no idea what succinylcholine and amobarbital sodium does. The lobotomy part was very well received. Several neurosurgeons and psychiatrists contacted me with favorable comments.

TB: It's a great film.

FA: Well, I'm not sure whether I did get my message across in the film.

TB: You did several other films as well.

FA: Yes, in 1961 I also did for Merck Sharp and Dohme, a film called, *Recognizing the Depressed Patient*, in which, I interviewed a number of my patients.

TB: *Recognizing the Depressed Patient* was also published.

FA: Yes, and it sold a hundred and fifty thousand copies. It was a best seller.

TB: Was it translated into any other language?

FA: It was translated by Jean Delay into French. There was also a German translation but I did not see it. And there was a Spanish one translated by Lopez-Ibor. They're collectors' items today, if you can find them. Anyway, the film, *Recognizing the Depressed Patient* was shown and won first prize in an International Film Festival on scientific films. And I was very grateful to all those patients who let themselves be interviewed before camera. I, also, had another film, *Tom*, which has been very successful. It was on *Drug Induced Extrapyramidal Reactions* that was made available, I think, in ten languages.

TB: While doing those films you were involved in research.

FA: Oh, yes. I never stopped doing research in those years.

TB: You were involved primarily in clinical investigations and survey research.

FA: Oh, yes. Well, I did a survey on *Drug Induced Extrapyramidal Reactions*. It included 33,775 patients. It wasn't a one week or a one month survey. Those people were surveyed over a period of years. And, I'm proud of

the fact, Tom, that, I published the findings of that survey in JAMA so that my colleagues, who are not psychiatrists, can be informed about what we psychiatrists are doing, and that we psychiatrists are physicians.

TB: Well, you were one of the few who tried to communicate at the time that we psychiatrists are physicians.

FA: Oh, yes.

TB: Was not your paper in JAMA one of the most frequently cited papers?

FA: Yes, that's correct. On the 100<sup>th</sup> anniversary of JAMA, they did an analysis find out the 150 most frequently cited papers of the journal and my paper was number 20 on the list. It was also the only paper on the list that was written by a psychiatrist. It got a tremendous reception and a recent survey showed that's still a very, very frequently referred to article.

TB: And, then, in the mid-1960s you started your International Drug Therapy Newsletter.

FA: The International Drug Therapy Newsletter was started after a very strenuous tour of the Orient, Australia, New Zealand, Fiji, Japan, Hong Kong and Singapore. It was a very strenuous tour. I think it was a British epileptologist who arranged it, a very well known one, but I cannot recall his name now. But, at any rate, we met in Tokyo. My first stop was in San Francisco. I did something at the medical school there, then went over to Honolulu and did two stops there, at the Army hospital and at the medical school. Then, from there I went to Guam and met with some neurologists there. From Guam, I went to Tokyo, from Tokyo to Singapore, from Singapore to Perth, Australia, from Perth to Melbourne, from Melbourne to Brisbane, from Brisbane to Sidney, and from Sidney to New Zealand. I made several stops in New Zealand. It was summertime there but it was snowing at the top of the mountain.

TB: Was it Mount Cook where you went?

FA: That was the sightseeing place. I stopped there. It was beautiful.

TB: You were in Auckland also, I suppose.

FA: I was in Auckland.

TB: In Christchurch?

FA: Christchurch.

TB: And, Dunedin?

FA: Yes. I covered all of Australia and New Zealand. Anyhow, in Melbourne, John Cade was my host and John is or was a very devout Catholic. He's dead now, as you know. I hit it off with him just like that. I learned, from the horse's mouth, so to speak, everything I had ever wanted to know about lithium. We really covered the subject.

TB: So, the International Drug Therapy Newsletter was born after that trip.

FA: It was born after that, yes. As I said it before it was a very strenuous trip and my colleague, the epileptologist was older than I was. We were not long enough in any one place to really adjust, so he decided to stay and rest in Melbourne. In fact, I think he may have even gone in the hospital for a couple of days, just to be checked. And, I had a marvelous time just going around in those glass bottomed boats and seeing all those beautiful corals and fishes. But you can't do that all day long. So, one night I woke up and began thinking about what I'm doing here. So I had the typewriter that John Cade loaned me. It was a portable typewriter. So, I wrote a little thing to myself. I wasn't in a hypomanic state or drinking. I'm gifted with energy and I have a way of organizing things. I sent the piece to John. He wrote back and thought it was pretty good. So, with that encouragement, I decided to embark on what was to become The International Drug Therapy Newsletter. It was very interesting, the reaction to it. Gerry Klerman with whom I had been good-friends for many years, wrote me a letter, which I saved, saying, "Frank, I've read the first issue of this International Drug Therapy Newsletter of yours. It's good, but, I'm not going to subscribe to it, because it's going to be out of business in a short time. You'll run out of ideas". So, I said, "OK". So, to make a long story short, twenty-five years later I sent Gerry a lifetime subscription free. It's still in business.

TB: It's still in business?

FA: Oh, yes. Lippincott Williams and Wilkins bought it from me. If you're getting older you have to be careful with your time. It was a lot of work to keep all those records of subscribers who paid and hasn't paid straight. It is lots of work.

TB: And you wrote the Newsletter without any help.

FA: I wrote the whole thing.

TB: You wrote the whole thing.

FA: Occasionally, a colleague would come to my rescue if I got sick and couldn't get an issue done, so I would, occasionally, invite somebody, whom I thought could do much better than me on one or another topic. I asked Bob Post or Fred Goodwin or Leo Hollister and so forth.

TB: Was it distributed worldwide?

FA: Yes, but primarily in the United States. But I had subscribers from Canada, UK, Switzerland, Australia, and New Zealand.

TB: So, it was distributed all around the world.

FA: Yes, but things were getting increasingly difficult because drug companies started to send out reports on their meetings, and others have started their own little things. When I started the newsletter it was the only newsletter.

TB: Yes.

FA: And, then, Drug Alert was put out by John Powers and some other publications.

TB: You gathered in the Newsletter all the important events in neuropsychopharmacology monthly.

FA: I tried to.

TB: And you reviewed the material you gathered critically.

FA: Well, there's also another thing I do, Tom, and I've been doing it for some years. I write for Psychiatric Times.

TB: Yes.

FA: I write an annual report on the highlights of the APA meeting.

TB: Your writings have an important impact on the field.

FA: I hope it has. I hope it has.

TB: After launching the Newsletter, you organized a very important meeting dedicated to the history of the field

FA: The Discoveries of Biological Psychiatry.

TB: The Discoveries of Biological Psychiatry.

FA: And, Donald Klein at this meeting, so kindly referred to it at the end of his presentation yesterday, saying, "I couldn't have done this without Frank Ayd's support".

TB: Yes.

FA: But, my idea, Tom, was, why not get the guys who have made these discoveries, while they're still alive, together in one place to tell their story themselves. And, I proposed this to Dr. Taylor, because the hospital would have to be sponsor for it. I knew that it wasn't going to be an inexpensive venture, to say the least, because we had to bring in John Cade came from Australia, Lopez-Ibor from Madrid. We had...

TB: You had Pierre Deniker from France.

FA: We had Hugo Bain from CIBA. We had Albert Hofmann, the LSD man from Switzerland. And, then, I had my professor in pharmacology, John Krantz, who's a great lecturer, tell the story of Indoklon, which was never a great replacement for ECT but still gave hope that there could be some alternatives.

TB: You, also, had the amphetamine story told.

FA: Yes, the amphetamine story told by, what's his name, the fellow from California. I can see his face in front of me...

TB: Chauncey Leake. You, also, had Tracy Putnam there. He gave the diphenylhydantoin story. What happened to him?

FA: He's still alive, but I understand he's quite feeble now. I would think he would be, because, after all, that's forty years ago, almost, now. No, that's thirty-one years ago, thirty-two. Well, I was anticipating the possibility

that anticonvulsants will end up being mood stabilizers. Tom, I remember this guy, Dreyfus, the big investor guy, who claimed that he was cured of his instability by taking Dilantin. And, this got a lot of publicity. He felt that he had found something that could help a lot of people like himself. And, he assembled in Florida some of the top people in business. And in the middle of that meeting, when everybody was just relaxing, television announced that the son of one of the participants, an internist from the Mayo Clinic, had just won the Nobel Prize. And, I'm telling you everyone felt like it was his son. It was quite a celebration. Out of that meeting came a full day symposium on Dilantin at the ACNP meeting in San Juan. Dreyfus came and told his story. He also drew up grant money for various studies done at Hopkins, at Columbia and so forth, most of which did not hold out much promise for the drug.

TB: Going back to the meeting on Discoveries in Biological Psychiatry, you had Frank Berger there.

FA: Yes, Frank told us his meprobamate story.

TB: Then you also had Joel Elkes.

FA: Joel Elkes, yes.

TB: He had the first department of experimental psychiatry and done the first double-blind cross-over study with chlorpromazine.

FA: Yes, the first double blind study with chlorpromazine. But, you see, I had to know all those people. I had to know, not only what they did, but who they are, what kind of speakers they are.

TB: You also had Paul Janssen there.

FA: He did the haloperidol story.

TB: The butyrophenone story.

FA: Oh, yes, that's right.

TB: It was in 1970, right?

FA: Yes.

TB: And, you published a book on it with Barry Blackwell.

FA: Yes, Barry and I edited the book.

TB: It was probably also a best seller.

FA: Oh, yes. It's out of print now, but I have the copyright to it and I'm planning to reprint it, sometime, when I find the time.

TB: I am using it very extensively. It is an excellent source book.

FA: That's right. It's very authentic.

TB: Yes, when people tell their own story.

FA: When I wrote to these very well known guys I told them if they want to be on the program they must arrive couple of days ahead with their manuscript.

TB: To be able to publish the book promptly?

FA: The book was published two weeks after the meeting was over. Barry would edit the chapters as we got it from them. When they presented their papers they already had the edited version in hand. And on Sunday night, after the meeting was over, I sat up with a guy from Lippincott till about three in the morning, finishing off the final touches. It was a lot of work.

TB: In the early 1970s you became involved in drug delivery systems.

FA: Absolutely.

TB: You recognized the importance of giving neuroleptics in long-acting depot preparations. Would you like to talk about that?

FA: Well, you know, if a drug is going to be beneficial to someone, the person will have to take it by a particular route and you might enhance the benefit by by-passing some metabolic pathways if given parenterally instead of orally or by a deep intramuscular injection instead of subcutaneously. Actually, the story of depot preparations is an interesting one, Tom. I did the first study on fluphenazine for Schering and the company was doing quite well with the success of the drug. This might have been the reason that Charlie Revlon was buying up Schering stocks. Schering wanted to stop this and the only way they could do it was to merge with another company. So they merged with White Laboratories. I knew White Laboratories very well, because they were predominately a pediatric pharmaceutical company, and my father had contacts with them. They produced a lot of vitamin preparations for children. It turned out that those vitamin preparations came from Squibb. So, anyhow, to get Revlon out of the picture, the merger between Schering and White Laboratories was finalized. The agreement was that Schering would continue with fluphenazine at an adult dose whereas White, being known as a pediatric pharmaceutical company, would market a low dose of it. Well, shortly thereafter, Squibb, which had already developed a way of producing a depot formulation, said to White Laboratories, we want the rights to fluphenazine and if we don't get it we will not produce the other stuff for you any more. Basically, that's what it was. So, that happened. So, then, they developed a depot formulation of the drug. The first one was the enanthate that worked for two weeks. And, then with some more structural manipulation they got the decanoate that lasts from four to six weeks. That was the beginning of the depot formulations. Now, there are close to twenty-seven or twenty-eight different depot preparations of antipsychotic drugs available, and you're going to see some of the atypical depot preparations in the not too distant future.

TB: The availability of drugs in depot preparations is very important for developing countries, like India. They use them, probably even more extensively than we use them in the Western World.

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- FA: Oh yes. But depot preparations also have their drawbacks. There are inconveniences associated with them. I mean, either a nurse has to go to the patient or the patient has to come to a clinic. So, the clinic has to operate on schedules that people can come, say at night, because they can't get off from work without losing their job, to get their shots, usually. So, a lot of things are involved in it. I envision that eventually we will see olanzapine, risperidone, ziprasidone available in depot preparations. Clozapine, I think, would not be available because it would be too risky.
- TB: You were also director of research and education at the Taylor Manor, and professor at...
- FA: West Virginia; University of West Virginia. Tom, to be perfectly truthful, that was never intended. The young fellow, I had known for some time, who became chairman there had an accreditation visit shortly after he took the job. And, there he was, a young man, about thirty-five with all the residents without senior people, so to speak. So, the question was raised, where are your old people? I don't have any he said. He was asked why he is not getting some senior people in to help out. So, he called me and asked me if I would come down and help him. So, I went down and the agreement was that I would teach a certain number of hours every month. Usually I went down either Wednesday and be there Thursday and Friday and came back Saturday morning, or go down on Sunday evening and be there Monday and Tuesday and come back Wednesday. That worked fine and I was pleased. They were pleased. I'm still, officially, on the faculty and still get invited to graduations and all the faculty ceremonies, but in fact I haven't been there to teach for the last few years.
- TB: You became emeritus at Taylor Manor in 1987, I think, and when you became emeritus they changed the name of the library of the hospital to...
- FA: Oh, yes. You know, I'd been admitting patients to that hospital since 1951. I built that hospital's reputation, even before I became the director of professional education and research. And, to show their appreciation Dr. Taylor said to me, "I'd like to name the library the Ayd Professional Library at the hospital". They had a little ceremony, and put a plaque on the wall. So, a number of doctors from Washington came and we had a very pleasant luncheon. It was nice. I felt very glad about whatever I'd done to help them and their patients.
- TB: ACNP also recognized your contributions. You were recipient of the Paul Hoch Award.
- FA: The College has given me two awards.
- TB: The other one was the Distinguished Service Award.
- FA: That's right. That's correct.

TB: But, the same year when you got the Paul Hoch, you got also another distinction, The Open Mind Award.

FA: Yes, from the Janssen Research Foundation. That year, it was Pierre Deniker and myself who got that award. Since then, Hans Hippus, and the fellow who was in New York and now is back to Holland...

TB: Herman van Praag.

FA: Yes, Herman van Praag, he also got it. I don't know if it has been given since that time to anyone else.

TB: Then, The Psychiatric Times gave you also an award.

FA: Yes, yes, they did. They gave me The Lifetime Achievement Award.

TB: You got it in the early nineties.

FA: Yes, and they gave Paul Janssen the same award also that year, and, to somebody else as well, but I've forgotten who it was.

TB: In the mid 1990's you were listed among The Best Doctors in America.

FA: Yes. I don't know how that happened. I think, they wanted me to buy a copy of their book. Still, it's an honor somebody thought I deserved to be listed.

TB: Then, in the mid-1990s, you also got The Distinguished Professor Award from The Center of Psychiatry.

FA: That's right. Tom, I've been blessed. There's no question about that; I've been blessed. As a Catholic, for example, I was honored to become a member of The Holy Name Society, and, to my knowledge, I'm the only psychiatrist that The Maryland Holy Name Society awarded this honor. And, then, I got from the Palatine Fathers, the Saint Vincent Palatine Award for service to the church and the state. These things always come as a surprise to me.

TB: They were well deserved.

FA: Well, you know, when it happens, you're grateful that it happened. But I have a duty to teach my children don't let pride become a big item.

TB: Now, all through those years, you did practice and saw patients

FA: That's right.

TB: And, you said that at the beginning you had your practice in your father's office.

FA: Oh, yes, that's was only for about a year.

TB: And, then, you moved into...

FA: I moved into a wing of my home. I bought an old country home, tore down the barn, and got the ground for my wife and the children. Then, I built a wing on. It took about eight months for them to dig out the foundation, run in the water and all that sort of stuff. Then I moved immediately full time into the office. And, the office was set up in such a way that there were two floors. In the basement we had beds where I could give

ECT. And, then, on the other side of the basement there were four offices for interviewing patients that the psychologists and social workers could use. On the first floor there was a big reception room, my office, offices for two psychologists, or internists, or whoever was working at the time with me. And then we had storage place for the records of the patients.

TB: Did you have usually two psychologists working with you?

FA: Yes.

TB: Did you also have psychiatrists working with you?

FA: Yes.

TB: How many?

FA: Well, it varied. It really varied. I had a very fine board certified psychiatrist from Argentina who was very fluent in English. He was a distinguished looking and soft-spoken man. He worked for me until he died. He died, prematurely of cardiac arrest. And, then I had a fellow, whom I'd met in a strange way. You know, I'm a Catholic and I have never charged widows and so forth. And, God has been good to me, so I pay Him back any way I can. I used to go to the Bahamas, once a year, and donate a month of my time to the church and outpatient clinics there. And, I also help in the psychiatric hospital. These things were my way of saying, "thank you." I've lost my train of thought. What was the question before?

TB: We talked about your office, about people who worked for you, and that one of the psychiatrist working with you that you met while donating your time to the Church in the Bahamas.

FA: He was a board certified psychiatrist who was also donating his time to the Church. He was down there with this wife and two children, and he wanted to go into private practice. So I gave him a job. His wife was expecting their third child, then. So, we gave them the third floor of our house to live up there. He would be on call twenty-four hours a day.

TB: So, you usually had at least one psychiatrist to cover for you when you were away, right?

FA: No, actually when I was away, Taylor Manor Hospital covered for me.

TB: Oh.

FA: They had people on duty twenty-four hours a day. I have almost forgotten but I also had a fellow working with me, who ultimately became a neurologist. During his residency he got married and his wife was expecting a child. So he needed some extra income. He did physical exams in the office.

TB: And all through the years you have been doing clinical investigations in your practice.

FA: Lately I've been involved more, as a consultant, than in actual research. You get to the point in this business, so to speak, Tom, that you begin

to put together which way the wind is going to blow with one or another particular compound. For example, I had a tremendous experience with the depot neuroleptics, so Squibb had me go to the Orient, and I gave lectures in Singapore, Hong Kong, Tokyo. They, also, had me in Australia to give some seminars on depot neuroleptics, setting up the clinics and that sort of things. It is important how you set up the clinic, how you schedule the appointments and how you consider the patients. Doctors can be cruel people, Tom, and I've witnessed this in clinics, you know, where patient comes in to get a depot injection and some guy pulls the dress up and pulls the pants down while the patient is menstruating. You know, it's a terrible thing to do. And that creates hostility on the part of the patient, and, boy, you try to get them back – it's impossible. Now, for example, recently at a meeting of one of the pharmaceutical companies that has an atypical neuroleptic to be studied in a depot form, I listened to their plans and said, "You're going down the wrong road. This isn't going to work", and pointed out, that you need to schedule things properly and for this you've got to have nurses who understand this; you've got to train people; it's not just a matter of injection; you've got to know how to use the needle that it wouldn't hurt. These are very simple things that apply to all of the depot neuroleptics.

TB: So, lately you have been more involved in research as a consultant. Which were the last drugs you were actively involved with as a clinical investigator?

FA: I worked with zimelidine. That was an unfortunate story. It was a very good antidepressant drug, and, then "bingo", something that you could not predict from animal data happened. Before it was released for clinical use, Tom, they brought together a remarkable board of experts to advise them. Leo Hollister, Bob Post, Malcolm Lader, I, and many others were there. The company wanted to be a success without any risk to the patients whatsoever. They had had a couple of other drugs that had backfired on them, so they were really touchy about this thing. And, they brought us all to Sweden and treated us very graciously. There were no holds barred on the data. We saw all of their data and it was the consensus that it was a good drug and, as you know it was marketed, but unfortunately it produced neurotoxic effects

TB: So it was zimelidine the last antidepressant you were involved with as an investigator. What about antipsychotics? Which was the last antipsychotic you were directly involved with as an investigator?

FA: Well, the last one would have been clozapine.

TB: Clozapine.

- FA: I got involved with clozapine in a strange way. Warner Company in Bern, Switzerland, a small pharmaceutical company, invited me over to give a talk on antidepressant drugs. I wondered why because they didn't have any antidepressant, to my knowledge. And, I went over and after I gave my lecture they showed me data they had on a new compound that they thought to be an antidepressant drug, and they wanted me to do a study with it. So, I brought back with me the data and after studying what I got carefully I wrote them back and said, I'd be willing to do a study. And the drug turned out, Tom, to be a very effective antidepressant in a certain dose-range. I had seen no serious adverse effects with it until ninety percent through the study. It looked very good, then, "bingo", a fatal agranulocytosis occurred in an elderly woman. And, of course, I reported it to Warner. The drug turned out to be a predecessor of clozapine. So, shortly after that, they merged with Sandoz and Sandoz got all the derivatives of this compound. And, I ended up being consulted by Sandoz, quite frequently. I'd fly over to Basel, Switzerland for a weekend, or for three or four days. This is how I got involved in a small study with clozapine.
- TB: From early on you were frequently one of the first to describe one or another adverse effect of a new drug. Didn't you write something about akathisia and suicide recently? Were you the one who thought first that there was a possible relationship?
- FA: No, I was not. I was the first to say that people who say that are wrong. What happened, Tom was, that there were a number of letters to the editor on akathisia and suicide based on very weak scientific data. I wrote a rebuttal to some of these letters that was published. Just recently, I published an issue of the Newsletter on extrapyramidal reactions with the various atypical antipsychotics, and the fellow, who wrote it for the Newsletter, brought up the issue of potential suicide because of akathisia. I wrote a rebuttal to that and it's been published. If you'd like to see it, I'll send you a copy.
- TB: I knew you wrote on the topic and I should have read it.
- FA: Well, the difficulty is that both, akathisia and suicidal ideation are common and statistically you are going to have X number of persons who have suicidal ideation and akathisia together.
- TB: So, you don't think that there is a relationship between them.
- FA: There isn't. There isn't any. Now, it's possible that akathisia make some people so uncomfortable that they act impulsively, but this is not necessarily a suicidal action induced by a desire to die.
- TB: In the middle of the 1990's you became involved in writing a book in collaboration with some people...

FA: John Davis, Sheldon Preskorn, Phillip Janicak and myself, yes.

TB: It was on *The Principles of Psychopharmacology*.

FA: *The Principles and Practice of Psychopharmacotherapy*. The third edition just came out. It's been very successful. The second edition is now translated into Russian and, now, there are negotiations to have it come out in Chinese and Japanese. It's been a very successful book. It's very practical and fairly comprehensive. If you pick up a copy of the latest edition, the foreword to it was written by Jonathan Cole and Jonathan was very, laudatory in his comments on the structure of the book, its coverage in terms of comprehensiveness, and its clarity of presentation. It's a good book for practitioners. Whether we'll have a fourth edition, who knows?

TB: It seems to be very successful. And the same applies to your *Lexicon* that is also very successful.

FA: The first edition of the *Lexicon* was quite successful. The sales of the second edition have been a delight. And, the reviews of it have been, I think, very objective and laudatory.

TB: The *Lexicon* covers psychiatry, neurology and neuroscience. It is really more than a *Lexicon*. It's like an encyclopedia.

FA: Well, Floyd Bloom was a peer reviewer of it. He's a very busy man, editor of *Science* and he was the first to comment that, "This is no longer a *Lexicon*. This is an *Encyclopedia*". And, I took a poll of other people whose opinion I respect and there were many of them who agreed with him. There were a few dissenters who felt that in the minds of people this was established as a *Lexicon* and if we try to change it to *Encyclopedia* it'll confuse people and they will not be inclined to buy the third edition and five years of labor will be going down the drain.

TB: You had an editorial board. But, it seems to be that you did most of the work.

FA: Editorial boards have perspectives but if you respect the people on the editorial board enough to have them on the board, you ought to respect their judgments, unless it's so way off beam. And, I picked some psychiatrists because of their broad experience and some very bright, young psychiatrists. I didn't expect them all to be expert writers. They could write some things or call my attention to something, and they were very helpful. I'm grateful to them; I tell you that. But, basically, the writing is mine.

TB: How long did it take you to write it?

FA: Five years. The second edition took five years. It has a thousand new entries in it, and the size of the book increased from 500 to 1200 pages.

TB: One of the reviewers of the book said in his review that no one else could have done this, and it's true.

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- FA: Well, I'm glad to hear you say it's right.
- TB: Could you mention some of the people who might have had an impact on your professional development?
- FA: Tom, there are very many that I could name, but will pick out for you just a few. One of them was Paul Janssen. He is clearly a great pharmacologist. Paul Janssen is not a psychiatrist, but he's a genius. He's got a gift. Paul and I met under strange circumstances at an annual meeting of The American Academy of Chemistry in New York. He was presenting a paper on How To Cure It All and I presented a paper on Structure Activity Relationships. I didn't meet Paul before but I knew who he was, by reputation. And, after he delivered his paper I went over and talked to him; we ended going out to dinner and that was the beginning of a very valuable friendship, for me anyway, and I hope for Paul also. I've spent many hours with Paul at his home and at meetings. Another person I would like to mention is of course Heinz Lehmann. Then Malcolm Lader is also one.
- TB: Just one more question. Do you think your expectations at the beginning of your career to bring back psychiatry into medicine are fulfilled?
- FA: We're not a hundred percent there, but we're getting there. I mean, there's no question about it. Look at what Representative Kennedy had to say yesterday about the attitude of people toward a person who has a physical illness vs. the attitude of the public toward a person who has a psychiatric illness. The stigma is still there. There's no question about that and we've got to eliminate that. We're getting closer to it all the time. We've got to educate the public. That's one of the reasons, in fact why I did that television show on ABC many years ago. I didn't get paid for that. I had a lot of headaches because of it, because I was trying to run a practice and they were running wires through my house.
- TB: Do you think we are moving in the right direction?
- FA: Yes, we are moving in the right direction.
- TB: Is there anything else you think that should be mentioned?
- FA: No. I think we have a right to be proud.
- TB: I think we are proud, lucky and thankful to you that you were willing to share all this information with us. Thank you very much.
- FA: You're more than welcome.



## **JONATHAN O. COLE**

**Interviewed by Carl Salzman  
Cambridge, Massachusetts, October 8, 2008**

CS: Good morning. I am Carl Salzman at the home of Dr. Jonathan Cole in Cambridge, Massachusetts. It is Tuesday morning, October 8<sup>th</sup> 2008. We're here to talk with Jonathan about his remembrance of the ACNP, and his role in matters related to the organization. Jonathan, perhaps we could start by you just telling a little bit about how you got involved in Psychopharmacology?

JC: Well, I'll give you the shortest version. I was in Washington, working for the National Academy of the Sciences two years after my three year residency in Psychiatry at Payne Whitney and my two years in the Army. They advertised the job to everybody getting out of the service that year and I took it. One of the Committees of the National Academy was supposed to be advising the Army on research but the Army did not want to be advised. So, when the new drugs Thorazine (chlorpromazine) and reserpine came along they told me to go to the NIH to find out what scientists were doing there with the new drugs. They were not doing much. Ed Everts was doing studies on the effect of drugs on brain function and Steve Marchetti was studying biochemical abnormalities in schizophrenia but they didn't have any clinical work going on. They were also starting to organize a big conference on how to evaluate psychiatric drugs and needed somebody to run the conference. Ralph Gerard, an eminent neurophysiologist, was going to be the 'lead-man'. To make a long story short, I became the 'wing-man', the coordinator of the conference!

CS: Now, could you say something about the creation of the Psychopharmacology Service Center?

JC: What actually happened was that while we were working on developing the conference that was to take place in the fall of 1956, Mike Gorman and Nate Kline were testifying to Congress on the urgency of providing support for research with the new drugs. Some people were saying that the new drugs were totally ineffective and psychoanalysis was the key to any therapy in psychiatry, but Nate Kline and Mike Gorman testified and persuaded the congress to provide two million dollars to the National Institute of Mental Health to do a big co-operative study in state hospitals, run by medical schools, to find out whether they work or not. So while we were preparing for the conference in October, grants, in the amount of the two million dollars were allocated for Psychopharmacology research. It was a real first step. The NIH, needed somebody to run the program and I was available. I don't think anybody else applied. It was

handy that I was a psychiatrist and had had some experience with committees. So, I got the job.

CS: What year was that?

JC: It was the summer of 1956.

CS: And, then Gerry Klerman came along?

JC: That was later. I'd been lucky in setting-up the Psychopharmacology Service Center (PSC). Sherman Ross, a psychologist with many friends in many places helped me recruit excellent psychologists. A year or two later, somehow Massachusetts Mental Health Center sent Gerry Klerman down to work with me. He was followed by a series of young psychiatrists, A couple came down and spent two years with me and have gone on, mainly to better jobs.

CS: That's how I first met you; I went to work for you at the NIMH in 1967. But by that time, the PSC was well established with many, many wonderful people. Along the way you had created the early clinical drug evaluation unit network.

JC: Yes.

CS: When and how did that start?

JC: My time points are unclear. We were involving nine hospitals in a comparative study of Thorazine (chlorpromazine), Mellaril (thioridazine), Prolixin (fluphenazine) and placebo in schizophrenia and in the course of that process, I would guess about 1959 or '60, my staff, working with doctors who did early clinical drug studies, saw that these doctors were going from one little study to another little study without having any enduring support. So, I thought it would be a good idea to have some kind of grant program to support them, to carry them along in order to be able to do their research on their own and not drug company directed. I persuaded Dr. Shannon, the head of NIH to support it at the time. Then, Bob Felix succeeded Shannon and became the head of NIMH. For ten years he was testifying annually to Congress about our budget and people like me would help him fill-in the typescript of the actual testimony.

CS: This was in the 1960s?

JC: Yes. One of my chief deputies, Sy Fisher told me in recent years that he learned administration from me. My reaction was, huh, I didn't know any administration. Actually, what I saw my main task was preparing letters to Congressmen and to the White House. I turned out to be good at responding to all kinds of irrelevant questions. So, I would answer all the requests and that would free up my staff to do the real work, to get the studies going.

CS: You were there at the inception of the phenothiazine era.

- JC: I enjoyed watching drugs develop and seeing whether they would blossom or not. I think as time has gone by we had less good drugs and more elaborate and dubious studies.
- CS: Do you think more dubious studies now than there were then?
- JC: Yes, I think so. You know, my final will and testament, I guess, is that if you're working with a drug in 100 patients and a few of the patients hadn't said, 'Wow, do I feel better', then you probably haven't missed anything and the drug probably isn't going to turn out better than the placebo.
- CS: Now, also in those early years, antidepressants began to come along
- JC: Yes.
- CS: You had imipramine and amitriptyline first and then things began to expand. How did you see that?
- JC: The more drugs we had, the more we found that every new drug seemed to find a handful of patients that weren't responding to the old ones.
- CS: It was you and Gerry Klerman who created the first large-scale, multi-site study to study the effects of new drugs in schizophrenia. .
- JC: Yes. He and I and Sol Goldberg did. Well, actually, the VA ran a study before we did, but we did the first one that was outside the VA. And I had learned from the VA study. Prior to their studies in schizophrenia, the VA had been running several multi-site studies in tuberculosis, but this was before I came along.
- CS: I see. And then you got involved with lithium,
- JC: Yes.
- CS: Tell us about that.
- JC: I had heard and read about lithium. I think by that time, Ralph Gerard's Ypsilanti State Hospital research unit had Sam Gershon who worked with lithium as a resident in Australia. We went out there and got educated about it and the FDA kept lithium alive. A guy named Merlin Gibson, who was not a psychiatrist, was sympathetic and let lithium carbonate to be given as an investigational drug to almost anybody who wanted to give it to almost any patient. Then we got two double blind multi-center clinical studies going and the complexities of life began because in the two cooperative studies we didn't get the same answers.
- CS: What were the answers they gave?
- JC: Well, in the first study lithium worked pretty well. In the second one we got mainly lithium failures. We figured that we had a different group of people in the second study. By the time of the second study lithium had gone on the market.
- CS: So, what happened next?
- JC: I got mildly irked because an upstate Minnesota group had been working with lithium and they could have been given the right to market the drug

earlier but they were held back until Pfizer and Smith-Kline-Beecham were ready to go on the market and that was sort of unjust, I thought. But that was not my department.

CS: OK, and then the last group of new drugs that were being developed in those years were the benzodiazepines. What do you remember about those?

JC: Well, I think they had been subject to bad advertising as time passed. I'm currently bouncing in and out of a hospital, and when you get in there and get upset, they're happy to give you Percocet a fairly powerful opiate but they won't give you diazepam for sleep. Whether they're right or not, I don't know. So it's become a nightmare.

CS: What about in the 1950s and '60s?

JC: Meprobamate came just before the benzodiazepines. It hit the market before the Psychopharmacology Evaluation Conference in 1956 and Wallace labs wanted to be included in the group participating in the conference.

CS: Was Wallace Laboratories the manufacturer of meprobamate?

JC: Yes.

CS: Then, Roche was releasing Librium.

JC: That came later.

CS: OK. Now, turning to the ACNP, do you remember how it got started? Who got the idea?

JC: I suspect it was Paul Hoch. Paul Hoch and Ted Rothman, a psychoanalyst in Los Angeles who used drugs in psychotherapy, held a meeting in the Barbizon in New York. Joseph Wortis, I, Fritz Freyhan, Heinz Lehmann, and I can't remember who else, about 15 people were there.

CS: Could you name some of the others?

JC: Doug Goldman, I think. They have records in Nashville, as to who were there.

CS: Did someone think up the name ACNP right at the beginning or did it come along later?

JC: I presume it was Joel Elkes, but I don't know when.

CS: If you think back to that early meeting, who would you think were most important in establishing the ACNP?

JC: I think Paul Hoch was one. Ted Rothman was sort of the driving force who would travel around and do almost anything to get it started. Paul Hoch was the senior commanding officer, the Dwight Eisenhower, of the operation.

CS: How did the meetings in Puerto Rico start?

JC: The group didn't meet in Puerto Rico for several years because Hoch thought it was inappropriate. Well, there were other people like me who

thought that meetings in Puerto Rico would be sort of fun. Then Hoch died and we moved to Puerto Rico. It did turn out to be good. We had meetings in the morning and then, like three hours around the pool and meetings in the afternoon. It worked fine, until we got too big.

CS: Well, we'll get to the size in a minute.

JC: Yes.

CS: Did the CINP also start around that time?

JC: It was sort of established by then.

CS: Now, the ACNP started as a small organization.

JC: Well, I think it was eighty some people.

CS: Who were the original people who attended? Were they mostly just researchers?

JC: It was a mixture of laboratory researchers like Peter Dews, and clinicians like Fritz Freyhan. We had working groups of people who seemed to enjoy the same topics, so they would discuss their recent findings.

CS: Were all of the annual meetings in Puerto Rico in the beginning?

JC: One out of three or four were back in the States. Then we began to have meetings also in the west.

CS: Did the ACNP have any other function early on, or was it just an annual meeting?

JC: I think we reviewed a policy statement coming out of the FDA at one point or another and I know we gave a statement on tardive dyskinesia whenever that became prominent.

CS: That, tardive dyskinesia, was George Crane's area.

JC: Yes.

CS: Were the ACNP and the ECDEU working together?

JC: They had an over-lapping membership. We would all attend meetings in Puerto Rico.

CS: Were most of the people who attended those early meetings academically based or were there some private researchers who were operating independently.

JC: It was a mixture.

CS: Did your own work and the ACNP interact at any point?

JC: We provided research funds to the ACNP at one point, early on. I managed to have them apply for and get a grant to support for four or five years, which was, I think helpful.

CS: Were drug companies invited into ACNP right from the start?

JC: Yes.

CS: Do you think that was helpful to the organization or did it interfere with free exchange of information?

JC: I think it was helpful. I think without financial support, a certain amount of spark from drug companies they wouldn't have gone forward.

CS: Did the posters start out right at the beginning or was that a later innovation?

JC: Probably five to seven years after the ACNP was established.

CS: Did the drug companies would submit posters as well? They do now. Did they do it back then?

JC: Probably, I don't remember there being any exclusion on them.

CS: I see. Do you feel that the posters from drug companies were helpful?

JC: We thought they were interesting. Nobody was really worried about investigators' arms being twisted or their minds being bent by drug companies.

CS: All right. Well, in the early years, did you feel there was any conflict of interest?

JC: No, I don't think so. I think that people followed their own ideas and decided what they wanted to. We realized the drug companies had a bias and they probably realized we had a bias and we did our own studies.

CS: Was the ACNP largely about getting money from the companies?

JC: The committee on drug dependence had developed a model of getting drug companies to put money in. And they had meetings with industry and investigators and the whole thing worked out. Nathan Eddy was the guy, a chemist at NIH who masterminded all that.

CS: So that was a model for ACNP?

JC: Yes.

CS: And for the ECDEU?

JC: Yes.

CS: So now here we are in two thousand and eight and there's a great deal of concern about possible conflict of interest, do you have any thoughts about that?

JC: I think it's really over-blown, exaggerated.

CS: Do you feel that the ACNP itself has been influenced too much by the presence of drug companies and their money?

JC: No, and I'm not sure which directions the drug companies wanted us to go in.

CS: OK. Do you have any particularly fond memories of the early years of ACNP?

JC: Oh, I wish we had recording of what happened at the annual meetings when Heinz Lehmann introduced me as president. He gave a very nice speech about me; I would love to have a copy of it.

CS: OK. Let's jump and let me ask you if you were president of ACNP today, would you do anything differently?

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- JC: I'm not sure I would.
- CS: Well, let me ask you a few specific questions.
- JC: OK.
- CS: Do you think the ACNP, the organization, or the annual meeting has gotten too large?
- JC: Yes.
- CS: Would you continue to hold annual meetings in nice resort-type places?
- JC: Yes.
- CS: Why would you do that?
- JC: Well, everybody likes it and I think more people are talking to each other.
- CS: So, you feel one of the great values of the ACNP is this informal discussion that goes on.
- JC: Yes. I think so.
- CS: And you would continue to have drug company presence?
- JC: Yes.
- CS: As much as it is today?
- JC: I would probably continue as it is. I just don't know of any negative or unethical or embarrassing event for the organization that they have done.
- CS: In terms of the length of the meeting, would it continue to be more or less as it has been?
- JC: I think five days from Sunday through Thursday is probably as long as anybody can stand.
- CS: Now, what about activities of the ACNP now, as compared to the beginning? Do you feel that the ACNP should be more involved in political discussion or less; more involved with academic matters, FDA matters, etc?
- JC: I think it should be more involved in advocacy matters with the FDA and, I guess more involved in political matters. I just don't know how much that would cost.
- CS: Do you remember how ACNP's involvement in advocacy matters started?
- JC: Danny Freedman was the leader on that issue by testifying on the hill.
- CS: Do you remember what the testimony was about?
- JC: I know that part of it was about an opiate related issue.
- CS: I remember that Danny Freedman was very interested in LSD. Did the ACNP get involved in the LSD controversy at all?
- JC: No.
- CS: You set-up ECDEU which now is called NCDEU as a group of researchers who could individually or collaboratively do psychopharmacology research without the drug companies.
- JC: Yes.

CS: So, they were conflict free. Do you see a role for some organization like that again?

JC: Oh, it's still going and it has a meeting annually in the spring in Florida.

CS: That's correct, but it's not being funded by NIMH anymore.

JC: Only in the last two or three years

CS: Do you think that the ACNP should have any role in such an organization, either supervisory or financial or collaborative?

JC: It's certainly worth thinking about it but I can't tell whether it would be better or worse.

CS: I just wanted to say one more thing to those who will be watching listening this tape: I went from the Mass Mental Health Center to work with Jonathan from 1967 to '69 and my experience with Jonathan at that time was that he was a they superb researcher and clinician. Jonathan, as the leader, had in his head a wealth of information about psychopharmacology. So, in the pre-computer era, if we needed an answer to a psychopharmacology question, we simply asked Jonathan. And Jonathan would look up at the ceiling, and say, for example, 'Well, let's see, a study was done by some Hungarian psychiatrists with 1,200 people, 700 were male, 500 were female and the average age was so and so, the doses of the drugs given were so and so, and that was the outcome.' And, that, frankly, I think he was a better resource than what we have now.

JC: Things get too big. My information system was based on key cards and several thousand references.

CS: I remember that.

JC: It worked very well. They expanded it to the mental health information system with a small database and staff, and then the system fell apart. You just couldn't get a reliable coding system of that size.

CS: Let's see if we can just name some of those people at the PSC?

JC: OK. Sol Goldberg was an administrator and then he became a co-investigator. Sy Fisher got into side effects studies in the community at the University of Texas, Galveston branch. Martin Katz ran a big depression study at Einstein mainly with the people in Texas.

CS: And still is.

JC: And still is. Mitch Balter ran a bunch of studies on the use of illicit drugs, internationally.

CS: Mitch was a force of nature.

JC: Oh he was. He couldn't write, but you could team him up with people who could write and run studies. He had all the ideas, they'd run the studies. He was great.

CS: There was Jerry Levine

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- JC: Jerry Levine was the psychiatrist who spent his time down there but there was a guy earlier than him who was my deputy.
- CS: Irene?
- JC: Irene Waskow did the psychotherapy study.
- CS: And Al Raskin?
- JC: Al did a depression study and moved to Detroit. And...
- CS: George Crane.
- JC: George Crane certainly documented the existence of tardive dyskinesia.
- CS: Well, all of those people who were there in the early 1960s, played major roles in the ACNP as well. And we should also mention Gerry Klerman and Roger Meyer and Dick Shader and the other Mass Mental Health Center trainees who came through under your guidance. Thank you Jonathan very much.
- JC: Thank you
- CS: Great to talk with you.
- JC: Thank you for coming. Thank you for doing it here.
- CS: And, congratulations to the ACNP. It is the best meeting that I go to every year. It is the meeting I've learned from the most. It is the organization that I feel the strongest loyalty for and I love it.



## THOMAS DETRE

Interviewed by David J. Kupfer  
Pittsburgh, Pennsylvania, October 2, 2008

DK: Tom, good morning.

TD: Good morning

DK: How are you? I'm trying to remember when was the first time that you went to an ACNP meeting?

TD: I believe I was already in Pittsburgh when I went to the first ACNP meeting. I was curious how a meeting of an academic society operates differently from the very large meetings of the American Psychiatric Association (APA), in which not only academics but also practitioners participate. I was very pleased to see how my colleagues interacted. Small evening seminars were the highlights, especially in the early days when there were fewer of us attending the annual meeting. It was a wonderful learning experience and I immediately decided I would like to become a member of the College.

DK: So that, that was probably around 1973.

TD: Being at an ACNP meeting was very different from being at the meeting of any other so called academic society by its greater cordiality and intimacy. We had a shared interest, we were all in academic medicine and we were all curious about what the future holds for us. Psychopharmacology made great strides and we had unreasonable hopes that we are going to arrive at very effective treatments in the near future. I joined the college in 1974 or '75. We thought in those days that we have these wonderful new drugs. While we did not know much about their effect on the central nervous system, we believed that by using them we will derive to some very important information regarding the etiology and the pathogenesis of psychiatric disorders. Well, that hope was not fulfilled; those drugs were dirty drugs which acted on many different systems in the brain.

DK: Exactly. Right from the outset ACNP has been a very multi-disciplinary group of individuals. It wasn't like a group of psychiatrists at the annual APA meeting. I also remember that there was a lot of time left for relaxation on the beach, or around San Juan in the casinos and restaurants.

TD: Yes.

DK: Well, it was genuinely funny that even when we were sunbathing we never talked about anything else but psychopharmacology. Maybe around 6 PM in the afternoon we managed to think about what restaurant we should go in the evening. There was a desperate search to find outstanding restaurants in San Juan. But they did not exist. Every year somebody found one but when we went there it was disappointing. During the day we

could relax on the beach and talk about issues related to the field. As you pointed out it was a multidisciplinary group and they were not just psychiatrists there; the majority of people were basic scientists. Attending those meetings was a phenomenal learning experience. It's almost impossible to read all the journals today; nobody has the time for that. But, if you go to a meeting like the annual meetings of the ACNP you get a perspective about the field from neuroscientists operating in twenty different areas

DK: How do you think those meetings impacted on what you were planning to do in your work?

TD: It was very difficult to see where psychiatry was heading. We did know that eventually real discoveries will be made by molecular pharmacologists. But, you knew that it was a long way before molecular biology and molecular pharmacology will translate into clinical practice. I'm sure you have done what I have done in those meetings: looking for talented people. It was an outstanding opportunity to see who would be not just creative but also a good colleague. It was an opportunity to assess the social competence not just the intellectual competence of people, an important aspect in recruitment.

DK: We were both members of the council and served as president in the mid-1990s.

TD: Yes

DK: Two years back to back, 1994 and 1995. If we had to do it now, what do you think we would have to do if we were saddled with the responsibility of the presidency of ACNP? What do you think has changed?

TD: Well, I believe that over the past fifteen years federal funding has been getting slimmer and will become probably much slimmer in the ensuing years. People are turning to pharmaceutical companies to support their research and while most of these relationships have clear, ethical boundaries, problems have developed. We have very different standards than we had twenty-five years ago. You know luncheons and dinners sponsored by pharmacy companies were normal in olden days. I was always astonished at the meeting of the American Psychiatric Association, that when tobacco companies gave a carton of cigarettes away, there were long lines of people waiting for it. These were people who made anywhere from a hundred to two hundred thousand dollars a year. I could never understand why they were lining up for cigarettes. None of these gifts are now there. When pharmaceutical companies sponsor events they have to be clean, in a sense, that their products may be mentioned only in the context of other developments in the field. So, that's a great development. I think that some of our colleagues also got into trouble and all the media talks about their greed. Well, I must say that physicians and

bio-medical scientists are no different from the rest of society. We have just as much greed as anybody else and as a result, numerous problems have surfaced. If you or I would be in charge we would be struggling with those problems. We wouldn't know exactly what to do with our colleagues who have slightly or not so slightly deviated from the standards.

DK: So you think that it was easier in the old days?

TD: I think that it was easier. It was easier. We could discuss important matters as for example how many new members should be accepted next year or how are we going to deal with our junior colleagues who are almost ready to become members. We could have lengthy discussions about that. That's no longer the case, I don't think it is.

DK: What do you think is going to happen to the ACNP in the future?

TD: You know that's very difficult to predict because we already see that neuroscience societies attract most of the basic scientists, and clinical trials, which are very important, themselves, obviously are insufficient to provide the content for an academic society. I think the focus probably will shift to translational science in the coming years, because the neurosciences will go to the neuroscience societies. So the novelty in clinical science and translational science may stay at the ACNP, but not the basic science. I also believe that we are getting perhaps slightly too large for our own good. I have nothing against it; the kind of intimate exchange of ideas which existed in the past cannot be done as easily as it could be done in the past. The schedule of programs is also very crowded. Our new leaders want to give a place to everyone to speak and we have now this large number of evening programs. What is missing now is the opportunity for informal exchange.

DK: Do you think that by becoming much larger and maybe less personal would put the training function of the College in jeopardy?

TD: I am not sure about that but at the same time I don't think that assigning a mentor to new people would accomplish everything.

DK: We are using mentors as if they were like travel guides.

TD: Yes. I look forward to talk to young people but that got sort of lost in these large meetings.

DK: So, maybe we should cut the ACNP in half?

TD: We should cut it in half. I think it would be nice to have a couple of days dedicated to a program that has only one set of lectures and one set of seminars instead of having twenty-four different study groups going at the same time. We should have a couple of days of quiet reflection to digest what people have been talking about. One or two panel discussion in the evening could be relaxing and perhaps even productive.

DK: Are you suggesting that we go back to a little bit less concentrated set of first days?

TD: Yes. Not only that, but also that for the first two days everybody should take a tranquilizer, sit down and not only listen but also think about what is said. Lectures currently always overrun in time. We have forgotten that the important part of any lecture is the opportunity afterwards to ask questions and make comments. There is no time for that in the current system. I would like to have that restored, at least during the first two days

DK: OK.

TD: Then, let the crowd have whatever they want to have.

DK: Anything you would like to say to our colleagues on the occasion of the fiftieth anniversary of the College?

TD: Yes. You are a young old and I'm a nearly old-old. We have predecessors and we should first congratulate our predecessors, especially to those who are still alive, because they have done something wonderful by creating the College. I believe that the leadership of the College throughout the years has done a magnificent job. But the leadership will have to think about how the future is going to evolve because nothing is stable in science. Academic societies may lose their original characteristics and my plea, solely, is that part of it, not all of it, should be restored.

DK: One of the key players who come to mind is Oakley Ray.

TD: Well, you and I were presidents for a year, maybe council members for a few years. We came and went away and the only person who stayed was Oakley Ray. The only person who organized these meetings was Oakley Ray. He made very wise comments in our council meetings and scouted for good places to organize our meetings. Oakley set-up a good organization and he was a very cordial and funny host with a wonderful sense of humor. He really radiated warmth. Apart from his role as host and organizer Oakley was an excellent lecturer and a beloved teacher. He also wrote a very sensible textbook on psychopharmacology. In general he understated himself and managed to convince himself and everybody that he was not important and not even very bright. Of course, the exact opposite was true. He often interjected a little comment into the council by saying, "yes that sounds good, but, perhaps we should also...", and, then, he would say the exact opposite of what we were saying. But, he did it nicely and we all knew deep down that he was right and we were wrong. It was a wonderful, wonderful interaction with him. I really miss him. I miss the ecology he created around this annual meeting. Well talking about the ecology and not just the annual meeting, I can remember that we were doing as a council much more lobbying

- DK: At least trying to create a presence in Washington.
- TD: What do you mean not lobbying, we were lobbying ferociously.
- DK: Well, do you think that is something that was lost and picked-up by other societies and organizations?
- TD: Well, you know we were running into a little bit of a problem because one year we lobbied for increased research funding and next year we lobbied for increased training research funds and eventually, people got a little tired of us. Moreover, almost no professional society can compete with the lobbying firms now in Washington. Of course our politicians say that lobbyist have no influence on them whatsoever. I do not believe that academic societies per se can do very much in influencing matters but I do believe that personal relationships with our Congress, House and Senate members is very important. I believe, in today's world. If I were president of the ACNP, I would make every effort to testify on critical issues. I would ask Congress members to use us as expert witnesses wherever that's appropriate because that's the only way we could be really heard. Lobbying means not just presenting an idea, but promising support to a Congressman, financial support or visibility and we are too small to provide visibility and certainly not rich enough to provide economic support. So expert witnessing is probably the best way to exert our influence.
- DK: What's your favorite memory from a meeting? Do you have a funny story to share, something that happened to you at an annual meeting?
- TD: Actually, you ought to know that neither neuroscientists nor psychiatrists, with few exceptions have a sense of humor. We are not known to be very funny just as cab drivers in Puerto Rico told me, "you guys are the poorest tippers we have ever seen". There were some sad moments too at annual meetings. When I was president, for instance, one of our colleagues who strongly believed that running is a good thing collapsed and died. He did this running, despite my concerted effort to stop him from doing it. I told him that we are biologically derivatives of monkeys and monkeys run twenty or thirty steps, then stop, scratch themselves, or eat a little something and swing maybe on trees, but they have absolutely no intention of running three to five miles. I don't believe that our organism is suited for these long runs. The only reason we encourage it as physicians because these runners are candidates for orthopedic surgeons.
- DK: Before you were elected a member to the ACNP, obviously you had a strong interest in pharmacology and in all these new drugs. It was certainly manifest in the way you went about setting-up a specialty clinic at Yale, and you certainly had some clear ideas as you moved out to Pittsburgh about what a contemporary department of psychiatry should be.

TD: Well, as you probably know since you were with me almost from the beginning, that the psychiatric service I established at The New Haven Hospital was completely different from the standard service in managing psychiatric patients. Very few people got electroshock and nobody got psychoanalytical psychotherapy. We did not blame families for having caused their children mental illness. We educated them about the illness of the patients, we told them how important compliance, now called adherence, is. In America as I always say, we like to recreate everything. The toilet became powder room and compliance became adherence. We told relatives and patients how important it is to adhere to a treatment regime and it became clear from our little experiment at Yale's New Haven Hospital, that what we did was a sound way of managing patients. It was a sound way of managing patients, but we really didn't know very much about drugs. We talked about antidepressants and antipsychotic drugs as if they were some kind of nice, clean entities like antibiotics which they are not. We eventually learned that the diagnosis of patients' mattered less than their symptoms for deciding about what kind of drugs they should be receiving. We managed to create a system where the average stay was down to 30 to 60 days from years. In psychoanalytical establishments they stayed two, three, four, or even five years. So when I came to Pittsburgh I felt time has come to establish a department of psychiatry which would first and foremost concentrate on translational and strictly clinical research to improve the management of patients. And that's why I asked you to come with me as director of research. I also had this strange conviction that while advances in basic sciences represent the ultimate hope for us, we have a moral obligation to do the best that we can on the basis of what we know today. With all this said congratulations ACNP on your fiftieth anniversary, and congratulations to all of our colleagues who made this fiftieth anniversary possible. You were all fabulous people. You were even likeable. I only wish everybody would be still around, but of course, that's not in the cards. I'm sure the next fifty years are going to be very interesting and I truly regret that I won't be present to witness it

## JOEL ELKES

Interviewed by Fridolin Sulser  
Kalamazoo, Michigan, October 14, 2008

FS: It is Tuesday October 14, 2008. We are in the main boardroom of the Fetzer Institute in Kalamazoo, Michigan. I am Fridolin Sulser and I have the great honor and privilege to interview, Joel Elkes for the fiftieth celebration of the ACNP in 2011. Joel has been the first president of the ACNP. He has been there at the inception of the College and he played a key role in the evolution of the two interrelated fields, basic neuropsychopharmacology and biological psychiatry. He made his mark with his visionary approach of linking basic research and clinical psychiatry. I'd like to start the interview, Joel, by asking you a few questions about your background and how you got involved with neuropsychopharmacology before we talk about the inception of the ACNP in 1961. You could start telling us a little bit about your background; where you came from, your education and your involvement with the field.

JE: Well Fridolin, it is a very special honor for me to talk to you about something which happened fifty years ago or longer. I, as you know, was born in Koenigsberg, in Eastern Prussia on the border of Lithuania, a Baltic Country on the border of Russia. I went to a school in Lithuania, where every subject, from trigonometry to Voltaire, was taught in modern-Hebrew. Teachers were masters of their subject, and wrote the textbooks as they taught. I literally remember stenciling their lectures into textbooks in the summer for reading in the autumn. How I got into Psychopharmacology is still a mystery to me. I do not really know. I know that it is the fulfillment of what the Germans call Weltanschauung, arising out of my preoccupation with modern physics. I remember staring in awe at the cloud-chamber photographs of the early physicists. It was extraordinary. They held the mystery of the forces of which held the universe together. I went from physics to physical chemistry, from physical chemistry to the study of monomolecular films and on to medical school at St. Mary's in London where I was in the company of three giants. One was Alexander Fleming, the discoverer of penicillin, who taught me bacteriology; the other figure was my Dean, Sir Charles Wilson, also later Lord Moran physician to Churchill and the third was Sir Almroth-Wright the great neurobiologist, discoverer of the typhus vaccine. Somehow the bridge to psychopharmacology was molecular recognition in immunology. I became very interested in the immune system, and very early on began to regard the immune system as a sort of liquid brain, a tissue, which has memory, learns from experience very much like the tissue we carry in our

skull. So I got from physical chemistry to immunology and to psychiatry, which became a deep interest. My father was a distinguished physician in Lithuania and directed my reading. He directed my reading towards the writings of Paul Ehrlich, towards psychiatry, psychoanalysis, Freud and so on. Somehow there seemed to be a way of linking the economy of the tissue of the body to the economy, which goes on between people; to link the society within the skin to the society outside the skin. So I began to consider deeply, from the beginning the linking of the systems within the body to the systems outside the body. I could not make the break because we had no real basis of the knowledge of the biological substrate of mental processes. There was no link available nor was I equipped to do that, because my mathematics was poor. So, I didn't know what to do about it except to observe the phenomena. There, we were very fortunate at St. Mary's hospital where I studied because we had wonderful lecture demonstrations on the psychoses. We had a wonderful collection of mental hospitals in which I visited frequently; and I became absolutely fascinated by the phenomena of mental disorder which I saw in mental hospitals.

FS: **Joel, Can I** interrupt you for a minute. You mentioned that you were at St. Marys' Hospital in London. I assume this was before you became the head of the first Department of Experimental Psychiatry in Birmingham.

JE: That came later. I was in Pharmacology at the time. I had gone to medical school at St. Mary's Hospital, London and was working in the Department of Pharmacology. Then, to make it very brief I had followed my chief and friend Alistair Frazer to found the Department of Pharmacology in Birmingham where I backed into Psychopharmacology. It was not driven; it was much more a bumping into phenomena which didn't make any sense and which in some way had to be conjoined. And in that department, in my early work, I was very intrigued by membrane cell surfaces and so on. Alistair Frazer was interested in fat absorption and not the nervous system; he was interested in chylomicron, a particle which appears in the blood after a fatty meal, and the architecture of that particle. He gave me the task to find out what makes that particle and find what the covering of that particle is which keeps it, emulsified. So I was forced to look at a lipoprotein. I went from there on to the study of the lipoprotein, which is ubiquitous in the nervous system, myelin. We used x-ray diffraction following the wonderful work of Frank Schmitt from St. Louis to study the crystal structure of living membranes. We were, I believe, the first to study living myelin in the living cell. We constructed a cell which allowed us to irrigate a sciatic frog and test the viability of a segment while shooting x-rays through it and getting crystal picture of

myelin; seeing the living, liquid structure alter slightly but in a predictable way as a result of ether drying and so on. So, I was edging into the brain by creeping-up the myelin sheath. That is how I got into the brain. At the same time we were beginning to work on the distribution of enzyme systems, particularly the cholinesterases, in the brain. In watching the maturation of the nervous system, and the distribution of enzymes in the maturing of the system we found that some areas are rich in cholinesterases. By that time I was already deeply into neurochemistry; I had finally found a way to get into the field. At about the same time, we are still talking of the 1940s, probably about 1948, '49 or possibly 1950, '51, before the discovery of chlorpromazine, Jean Delay came to London and gave a talk on catatonic stupor. I went to the lecture and was deeply impressed by the syndrome of the catatonic state which was common in mental hospitals at the time. We began to study the effects of Amytal (amobarbital), amphetamine and then Myanesin (mephesisin) that just came out, on this syndrome. It became quite clear that the two drugs had different effects. Amytal like an Andersen fairy tale, brought patients out of their stupor; they began to talk, recognize their relatives, ate their meal with relatives on Sunday and so on. Amphetamine drove these people deeply into stupor and Myanesin relaxed their muscles but did not affect speech. So you had a principle of a selectivity of drugs on the syndrome that alerted me to the fact that maybe we are dealing in catatonic stupor with a state of hyperarousal, which is muted by Amytal and enhanced by amphetamine.

FS: It is overwhelming listening to the scope of your research interests. You started off with physical chemistry, then, went into chemistry, then into pharmacology and all the way to the clinic. You have in a very beautiful way integrated basic and clinical disciplines.

JE: I was beginning to do it at that time.

FS: This is in Birmingham.

JE: We are in Birmingham.

FS: In the first Department of Experimental Psychiatry?

JE: No, no, that came a little later. Why did it come? Because the university asked us what on earth we were doing? What is this strange field, what do you call it? And we said that we were working on "drugs and the mind". Drugs and the mind, not the brain! The Mind! And, that became known as the Drugs and the Mind program. Then fate knocks on my window again. There was a department, a small obscure department on Mental Diseases Research which was loose in structure, administered from the Dean's office that came under the Department of Pharmacology and I became head of it. Suddenly, I had two rooms and a lab to work in

and then came a wonderful opportunity of Philip Bradley coming to my lab. You see, there was a base in chemistry in our work that was bridging across to the clinic but there was nothing in-between, to help you to study pharmacological intervention in the living conscious animal. So I discussed our task with Philip and we decided the first thing we must do is develop a technique, which would allow us to study the electrical activity of the brain in the conscious animal. It took Philip nine months to work out the technique. It was a very elegant technique of implanting electrodes into the cortex and subcortex in an intact animal, then bringing the electrodes out in the back of the animal and attaching a little plug to the electrodes that the animal could be plugged in the electrical recorder that would record the electrical activity in the brain of the moving alert animal.

FS: Well Joel, I see a connection here to my teacher in Zurich, W.R. Hess.

JE: My goodness, yes, indeed.

FS: Did you know him?

JE: No, I did not know him. So, that was the bridge between Neurochemistry and the Clinic, the cat's electrophysiology. Then came the moment when I could compound the whole thing into a program which I showed the Rockefeller foundation when they came to see me. What I showed was that there was a connection between neurochemistry, electrophysiology in the conscious animal and behavior in patients.

FS: When was that?

JE: This was still two years before the discovery of chlorpromazine. And then Alastair Frazer supported me and said "why don't you create a department for this field. What shall we call it?" And I had experimented with the term "experimental psychiatry" in my head for some six months; an experimental department which brings experiments to psychiatry, and I called the department, Department of Experimental Psychiatry. The small department was created in 1951 and I still remember the day when it happened. I was an intern in Norwich State Hospital at the time and in the list of interns and staff outside the superintendent's office, I was at the very bottom: Intern, Joel Elkes. When I came into Dr. Kettle's superintendent's office, with the copy of a telegram which I'd just received from Birmingham that I had been appointed Professor of Experimental Psychiatry, he slapped his thigh and said "My God, that's the fastest promotion I've ever seen at this hospital". This is a true story. So I suddenly had a Department of Experimental Psychiatry, which I believe was the first one in the world.

FS: It was the first one.

- JE: Then, one day, Dr. Thrower, who was the clinical director of a pharmaceutical company, walked into my office and said "this is not a routine visit". Then, he carefully unlocked his briefcase and gave me the copy of a paper by Delay and Deniker and said, "this is astonishing". And he also said, "yes, that's why, I am here. We have got the patent in England for Largactil (chlorpromazine) and would you carry out a controlled trial?" So, I went to Charmian, my wife, who was given the responsibility of organizing the trial and make it work. We worked at the same mental hospital in a small research room and in that room we carried out the study of Thorazine (chlorpromazine) on 27 patients. I still remember walking into the boardroom at the end of the trial; the papers were on the table, the code was broken and the numbers went on the board. It became very clear that in 7 patients out of the 27, there was striking improvement on the drug and striking relapse on the placebo. Suddenly we were in Psychopharmacology! That's how I got into Psychopharmacology. I've given you the outline of this torturous past which led me to Psychopharmacology; the steps on the way were very, very unpredictable. I didn't know what I would bump into next.
- FS: Joel, this is absolutely amazing how you covered such a scope from physical chemistry to neurochemistry to electrophysiology to psychopharmacology and to clinical psychiatry.
- JE: Well...
- FS: This was Birmingham and I guess that the next big step was when you met Seymour Kety and he invited you to come to the US.
- JE: Yes. Then, I started commuting and exchanging information. I remember particularly Hy Denber coming over.
- FS: This was in 1957?
- JE: Before that, I remember being in the States; Smith Kline and French arranged for a meeting between Seymour Kety and myself. And I come into the lab and Seymour Kety was very busy. Shining, vibrant Seymour comes out and when he sees me his face falls saying with every gesture, "Oh, God, not another visitor" kind of thing. Then we go out to lunch, we talk and we go on talking, and it goes on and on and on... Seymour tells me of his dreams; he was just going from Philadelphia to the NIMH as Director of the Intramural Program of the NIMH and I was just going to Birmingham to assume the Chair of Experimental Psychiatry in Birmingham. And we compared notes. We dreamt of the future of psychiatry and the future of research. Seymour was a prince of a man, a remarkable person of vision, clarity, integrity, and enormous talent. I think he should have stayed with the opening up of cerebral circulation

and get the Nobel. Then Seymour and Bob Cohen were talking about the Laboratory of Clinical Science at the Institute.

FS: Was Kety chief of the Laboratory of Clinical Science?

JE: No, no, he was head, scientific director of NIMH. And he asked me to head-up the Laboratory of Clinical Science. I was so torn, at that time because the University, the Rockefeller Foundation and Medical Research Council in the UK had done a great deal for me so that I could not bring myself to move from Birmingham, and I said, no, I can't come. Then, a year later Seymour calls me up, and says, "Joel, I offered you the best job I've had; it was so good that I took it myself". And he stepped-down from his position as scientific director of the Institute and became director of the Laboratory of Clinical Science. But he kept on talking to me in Birmingham and told me that there was a building available at St. Elizabeth's, the William Alanson White building and he offered to refurbish it, to build labs. They sent me plans to Birmingham, and catalogs of equipment and sitting in my little office in Birmingham I designed what were to become my labs in the William Alanson White building.

FS: Joel, I remember that building from the time when I was a post-doctoral fellow with Brodie and we had discovered desmethylimipramine (DMI), the secondary amine metabolite of imipramine. There was a fellow at St. Elizabeths' who was with you and conducted the clinical trial with it. His name was Freyhan.

JE: Freyhan, Fritz. I remember standing in front of the William Alanson White building when I arrived in Washington, looking up. It was a five-story building and I said to myself, my God, how do we make a community in this building? How do we build a community where we manage to fashion a science which is transdisciplinary in nature and put a team into one head, if you see what I mean. How could we train people who are experts in several disciplines in this building and build a bridge between them. And I think we managed to do this; it was an extraordinary community in extraordinary times. We had people there working on the frog brain and we had people working on enzymology. We had people working on the relation of metabolism and behavior and we had people doing clinical trials, like Freyhan, Hordern and others .

FS: Maybe Joel we're getting close in time to the inception of the American College of Neuropsychopharmacology (ACNP) now.

JE: Yes.

FS: If you could perhaps talk about that and then we could go back later on to your research philosophy; to Joel the researcher and Joel the gardener. So, if you could tell us how the inception of the ACNP came about.

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- JE: There had been quiet discussions among some people about the need for a body where information and discoveries in psychopharmacology can be shared in a congenial way in a congenial environment. It started with Ted Rothman.
- FS: Who?
- JE: Ted Rothman, who unfortunately was not quite given his due. Ted Rothman, Jonathan Cole, Paul Hoch, myself and others convened a meeting in the Barbizon Plaza Hotel in New York to discuss how to advance Neuropsychopharmacology.
- FS: This was in 1960?
- JE: Yes. November 1960. There were twenty invited people and twenty guests. There, at that meeting, ways and means were being discussed and one suggestion was to form a college of Neuropsychopharmacology, a scientific society and incorporate it in Maryland. They did that and the constitution of the college was being prepared. And finally, the first organizing meeting of the ACNP took place, I have a photograph of it here now, please see us eating dinner.
- FS: Joel, if you could go back a moment and tell us again about who you consider to be the key figures shaping the field of Neuropsychopharmacology.
- JE: Well, there were so many excellent people and there were so many people active. But the key people I would think were Seymour Kety, Paul Hoch, the commissioner for mental health for the state of New York, extraordinarily active at that time and Jonathan Cole who had already formed the Psychopharmacology Service Center in Washington.
- FS: And of course you had in the basic sciences Bernard Brodie.
- JE: In the basic sciences, a key figure was Brodie, no question.
- FS: You know, Brodie's Laboratory of Chemical Pharmacology was truly a Mecca of Psychopharmacology. I could never understand why he didn't get the Nobel Prize.
- JE: Yes, I agree.
- FS: Two people from his lab got it, Julius Axelrod and Arvid Carlsson. And Brodie who was really the father of biochemical pharmacology never got it. I don't know why.
- JE: Politics is something I avoided continuously and it is due to my avoidance of politics that I've lived to 95!
- FS: Then Joel, you got elected the first president of the ACNP. I had the pleasure of reading your lecture which you delivered when you were the first president. In it you defined the place of Neuropsychopharmacology and you gave an identity to the new science. And you said "Like a modern Rosetta Stone, psychopharmacology holds the key to much that is puzzling today. It provides the key to three languages: the nervous system,

the endocrine system and the immune system”. Well, Joel, I would love if you could elaborate a little bit on these beautiful concepts that you developed.

JE: Well, I feel that in the 1960s, there was a lot of fluidity and mobility in the field, and crossing over into disciplines there was an emerging understanding that there are four footings of the new discipline: neurochemistry, which was maturing so to speak because we did not have anything more in neurochemistry than written in Thudichum, electrophysiology, animal behavior and clinical trials. These were the four footings, which I saw as essential elements of any psychopharmacological enterprise worth its name. At the end of that meeting we created the committees which still exist in the ACNP. We also created study groups on various subjects.

FS: That was lovely, your idea of small study groups. I remember attending the Annual ACNP meeting as a post-doctoral fellow when we met in bedrooms.

JE: That’s right.

FS: Could you talk a little bit more about your idea of study groups?

JE: The idea was to select people from different discipline into small groups and give them the opportunity to talk to each other. That’s very simple and it developed very, very well. Study groups led to a sense of scholarship identity, of owning certain areas of psychopharmacology. And, it worked. I think I’ll read to you what I said at the time: “It is not uncommon for any of us to be told that psychopharmacology is not a science and that it would do well to emulate the precision of older and more established disciplines. Such statements portray a lack of understanding for the special demands made by psychopharmacology upon the fields, which compound it. From my own part, I draw comfort and firm conviction from the history of our group. For, I know of no other branch of science which, like a good plow on a spring day, has tilled as many areas as neurobiology”.

FS: Beautiful. Keep on going.

JE: “To have in a mere decade questioned the concept of synaptic transmission in the central nervous system; to have emphasized compartmentalization and regionalization of chemical processes in the unit cell and in the brain; to have focused on the interaction of hormones and chemical processes within the brain; to have given us tools for the study of the chemical basis of learning and temporary connection formation; to have emphasized the dependence of pharmacological response on its situational and social setting; to have compelled a hard look at the semantics of psychiatric diagnosis, description and communication; to have resuscitated, the

oldest of all remedies: the placebo response for careful scrutiny; to have provided potential methods for the study of language in relation to the functional state of the brain; and to have encouraged the biochemist, physiologist, psychologist, clinician, and the mathematician and communications engineer to join forces at bench level is no mean achievement for a young science. That a chemical text should carry the imprint of experience and partake in its growth in no way invalidates the study of symbols and the roles among symbols which keep us going, changing, evolving, and human. Thus, though moving cautiously, psychopharmacology is still protesting; yet, in so doing it is for the first time compelling the physical and chemical sciences to look behavior in the face, and thus enriching both. If there be discomfiture in this encounter it is hardly surprising, for it is in this discomfiture that there may well lie the germ of a new science”.

FS: Well Joel, these are memorable words spoken by you as the first president of the ACNP. I wonder, what role did the ACNP play in your own work. And how do you feel the ACNP has shaped the field over the next years?

JE: I can only tell you that I looked forward to the excitement of the next meeting of the ACNP, year by year, as a boy looks to toy books. It was an extraordinary feeling. I remember in October and November, oh my God, ACNP is coming in December and how I was looking forward to it. Why? Because I found that among the colleagues there, languages developing that we could speak and understand each other. I could find sometimes, totally new, totally new areas opening up suddenly in a meeting by a presentation. I found extraordinary contact and enrichment and I felt home. The ACNP was my home! I used to go there regularly not only to listen to the stories, the same stories, told by the same people, with the same Élan; there was also a feeling of great seriousness about the ACNP. This was a very serious body. It meant its business; it created committees, which did their work. It created rules, which were followed. It gave guidance, which has guided us to this day in our work. I think it was to me a home base that was so absolutely necessary, because we had no moorings, a wonderful organization that grew and grew and grew.

I remember in the early days when I was still in Birmingham that Ernst Rothlin and Mrs. Rothlin came to stay with us and we discussed, with Bradley's and Dr. Mayer-Gross' participation, who was working with me at the time, the desirability of a journal in psychopharmacology and the desirability of an international association in psychopharmacology, which became the International College, the Collegium Internationale Neuro-Psychopharmacologicum. Mayer-Gross spoke to Jung of Springer Verlag

and they were interested in founding a journal. And, then, we brought in Abe Wikler, a very shy and modest man, a seminal figure in psychopharmacology, as editor. His book on the relationship between pharmacology and psychiatry was one of the first real texts in the field. I also remember the wonderful time when suddenly the yellow journal, *Psychopharmacologia*, our journal, landed on my desk.

The World Health Organization became very interested in psychopharmacology and asked me to convene a small group of people in Geneva and we had a very good discussion. I wrote the initial draft of the working paper. Then, I remember getting a letter from the head of the Drug Programs of the World Health Organization, Dr. Wolf. The letter said you have given joy to a man who gets breathless as he reads your paper. And I didn't know what he meant until I got to Geneva and found that Abe Wikler was dying from cardiac failure. When I was visiting him he hardly recognized me; he was on oxygen, his breathing at the time was terminal.

FS: Well, Joel, you have been the first president of the ACNP and you have given a new identity to the science of neuropsychopharmacology. Let's go back a little bit for a little while to the ACNP and to the early meetings in Puerto Rico. If I remember correctly, we met at the beginning at the Sheraton and then we moved the meetings to the Caribe Hilton.

JE: Yes.

FS: If you could talk about the early days of the meetings in Puerto Rico and the people who were involved in running the organization and any fond memories you have.

JE: My fondest memory is simply the memory of Puerto Rico. I love the sun and I think what brought us to Puerto Rico was the love of the sun. We had wonderful times there and I remember particularly the meetings that Jonathan Cole and Oakley Ray organized later. With time Oakley Ray became the giant of the organization.

FS: You know I was the one who brought Oakley in as secretary-treasurer when I was president of the ACNP after Al DiMascio passed away. At a council meeting in New York, Larry Stein suggested that when I go back to Nashville I should ask Oakley Ray to run for secretary of the ACNP. Oakley agreed, ran and got elected and I think the ACNP has never been the same.

JE: Absolutely. Oakley was the spirit of the ACNP.

FS: I agree with you.

JE: There might be a rambunctious way about him but at the bottom of it there was dignity, there was grace, there was decorum. I think that he really was a remarkable man.

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- FS: Yes, I couldn't agree more with you. Well Joel, of all the people who were there with you were people like Danny Freedman...
- JE: Danny Freedman. I remember that the first contact I had with Danny Freedman was at a seminar at Yale where I mentioned something about that schizophrenia may turn out to be a biochemical lesion of the upper brain stem. That is the word I used. And he, little fellow that he was with piercing eyes, came up to me and gripped my hand, and said, you said it Joel, you said it, with a kind of enthusiasm which I've never forgotten. And we've corresponded about this idea since.
- FS: Well, we also had Leo Hollister, who is not with us anymore; do you want to say a few words about Leo? He was our president in the 1970s.
- JE: He was a fine person, a fine person.
- FS: And Morris Lipton...
- JE: Morris Lipton I knew very well. He came up from North Carolina.
- FS: Chapel Hill.
- JE: Yes. And I remember him doing a headstand in my living room. And Lou Lasagna., God, what a fellow.
- FS: We had the Killams, Keith and Eva.
- JE: I knew them very well. I knew them back in Birmingham. One of my colleagues, Jim Hance, joined them. I saw Eva from meeting to meeting and then gradually she became ill and invalid in a chair. But never, never did her spirits flag. They were a remarkable couple. They were very early in the field.
- FS: And of course there was Dick Wittenborn.
- JE: I knew him well. Dick Wittenborn was a very straightforward, honest, strong man.
- FS: Do you want to say anything about the flavor of the meetings in Puerto Rico?
- JE: Only that they were extravaganzas, of a sort. I couldn't believe it that we could talk science in such company and in such a place. And then in the afternoon we were all in our swimsuits, walking around, talking and coming into the meetings in swimsuits very, very casual. I loved it!
- FS: It is quite a change now from the early days when we met in bedrooms
- JE: I remember the bedrooms. I remember particularly the hotel in Washington in which the first meeting took place, the Hotel on 16th street. All that I remember apart from the meeting was the short skirts and silk stockings that waitress' wore. I remember it to this day.
- FS: Well, it is already late Joel and I'd like to talk about your research philosophy, the concept of the Rosetta Stone...
- JE: Oh, the Rosetta Stone...

FS: I think that this is such a beautiful concept. And it's not only beautiful but it's true! Joel, please talk a little bit about molecular communication.

JE: I will. In 1952 I gave a paper to a research association and I talked about that for neurotransmitters to be present enzymes should be present for their synthesis and destruction. I also said that enzymes should be responsive to enzyme inhibition and there should be a specific tissue response. Then I began to think of the concept of these molecules acting as transducers and transponders in the brain, facilitating communication. And I was struck by the fact that psychoactive drugs have peculiar properties of interaction with two or three neurotransmitters, and from the shared properties of psychoactive drugs and neurotransmitters came then the idea of psychopharmacology as a tool for understanding shared properties in molecules, leading to the concept of psychopharmacology as a Rosetta Stone for understanding the way that the brain communicates inside itself. I talked earlier about communication of the society within the skin and the society without.

FS: Before we leave we have to talk about one other great contribution that you made. And this is the making of people. I wonder if you could talk about what you called the "gardening".

JE: I called it gardening. Well I tried to create a climate of receptivity, understanding, excitement and tolerance for ideas, for new ideas. I tried to create a language which was understood and which could go across disciplines. Let me put it this way. We created a clinical neuropharmacology research center with basic science labs at St. Elizabeths' where Floyd Bloom and Nino Salmoiraghi worked. When you walked to the canteen to have your lunch, you saw a schizophrenic patient hallucinating under a tree; that is what I'm talking about.

FS: Joel, wasn't Weil-Malherbe at St. Elizabeths'?

JE: Oh, yes, very much so. I brought him all the way from England.

FS: It was Montagu in Weil-Malherbe's laboratory who reported in 1957 first on the presence of dopamine in the brain of several species, including man. Wasn't Baldessarini from Harvard with you?

JE: Yes, and Sol Snyder, who had this wonderful career. He started as a resident. I think I could go through the list but it is rather long of people who came through the labs and who left their mark, everyone of them. They left their mark on me. But, I don't think we have the time for that.

FS: We're now in the year 2008, Joel and the field, our field has gone predominantly molecular. During the last few years we have learned more and more about less and less and I think it's time to go back to your more holistic philosophy. I am wondering how you see the future will develop from now on?

- JE: I see the future in linkages. Linkages! Linkages of the college with areas on which psychopharmacology clearly impinges but which remain undefined. I see linkages with psychoimmunology; linkages with endocrinology and linkages with people who have an understanding of message transmission, with information engineers.
- FS: And behavior.
- JE: And behavior.
- FS: You know it is remarkable, Joel, that every prototype of psychotropic drugs got discovered in the 1950s at a time when we used behavioral correlates as drug targets.
- JE: Yes
- FS: And now in the last fifty years we haven't discovered anything new.
- JE: We are not looking in the right place.
- FS: That's right.
- JE: We are not looking in the right place.
- FS: It's a very important message that you and I need to give to young people.
- JE: Yes: Linkages, linkages and linkages.
- FS: That's right. Say it again, Joel.
- JE: Linkages!
- FS: I think that molecular pharmacology has to become functional again.
- JE: Yes, exactly.
- FS: We have to go back to W. R. Hess.
- JE: Yes.
- FS: Well, Joel, the last topic which I wish to cover is your work in the arts; the importance of art in medicine and healing.
- JE: Well, thank you. That grows from a personal, very personal inclination. Let me put it this way. I ask myself why art? Why art? Why is art so powerful? Why does it influence people so profoundly? I suggest to you that art is so powerful because it reaches into the realm of the "No Words". Words are limited. Words create a little universe of the sound and the meaning in which to convey. It is what lies between words that make prose poetical. It is the exploration of the in-between which art allows. As you know, I paint. And my painting arises out of feeling, a profound sense of communication with nature. It is a direct, very direct communication. What you cannot express in words you can convey in art. We started for example in Louisville at the end of my career, a program for the arts and medicine. We employed painting, drama, poetry, prose, and humor. We had some very gifted young people working with us and we started working in areas of post-traumatic stress in the Vietnam veterans. And I remember distinctly the occasion when an art therapist took a lump of clay and handed it to a patient who could not speak, who

could not remember, who could not communicate and put it into his hand and said, “Tell me with this lump of clay”. And within twenty minutes that totally inexperienced young person fashioned a beautiful figure with another small figure draped across knees, like a Pieta and was excited and started talking about, “I didn’t kill that child. I didn’t kill that child. He just fell on my knees”. And went on and on about the time when he was there in the bush, in a native village. And he went on drawing, sculpting away until the last sculpture materialized, an angelic figure rising to heaven. And it was all...When I saw that and we have it on film, I was convinced, my god, it goes much deeper than words. When I paint I start by staring at an object. I keep on staring at it and staring at it until I hear a conversation between the object and its ghosts. A stone will speak to a ghost of a stone and there is a conversation between mundane and the mysterious taking place. And then you put it down. It is a conversation between the light and the dark, the visible and invisible. The trees have always bright leaves against the dark trunk; there’s a tint of nature about them. I have some paintings, which bring back what happened to my family, but indirectly, indirectly. I have never yet painted a truly direct painting... I have one, actually, called the Mass Grave. Sticks of figures lie in a pit. But apart from that what I am saying is art goes where words do not go. Art leads you into a world which is magnificent and art is something which should be part of the substance of medicine because it is the substance of healing like this young man began to heal for the first time in seven years by having a piece of clay in his hands. So, there are many, many opportunities and at The Phipps Clinic at Hopkins when I was there we had an active art therapy group. We had a very active art therapist, and Sally, my wife and I talk about it very often because Sally has much more experience than I have in art therapy and we hope to do something practical about it sometime.

FS: Well, Joel, I think this is a very unique part of your curriculum. If I remember correctly you created a program in Louisville on the arts and medicine.

JE: Yes. I did.

FS: Can you tell us a little bit about this before we close?

JE: I had a colleague in Louisville who worked with me and helped me create the program where therapy was applied as an accepted therapeutic modality for patients who are disturbed, who have fantasies, who have wild dreams and so on. We also gave students an opportunity to develop art as a hobby. They created art works. We had an exhibit every year of student works. We had readings of poetry, somebody wrote a novel etc. etc. etc. It was a magnificent program. It was part of a health awareness program for medical students. We thought, at Louisville, that it would

give an opportunity for students to get to know themselves and each other. We introduced it at the beginning of the medical curriculum; before they became medical students, we invited them for a week, to come early and have an exposure to the opportunities that they all are heir to. They were segments on nutrition, exercise, meditation, training and awareness training, listening skills, small group work. We did this for a week before the medical school started. At the end of the week the Dean comes in and says, "Welcome to the medical school". And they have already had an exposure to aspects of medicine, which they otherwise would have missed. And that program went really extraordinary well. We continued it for fourteen years at Louisville. We carried-out some studies, but, unfortunately, didn't have the money to carry out a really good follow-up study. But, I know from an anecdotal remembering how much the students valued this exposure.

FS: Well, Joel, we have covered a remarkable story in neuropsychopharmacology; your journey through the field from physical chemistry, to neurochemistry, to clinical pharmacology, to the integration of basic and clinical sciences, and to the creation of the ACNP. We talked about the major people who have moved the field. We have talked about Joel, the research scientist and physician, and Joel the gardener of people! We have talked about Joel and the arts and medicine and Joel the painter. How remarkable, Joel. We are looking forward now to the fiftieth anniversary celebration in 2011 and I think you have inspired us for fifty years with your eloquence, your creativity and your undying curiosity. And for this, Joel, we thank you very, very much.

JE: Thank you very much for listening. This is a very special moment for me. I have really very little to add because there is such an enormous amount to say. I can only express my deepest gratitude, respect to the College for doing me the highest honor I received in my life. To give me the opportunity to be in the company of such wonderful people and participate in the growth of young people who came to the laboratory. We've all done well. We all keep on looking. We all have to hold lanterns, lanterns, which illuminate areas, which are still murky, poorly understood. Above all, I think, we have to create new alliances because the nature of our field compels us to choose and choose again people, from disparate and different fields. For example, the whole question of communication in the nervous system cries out for collaboration between neurophysiologists and psychologists, education experts, communication engineers, language-translation specialists and so on. And they don't know what we know! And we don't know what they know! And the knowledge has to come together by work at the bench and common new languages will

evolve as we work together. So, we need alliances and alliances, even with strange fields; to be trans-disciplinarians; make it evident that this is a science like no other is, it has special characteristics of its own and will in time have earmarks by which it is known. It is not only molecular biology; it is not only electrophysiology; it is not only animal behavior; it is not only clinical syndromes. It is the conversation and the interaction between these areas, which matters and we must do all we can to enhance the conversation. This is what the college can do like no other organization nationally and internationally. We must bring people in, we can learn from them. We have an unusual opportunity as a College and we should move it as my wife Sally says: “move it, move it”. I’m delighted to be here and share this with you. Thank you very much.

## **MARTIN M. KATZ**

**Interviewed by Thomas A. Ban  
Boca Raton, Florida, December 12, 2007**

TB: This will be a special interview with Dr. Martin Katz for the International Archives of Neuropsychopharmacology of the American College of Neuropsychopharmacology, about the birth of the College and about the role of the National Institute of Mental Health (NIMH) in the founding of the ACNP. We are at the Boca Raton Resort Hotel in Boca Raton. It is December 12, 2007. I am Thomas Ban. So Marty, could you tell us about some of the background to the founding of ACNP.

MK: Thank you, Tom. Tom and I go back many years and lately we reminisce about at annual meetings of the College, how ACNP started. I am happy to be able to talk about some of the events that led to the founding of the college.

TB: Could you tell us briefly first how you got involved in psychopharmacology?

MK: As a young psychologist I was doing research on the evaluation of psychotherapy and in other clinical areas in psychology and psychiatry. It was a very exciting opportunity for me in 1957 to come to work at the National Institutes of Health (NIH) to help to begin the Psychopharmacology Program. It was made possible for me by Jonathan Cole, who at the time, was the newly appointed head of that program.

TB: Could you say something about how this program came about?

MK: The establishment of a Psychopharmacology Program at NIH was the outcome of testimonies at the Congress from many psychiatric experts and lay professionals about the importance of the discoveries of some new psychotropic drugs in the mid-1950s. Introduction of these new drugs was by any stretch of the imagination a revolution in psychiatric treatment. These testimonials played a role in convincing the Congress of the United States of the need for a great deal of support from the Federal Government, to fund and to engineer the founding of a new discipline, neuropsychopharmacology, that could have a very great effect on the treatment of mental disorders in this country and in the world. One of the people who testified before the Congress was Nathan Kline, a young psychiatrist at the time.

TB: Could you tell us something about Nate Kline?

MK: Kline played a role in introducing reserpine, one of the first "tranquilizers", that was used in those days in treatment. He had a flamboyant presence, a very convincing manner and was very adept at influencing US Congressmen and other people. He deserves a lot of credit for getting that first two million dollars from Congress dedicated to the NIH to begin

this new program in Psychopharmacology. At the National Institute there was another formidable figure and that was Seymour Kety. He was in charge of the intramural laboratory program there. And, Nathan Kline and Seymour Kety were two of the members of the first National Advisory Committee on Psychopharmacology for the NIH. Their job was to make recommendations how to spend two million dollars, which at the time was a very large amount of money, to initiate research in this new discipline and to carry out certain projects and especially a very large collaborative controlled study, involving a large, representative sample of patients, on the effects of phenothiazine tranquilizers on schizophrenia. Most of the work done up to that point with these drugs had been done in smaller, “open” studies which were neither controlled or “double-blind”.

TB: Who else were on the Advisory Committee?

MK: Others on this advisory committee were figures like Heinz Lehmann, the psychiatrist who introduced chlorpromazine, the first phenothiazine tranquilizer in the treatment of schizophrenia, in North America. Drs Kline and Lehmann represented psychiatry on this committee. The Committee had to also include representatives of all the other disciplines, which were to make up this new field. That meant bringing together experts from the psychological, biological and psychiatric elements of the field. So, we had scientists like Lou Goodman, who had written the principal pharmacology textbook in the medical field, and Louis Lasagna, a very creative pharmacologist, who was at that time at the University of Rochester in New York. And, then, we had Howard Hunt and later, Gardner Lindsey, who were leading figures in the psychological field. We also had experts in the fields of statistics and epidemiology. The most formidable in the latter group was, I thought, Sam Greenhouse, who brought expertise in both statistics and in the clinical trials field. He was particularly critical in the development of the collaborative program, as were Mort Kramer, who ran a major epidemiologic facet of the NIMH), and some other figures.

TB: Who was the chairman of the Committee?

MK: The Chairman of the Advisory Committee was Ralph Gerard, a world-renowned neurophysiologist. You can imagine the difficulties that they had in weaving psychology, psychiatry and pharmacology together to create this new discipline. And, I, a young investigator, was given the task as the first Executive Secretary of this group, to observe and record the major points of their discussion and the nature of activities that were going on in the new field. My eyes, of course, were very big at that time. The people on the Committee were very impressive. And the battles that went on in the committee were provocative and highly productive. It would be worth documenting them in more detail. Just to give you an impression, Nathan

Kline, credited with influencing the Congress to appropriate the funds to get this field started, as I mentioned, was a rather expansive representative of the field, and he was not very well liked by Seymour Kety, a basic scientist. Kety thought that Nathan Kline had exaggerated, overestimated what the new drugs could do and oversold the field to Congress. He wasn't too happy with the outcome and Congress' action. Everyone realized that if you did not present the case for expanding research on the new drugs in a salesman-like persuasive manner that the two million dollars would never have come in the direction of the Institute. So, those of us working in the program at that time, were not unhappy and weren't too critical of Dr. Kline. But, Dr. Kety had very sturdy principles in this respect and he and Dr. Kline were continuously arguing about the ethics and the direction the new program should take. I once labeled this the Battle of Saint Seymour and Nathan Kline, or something to that effect. Dr. Kety wanted most of this money to go towards basic research to provide the foundation in chemistry, pharmacology and biology for the new field, whereas Dr Kline and Dr. Lehmann were for using a major part of the funds to carry out a very elaborate collaborative study, which would involve nine hospitals across the country with many clinicians and many patients to demonstrate the effectiveness of the new drugs. Their idea was that if the sample is large and representative enough, then the results of the study could be generalized to schizophrenic patients at large across this country and other countries, and consequently the demonstration of the effectiveness of the new drugs would move the field ahead. So, the Battle was basic science versus clinical science. But, the mission was clear in the Congress' recommendation, and we had a charge to carry out a collaborative study.

TB: How did Jonathan Cole get into the picture?

MK: Jonathan Cole, an extremely innovative psychiatrist and leader of the NIH psychopharmacology program, brought the research plan for the study to the Committee, and the Committee approved the funds to do the research he proposed.

TB: It seems that the Advisory Committee had a major role in starting the new field.

MK: The Advisory Committee, consisting of ten to twelve members, established the structure for the field of Psychopharmacology. Soon after this cross-national clinical studies program at NIH got started in 1960, the investigators began to act on the need for a national association, a scientific college.

TB: Could you elaborate on this?

MK: Because there were so many disciplines involved, it was a problem how to get the different disciplines to communicate with each other in order to

solve the scientific problems unique to this new science. It required that researchers involved cross biological, psychological, psychiatric considerations in their research. It was in the course of this process that the concept of the American College of Neuropsychopharmacology evolved.

TB: Could you name some of the people involved in the creation of ACNP?

MK: The early creators of the college were people like Paul Hoch, Jonathan Cole, Joel Elkes, Ted Rothman, Dick Wittenborn. Elkes was a leading figure in the field; he had created the first Department of Experimental Psychiatry in the world in Birmingham, in the United Kingdom by setting up a model for merging science and psychiatry. He was also one of the most eloquent spokesmen in the field, emphasizing the importance of linking basic and clinical research into the future. He had a major influence on my work as a young investigator because of his emphasis on the importance of creating a new clinical methodology in order to move the science forward.

TB: When was the College actually founded?

MK: In 1961.

TB: Were the annual meetings at the center of the activities of the new College?

MK: Yes. The first secretary/treasurer of the group was Ted Rothman. Then, it selected Dick Wittenborn, a scholar in psychology from Rutgers University with a long history of developing psychiatric rating instruments. He also had a flare for doing things well when it came to organizing conferences. Wittenborn established the home base for the annual meetings in Puerto Rico and set the annual meeting dates for the beginning of December. This location and date became a tradition that was maintained up to a few years ago. When the group was small it worked beautifully well. We would meet for a week. There would be some formal presentations, but half-, or full day “Study Groups” were the main features of the meetings. They covered a range of topics from the Neurochemistry of Mental Disorders to Transcultural Psychopharmacology. The idea was that we had to move the field of clinical science forward as we couldn’t wait for things to simply move on at their own rhythm as they apparently do move in the basic sciences. The study groups were heavily invested in attacking problems. We also had a wonderful study group on “Drugs in the Year Two Thousand” that was later published as an ACNP volume. We tried to look ahead into the future what would the field of psychopharmacology look like in the year two thousand from the knowledgebase of in 1970. If you are Westerners and not from the Far East where cultural representatives plan in ten and twenty year cycles, you are not likely to be looking more than a few years ahead. Most of us felt personally that we would not

see the year two thousand. In that particular study group, we had celebrated people, like the novelist, Arthur Koestler, as one of the panelists, along with the anthropologist, Ashley Montague, and clinical scientists. And, when we look at the College's 2008 annual meeting program, we now see a different picture, a very different set of topics and a contrasting approach.

TB: So, you think that the meetings have changed and we have lost something with the change?

MK: I would like to see some of the spirit of the "study group" orientation from the early years in today's program. It helped distinguish the College from other scientific associations. We might have lost that, because the College has become big and the emphasis has shifted from the clinical to the basic science world. However, some of the clinical issues have remained unresolved. I would say that many of the problems of how we bring together disciplines like neurochemistry, behavior and pharmacology have remained unresolved and bedevil efforts to solve major problems like for example the "neurobehavioral" mechanisms underlying the effectiveness of the antidepressant drugs. I can, if I were to speak from a scientific basis, say that we still have not created those components that cross biological and behavioral spheres, a process that is necessary in order to understand how the drugs work. I don't think we should be leaving that area of research as quickly as we appear to be doing.

TB: So you think we should continue with the old type of study groups?

MK: Yes. It would be useful to invite outsiders, leading figures from other fields to help extend our perspectives. We should also have plenary symposia that we had for example in 1973 in which I was proud to have David McClelland, the chair of psychology at Harvard, Eric Stromgren, from Denmark, one of the leading world psychiatrists on the epidemiology of schizophrenia, Sol Snyder, one of the then rising investigators in the field of biochemistry and pharmacology, and the Nobel Laureate Linus Pauling. They stirred up our membership, especially Pauling with his ideas about the rigidity of scientific thinking, as he put it, the resistance to and the subsequent, unnecessary delay in the acceptance of new scientific evidence. I think those kinds of symposia could be put together again, to maintain the uniqueness of the organization and to stir us up again, to get us moving in the right direction.

TB: On this note, we should conclude this interview with Marty Katz. Thank you Marty for sharing with us this information.

MK: And, thank you, Tom. Thanks for having me



## ***Group Interview***



**ROBERT H. BELMAKER**

**ARVID CARLSSON**

**SALOMON Z. LANGER**

**TREVOR W. ROBBINS**

**JOSEPH ZOHAR**

**Interviewed by Alan Frazer  
Scottsdale, Arizona, December 9, 2008**

AF: Hello, I'm Alan Frazer, the secretary of the American College of Neuropsychopharmacology. It is December 9, 2008. We're in Scottsdale, Arizona, at the annual meeting of the ACNP having a panel discussion with some of our most eminent members, our foreign corresponding fellows, to discuss the impact the ACNP may have had both on their careers as well as on international aspects of the field of Neuropsychopharmacology. So, let me start by asking the panelists to identify themselves and perhaps state the year they joined the ACNP.

TR: Trevor Robbins, 1994.

SL: Salomon Langer, 1984.

AC: Arvid Carlsson, 1975.

RB: I'm Bob Belmaker, or Haim Belmaker. I was elected to become a member in 1990.

JZ: I'm Joseph Zohar, I joined the ACNP in 2006.

AF: Would you like to say what countries you represent?

TR: I'm from Cambridge University, UK

SL: I'm originally from Argentina, but I live in Tel Aviv, Israel.

AC: University Gothenburg, Sweden.

RB: I was born in the United States and have worked in Israel since 1974.

JZ: I was born in Israel, and live still there.

AF: Good. Well, thank you all for coming. I hope this will be a very productive session. I was wondering if you might give us some insight into the impact that the ACNP has had on the development of this field we call Neuropsychopharmacology from the perspective of your countries.

AC: Thank you. I perhaps should say that CINP started earlier than ACNP because they were European developments that started the new field. But then through the years ACNP meetings and activities have been superb and I must confess, a little bit above what CINP has been doing. I

think we have to admit that the US has been doing better over the years than Europe has.

AF: Anybody else want to comment about that? Sol?

SL: Well, I would like to say, that when I started attending the ACNP meetings in the early 1980s I was working in Paris where I spent 23 years with the pharmaceutical industry. During those years I was looking forward to the opportunity every year to escape a winter in Europe for at least a week to come to the annual ACNP meeting. But, most of all it has been the quality of the science and the opportunity for interaction with the most distinguished and active neuroscientists both at the pre-clinical and at the clinical level that I found attractive in these meetings. .

AF: Trevor?

TR: I've always liked meetings where there is a mixture of basic and clinical science with participation of people from the drug companies. Obviously, the pharmaceutical industry is synthesizing drugs and the effects of these drugs are of great interest to us. I have been involved with the British Association of Psychopharmacology, which was formed in the early 1970s and it's only been quite recently that I've realized that actually its founding was stimulated by the ACNP that was founded in 1961. I regularly come to the ACNP meetings because for me, it's the best meeting in terms of quality of science and in particular because it has this unique overlap of academia and industry

AF: Bob?

RB: I think the impact of the ACNP on science in Israel could perhaps be measured by how popular I became when I became a foreign corresponding member of the College, and I could invite once a year a person to attend the annual meeting of the College. The number of people contacting me and asking me to sponsor them to come to the ACNP increased exponentially from 1990. Today it is tens of people who are asking me years in advance, and I think that reflects the quality of these meetings. The ACNP is a model for us. Of course there's also another side of it; some of those who come from Israel to the ACNP meeting feel that there's a lack of clinical take-home message. The ACNP is clearly the place where people present new science and not so much the place where the new science gets communicated to clinicians. So, I have experienced sponsoring someone to come and then having him tell me that he was disappointed and preferred the CINP for getting a clinical take-home message.

JZ: I, actually was, one of the individuals coming with Haim to the annual meetings and still thanking him for inviting me before I became a foreign corresponding member. For me, it was a very unique experience when I attended these meetings for the first time. The form of the meeting,

- the science and the interactions at these meetings are unique and very appealing. So, I try to come to as many meetings as I can. The ACNP was one of the models that we were looking into in order to shape the future of the ECNP.
- AF: Good.
- SL: I could perhaps add to this as one of the first presidents of ECNP that we openly copied many things ACNP did. This was very obvious and we were proud of it.
- AF: Good. So it has had that type of impact in Europe. Although CINP came first, the ACNP became the model that you tried to emulate when you were developing the European College.
- SL: Absolutely. The ECNP started in the late 1980s.
- AF: Just for my own perspective: Was the ACNP asked to help? Was it interacting with you in the process?
- SL: Well, we had an arrangement at that time whereby ECNP had one session at the annual ACNP meetings and the ACNP had one session at the ECNP meetings every year. I don't know whether this arrangement has survived, but it lasted for quite a few years.
- AF: And that was useful early on. This arrangement is not going on for the last I think three or four years, because of finances. But I think there is collaboration between the two colleges and actually we will be meeting tomorrow about this. We would like to make sure that the collaboration between the major organizations, ACNP, CINP, ECNP, is going to continue. I think that should be very fruitful since we are dealing with the same issues in different parts of the world
- AF: Yes. This might be a more difficult question: Can either of you or all of you think of any particular scientific advance that was mentioned at the ACNP meeting that would have caused you to have gone back and carried out, perhaps a significant experiment or went back to your countries and said it looks as though America is moving in this specific direction.
- SL: I can think of an example. In the, late 1970s many of the sessions were dealing with high affinity labeling of receptors and receptors sub-types. It occurred to us, while attending the meeting that the neuron transporter had many of the properties of receptors and perhaps could be labeled by the inhibitors available if they were created in high specific activities.
- RB: I can remember two examples: one is rather straight forward and the other more circuitous. The straight forward one was the use of 'knock-outs' in neuroscience. I also made my first contacts for collaboration to get knock-out mice at an ACNP meeting. The more circuitous one was about the use of valproate in bipolar disorder. I first heard about it at a symposium here and later our group did clinical studies with the

substance. But the truth is it had actually been used in small studies and reported on previously in Europe, which were not mentioned at the ACNP Symposium. It is typical, that something becomes legitimate once it's reported at the annual meeting of the ACNP, although it might actually have been studied previously elsewhere.

AF: Well, that's going on even today in the electronic age because on line information from most journals does not go back to papers published before 1996. We sometimes have to remind our students that there was a literature prior to 1996 because they don't go to the library anymore. I have to remind them that serotonin was known prior to 1996 for example.

I think one of the hallmarks of the ACNP historically has been not only the science that gets presented in the sessions, but the interaction with people outside the sessions which many people find the most productive. In fact, it's a problem for us now as we get larger to keep the informality. Sol and Arvid probably remember more than I, what went on at the Caribe Hilton when there was plenty of time. I wonder if somebody, perhaps you, Arvid, could tell us some of your fonder memories about interacting outside of the formal sessions with people. .

AC: Well, there are many people that I have met but I cannot point to anything specific. But that's certainly one of the most charming aspect of these annual meetings I think.

SL: Yes, indeed. The discussions at the beach were usually very relaxed and very spontaneous. In many cases there was not only exchange of valuable information but also "criticism" that could not have taken place in a formal session.

AC: Scientific gossip, which I think, is very important.

JZ: One unique feature of the ACNP meetings for me was that I got some feedback outside in the corridor and near the beach that helped me a lot in my research.

TR: Invaluable blend of scientific and social interactions.

AF: Do you have any particularly fond memories of the ACNP that you could share with us?

SL: Well, I used to look forward to meeting people at ACNP; to get Arvid's uninhibited criticism. I was really looking forward.

AF: The two of you had to fly thousands of miles that you get that criticism. Perhaps it was better in the winter to come here than it was to go up to Sweden.

AC: Sorry....

SL: It was appreciated.

AC: Thank you.

- AF: Is there any particular colleague that you have become friendly with professionally or socially, as a consequence of attending the annual meeting? Trevor, is there anybody?
- TR: Well, there is a whole set of American colleagues, like George Koob.
- AF: Do you think meeting people is an important aspect of these meetings?
- TR: I think it's important for British neuropsychopharmacologists to interact with American and European neuropsychopharmacologists. You have to interact all the time. My favorite memory about ACNP meetings is from the late 1980s. It was the first ACNP meeting I attended. Everett Ellinwood invited me to be one of the discussants of an evening panel on computerized neuropsychological tests. Those tests were barely out there at the time and he got together three or four of us to discuss them and that was quite amazing. I was really impressed to be invited by him because I was such an admirer of his work on amphetamine and amphetamine intoxication. I had been involved in research with amphetamine myself.
- JZ: I think the informality at ACNP meetings is unique. There are no ties, people move around in shorts. This makes it easier for me to go and talk to people.
- RB: I think the yearly elections in the ACNP are impressive. The leadership changes year to year and it doesn't seem to be any clique that controls the organization. The committees all function so well. Although ACNP is an establishment, a conservative organization, it still speaks up for radical small minorities. It is also very admirable that the business meetings are so well attended, and active, compared to the business meetings of some other organizations.
- TR: Don't you feel a bit guilty sometimes Robert that you don't need to participate in endless committee meetings, that you can enjoy what ACNP has to offer without having to do any of the hard work.
- AF: So you're suggesting that foreign corresponding fellows should become committee members?
- TR: No, I'm not suggesting that!
- AF: Now, look into your crystal balls and tell us how you think in the next ten years, or fifteen years you think our field is going to develop. Trevor, do you want to start with this?
- TR: Well, we should expect focusing on cognition in terms of pharmacological treatment of schizophrenia, Alzheimer's disease, and other conditions. Clearly, there's a lot of interest in the cognitive area; many companies find ingenious ways of producing new compounds targeting cognition. Some of these compounds are going to be tested in the near future and we're going to learn a lot from the findings. I suspect we will be quite

disappointed in some of the results, but I also suspect that there will be big advances in that area of research.

AF: Arvid, Sol, you've both been involved in drug development for many years and I'm curious how you think about the future?

AC: Let me just say first of all, that looking back, the development we've had through the past decades have been revolutionary and there is no reason to believe that it's not going to continue in the same way in the future. We will have surprises, dramatic developments, but what is going to happen, I cannot tell.

AF: Sol, what do you think what's going to happen?

SL: I think there is a concerted effort to deal with non-responders in depression. I think the pharmaceutical industry and even the biotechnology companies are aware of unmet medical needs, and are producing molecules that would address this issue. In schizophrenia compliance remains a problem. Perhaps, new approaches may get around better therapeutic agents for negative symptoms in schizophrenia.

RB: Well, the body of knowledge will certainly increase; we will know more and more about the most complex organ in the universe. Whether we will have new treatments, I agree with Arvid, that we can't predict. I think we have to deal with things as they are without over promising. We cannot promise genes for mental illness in 'x' time. We cannot promise new treatments in 'x' time. We want to be optimistic but we should not promise that we can not deliver.

JZ: I think we will look at circuits and more microcircuits, which might lead us to better understanding about the nature of mental disease. I think that we will realize that we need to tailor treatment to the specific needs of the patient based on genetic infrastructure and specific brain circuitries, and so on.

TR: Perhaps we will need to combine psychological approaches with the psychopharmacological.

AC: Can I perhaps add one thing? I wouldn't be surprised if we would see in the future an entirely new diagnostic system in psychiatry, one that is based on knowledge about circuitries, on the immense new knowledge based on imaging and other fabulous techniques that developed in the past decades. One could come up with an entirely new diagnostic system, I think. We already have seen that the drugs don't care about the boundaries between one diagnosis and the other. So my prediction is that the new knowledge will eradicate a lot of the current diagnoses and that there will be a real paradigm shift in terms of diagnostics.

AF: Good. Any issue that you would like to talk about?

TR: Well, just rather humorously I never had as many problems with the airways as flying to a meeting in San Juan. Getting from London to San Juan is quite a hassle. I tried every conceivable way, from flying from London to Madrid and so on. So the very first time that I went to ACNP I missed my connection to San Juan. The next flight went two days later. So I took a flight from Madrid to Lima, Peru, stopping at the Dominican Republic and getting on American Airlines back to San Juan. I arrived only 12 hours late. At another time there was snow on the east coast. I also had hassles with immigration. I've had more adventures coming to the ACNP than to any other meeting.

AF: But it's been worth.

TR: It's been worth. I still come back.

AF: Any other concluding remarks? If not, I really want to thank the panelists for participating and devoting your time to this videotaping. Thank you very much.



## **PART TWO**

***The Membership Talks About Their College***



In Part Two of this volume, excerpts from transcripts are presented from all transcripts in the ten volumes under five headings: (1) The Founders and The Founding of ACNP, (2) The Presidents and the Story of ACNP, (3) The Membership and The Story of ACNP, (4) The Mission of ACNP: Basic and Transdisciplinary Scientists and (5) The Mission of ACNP: Clinical Researchers. Those excerpts in which the members refer to the College only tangentially are included in Appendix Three.

In the excerpts, the question and answer format is retained but since the answers are abridged, with text unrelated to ACNP eliminated, some of the answers of the interviewees may sound unrelated to the questions of the interviewers. At the end of each interaction the interview where the information comes from is identified. The reference includes the full name of both, the interviewee and the interviewer, the year the interviewee was elected to membership to ACNP and the volume number in which the full interaction appears.

Within this framework, the story of the ACNP is extended from the manner in which it was conceived at its founding, i.e., its mission, the nature of its membership and the structure of its annual program, to how this conception fared over the ensuing 50 years of its history. This is done by beginning with a section with excerpts from the interviews of those who shaped the founding, the Founders. It follows, in section two with the College's development over the years through the eyes of its leaders, its annually elected Presidents, who sometimes focus on an outstanding issue in the year they served or simply comment on the general state of the field at that time. An overview of this section provides us with a historical vantage on the central issues that the College confronts over time, and how it deals with them in its efforts to stay timely and to progress in achieving its mission. The third section samples the views of members regarding the role the College has played in their careers and the bases for their obviously strong personal attachment. Sections four and five tackle the issue of the College's Mission, its early conceptualization by the Founders and how it has been sustained and modified during the ACNP's now lengthy history. To accomplish that task, the views of the Basic and Transdisciplinary Scientists and those of the Clinical Scientists were separated. The separation is designed to ease the task for the reader in interpreting a controversy over what appears to many in the College, to be a steadily declining role for clinical researchers in the conduct of the science of neuropsychopharmacology and specifically, in the negligence on the current scene, of clinical issues in the planning of annual programs.



## THE FOUNDERS AND THE FOUNDING OF ACNP

Under this heading excerpts, relevant to the founding and the story of ACNP are presented from the 42 interviews conducted with 33 (of the 105) founders. (See, Appendix One.) Two of the founders (Ayd and Cole) were interviewed three times; six (Elkes, Fink, Gottschalk, Hollister, Kornetsky and Sarwer-Foner) were interviewed twice; 24 were interviewed once; and two of the founders (Eva and Keith Killam) interviewed each other.

Twenty-seven of the 42 interviews conducted with founders include information relevant to the story of ACNP but only 14 of these 27 transcripts based on interviews with 13 founders (Ayd, Cole, Costa, Elkes, Fish, Hollister, Kety, Klee, Klett, Kurland, Lehmann, Sarwer-Foner and Turner) include information relevant to the founding of ACNP. Details on events that preceded the founding and on the early years of the college are provided in eight of these transcripts (Ayd-Hollister, Ayd-Healy, Ayd-Ban, Cole-Salzman, Elkes-Sulser, Hollister-Ayd, Hollister-Ban and Turner-Engelhardt).

Note that the text of the excerpts are not restricted to the founding but includes everything that the Founders said about the ACNP. The excerpts include comments from E. Callaway that simply states information about regular attendance of the annual meetings or from J. Brady and A. Friedhoff that refer to discoveries occurring at the time of the College's inception. Brief comments of this type were provided by E. Costa, E. Domino, who did not attend the first meeting, and from M. Jarvik and A Karczmar. Eight of the Founders interviewed (J. Carr, L. Cook, J. Delgado, P.Dews, L Gottschalk, S. Kaim, E. Uhlenhuth and S. Wortis) stated nothing of relevance about the ACNP. Only the fact of their interviews is recorded.

Here we have the comments of a broad range of the Founders who created the concept and organized to establish the College. Joel Elkes describes events that led to the creation of psychopharmacology as a discipline and its conception as a nexus for linking the sciences, notably, linking brain function to behavior: *There had been quiet discussions among some people about the need for a body where information and discoveries in psychopharmacology can be shared in a congenial way in a congenial environment* . Frank Ayd describes the climate in the profession and the world of psychiatric practice prevailing in the late 1950s. He locates the thinking about the American College in the context of the era that preceded it, including the relevant events world-wide that were occurring, such as the inception of the international CIMP organization. Ayd comments that *there was a need for this College. Psychiatrists were not talking to pharmacologists; nor were the biologists or geneticists*". Jonathan Cole provides a narrative on the founding of the College, the primary players, its original composition, and its goals. On the membership he comments: "*it*

was a mixture of laboratory researchers like Peter Dews and clinicians like Fritz Freyhan . Other founders contribute to describing the early makeup of the membership of the College (Barbara Fish, Max Fink, William Turner), its aspirations in linking basic and clinical science (Seymour Kety, Eva Killam) and the selection of structure and content of the early meetings (Karl Rickels, Albert Kurland). In that group we find also such other early figures as Erminio Costa, Keith Killam, and Leo Hollister. Later, of course, Alfred Freedman reports on early attempts to incorporate substance abuse into the College's overall perspective. Regarding the cohesion of the College, Keith Killam comments that *"the amazing thing that we've seen in all of this is the ability of the people to pull together and and work together and accomplish thngs with no major remuneration other than the fact that it was fit for the College"*. Karl Rickels reflects on the changes since the founding: *When we started, neuroscience hardly existed and 95 per cent of the presentations were clinical. We can do things now that we couldn t even imagine when ACNP started* . So that a reading of the excerpts from the interviews in this section provides a relatively complete description of the early days citing the important figures from the several sciences, who, helped construct and establish the College.

The section starts with excerpts from a special interview with Martin Katz on some background information to the founding. This is follwed by excerpts from 27 interviews with 25 founders. At the end of each excerpt the name of the interviewee and the interviewer, as well as the volume in which the full transcript appears is noted. The Arabic numerals beside the name of founders indicate that the excerpt is from the 1st, 2<sup>nd</sup> or 3<sup>rd</sup> interview of the founder. The number in parentheses beside Katz's name indicates the year he was elected a member.

### ***The Excerpts***

#### **KATZ (1963).**

**Ban:** Could you tell us about some of the background to the founding of the ACNP?

**Katz:** I am happy to be able to talk about some of the events that led to the founding of the College. The Cross-national clinical drug evaluation studies program at NIH got started in 1960 and about the same time, investigators began to act on the need for a national association, a scientific college. Because there were so many disciplines involved, the problems of how to assemble them, how to get the different disciplines to communicate with each other in order to solve the scientific problems unique to this new science, was a major undertaking. It required crossing the various disciplines involved, while each group of investigators was doing work with their own perspectives in their own fields. It

required getting them to merge, to cross biological, psychological, psychiatric considerations in their research and to develop future programs for the new discipline. It was in the course of this process that they began to see the need for greater communication, increased discussion across disciplines and the introduction into the process of more scientists of various types from around the country and from other countries. And, so, the concept of the American College of Neuropsychopharmacology evolved.

*Ban:* Could you name some of the people involved in the creation of ACNP?

**Katz:** The early creators of that college were people like Paul Hoch, Jonathan Cole, Joel Elkes, Ted Rothman. Joel Elkes who I haven't mentioned up until now, was a leading figure in this field, because he had created the first Department of Experimental Psychiatry in Birmingham, in the United Kingdom. He set up a model for merging science and psychiatry for the future and he was one of the most eloquent spokesmen in the field, emphasizing the importance of linking basic and clinical research into the future. Of course, Heinz Lehmann, who brought with him the experience with clinical trials of new drugs and the notions of the values that come out of good science in the simple assessment of a particular drug, contributed to the early advances in treatment. We had psychology and we had statistics and out of this group came this notion about the College which I believe was established and chartered by a small dedicated group of visionary investigators in nineteen sixty one.

(Martin M. Katz interviewed by Thomas A. Ban; Volume 10.)

## **AYD 1**

*Hollister:* Well, what do you think was the biggest accomplishment that you've made? I know that's a tough question because you've made a lot of them.

**Ayd:** Well, I think aside from looking at the drugs and being persistent, I was sort of a St. John the Baptist in the wilderness preaching the gospel of the psychopharmaceuticals and their potential value for people. In addition of testifying before Congress I was very much involved in getting the ACNP started. I also played a role in the formation of the British College of Neuropsychopharmacology. I went over there at the request of David Wheatley, Tony Horden and Max Hamilton and met with them for a couple days. I told them how we started the ACNP. I've tried to extol the virtues as well as the liabilities of the drugs, because they are the only things that has really has changed psychiatry. There is nothing new in the psychotherapy field.

*Hollister:* I think it's become a little less dogmatic.

**Ayd:** Well, the challenge of the drugs, Leo, is that you give a pill and over a period of days or weeks, there is a change in the individual. One of my benefits from starting the College was that I got to know Bernie Brodie well. He, Jon Cole and I were on a committee, and we met frequently because Jon was still

in Washington and I was in Baltimore. I had ample opportunity to get to know him as a man.

*Hollister:* Well, it has been sort of gratifying, hasn't it, to see the changes that have occurred.

**Ayd:** Yes.

*Hollister:* Do you think we've gone too far in de-institutionalizing people?

**Ayd:** Well, I think so.

*Hollister:* Is there still room for an asylum?

**Ayd:** Yes. And that's one of the things the New York Psychiatric Association and the ACNP ought to be taking a very strong stand on. Look, there are people who can be controlled with these medications in a structured environment, but they cannot be relied on to comply with a pharmaceutical program on their own out in the community, and they deteriorate.

(Frank J. Ayd, Jr. interviewed by Leo E. Hollister; Volume 1.)

## **AYD 2**

*Healy:* You were involved in the early days of CINP, which as I understand it, was largely perceived in America as being a very European thing.

**Ayd:** Very few people over here knew about the CINP at all. When I brought it up at our first meeting in New York, that we should start a College here, it was based on my experience with being at the founding of CINP in Milan. And, there was a need for this College. Psychiatrists were not talking to pharmacologists. Pharmacologists were not talking to psychiatrists; nor were the biologists or geneticists. It was clear that this was a very complex situation and it would be helpful for all of us if we could talk to each other. So, when Ted Rothman approached me about such a meeting I quickly jumped in with some ideas and he invited me to the meeting and in the course of the discussion I brought up what had happened in Milan and said, you know, we really should have an American College. It took some time to work out how it should be formed but it's a reality today and it's become, in my judgment, the most prestigious organization of its kind in the world. I'm very proud to have had a role in its beginning and it has made a world of difference when you look at what goes on at these meetings today with the basic scientists and psychiatrists talking to each other, exchanging views. That's for their benefit but also for the benefit of patients.

*Healy:* You're saying the first meeting about the idea of some kind of society was Ted Rothman's?

**Ayd:** Ted had an idea there should be something. He wasn't quite clear what it ought to be. His idea was that he was going to get together about a dozen of us in New York, and the reason for that was that the medical director from

Geigy, who was going to fund this thing, would be at the meeting and he was in New York. By this time, Jonathan Cole was in Boston, I was in Baltimore, and Bernie Brodie was in Washington so we were all fairly close together. The only one who really had to travel any distance was Ted Rothman - Leo Hollister was not there initially but he came in later - so the bulk of us were from New York.

*Healy:* So it was an East coast thing at the start?

**Ayd:** Basically, yes. There were a few others, I don't remember them all. Joe Tobin came, he was from Wisconsin. So there were some who came a distance to get to the meetings. From the very beginning, Joe Tobin, a basic scientist, was there. And Brodie of course was a basic scientist. Joe Brady was a psychologist so almost from the beginning the clinicians were outnumbered. Not quite, but there was good representation from different specialties.

*Healy:* The early meetings were held in New York on the East Coast. Why did you ever think to move to Puerto Rico?

**Ayd:** A snowstorm.

*Healy:* Really?

**Ayd:** Oh, yes. I think it was the 1963 meeting, I know I came from Rome for the meeting. Milt Greenblatt was the president that year and the meeting was in Washington. We had a terrible blizzard and only a limited number attended. I don't think there were a hundred people showed up for that meeting. This led to a discussion about finding a better place to meet. They didn't want to come to Florida and questioned whether the facilities would be OK, so the decision was to hold it in Puerto Rico. As you would expect, there was some dissatisfaction with that, so then we moved back into the United States and we had meetings in New Orleans, Las Vegas and Palm Springs. We also met in Hawaii on several occasions and today we're back in San Juan.

*Healy:* The early meetings, as I understand it, were very informal brainstorming sessions.

**Ayd:** Exactly.

*Healy:* It's a lot more structured now isn't it?

**Ayd:** Yes, it has to be.

*Healy:* Well, yes, possibly it has to be.

**Ayd:** It has to be. You've got a much greater number of members and a number of invited guests. We have more people from outside the United States here than we had at that first meeting from the United States. That's a change. Tomorrow, the first of poster sessions, there are 161 posters. We didn't have that many presentations in a whole meeting in the beginning. In fact, we didn't have poster sessions. We had morning sessions. The afternoons were to lie around on the beach and to have brainstorming and serendipity sessions. It was great, because it really gave us a chance to get to know each other. Even

the evening sessions were finished early so we could go out to dinner together. In those days, in the beginning, the pharmaceutical company presence was there but not felt. Not that I'm against the involvement. I'm grateful that the industry makes them possible. It wouldn't happen otherwise. Then, unfortunately, the College got accused of being an elite old boys club. People couldn't get in. I raised that issue this morning at the History Meeting because that's being alleged again, that we've not taken in people who really are qualified. It's a question of a reluctance to increase the membership and I can understand that, but I think we'll have to, in another couple of years, increase the number of members.

*Healy:* Has it changed? Yes, it's got larger, but has it shifted too much towards the basic sciences, from your point of view, do you think?

**Ayd:** Emphatically, yes, and that has discouraged a good number of people who I frankly think come for a week's vacation. They're not interested in the topics but they would much rather be able to go back and say I learned this that I can use in my practice, or that I can use in my teaching of the residents. I frequently have people talk to me about this who I don't think would have talked to me, otherwise but they know I have been involved and am still dedicated to this college. We have some very fine young people here at this meeting and that's good for them and it's good for us, but they're not getting involved as much as I think they should be in the leadership and thinking of this kind.

*Healy:* Leadership for the future?

**Ayd:** Yes.

(Frank J. Ayd, Jr. interviewed by David Healy; Volume 9.)

### **AYD 3**

*Ban:* We talked about the birth of the CINP. We talked about your life in the Vatican. We also talked about the congressional hearings in the United States which led to the establishment of the Psychopharmacology Service Center, but we have not talked yet about the founding of the ACNP, an organization you had been involved with very much.

**Ayd:** The idea behind the founding of the ACNP was to get better communication between psychiatrists, pharmacologists, industry and physicians, in general. From the very beginning, so, there were a few psychopharmacologists involved. Nate Kline was there, I was there, Heinz Lehmann was there, and other leaders in the field. But we had very few pharmacologists and I thought that we should have more of them. So, lo and behold, at the next meeting, we had Brodie there. What a mind that man had! At that time he was working on determining the presence of drugs in plasma and serum, and he told us, "We've got to work on determining drugs in the blood because otherwise we don't know whether the drug is in the body". He championed that area of

research, and, we established a sub-committee that consisted of Jonathan Cole, Brodie and myself, that focused on that issue. So, before long, we were getting into such issues as hormonal kinetics and pharmacokinetics, and so on. And, that, to me, was the important thing. The college should be a college, a source of information, a source of stimulation. That was my position. (Frank J. Ayd interviewed by Thomas A. Ban; Volume 10.)

### **BRADY**

*Hollister:* What people or events steered you in regard to your activities relevant to ACNP and neuropsychopharmacology?

**Brady:** We had some methodologies that we developed, conditioned emotional responses in animals, and that was really the beginning of my interest in this area.

(Joseph V. Brady interviewed by Leo E Hollister; Volume 1.)

### **CALLAWAY**

*Ban:* When did you become a member of ACNP?

**Callaway:** I don't think I was there at the very first meeting but I think I was at the second one.

*Ban:* So, you became a member soon after it was founded, in the early 1960s?

**Callaway:** Yes.

*Ban:* Were you ever an officer?

**Callaway:** I was on the Council.

(Enoch Callaway III interviewed by Thomas A. Ban; Volume 2.)

### **CARR**

(Charles Jelleff Carr interviewed by Thomas A. Ban; Volume 1.)

### **COLE 1**

(Jonathan O. Cole interviewed by Leo E. Hollister; Volume 4.)

### **COLE 2**

(Jonathan O. Cole interviewed by Thomas A. Ban; Volume 9.)

### **COLE 3**

*Salzman:* Now, turning to the ACNP, do you remember how it got started? Who got the idea?

**Cole:** I suspect it was Paul Hoch. Paul Hoch and Ted Rothman, a psychoanalyst in Los Angeles, who used drugs in psychotherapy, held a meeting in the Barbizon in New York. Joseph Wortis, I, Fritz Freyhan, Heinz Lehmann, and about 15 people were there.

*Salzman:* Could you name the others?

**Cole:** Doug Goldman, I think. They have records in Nashville, as to who were there.

*Salzman:* Did someone think up the name right at the beginning or did it come along later?

*Cole:* I presume it was Joel Elkes, I don't know

*Salzman:* If you think back to that early meeting, weren't there three people more important in establishing the ACNP than anybody else?

*Cole:* I think Paul Hoch was one. Ted Rothman was sort of the driving force who would travel around and do almost anything to get it started. Paul Hoch was the senior commanding officer, the Dwight Eisenhower, of the operation.

*Salzman:* How did the meetings in Puerto Rico start?

**Cole:** The group didn't meet in Puerto Rico for several years because Hoch thought it was inappropriate. But, there were other people like me who thought that meetings in Puerto Rico would be sort of fun. Then Hoch died and we moved to Puerto Rico. It did turn out to be good. We had meetings in the morning and then, like three hours around the pool and meetings in the afternoon. It worked fine, until we got too big.

*Salzman:* Well, we'll get to the size in a minute

**Cole:** Yes.

*Salzman:* Did the CINP also start around that time?

**Cole:** It was sort of established by then.

*Salzman:* Now, the ACNP started as a small organization.

**Cole:** Well, I think it was eighty some people.

*Salzman:* Who were the original people who attended? Were they mostly researchers?

**Cole:** It was a mixture of laboratory researchers like Peter Dews and clinicians like Fritz Freyhan.

*Salzman:* After moving to Puerto Rico, were all the annual meetings in Puerto Rico?

**Cole:** One out of three or four were back in the States. Then we began to have meetings also in the west.

*Salzman:* Did the ACNP have any other function early on, or was it just an annual meeting?

**Cole:** We also reviewed a policy statement coming out of the FDA at one point or another and I remember we gave a statement on tardive dyskinesia whenever that became prominent.

*Salzman:* That was George Crane's area.

**Cole:** Yes.

*Salzman:* Were the ACNP and the ECDEU working together?

**Cole:** It had an over-lapping membership. We would all attend meetings in Puerto Rico.

**Salzman:** Were most of the people who attended those early meetings academically based or were there some private researchers who were operating independently?

**Cole:** It was a mixture.

**Salzman:** Did your own work and the ACNP interact at any point?

**Cole:** We provided research funds to the ACNP at one point, early on. I managed to have them apply for a grant to support them for four or five years, which was, I think helpful.

**Salzman:** Were drug companies invited into ACNP right from the start?

**Cole:** Yes.

**Salzman:** Do you think that was helpful to the organization or did it interfere with free exchange of information?

**Cole:** I think it was helpful. I think without financial support, a certain amount of spark from drug companies ACNP wouldn't have gone forward.

**Salzman:** Did the posters start out right at the beginning or was that a later innovation?

**Cole:** Probably five to seven years after the ACNP was established.

**Salzman:** Did the drug companies submit posters as well? They do now. Did they do it back then?

**Cole:** Probably, I don't remember there being any exclusion on them.

**Salzman:** I see. Do you feel that the posters from drug companies were helpful?

**Cole:** We thought they were interesting. Nobody was really worried about investigators' arms being twisted or their minds being bent by drug companies.

**Salzman:** All right. Well, in the early years, did you feel there was any conflict of interest?

**Cole:** No, I don't think so. I think that people followed their own ideas and decided what they wanted to. We realized the drug companies had a bias and they probably realized we had our biases and we did our own studies.

**Salzman:** Okay. Was the ACNP getting money from the companies?

**Cole:** The committee on drug dependence had developed a model of getting drug companies to put money in. And they had meetings with industry and investigators and the whole thing worked out. Nathan Eddy was the guy, a chemist at NIH who masterminded all that.

**Salzman:** So that was a model for ACNP?

**Cole:** Yes.

**Salzman:** So now here we are in two thousand and eight and there's a great deal of concern about possible conflict of interest; any thoughts about that?

**Cole:** I think it's really over-blown, exaggerated.

*Salzman:* Do, do you feel that the ACNP itself has been influenced too much by the presence of drug companies and their money?

**Cole:** No, and I'm not sure which directions the drug companies wanted us to go in.

*Salzman:* OK. Do you have any particularly fond memories of the early years of ACNP?

**Cole:** Oh, I wish we had a recording of what happened at the annual meetings when Heinz Lehmann introduced me as president. He gave a very nice speech about me; I would love to have a copy of it.

*Salzman:* OK. Let's jump to now and ask you if you were president of ACNP today, would you do anything differently?

**Cole:** I'm not sure I would.

*Salzman:* Well, let me ask you a few specific questions.

**Cole:** OK.

*Salzman:* Do you think the ACNP, the organization, or the annual meeting has gotten too large?

**Cole:** Yes.

*Salzman:* Would you continue to hold annual meetings in nice resort-type places?

**Cole:** Yes.

*Salzman:* Why would you do that?

**Cole:** Well, everybody likes it and I think more people are talking to each other.

*Salzman:* So, you feel one of the great values of the ACNP is this informal discussion that goes on.

**Cole:** Yes. I think so.

*Salzman:* And you would continue to have drug company presence?

**Cole:** Yes.

*Salzman:* As much as it is today?

**Cole:** I would probably continue it. I just don't know of any negative or unethical or embarrassing event for the organization that they have done. .

*Salzman:* In terms of the length of the meeting, would it continue to be more or less as it has been?

**Cole:** I think five days from Sunday through Thursday is probably as long as anybody can stand.

*Salzman:* Now, what about activities of the ACNP now, as compared to the beginning? Do you feel that the ACNP should be more involved in political discussion or less; more involved with academic matters, FDA matters, etc?

**Cole:** I think it should be more involved in advocacy matters with the FDA and, I guess more involved in political matters. I just don't know how much that would cost.

*Salzman:* Do you remember how ACNP's involvement in advocacy matters started?

**Cole:** Danny Freedman was the leader on that issue by testifying on the hill.

*Salzman:* Do you remember what the testimony was about?

**Cole:** I know that part of it was about an opiate related issue.

*Salzman:* I remember that Danny Freedman was very interested in LSD. Did the ACNP get involved in the LSD controversy at all?

**Cole:** No.

*Salzman:* You set-up ECDEU which now is called NCDEU a group of researchers who could individually or collaboratively do psychopharmacology research without the drug companies.

**Cole:** Yes.

*Salzman:* So, they were conflict free. Do you see a role for some organization like that again?

**Cole:** Oh, it's still going and it has a meeting annually in the spring in Florida.

*Salzman:* That's correct, but it's not being funded by NIMH anymore.

**Cole:** Only in the last two or three years.

*Salzman:* Do you think that the ACNP should have any role in such an organization, either supervisory or financial or collaborative?

**Cole:** It's certainly worth thinking about it but I can't tell whether it would be better or worse.

*Salzman:* I just wanted to say one more thing to those viewing this tape. I went from Mass Mental Health Center to work with Jonathan from 1967 to '69 and my experience with Jonathan at that time was that he was a superb researcher and clinician. Jonathan had in his head a wealth of information of psychopharmacology. So, in the pre-computer era, if we needed an answer to a question, we simply went and asked Jonathan. And Jonathan would kind of look up at the ceiling, and say, "Well, lets see, a study was done by some Hungarian Psychiatrist with 1,200 people, 700 were male, 500 were female and the average age was so and so ....the doses of the drugs given were so and so, and that was the outcome....." And, that, frankly, I think was better than than it is now.

**Cole:** Things get too big. My information system was based on key cards and several thousand references

*Salzman:* I remember that.

**Cole:** It worked very well. They expanded it to the mental health information system with a small database and staff, and then the system fell apart. You just couldn't get a reliable coding system of that size.

*Salzman:* Thank you Jonathan very much. It was great to talk with you.

**Cole:** Thank you for coming. Thank you for doing it here.

*Salzman:* And, congratulations ACNP. It is the best meeting that I go to every year. It is the meeting I've learned from the most. It is the organization that I feel the strongest loyalty for and I love it and love it.  
(Jonathan Cole interviewed by Carl Salzman; Volume 10.)

## **COOK**

(Leonard Cook interviewed by Larry Stein; Volume 1.)

## **COSTA**

*Koslow:* What role have you played or has the ACNP played in your life?

**Costa:** I was involved early on with the ACNP. Washington, D.C., is the place where the ACNP was formed. In the beginning we had the meetings in rented bedrooms at a hotel. Eventually we went to Puerto Rico, because it was far away and everybody liked to go there in December.  
(Erminio Costa interviewed by Stephen H. Koslow; Volume 7.)

## **DELGADO**

(Jose Delgado interviewed by Joel Braslow; Volume 1.)

## **DEWS**

(Peter B. Dews interviewed by John A. Harvey; Volume 1.)

## **DOMINO**

*Gillin:* When did you first get involved with the ACNP?

**Domino:** Very early. I wasn't one of the charter members but I think it was about the second year that I was put on the list, probably because of recommendations from people like Carl Pfeiffer and Klaus Unna. So very quickly I was asked to become a member of this society.

*Gillin:* What was the first year you attended, do you recall?

**Domino:** I think it was within a year after the society was formed when the meetings were held in Washington D.C. I always get colds in December and whenever we'd have a meeting in Washington, I'd be sick. When we finally started having the meetings in San Juan that solved that problem.

*Gillin:* That made a lot of difference?

**Domino:** A big difference, indeed.

*Gillin:* Were there any other scientists, in particular, whose work you admired or emulated?

**Domino:** Well, I would say a lot of the people in ACNP. One of them was Jonathan Cole and another was Frank Berger. There were a number of other people who were important e.g., Ralph Gerard.

*Gillin:* Also, from Michigan, right?

**Domino:** Yes. He was originally at the University of Chicago. He came to Michigan to build up research at the Mental Health Research Institute, which, incidentally, has grown into something beautiful. After Bernie Agranoff stepped down, Huda Akil and Sam Watson became co-directors.

*Gillin:* Again, ACNP members.

**Domino:** You bet.

(Edward F. Domino interviewed by Charles J. Gillin; Volume 1.)

## ELKES 1

(Joel Elkes interviewed by Fridlin Sulser; Volume 1.)

## ELKES 2

*Sulser:* Maybe Joel, if you could tell us how the inception of the American College of Neuropsychopharmacology came about?

**Elkes:** There had been quiet discussions among some people about the need for a body where information and discoveries in psychopharmacology can be shared in a congenial way in a congenial environment. It started with Ted Rothman, who unfortunately was not quite given his due. Ted Rothman, Jonathan Cole, Paul Hoch, myself and others convened a meeting in the Barbizon Plaza Hotel in New York to discuss how to advance Neuropsychopharmacology.

*Sulser:* This was in 1960?

**Elkes:** Yes. November 1960. There were twenty invited people and twenty guests. At that meeting, ways and means were being discussed and one suggestion was to form a College of Neuropsychopharmacology, a scientific society and incorporate it in Maryland. They did that and the constitution of the college was being prepared. And finally the first organizing meeting of the American College of Neuropsychopharmacology took place.

*Sulser:* Then Joel, you got elected the first president of the ACNP. I had the pleasure of reading your lecture which you delivered when you were the first president. In it you defined the place of Neuropsychopharmacology and you gave an identity to the new science. And you said "Like a modern Rosetta Stone, psychopharmacology holds the key to much that is puzzling today. It provides the key to three languages: the nervous system, the endocrine system and the immune system". Well, Joel, I would love if you could elaborate a little bit on these beautiful concepts that you developed.

**Elkes:** Well, I feel that in the 1960's, there was a lot of fluidity and mobility in the field, and crossing over into disciplines there was an emerging understanding that there are four footings of the new discipline: neurochemistry, which was maturing so to speak because we did not have anything more in

neurochemistry than written in Thudichum, electrophysiology, animal behavior and clinical trials. These were the four footings, which I saw as essential elements of any psychopharmacological enterprise worth its name. At the end of that meeting we created the committees which still exist in the ACNP. We also created study groups on various subjects.

*Sulser:* That was lovely, your idea of small study groups.

**Elkes:** That's right.

*Sulser:* Could you talk a little bit more about your idea of study groups? I remember attending the annual ACNP meeting as a post-doctoral fellow when we met in bedrooms.

**Elkes:** The idea was to select people from different discipline into small groups and give them the opportunity to talk to each other. That's very simple and it developed very, very well. Study groups led to a sense of scholarship identity, of owning certain areas of psychopharmacology. And, it worked.

*Sulser:* I wonder, what role did, the ACNP play, in your own work. And how do you feel the ACNP has shaped the field over the next years?

**Elkes:** I can only tell you that I looked forward to the excitement of the next meeting of the ACNP, year by year, as a boy looks to toy books. It was an extraordinary feeling. I remember in October and November, oh my God, ACNP, is coming in December and how I was looking forward to it. Why? Because I found that among the colleagues there, languages developing that we could speak and understand each other. I could find sometimes, totally new, totally new areas opening up suddenly in a meeting by presentation. I found extraordinary contact and enrichment and I felt home. The ACNP was my home! I used to go there regularly not only to listen to the stories, the same stories, told by the same people, with the same Élan; there was also a feeling of great seriousness about the ACNP. This was a very serious body. It meant its business; it created committees, which did their work. It created rules, which were followed. It gave guidance, which has guided us to this day in our work. I think it was to me, a home base that was so absolutely necessary, because we had no moorings, a wonderful organization. That grew and grew and grew.

*Sulser:* Well, Joel, we have covered a remarkable story in neuropsychopharmacology; your journey through the field from physical chemistry, to neurochemistry, to clinical pharmacology, to the integration of basic and clinical sciences, and to the creation of the ACNP. We talked about the major people who have moved the field. We have talked about Joel, the research scientist and physician, and Joel the gardener of people! We have talked about Joel and the arts and medicine and Joel the painter. How remarkable, Joel. We are looking forward now to the fiftieth anniversary celebration

in 2011 and I think you have inspired us for fifty years with your eloquence, your creativity and your undying curiosity. And for this, Joel, we thank you very, very much.

**Elkes:** Thank you very much for listening. This is a very special moment for me. I have really very little to add because there is such an enormous amount to say. I can only express my deepest gratitude, respect to the College for doing me the highest honor I received in my life. To give me the opportunity to be in the company of such wonderful people and train, participate in the growth of young people who came to the laboratory. We've all done well. We all keep on looking. We all have to hold lanterns- lanterns, which illuminate areas, which are still murky, poorly understood. Above all, I think, we have to create new alliances because the nature of our field compels us to choose and choose again people, from disparate and different fields. For example, the whole question of communication in the nervous system cries out for collaboration between neurophysiologists and psychologists, education experts, communication engineers, language-translation specialists and so on. And they don't know what we know! And we don't know what they know! And the knowledge has to come together by work at the bench and common new languages will evolve as we work together. So, we need alliances and alliances, even with strange fields; to be trans-disciplinarians; make it evident that this is a science like no other is, it has special characteristics of its own and will in time have earmarks by which it is known. It is not only molecular biology; it is not only electrophysiology; it is not only animal behavior; it is not only clinical syndromes. It is the conversation and the interaction between these areas, which matters and we must do all we can to enhance the conversation. This is what the college can do like no other organization nationally and internationally. We must bring people in, we can learn from them. We have an unusual opportunity as a College and we should move it as my wife Sally says: "move it, move it". I'm delighted to be here and share this with you. Thank you very much.

(Joel Elkes interviewed by Fridolin Sulser; Volume 10.)

## **FINK**

**Cole:** Once in a blue moon they will have a study group on it or a special day or something, a half day or something or other, but it's not a core thing that is presented.

**Fink:** It used to be. In the first decade of the ACNP we had sessions on EEG as a regular feature. It was an important part of the work, just like we had neuropsychology sessions. Without trying to be critical, the reality is that somewhere in the 1970s, American Psychiatry adopted this neuroscience approach.

The Society of Neuroscience was very successful in the late 1960s, when it was created. Molecular neuroscience has dominated our field during the past decades and not only in this society, but also in the Society of Biological Psychiatry, and the American Psychiatric Association; they've all been contaminated by it. What I see, at the present time, is that we have missed, in this society, what we were originally brought together for. The original group consisted of psychiatrists, psychologists, and laboratory scientists. And, if I remember correctly, Jon, it was one-third, one-third and one-third, in the original group.

*Cole:* Yes.

**Fink:** And, in the first decades, I'm not sure how long, the meetings and the intent of this group to study the effect of chemicals on the mind has changed. Somewhere, the chemicals, the brain chemicals and the chemicals in the animal took over. We have, literally, lost the human being in this society. It sounds like sour grapes. It's not sour grapes. It is merely as I see it.

*Cole:* I think it's true, there is usually, in any given session of half a day, one session that I have some interest in. And, there used to be a choice of three or four and I'd have to decide which one I wanted to go to. From George Zubenko's talk yesterday in my honor I didn't understand a word he was talking about and I wasn't sure whether I wanted to or not. I mean, it was gene expression and what not.

**Fink:** Well, I think your session yesterday was in the old style. The only problem was that they didn't give me and others a chance to raise some questions. But, I would say, in the next five years, this society will either be changing its' direction or become a molecular science society that is going to lose all the clinicians. The clinicians are going to go out.

*Cole:* They're going to go to Don Klein's and they're going to Paul Wender's.

**Fink:** The neuroscientists are rather glib about schizophrenia. They're rather glib about all the terms that we use in clinical psychiatry and that's unfortunate. Schizophrenia is a complex disorder and it's not easy to diagnose it, and it's not easy to follow its course, and it's not very stable. And, it's hard to know the difference between manic-depressive insanity, or a bipolar disorder and schizophrenia. And, what's going to happen in the next few years? I would think that if the clinicians bring themselves together and, maybe as you just mentioned, with Fuller Torrey, urge that clinical work, rather than laboratory work as the core issue, be supported, then, we might come back. If not, I think that we will have to have a new explosion, a new interest somewhere, but it will not be here.

(Max Fink interviewed by Jonathan O. Cole; Volume 2.)

## **FINK 2**

*Healy:* In the wider public mind, the thing you're most interested in is ECT. Now, you've been part of ACNP from the start. ACNP hasn't always been the

friendliest organization for ECT. Can you link those two stories together for me?

**Fink:** When ACNP started, about a third of the members were clinicians; physicians treating psychiatric patients and carrying out drug studies. About a third of the members were psychologists, most often interested in behavioral measures; and a third were laboratory chemists and physiologists. In the first decade there was a strong emphasis on the clinical issues including an interest in EEG. We held a number of pharmaco-EEG panels. There was also some interest in ECT. At the time, we discussed the conditions for which ECT was applicable, as in patients who don't do well with antidepressants or antipsychotics. Members of the ACNP, by and large, cut off interest in ECT. Since 1980, there's been zero interest. There's been some nascent recent interest because of the enthusiasm for brain stimulation as a new gimmick. A Brain Stimulation Symposium is scheduled for this afternoon. My active involvement with the ACNP was at the very beginning. I was a member of a number of the committees. I was chairman of a Nominating Committee the year that we nominated Nathan Kline, which, by itself, caused a furor, because Nathan Kline already had a reputation as being somebody who did multiple trials, etc. Nevertheless, he was a leading figure and became President. Originally, there was some interest in the ACNP in such things as, "How Does One Make Diagnoses?" I had two evening sessions on Catatonia that worked out very well, because there were people in the audience who stood up and said, "You're imagining things, you're seeing cases we never see; they don't exist". More recently interest in these topics has been non-existent, not only here, but in the New Clinical Drug Evaluation Units and Biological Psychiatry meetings. A few years ago I was appointed to the History Committee and I chaired it for a year and had a wonderful time. The function of the History Committee at that time was only to invite an annual lecturer. We had debates on whom to invite. Now, they've taken over the Archives and that's an interesting feature.

*Healy:* All the people interviewed say that the ACNP helped them hugely. In your case, in terms of ECT and melancholia, catatonia and pharmaco-EEG, how has the ACNP helped, or have you been at odds with the organization?

**Fink:** In the first decade, Itil and I and others submitted symposia, clinically related, about pharmaco-EEG and they were accepted on the program. We ran some two or three hour sessions before there were posters. We also offered some ECT sessions and they were accepted. So, every other year we would have an ECT session or a pharmaco-EEG session. I said that badly; Pharmaco-EEG was active before ECT. ECT came in the 1980s, and we had a number of symposia at that time, not well attended, but they were here. Once we learned the mechanism of ECT with the neuroendocrine hypothesis we had one symposium in the late 1980s, and that was it. Then, whenever we

submitted symposia, they were rejected I think one would say that the ACNP has become too neuroscience-oriented, that the clinicians; physicians, psychologists and sociologists have all disappeared and the symposia now are mainly related to industry projects and proposals, or to fantasy neuroscience. (Max Fink interviewed by David Healy; Volume 9.)

## **FISH**

*Bromley:* But your studies were the first in children?

**Fish:** Yes.

*Bromley:* With chlorpromazine?

**Fish:** Yes. There may have been some private practitioners doing work, but not official studies. In the ACNP, I was the only one working with children.

*Bromley:* Maybe you can tell us more about the origin of the ACNP. What brought you all together? What were you trying to do with the organization early on, would you say?

**Fish:** It was the beginning of the work on psychopharmacology and I was at Bellevue. There were about twelve of us doing early clinical drug evaluations. I was the only one with a child unit, and the only woman. So I was kind of a star in this circle, and it was fun. In the ACNP as a whole there were a hundred men and five women. Laretta Bender, Else Kris, who was also a state hospital person that Laretta knew very well. I collaborated with her on some stuff, because she knew what I was doing with the babies. Then there was Eva Killam. It was a good comradeship. I just knew a lot of those who were working in the field.

*Bromley:* Would you say in the beginning you were meeting to work on trial design, to attract new trainees, to form a professional organization or to lobby in some way? What was the impetus for getting together and the mission?

**Fish:** We had not just the annual meetings, but those of us that were doing this early clinical work, the dozen of us, were also getting together. And then there was a larger group. We would meet with Heinz Lehmann from Canada and some of the big figures in the field. If you look at that first dinner picture of the ACNP, I'm sitting between the big state hospital guy, Henry Brill, and Heinz Lehmann. They were my buddies and they were brilliant guys. It was all very exciting; I was part of the gang.

*Bromley:* Right

**Fish:** In 1963 or 1964, the head of NIMH gave a speech there. Stanley Yolles stood up and said we were all going to solve schizophrenia in twenty years. We looked at each other, those of us at the ACNP, and knew he was just plain wrong. That was when they started to close the state hospitals. They were curing schizophrenia, and threw the patients out in the street.

*Meldrum:* You knew what he said wasn't true?

**Fish:** They couldn't possibly do this. It became a disaster. They threw the people out without any preparation. I remember because one of my classmates then, Al Miller, who was a very decent person, worked in the New York State system. I said, "Alan, you simply cannot do this. This is a terrible thing. There are no facilities ready for these people". He acted as though he was helpless and had to do whatever they told him to. He was a fine person but he gave in. *Bromley* And you all had to rationalize this decision to close and reduce populations in state hospitals.

**Fish:** Well, we were against it. All of us at the ACNP certainly knew that schizophrenia wasn't going to disappear, and they weren't going to cure it in twenty years.

*Bromley:* Yet in his position as NIMH director, he was perhaps saying, look, we've made such progress in drug research in the last nine, ten years, and the science is advancing fast.

**Fish:** This was in 1963; it was one of the first years of ACNP.

(Barbara Fish interviewed by Marcia Meldrum and Elizabeth Bromley; Volume 7.)

## **FREEDMAN**

*Ban:* Then in the early 1970s you became a national figure.

**Freedman:** In 1970, I became President of the American Psychopathological Association, after serving for years on many of their committees, and just as my term was terminating in 1971 I was elected President of the ACNP. During my Presidency I was trying to make substance abuse a legitimate subject of psychopharmacology and I don't think I succeeded very well, even though I spoke about it in my Presidential address and I turned out a volume with Seymour Fisher on drug abuse. I was also trying to democratize the ACNP, get more people involved and maybe to have regional meetings organized several times a year. I guess some of that has occurred over the years.

(Alfred M. Freedman interviewed by Thomas A. Ban; Volume 1.)

## **FRIEDHOFF**

*Bunney:* So, what did you decide to do next?

**Friedhoff:** Recently, in the ACNP Journal we published an article showing that if you stress rats, acutely, nothing happens, but if you stress them with fairly mild stress for seven or eight days, it inhibits the conditioned avoidance response.

(Arnold J. Friedhoff interviewed by Benjamin S. Bunney; Volume 5.)

## **GOTTSCHALK 1**

(Louis A. Gottschalk interviewed by William E. Bunney; Volume 1.)

## GOTTSCHALK 2

(Louis E. Gottschalk interviewed by Thomas A. Ban; Volume 9.)

### HOLLISTER 1

*Ayd:* They were very important.

**Hollister:** So that was my early career in psychopharmacology. By that time, of course, I had become fairly well known. I was one of the first members of ACNP, but I never attended a meeting of the ACNP for the first two years, which should have gotten me kicked out, according to the rules. Ted Rothman had to prevail on me to get me to join, because it appeared to me there were enough organizations now, and we didn't need another one, about which I was dead wrong. So I did attend the third one, and as we were checking out of the hotel, I walked over to Ted and I said, "Ted, I was dead wrong. This is a great organization. I'm awfully glad you persuaded me to join". Since then, I've never missed a meeting.

*Ayd:* I know that. That was in Washington, that year.

**Hollister:** That was the meeting in Washington.

*Ayd:* Was that the one where we had the blizzard?

**Hollister:** Yes.

*Ayd:* I had flown in from Rome for that, and we only had a handful of people there because of the blizzard.

**Hollister:** Well, I never attended any of the meetings of the Collegium Internationale Neuro-Psychopharmacologicum (CINP) until 1964, in Birmingham. I remember very well we had lunch together in Birmingham and you were coming from the Vatican then also.

*Ayd:* That's correct.

**Hollister:** I told you, my secretary told me last Christmas, "There's a card here from the Vatican", and I said, "Well, that must be from my friend, Frank Ayd, and if there's not a signed picture of the Pope, I'm going to be disappointed". You didn't say a word. The next Christmas, there was that photograph of you and the Pope with your whole family.

*Ayd:* The CINP is an organization that you know something about, in terms of its early days, and you also became a president of the CINP, right?

**Hollister:** Yes, that was quite a surprise to me. I didn't anticipate it at all. It was at the meeting in Paris in 1974 and I understand that they had the idea that they should increase their bonds with the ACNP. At that time, I had become ACNP president, so they figured if they had somebody there from the ACNP that would increase their bond. My understanding is that Nate Kline argued fiercely against my being given that job. Of course, in those days, it was given and it still is, I guess. You're really not elected, but selected. But they did give it to me anyway and I became president. I had a tremendous influence, much more so

than usual presidents do, in selecting my successors. I got Arvid Carlsson as one successor; I selected Arvid Carlsson, Paul Janssen, Paul Kielholz and Ole Rafaelsen. I think that getting both Arvid and Paul as presidents was the right thing to do. They're giants in the whole field, far more so than I am or any other presidents we've ever had.

*Ayd:* There were a lot of politics, and if you got the right people behind you, then, yes, you had a chance of becoming a president.

**Hollister:** Speaking of presidents, though, I really think that you have been slighted. You should have been president of this organization and you damn well could have been president of the CINP. I was very happy to see your photograph is up with all the presidents, as a founding member, and I think that gives you the same rank.

*Ayd:* Oh, I'm pleased. I never aspired politically, you know, and I don't think you have either. If someone had asked me, I would have said yes, but I never said no to any request I've had from the College.

**Hollister:** Well, how I became president of the ACNP is kind of a strange thing. The council had a nominating committee, of which Doug Goldman was the Chairman, and Doug had come to me and said, "I'm the Chairman of this nominating committee, and I'd like to see Ted Rothman nominated as president. Do you have any objection"? I said, "No, how could I have any objection, because Ted got me into this organization". Well, he gave his report and the council was upset because they thought he was going to nominate me. So Dick Wittenborn, I think it was, came to me and said, "Say, is it true that you don't want to be president of this organization"? I said "No". I told him the story, and eventually got into a little hairy situation, because I was very good friends of both Ted and Doug. And here it looked as though I was trying to intervene over Doug's decision and over Ted's ascendancy, so I didn't feel too good about that. But ultimately Ted was given the Paul Hoch Award and I think we all recognized his importance in the founding of this organization.

*Ayd:* Okay, now, predict what you see for the future of psychopharmacology and, also the ACNP.

**Hollister:** Well, the ACNP, in recent years, has become a kind of secondary society for neuroscience, at least, in terms of the program content. Neuroscience advances have been so enormous, especially in molecular pharmacology and all the explicit techniques that are now used for genetic analysis. So as we have your lexicon for psychiatric terms, we need now a lexicon for the terms in molecular biology, and this hurts some of our members. There's been an eclipse in the clinical emphasis. Now, whether this will continue indefinitely or not, I don't know, but I think, maybe we as clinicians, need to try to develop some new approaches of our own in evaluating these drugs and seeing if we

can find some ways to reduce the time and the cost of getting them on the market.

(Leo E. Hollister interviewed by Frank J. Ayd; Volume 1.)

## **HOLLISTER 2**

*Ban:* When did you become a member of the CINP?

**Hollister:** Around 1960. About the same time I remember getting a call from Ted Rothman, in Los Angeles. I knew him as a clinical psychopharmacologist and he was in the process of starting a new society to be called the American College of Neuropsychopharmacology. Would I like to join as a founding member? I said, “Ted, there are so many societies these days and they’ve just formed a new international one. Why do we need another one”? I tried to talk him out of even starting it. Finally I said, “Well, if you want to start it, I’ll be happy to join as one of the first members”. There were two meetings in Washington, neither of which I attended. It turns out, according to the by-laws, after two meetings you miss that are unexcused, you should be booted out! Finally, I went to the third meeting which was also in Washington and punctuated by a blizzard that marooned us but it was a good meeting. At the hotel, we were checking out and Ted and his wife were nearby so I went over and said, “You were absolutely right to found this society. It’s a great one, I’m glad you asked me and I’m proud to be a member”. From that point on I don’t think I ever missed a meeting.

*Ban:* You became President of the College. When was that?

**Hollister:** I guess, in 1973. After that blizzard, we moved to warmer climates, most often to Puerto Rico but also Phoenix, Las Vegas and San Diego. We stayed away from snow.

*Ban:* What about CINP meetings?

**Hollister:** Every organization I’ve belonged to, I wind up being active and becoming some official. I became President of the ACNP. At that time, there had only been one U.S. President of the CINP, and that was Paul Hoch, who was the second or third President. Since I was an authority with the ACNP, they figured I would be sort of a liaison as President of the CINP and I was honored with that. I missed very few meetings of the CINP, one in Jerusalem and the one they had in Puerto Rico. Other than that, I’ve attended all the meetings. They, too, have been excellent.

(Leo E. Hollister interviewed by Thomas A. Ban; Volume 9.)

## **JARVIK**

*Ban:* When did you become involved with ACNP?

**Jarvik:** I think in 1961.

*Ban:* Are you one of the founders?

**Jarvik:** That's right and the same is true of the CINP.  
(Murray F. Jarvik interviewed by Thomas A. Ban; Volume 3.)

**KAIM**  
(Samuel Kaim interviewed by Leo E. Hollister. Volume 2.)

### **KARCZMAR**

*Costa:* And, that was true not only for cholinergic but for all transmitters!

**Karczmar:** I also organized several Symposia, participated in the meetings, including the ISCMs and ACNP, and, particularly I was busy working on my book "Exploring the Vertebrate Central Cholinergic Nervous System"; the book serves as a maxi- review of our past work as well.  
(Alexander G.Karczmar interviewed by Erminio Cost; Volume 3.)

### **KETY**

*Kopin:* Can you tell us about your role in starting the ACNP?

**Kety:** I was a charter member and Paul Hoch was a good friend of mine and also Fritz Freyhan. I had worked with Fritz. In fact, with Fritz, we had done the studies of the cerebral blood flow in schizophrenia. And, Paul Hoch was the one who started the ACNP and he gathered around him a group of people, including me, and I was member then of the first Council. That was all I did with regard to the ACNP. I was a member of the Council.

*Kopin:* The time had become so ripe for having a college of this nature because of the interest in biological psychiatry and also because of the rise of some psychopharmacological agents. I think that the founders of this college really were following up on many of the ideas that were current then and which you had such a major role in developing; the importance of bridging the basic science in pharmacology and in neurochemistry with brain function and mental disorders. I think that was probably why you were included in the group. I'm sure it was.

**Kety:** I was one of the few people around doing biological studies in psychiatry or fostering biological study of psychiatry.  
(Seymour S. Kety interviewed by Irwin J. Kopin; Volume 2.)

### **KILLAM E**

*Killam:* Is there anything else you would like to add?

**Killam :** No, I think, except that we didn't say very much about the history of ACNP, but other people will do that. We were among the people that joined at the beginning and the planning of having this society and we strongly believed, despite the fact that we lived a continent away, in the fact that the rules about coming to every meeting and, so, we see almost everybody every time, and

we feel that that leads to the co-reality of the meeting and people recognize and start over on a conversation they had with people and continue on with people that they've known for many, many years. As a pharmacologist when I went to the meetings of the American Psychological Association, or to Basic Science meetings, I was unable to find among the thousands of people anyone interested in drugs for mental disease, or interested in exchanging ideas. And, we found that the ACNP meetings were a place where we could talk to people and exchange ideas. The meetings were small with not too many people, and in those early days nobody was worrying about that somebody is going to steal his/her ideas. Everybody came with a few slides they could project or something they could show to the others. It was something similar to that we had at UCLA. That was a wonderful period in the history of this society.  
(Eva K. Killam interviewed by Keith F. Killam; Volume 2.)

### **KILLAM K**

*Killam:* We didn't say very much about the history of ACNP, but other people will do that. We were among the people that joined at the beginning and in the planning of having this society.

**Killam:** And, we feel proud that our colleagues elected each of us to be president of this organization at one time or another and the amazing thing that we've seen in all of this is the ability of people to pull together and work together and accomplish things without any major remuneration other than the fact that it was fit for the college. That kind of spirit still remains within the college, but the external forces that are enchantered on our field and on the college, itself, is going to increase more than decrease. I wish we had twenty more years to help you all.

(Keith F. Killam interviewed by Eva K. Killam; Volume 2.)

### **KLEE**

*Carpenter:* Let me change the subject and ask you to tell us what it was like when the ACNP was first forming.

**Klee:** The ACNP was founded in 1961. My entrance into the international neuropsychopharmacology community took place in 1958 in Rome, Italy, at the first meeting of the Collegium International Neuropsychopharmacologicum, where I presented a paper about Paranoid Reactions Following Lysergic Acid Diethylamide. The report describes a study in which we were able to correlate the occurrence of paranoid reactions with personality factors in subjects. This enabled us to screen out subjects at risk for pathological reactions. In 1961 I was invited to become a founding member of the ACNP. The organization was not large in the beginning and meetings were small, informal and close to my home in Maryland. As the years went by the ACNP grew and meetings were

more often distant from my home, my family responsibilities made it more difficult for me to attend them regularly.

(Gerald D. Klee interviewed by William T. Carpenete; Volume 6.)

## **KLETT**

*Hollister:* Well, would you have done the same career all over again?

**Klett:** Absolutely! You didn't ask me how I got into ACNP. Jon Cole told me that I ought to be a member of ACNP and that's how I came to join the organization. Also, Jon Cole was at the Psychopharmacology Service Center at that time and asked me to be a member of his committee for grant reviews. So, Jon Cole gave me a first step up in several ways, and there are others like that, as well.

*Hollister:* Well, I was going to ask you, what do you see the chances of replacing people like you and John Overall, the pivotal pioneers in the field of statistics applied to psychopharmacology? Are we getting enough new people in the field to keep it alive and flourishing, or should the ACNP take a little more liberal policy toward admitting people in this discipline?

**Klett:** Well, yes. I think it is important to have people represented in the membership and it doesn't always work out that way. ACNP needs those people who can work together with clinicians, but bring together a lot of expertise in quantitative work, and there should be some outreach to get them in. Now, they're not replacing people like John Overall. These positions are now, I think, being filled by bio-statisticians, PhDs in statistics, and that's alright. That's fine. They don't come with the background in psychopathology that the psychologists tended to have or as much of an interest in the subject matter, *per se*.

*Hollister:* But, people cross disciplines all the time, as you did, so I think that even if they came from a purely statistical background you could give them enough know how in time.

**Klett:** Oh sure, in time, especially if they make a commitment to working on psychopharmacology problems. Who's the woman at Palo Alto?

*Hollister:* She's doing the history of the VA?

**Klett:** Oh, no, that's Margarita Hayes. There's a woman statistician at Palo Alto, Stanford, Helena Kramer. She's now a member of ACNP, I believe.

*Hollister:* Well, some of us feel, in that field, that there is a gap in the membership developing where it's not representative enough. You know, these guys doing basic work grind out references, you know, by the dozens. They'll come in with 36 published papers. That drives all the rest of the people for cover, because you can't do that as a statistician. You can't do that as a clinician.

**Klett:** But, Leo, another thing has happened in the past 30 years or so. When I first arrived on the scene, wet behind the ears, if I described how you could

do a chi-square test, people would oooh and aaah, you know. The clinicians really needed help in those days.

*Hollister:* That's right.

**Klett:** But, the clinician of today, the investigators of today, are a lot more sophisticated than that, and so they don't have quite the same needs for quantitative back up. And, look what's happened to the computer field. All of this statistical stuff is in pack.

(James C. Klett interviewed by Leo E. Hollister; Volume 4.)

### **KORNETSKY 1**

*Koob:* Well, my last question for you would be, what about the College? Where do you see this College of Neuropsychopharmacology going? What do you think they should be doing, perhaps, that they are not doing? Obviously, you and I share concerns about training and the need for the continuation of influx of fresh young people into the College and that is, of course, one of the goals the College has been working over the last few years. But, what else would you see as an important issue that the College should be addressing?

**Kornetsky:** Well, the College should never lose sight of the fact that it is a major multi-disciplinary organization. And, if it becomes and moves too much in one direction or the other, it will be in trouble. A lot of the basic science in the field has become very molecular. Now, molecules change in the brain and, as people say, you can't even have a thought without molecules changing in the brain. There's no magic up there. And, so, we can't become overboard one way or the other. We have to keep a balance in this organization and that includes more integrated types of panels. By integrated, I mean, not all the molecular here, and then all the clinical here, we have got to get the clinical people going to the molecular people and they have to be willing to explain it so the non molecular scientist can understand the significance. I have always felt that disciplines that can only talk to it are not very helpful. Any discipline needs to be able to talk to the reductionist at least one step below it and to the expansionist at least one step above it. I think it is important that we maintain the original intent of the organizing committee of ACNP that we maintain ourselves as a multi-discipline organization and not an organization of multi-disciplines. (Conan Kornetsky interviewed by George F. Koob; Volume 6.)

### **KORNETSKY 2**

(Conan Kornetsky interviewed by Thomas A. Ban; Volume 9.)

### **KURLAND**

*Hollister:* Didn't you organize a fairly large control study with Thorazine in the early 1960s?

**Kurland:** Yes, we did a big control study. The bottom line in all that, in spite of the magnitude of the study, was that we didn't feel it did anything one way or another. It didn't influence the course of events. And then, we also got involved with the antidepressants and did a lot of stuff in that area. And, then, another thing, which was very, very fortunate, was that the organization of the ACNP got started somewhere around that time.

*Hollister:* Around 1960.

**Kurland:** 1960. I learned about it from Frank Ayd. Frank Ayd was one of the original members who had been involved with some of the others and got the ACNP started. And when I heard about it, I said, "Hey, I want to come to your meetings". So he says, "You're welcome". I think I attended the second meeting, and then others began to join, too, because in those very heady days at the ACNP meetings, everybody was on the verge of a major discovery of one kind or another. But the interesting thing is, over the years that we carried on our research, and everything we were involved in - and we were involved in some very tenuous and sensitive areas - we never got in any trouble.

*Hollister:* Each person has a somewhat different experience with hallucinogens. So, you know, it's a different kind of reaction, I guess depending on our own personality, to so much of an extent that it's hard to quantitate it.

**Kurland:** It's hard. I went through a couple of years of analysis and I sometimes say to myself, well, what did it accomplish for me? I'm not so sure, maybe better insights, maybe a more humble attitude towards myself, my fellow man, maybe a capacity for tolerating the shortcomings of others. The other thing that's very important, that nobody realizes, is that the organization of the ACNP, with the structure and the role it has played in getting drugs, getting people interested, and making it available for the younger generation, the people that are about to carry on the organization was a tremendously important development. Carpenter presents his papers, Tamminga presents her papers at the ACNP, and we need that. We need those kinds of activities.

*Hollister:* Well, the remarkable thing about the ACNP is the ability to bring together so many different disciplines, so we can talk to one another. For instance, when I go to the ACNP meetings, I don't go for the things that I know about. I always go for the things that I don't know about; but, of course, every year there's more and more to learn, so I have trouble making my selection. And, of course, some people like Don Klein overreacted to it by saying, we're no longer interested in clinical psychopharmacology, and therefore he started a separate organization. Do you remember that?

**Kurland:** No.

(Albert A. Kurland interviewed by Leo E. Hollister; Volume 1.)

**LEHMANN**

*Bunney:* Let me ask you, since this is the ACNP, what was your involvement in the beginning with the ACNP? You were one of the founding members.

**Lehmann:** Yes, again, against my wishes. I remember quite a few of the people that I knew quite well asked me to join them in founding the ACNP, the American College, and we had had meetings, and I said, “well, that’s fine, but leave me out of it”. I said, “I had no time, definitely no time, and I hate institutions, anyway, and I don’t want to have anything to do with it”. Then, I think it was Malitz who told me, “well we’ll draft you”, and I said, “I don’t know what you mean”. He said, “you don’t know what drafting is”? So he explained to me what drafting is, and so anyway, they got me into it, and, I finally became one of the founders. . Eventually, they drafted me again for being a president. I think it was in 1964. Again, I didn’t want to, and I said, “I don’t know anything about the procedures of running it”. Anyway, I got into it, and as I was doing it, I was learning it. Now I’m very glad that we have an ACNP. In fact, it’s very difficult to imagine that we didn’t at any time.

(Heinz E. Lehmann interviewed by William E. Bunney; Volume 1.)

**RICKELS**

*Healy:* The world has changed since you actually began with your research. I’m sure the issues discussed at ACNP were completely different in those years compared to what they are now.

**Rickels:** ACNP is almost 40 years old. I’m one of the charter members. When we started neuroscience hardly existed and 95 percent of the presentations were clinical. We can do things now that we couldn’t even imagine when ACNP started.

*Healy:* How has the ACNP changed since the time it began? I understand it was a small group, much more informal, and had a lot more brainstorming sessions. Now you guys have become the establishment. You’re not the rebels you once were.

**Rickels:** That’s right, but I think some of the older members of the ACNP are missing some of the clinical context in the current meetings. We’re becoming almost part of neuroscience. Our founders, including me, didn’t think the ACNP should be a neuroscience organization. It was supposed to apply neuroscience to clinical problems.

*Healy:* Well, just on that point, there’s an awful lot of neuroscience happening out here at this meeting, but how much of it really feeds back into clinical practice?

**Rickels:** I don’t know.

*Healy:* Not a huge amount, probably.

**Rickels:** I would say that if you are attending ACNP meetings in these years you'll get nothing that you can apply in your practice. This wasn't the case twenty years ago.

*Healy:* Twenty years ago you're saying you'd come here to these meetings and you'd get something useful for your clinical practice?

**Rickels:** You would get something that you could apply when you went home. I also think that we have much more representation of industry now. It's a change.

*Healy:* Did Beecher come to these meetings?

**Rickels:** Oh, yes. He was a member. My research was very much influenced by him.

(Karl Rickels interviewed by David Healy; Volume 4.)

### **SARWER-FONER 1**

*Awad::* Are there any other important historical events that you have enriched us with?

**Sarwer-Foner:** Well, Ted Rothman played probably an abnormally large role in the founding of the ACNP. I liked the formation of the American College of Neuropsychopharmacology. But, earlier, before this group started we had informal research directors meetings, which was one of the developments that people don't remember because the government's involvement knocked it out very quickly. But, it was Ted Rothman more than anybody else who several years later got together the basic centers, the pharmaceutical industry, important professors who were necessarily psychopharmacologists, and researchers.

(Gerald J. Sarwer-Foner interviewed by A. George Awad; Volume 1.)

### **SARWER-FONER 2**

(Gerald J. Sarwer-Foner interviewed by Joel Braslow; Volume 10.)

### **TURNER**

*Engelhardt:* Bill, if you would go back with me in time to the New York hotel room where the founding fathers of the ACNP met and crystallized the idea of the College?

**Turner:** Well, Sid Merlis paged me one day and said "there is a meeting going on in New York, and would I like to attend, because some people were thinking about organizing a new scientific society dealing with psychopharmacology". Well, I was delighted. So I said sure and we met in a hotel room with about nine people on three different occasions. Henry Brill and Max Fink were there. But we had, if you name some of these other people...

*Engelhardt:* Well, I will tell you that at dinner last night we were talking about this, and I jotted down the names of Heinz Lehmann and Jonathan Cole.

**Turner:** Yes, indeed, I can confirm that, Heinz went to one of these three meetings in the hotel room in New York.

*Engelhardt:* Was Nathan Kline there?

**Turner:** Nate Kline was there and Leo Hollister, I think Leo was there, anyway.

*Engelhardt:* Jon Cole?

**Turner:** Jonathan Cole. We met in that hotel room, and eventually, it was decided to start a new organization that became known as the American College of Neuropsychopharmacology. I really had almost nothing to do with it. I was sort of a passive observer and participant, and keep in mind that I was not an organizer; I was just going along. But it was a wonderful thing because the stimulus of Thorazine was at that time keeping all of us just thrilled to the possibility that we could find something better, something more lasting, and that we could really, really accomplish something. So the papers were drawn up and the arrangements were made for this college to be established, and we used to meet in a hotel in Washington for, I guess, the first four or five years.

*Engelhardt:* Do you know if at these four meetings in Washington, include an increasingly larger numbers of people?

**Turner:** Oh, yes. The idea was that this organization would consist of one-third of government people, one-third industry people and one-third university people, and the membership would be kept small enough so that we could all interact actively instead of just sitting passively to listen to lectures. And that has worked out very well, except now the pressure is to increase the size, so that each time when I come to these meetings, there are fewer and fewer people that I know.

(William J. Turner interviewed by Jo Ann Engelhardt; Volume 1.)

## **UHLENHUTH**

(Eberhardt E. Uhlenhuth interviewed by Jerome Levine; Volume 4.)

## THE PRESIDENTS AND THE STORY OF ACNP

From the 33 founders interviewed 10 (Cole, Cook, Elkes, Freedman, Friedhoff, Hollister, Killam E, Killam K, Lehmann and Uhlenhuth) were elected presidents of ACNP.

In this section excerpts, relevant to the story of ACNP are presented from the 41 interviews conducted with 34 of the first 50 Presidents of the College. (See, Appendix Two.) One of the presidents (Cole) was interviewed three times; six (Detre, Elkes, Hollister, Klein D, Meltzer and Simpson) were interviewed twice; 26 were interviewed once; and two (Eva and Keith Killam) interviewed each other.

Thirty of the 41 transcripts, based on interviews with 29 presidents provide information relevant to the story of the ACNP. At the end of each excerpt the name of the interviewee and the interviewer, as well as the volume in which the full transcript appears is noted.

Each President in his/her year of office comments on issues of varying concern to the membership at that point in time in the history of the College. Most Presidents allude to one or two such issues in passing while discussing a range of concerns confronting the College. You get a sense, therefore, of which of its initial characteristics and its mission stayed the same and how certain things changed during the life of the College over these 40 to 50 years. Fridolin Sulzer draws from the first President, Joel Elkes, his overview in 1961 on the conceptual basis for the College: *"In the 1960's there was a lot of fluidity and mobility in the field crossing over into disciplines. There was an emerging understanding that there are four footings of the new discipline: neurochemistry, which was maturing so to speak, electrophysiology, animal behavior and clinical trials. These were the four footings which I saw as essential elements of any psychopharmacological enterprise worth its name . And on the structure of meetings: "the idea was to select people from different disciplines into small groups and give them the opportunity to talk to each other. That's very simple and it developed very well. Study groups led to a sense of scholarship identity, of owning certain areas of psychopharmacology. And it worked . And on mission: "It is not only molecular biology, it is not only electrophysiology; it is not only clinical syndromes. It is the conversation, the interaction between these areas which matters and we must do all we can to enhance the conversation. This is what the College can do like no other organization"*.

Issues that confront the Presidents as the years' progress are highlighted in the excerpts. Jonathan Cole in 1962 speaks on the relative absence of conflict of interest accompanying the early role of the pharmaceutical companies and the NIH in providing modest funding for its establishment: *I think it was helpful. Without financial support, a certain amount of spark from drug*

companies, ACNP would not have gone forward. And on the impact of the funding: *Nobody really worried about investigators arms being twisted or their minds bent by drug companies* . Then on his initiation of the NCDEU program, the funding of investigators at that time, to conduct clinical trials without drug company support, he comments on the program's endurance: *It's still going and has a meeting annually in Florida* .

In 1972, Alfred Freedman attempted to broaden the College concept with mixed results: *I was trying to make substance abuse a legitimate subject of psychopharmacology and I don't think I succeeded very well even though I spoke about it in my presidential address* .

Leo Hollister in 1974 alerts the membership that the balance between basic and clinical science was changing: *The ACNP in recent years has become a kind of secondary society for neurosciences, at least, in terms of program content. Neuroscience advances have been so enormous, especially in molecular pharmacology and the techniques for genetic analysis and maybe clinicians need to develop some new approaches in our evaluating the drugs...find ways to reduce the time and cost of getting them on the market* .

Donald Klein in 1981 saw new developments in clinical services research as *"impelling ACNP to formalizing its relationships with the heads of Federal agencies, FDA, NIH, to meet with them regarding their agendas. To re-shape the ways research grants are funded* .

Herbert Meltzer in 1985 introduced Posters to the annual meeting: *I had to fight two to three years to get them to accept posters"* and encouraged closer relations with the CINP by *making contacts and establishing research relationships* that would enhance international exposure.

Arthur Prange in 1987 oversaw, after several years of controversy, the establishment of the College-sponsored journal, *Neuropsychopharmacology*.

At the end of the 1980s, Floyd Bloom eloquently expressed the state of the science: *There is so much knowledge that just discussing the new discoveries crimps the amount of mental time that you can devote to trying to put those together* , and he continued: *It's hard for the clinicians to keep up with the pace of discoveries in the basic sciences and for the basic scientists to keep up with the evolution of thinking about the kinds of mental illness that are distinct categories* . He was concerned that the *sheer dent of discovery has forced apart the cohesive element, the intermingling of basic scientists and clinical scientists* .

Richard Shader, in 1990, saw the College as becoming more political, lobbying more actively in his year: *we got involved with advocacy groups, the highlight being when the Secretary of Health and Human Services came to our meeting* .

George Simpson in 1991 commented on the manner in which the conduct and support of clinical trials changed, was concerned that differently from the

early days when the NIH provided financial support, the current sponsors, the drug companies, *dictate what the results are going to be. People are unlikely to design a study that could possibly go against what they would like to see* .

Roger Meyer in 1993 observed “a great research renaissance in the addiction field and alcoholism and ” watching its impact on the ACNP during the past four decades, he notes that “*the field is poised to take advantage of molecular biology to understand pathophysiology It is important now to interest Industry in the need to develop drugs to treat addiction* .

Thomas Detre in 1994, saw a new goal for ACNP, i.e., *coping to insure an adequate number of clinical pharmacologists* , but was concerned with reduced funding for science and saw *the focus shifting to translational science .clinical science staying with the ACNP, but not the basic sciences* . He is concerned that the College *may be getting slightly too large for its own good and losing the informality and collegiality of its meetings* . He also, wanted to see its lobbying role diminished and *expert witnessing as probably, the best way to exert our influence”* in Congress.

David Kupfer in 1995 comments on the unique impact of ACNP on the linkages that a department of psychiatry should have in training new psychiatrists, generally. On the influence of the drug companies, he saw *the College as having struck a wonderful balance* giving the companies credit for *helping with the unrestricted educational grants* and the support of Teaching Day.

Charles Nemeroff in 1997 was pleased to see that the collegiality continued over the years and that it remains an organization that *combines excellence across many sciences suiting many needs ..and a place where he learns about areas that I simply don t know enough about and try to take my own research to the next level* .

Huda Akil in 1998 describes the organization as sitting at the interface between neurobiology and psychiatry at a time when the two should be coming together and notes that *this interface between the science of the brain and the science of the mind and how it goes wrong in psychiatric disorders, have come closer together* .

Steven. Paul in 1999 was concerned with how to keep the College intellectually vigorous, to make sure that we were bringing in the young, the brightest people, continuing to evolve and saw the College as having done *a remarkable job as a catalyst* in the search to understand the brain.

Alan. Schatzberg in 2000 thought that the capacity of the ACNP to maintain its role depends on filling in the gaps in membership *by actively adding expertise, some child psychiatrists, and some in research methodology and genetics* to keep ahead of the cutting edge .

In 2002, Joseph Coyle saw the science moved to the point where the College publications had expanded from the Journal and Progress volumes to the new

annual *Review of Neuropsychopharmacology* concept, to be published soon, resulting in several hundred thousand dollars income for the College.

Dennis Charney in 2003 comments on the expansion of the ACNP's role on advocacy issues. They help *by providing advice about important issues that relate to treatment* .

Judith Rapaport called attention in 2008 to the need for ACNP to encourage the clinical research that could be done within the CROs, noting the benefits and citing the neglect of these areas over the years by the College.

## **The Excerpts**

### **1962 ELKES 1**

(Joel Elkes interviewed by Fridlin Sulser; Volume 1.)

### **1962 ELKES 2**

See Founders.

(Joel Elkes interviewed by Fridolin Sulser; Volume 10.)

### **1965 LEHMANN**

See Founders

(Heinz E. Lehmann interviewed by William E. Bunney; Volume 1.)

### **1966 COLE 1**

(Jonathan O. Cole interviewed by Leo E. Hollister; Volume 4.)

### **1966 COLE 2**

(Jonathan O. Cole interviewed by Thomas A. Ban; Volume 9.)

### **1962 COLE 3**

See Founders.

(Jonathan Cole interviewed by Carl Salzman; Volume 10.)

### **1972 FREEDMAN**

See Founders.

(Alfred M. Freedman interviewed by Thomas A. Ban; Volume 1.)

### **1974 HOLLISTER 1**

See Founders.

(Leo E. Hollister interviewed by Frank J. Ayd; Volume 1.)

### **1974 HOLLISTER 2**

See Founders.

(Leo E. Hollister interviewed by Thomas A. Ban; Volume 9.)

### **1976 KILLAM K.**

See Founders.

(Keith F. Killam interviewed by Eva K. Killam; Volume 2.)

### **1978 FRIEDHOFF**

See Founders.

(Arnold J. Friedhoff interviewed by Benjamin S. Bunney; Volume 5.)

### **1979 SULSER**

**Sulser:** Administrators, if they're smart, can do a lot by channeling things in the right direction. I think that top administrators, who are also scientists, should have membership in the ACNP as real members, and not just as administrative members. Some of them have made tremendous contributions to the field.

*Hollister:* For a very long period of time, in this country, nobody employed by industry could ever hope to be President of the Pharmacology Society. John Burns was one of the very first people from industry to be asked.

**Sulser:** In 1958, when I came to this country, you could not even become a member of the Pharmacology Society if you were working in industry.

*Hollister:* That's never been a bias in the ACNP. Len Cook and Larry Stein were both connected with industry while they were President, and one of the guys running for president this year is also connected with industry. I don't think we've had any biases in that respect.

(Fridolin Sulser interviewed by Leo E. Hollister; Volume 3.)

### **1980 LASAGNA**

(Louis Lasagna interviewed by Donald F. Klein; Volume 1.)

### **1981 KLEIN D**

*Hollister:* Well, that's an interesting career you've had and more to come, I think.

**Klein:** It was also fun being involved with ACNP; it's a very elite organization. People, who are in it are very smart successful people. One of the problems, I believe, with being successful is that it makes you somewhat conservative you don't want to rock the boat too much, because, after all, you've done all right. But there have been a number of developments recently that I think should shake us up in terms of how psychopharmacology is going to go research wise in ensuing years, both, from the point of federal support and from the point of view of pharmaceutical industry support. I think the ACNP could play some proactive roles there. I hope it will do.

*Hollister:* Well, you've been a creative thinker in this line, on the more general political line, too. What do you think the ACNP should do?

**Klein:** Well, I think, for one thing, the ACNP ought to try to formulize a relationship with the various heads of the federal agencies, including the FDA and NIH and so forth, and to meet with them regarding their agendas. Like, for instance, I'm the head of a mental health clinical research center and I'm not at all certain as to whether mental health clinical research centers are viewed favorably as being a sensible way to spend money. I personally think that psychiatry is in a relatively primitive state as compared to, say, internal medicine. They're way ahead of us in objective measurements and physiological understanding. Are RO1s by independent investigators a really good sensible way of funding research?

*Hollister:* That's sort of Rosalyn Yalow's idea. You provide support to individuals rather than huge amounts of money to centers.

**Klein:** I think for Rosalyn that makes great sense, but I think for psychiatry, we still need to get critical masses together who can collaborate as experts in a variety of fields, because we're nowhere near Rosalyn Yalow. And, for that reason, centers make sense in psychiatry. It would be interesting to have a discussion about that with someone like, Dr. Harold Varmus.

(Donald F. Klein interviewed by Leo E. Hollister; Volume 4.)

## **1982 COOK**

(Leonard Cook interviewed by Larry Stein; Volume 1.)

## **1983 BUNNEY W**

*Ban:* You've gotten several honors and awards. Would you like to mention a few?

**Bunney:** I would say election to the Institute of Medicine / National Academy of Science, the Presidency of four organizations: Psychiatric Research; The West Coast College of Biological Psychiatry; The American College of Neuropsychopharmacology, and the Collegium Internationale Neuro-Psychopharmacologicum. The highest honor was certainly the ACNP presidency in that group

(William E. Bunney interviewed by Thomas A. Ban; Volume 5.)

## **1985 MELTZER 1**

*Koslow:* How do you assess the quality of the ACNP over the years?

**Meltzer:** It's going to sound like an advertisement for the ACNP, but it's really a fantastic group and I think it's getting better, the quality of the science and the interaction between people.

*Koslow:* Anything you would like to say about your contributions to ACNP?

**Meltzer:** People don't know this; I was the person who started the poster sessions at the ACNP when I was chairman of the Program Committee. I had to fight for two or three years to get them to accept posters and you know what's going on in the poster room now.

*Koslow:* We could probably talk for a very long time. You've had a very rich career. Is there anything you would like to add or say that we haven't touched on that you think would be important to document?

**Meltzer:** Well, I really feel it's just a privilege to have had this career in psychopharmacology. I think having the opportunity to really understand brain and behavior, as we said this morning, from the molecule to the mind, there's nothing more exciting and it's just great to be part of it.

(Herbert Y Meltzer interviewed by Stephen H. Koslow; Volume 5.)

## 1985 MELTZER 2

*Tammings:* Can you talk about the ACNP, when you joined it, and what your experiences have been?

**Meltzer:** It was the Shangri La we all wanted to go to when it was starting and Dan Freedman brought me here first, probably in the 1970s. I'm not sure exactly when I became a member, but probably 1975 or so. I was treasurer for a year, probably 1982 or 1983. Then I was the youngest President of the ACNP. I also chaired the Program Committee twice and was the person that introduced posters to the ACNP.

*Tammings:* That was important.

**Meltzer:** I had seen poster presentations at the Neuroscience meetings and thought we ought to do it here. So the presidency was a tremendous opportunity.

*Tammings:* What year was that?

**Meltzer:** It was 1985. I always look toward this meeting as a pivotal calendar event, an opportunity to learn the latest research, and see old friends.

*Tammings:* Both of those things.

**Meltzer:** Yes.

*Tammings:* You've been involved in other major organizations also?

**Meltzer:** The other major one was the CINF. I was president between 2004 and 2006, culminating in a huge meeting in Paris. They're very different experiences, being president of the CINF and the ACNP. In the CINF you could be part of a broader international community of neuroscientists. You get some of that at the ACNP, but not enough. From the CINF I made contacts and established research relationships that would never have happened had I not had that international exposure.

*Tammings:* Could you say something about the honors and distinctions you received?

**Meltzer:** The Efron and the Hoch Awards have been incredibly meaningful to me and also a prize from Vanderbilt. Vanderbilt has a Chancellor's Award for Lifetime Achievements, called the Sutherland Prize, and it's open to any faculty. (Herbert Y. Meltzer interviewed by Carol A. Tamminga; Volume 9.)

### **1986 UHLENHUTH**

(Eberhard E. Uhlenhuth interviewed by Jerome Levine; Volume 4.)

### **1987 PRANGE**

(Arthur J. Prange interviewed by Robert H. Belmaker; Volume 5.)

### **1988 KILLAM E.**

See Founders.

(Eva K. Killam interviewed by Keith F. Killam; Volume 2.)

### **1989 BLOOM**

*Kupfer:* Now, how would you best epitomize "your thing" at that time?

**Bloom:** The problem now is that there is so much knowledge that just discussing the new discoveries crimps the amount of mental time that you can devote to trying to put those together. And, I suppose, my view is a little biased because the political involvements and the time commitment to other things constrains how many sessions I can go to. But, it's hard for the clinicians to keep up with the pace of discovery in the basic science and it's hard for the basic scientists to keep up with the evolution of thinking about the kinds of mental illnesses that are distinct categories where you can look for unique mechanisms of prevention or treatment or diagnostics. If there's any regret I have, it's that the sheer dent of discovery has forced apart what was always the cohesive element, which was the intermingling between basic scientists and clinical scientists. As you and I have discussed many times that's what we tried to achieve with the latest ACNP fourth progress volume - to try to give them the hooks they could use if their scholarly interests awaken them to the opportunities that are out there.

(Floyd E. Bloom interviewed by David J. Kupfer; Volume 2.)

### **1990 SHADER**

*Salzman:* Yes, and somewhere in there, Dick, you also increased your activities in the ACNP and, ultimately, became its President.

**Shader:** Yes, that was at the same time, actually. I was President elect, Vice President; I'm sorry, we don't have that position anymore in the ACNP. I was Vice President and Gerry Klerman was going to be the President and Gerry died, a tragic loss, a very fine man, and, so, after having served as Vice President, they

decided to do away with that office and, then, I became President elect. And, then, the year of my presidency was actually the year of my bypass surgery.

*Salzman:* Could you comment on how you saw the ACNP as you were leading up to your presidency and, then, what there was during your presidency that you thought was important regarding the ACNP?

**Shader:** Well, I always thought it was a terrific organization. Again, I was very lucky in that both Seymour Kety, who I worked with at the NIH, from '62 to '64, and AI, were active in the ACNP, and through them I actually went to my first ACNP meeting while I was at the NIH. And then, I became a member very quickly, much to my delight, because, as a small meeting, it was probably the very best place to learn about the interaction of mind and body, about drugs, about drug design, about everything you might want to know about psychopharmacology through the workshops and through the close contact that people had with each other. Over the years the organization became more political, which I was certainly strongly supportive of, and we began to lobby actively, lobby for the decade of the brain, lobby for the appropriations for the NIH. We worked with issues having to do with advocacy groups. We got very involved in promoting advocacy groups at the time and I would say that the highlight for me was, in fact, the year of my presidency when the Secretary of Health and Human Services, Louis Sullivan, came to our meeting.

*Salzman:* I remember.

**Shader:** And, that took over a year of very hard work and preparation. It was an acknowledgement of the role of the society as a group of scientists, who could make positive contributions to government decisions. But, then, I think there were many members who felt we went too far and that we had become too involved in the political process. And, we seemed to pull back, at that point, as a group. And, there was a movement during my presidency from the American Psychological Association to give prescribing privileges to psychologists who were in the Army because of an MD shortage. I did not see that as a solution to a very real need and was very actively involved in trying to make sure that what was done was done so that no one was put in jeopardy, by trying to insure that all the psychologists who would get prescribing privileges goes through a very rigorous kind of education in his psychopharmacology training. Since then, of course, as you know, lots of people have prescribing privileges now with much less education than the trained psychologists did. I have mixed feelings about it. I'm not at peace about that, myself.

*Salzman:* In a very curious way, in a course that I was teaching, just two weeks ago, one of those psychologist trainees he took that course told me that she had learned psychopharmacology under the auspices of the ACNP, and that she was tested to make sure that she knew enough. That was interesting.

**Shader:** Yes, it is. I don't have a long term follow up, so I don't know what's become of the program.

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*Salzman:* Now, as part of this, you were always writing, always publishing and you also started a journal. We want to be sure to mention that and how did you come to decide to do that?

**Shader:** Well, that was at Mass Mental. In 1978, we began to talk about the curriculum for residents and how we were going to educate psychiatric residents. My feeling at the time was that we really didn't have a journal that would bring clinical psychopharmacology into the foreground. Later, the ACNP came along with its' own journal. We tried to talk the ACNP into doing it in the beginning, without much success. I'm glad that they have come along later with their journal, as well, because it's another contribution to learning. But, that was basically how it got started. We are now twenty eight years later and the Journal is still going strong. It's a great journal.

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*Salzman:* Could you talk about some of your work in pharmacology and psychopharmacology as you came over here?

**Shader:** 1989 was the year that I really began to feel that I had done enough of being Chairman of the Psychiatry Department. I had another mentor here, who was Lou Lasagna, who, as you know, was a President of the ACNP, and who became a very close friend of mine.

*Salzman:* OK, now, I'm supposed to ask you about any honors, awards and distinctions that you received during your wonderful career?

**Shader:** Well, I think there's some that have stood out in an interesting way. The late Frank Ayd, who just died, was a long time friend through the ACNP, somebody whom I admired, because he also had a commitment to bring drug information to people and making sure that bad things didn't get hidden.

(Richard I Shader interviewed by Carl Salzman; Volme 8.)

## **1991 SIMPSON 1**

(George M. Simpson interviewed by Leo E. Hollister; Volume 4.)

## **1991 SIMPSON 2**

*Ban:* When did you become a member of the ACNP?

**Simpson:** It was, I think, in the mid 1960s. Nate Kline suggested to me that I should apply for membership and it was easy to be a member then, relative to today, so, anyway, I became a member and the meetings were just very unique, because you got a chance to meet nearly everybody.

*Ban:* You were president of the ACNP?

**Simpson:** Right.

*Ban:* When?

**Simpson:** That was, I think, in 1995. I've forgotten. I guess I served on the Council for 3 years and, then, I was on the Council as the president elect and, then, there's the president. It was, again, a useful experience. There are some of things that we are engaged in that are unique and novel and I don't know how productive, like going up to Washington and going up on the hill, as we said, but that brought to the floor the sort of activist needs in science and our whole field. But, you know as well as I do, it's really just a very unique organization.

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*Ban:* Wouldn't that apply also to the atypicals?

**Simpson:** Well, I think that's true. At the annual meeting of the ACNP, a year ago, I told somebody that you don't have to read the posters of these comparative studies of atypical antipsychotics. In green and yellow, risperidone is better and if it's purple, then, it's going to be olanzapine better. And so far that's true that the sponsorship of the trial seems to dictate what the results are going to be. I don't think people cheat, but I think you are unlikely to design a study that could be possibly go against what you'd like to see.

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*Ban:* You moved from Rockland State to LA and from LA to Philadelphia.

**Simpson:** Wagner Bridger from the ACNP took the Chair at MCP in Philadelphia and after that research unit was not advancing the way it should, I came back then.

*Ban:* Would you like to mention any of the people you collaborated with?

**Simpson:** Well, Philip May I met, I guess, through the ACNP, just like, perhaps, seeing a lot of people at the ACNP that influenced me, because you got a chance to talk with them at our meetings, and with Philip, we became friendly and, then, we worked on chapters for Freedman and Kaplan and that time. I think we wrote a couple of other things. I also collaborated with Bob Kellner a bit, because he was somebody I met in the anatomy department at Liverpool and I guess he, Philip May and Don Gallant were the closest friends I had in this country.

(George M. Simpson interviewed by Thomas A. Ban; Volume 9.)

## 1992 KOPIN

*Ban:* When did you become a member of ACNP?

**Kopin:** In 1968, Sid Udenfriend and Seymour Kety were the people that urged me to join this group. It was very fortunate for me that I did.

*Ban:* When did you become president?

**Kopin:** In 1992. The theme that year was to put the "Neuro" back into Neuropsychopharmacology. As president, I tried to do that. It may have been premature, but I think that it is also the theme of the current president, Steve

Paul. Steve is another Laboratory of Clinical Science alumnus, as was his predecessor at Eli Lilly, Gus Watanabe.

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*Ban:* Any further developments in the MPTP story?

**Kopin:** To repeat it again, Leslie Iversen, Jacques Glowinsky, Sol Snyder, Dick Wurtman, and Perry Molinoff all spent their early years in the Laboratory of Clinical Science with Kety, Axelrod and me. In psychiatry, Joe Coyle, Steve Bunney, his brother, Biff Bunney, Mike Ebert, Fred Goodwin and Dennis Murphy, as well as others, began as young post-docs in our laboratory. Dick Weinshilboum, who went to the Mayo Clinic, started his work on the genetics of different enzymes with studies of catechol-O-methyltransferase in our laboratory. Dave Dunner, Walter Kaye and Bill Potter also came through the lab. Martha Weinstock, who is chairman of Pharmacology at Hadassah, came to work with us as a visiting scientist. So did Giora Feuerstein, originally from Israel, who stayed here, in the pharmaceutical industry, Joe Fisher, who was a surgeon, and is now chairman of the Department of Surgery. He and Ross Baldessarini carried out studies of S-adenosylmethionine to try to explain some of the deficits in hepatic encephalopathy. It's been such a great pleasure to work with them, and, the many, many friends that I've made at ACNP. The future direction of the College is going to be fun to follow. Many of the people that I've talked about are members of the ACNP; some are foreign corresponding members from abroad. I am a Past President of ACNP, so I keep going to the Past Presidents luncheons. I have also continued for many years as Treasurer.

(Irwin J.Kopin interviewed by Thomas A. Ban; Volume 3.).

### **1993 MEYER**

*Kosten:* Your career took a turn at some point where you moved away from heroin and towards alcohol.

**Meyer:** I have been privileged to be part of a great research renaissance in the addiction field and alcoholism. I have been pleased to watch the impact of our field on ACNP over the past four decades. From very small numbers, in the late 1960s, ACNP now includes many distinguished behavioral and neuroscientists and clinical investigators who receive their primary funding from NIAAA or NIDA. Several ACNP Presidents and a number of ACNP Council members have had very distinguished research careers in the addiction field. I've also been pleased to see the evolution of CPDD into a membership society and to be part of RSA as it has taken off as a multidisciplinary research society in the alcohol field. As I said in my Presidential address at the 1994 meeting of ACNP, I think the addictions field, including alcoholism, is in many ways much better positioned than other areas of psychiatry to begin to take advantage of

molecular biology and to apply imaging technology to understand pathophysiology. Because of developments in science and technology, the addictions field can test some of the theories of addictive behavior that emerged from clinical and basic science research dating back more than 50 years.

*Kosten:* Are there any developments that you would particularly target as becoming the most critical development in the next five or ten years?

**Meyer:** I think it's going to be terribly important to interest industry in developing drugs to treat addictive disorders. If the impact of managed care discourages young psychiatrists from entering the addiction field, and the treatment environment thus remains dominated by addiction counselors unreceptive to new drugs, it is going to be a huge task for ACNP and for others to stimulate industry interest in developing drugs to treat addictive disorders based on the exciting developments in science.

(Roger E. Meyer interviewed by Thomas R.Kosten; Volume 6.)

### 1994 DETRE 1

*Bunney:* In terms of side effects?

**Detre:** Not just in terms of side effects, but affecting the central nervous system a little more specifically than the so called dirty drugs we have today. Our hypotheses are often based on one receptor or one neurotransmitter and revised again as new receptors and neurotransmitters are identified. What concerns me, and we have talked about this in the past, is that just when a host of new biologic entities are ready to come down the pike the federal government, dedicated to a short term science policy, has stopped supporting training programs for clinical pharmacologists, who are also trained in molecular biology and genetics. I believe it should be one of the goals of the ACNP to campaign to ensure that we have an adequate number of clinical pharmacologists.

*Bunney:* So you're proposing that there be support for the training of these individuals, as well as research support to carry out the investigations?

**Detre:** Correct, but I think the training of this new type of clinical pharmacologist is a very urgent national task.

(Thomas Detre interviewed by Benjamin S. Bunney; Volume 1.)

### 1994 DETRE 2

*Kupfer:* Now, we were both, ah, members of council, served as president, in, I guess in the mid-nineties,

**Detre:** Yes

*Kupfer:* Two years back to back. if we had to do it now, what do you think has changed, in terms of what we would have to do, say, if we were saddled with the presidency or the responsibility of ACNP now versus, say, thirteen or fourteen years ago?

**Detre:** Well, I believe that as federal funding are getting slimmer and will become probably much slimmer in the ensuing years, people are turning to pharmaceutical companies to support their research and while most of these relationships have clear, ethical boundaries, problems have developed. I remember, in olden days. I always was astonished at the meeting of the American Psychiatric Association, tobacco companies gave a carton of cigarettes away and there were long lines of people waiting for it. I mean, these are people who made anywhere from a hundred to two hundred thousand dollars a year. I could never understand why they were lining up for cigarettes, but you know, none of these gifts are now there and when pharmaceutical companies, sponsor events they have to be clean, in a sense, that their products may be mentioned but only in the conduct, context of other developments in the field. So, that's a great development. I think that some of our colleagues also got into trouble and all the newspapers in the media talk about the greed. Well, I must say that physicians and biomedical scientists are no different from the rest of society. We also have as much greed as anybody else. And as a result, numerous problems have surfaced and, if you and I would be in charge we would be struggling with those problems. We wouldn't know exactly what to do with our colleagues who have slightly or not so slightly deviated from the standards we all would like to hold up.

*Kupfer:* So you think that it was easier in the old days?

**Detre:** I think that was easier. It was easier because we could discuss important matters how many new members should be accepted next year or how are we going to deal with our junior colleagues who are almost ready to become members. We could have lengthy discussions about that and that's no longer the case.

*Kupfer:* What do you think is going to happen to the ACNP?

**Detre:** You know that's very difficult to predict because we already see another important development. The society of neuroscience attracts most of the basic scientists and clinical trials that are very important but by themselves, obviously are insufficient to provide the content for an academic society. I think the focus probably will shift to translational science in the coming years. So the novelty in clinical science and translational science may stay at the ACNP, but not the basic science. I also believe that we are getting a perhaps slightly too large for our own good. It's not that I have anything against it, but the kind of intimate exchange of ideas which existed in the past is not, as easy as it used to be. The schedules are also very crowded, because, our new leaders as probably the old ones, want to give a place to everyone. But then you have this large number of evening programs. And what is missing is the opportunity for informal exchange.

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*Kupfer:* So, do you think the training function is in jeopardy?

**Detre:** I never talk to young people who, you know, arrived to the ACNP meeting who have a mentor assigned to them but you know, a mentor assigned to them really doesn't accomplish everything

*Kupfer:* I thought that what we were using as mentors were like travel guides.

**Detre:** I look forward to talk to young colleagues but that really gets sort of lost in this large meeting

*Kupfer:* So, maybe we should cut the ACNP in half?

**Detre:** I think it would be nice to have a couple of days be dedicated to a program that is only one set of lectures and one set of seminars. And then maybe at the end, do what the large groups are doing these days, namely have twenty-four different study groups going at the same time. But a couple of days of quiet reflection of what people have been talking about and, you know, a single or two panel in the evening so people could go to them would be relaxing and perhaps even very productive.

*Kupfer:* Are you suggesting that we go back a little bit less concentrated set of first days outside of the requisite number of committee meetings that they place in that space?

**Detre:** Yes. Not only that, but also that the program for two days should be, everybody should take a tranquilizer, and sit down and really think about what is really being said. Ah, lectures always over-run, we are allegedly pedagogues, but we have forgotten that the important part of any lecture is the opportunity afterwards to ask questions and make comments and there is no time for it in the current system and I would like to have that restored at least during the first two days

*Kupfer:* OK.

**Detre:** Then, you know, let the crowd have whatever they want to have.

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*Kupfer:* One of the key players who come to mind was Oakley Ray.

**Detre:** Well, you and I were presidents for a year, maybe council members for a few years, and all of us came and went away and the only person who stayed was Oakley Ray and the only person who organized these meetings was Oakley Ray. He scouted for good places and set-up a good organization and he was very cordial and funny host and a wonderful sense of humor and he really radiated warmth. He was, by the way, apart from his role as host and organizer an excellent lecturer and much beloved teacher. He also wrote a very sensible textbook on psychopharmacology. In general he understated himself and managed to convince himself and everybody that he was not important, not even very bright. And, of course the exact opposite was true. He often interjected a little comment into the council, "yes that sounds good, but, perhaps we should also", and then he would say the exact opposite of what we

were saying, but, he did it nicely and we all knew deep down that he was right and we were wrong. So, it was wonderful, wonderful interaction with him. I really miss him. I miss the ecology he created around this annual meeting. Well talking about the ecology and not just the annual meeting, I can remember, we were doing much more as a council, at the executive side in Washington. We were playing much more of....

*Kupfer:* ....trying to create a presence.

**Detre:** We were lobbying ferociously.

*Kupfer:* Well, do, do you think that that is something that was lost. Was it a good loss or is it something because clearly over the years that began to play less of a roll and maybe picked-up by other societies or organizations. I can remember and it was not that long ago, when we had all three Nobel Laureates in Washington, sponsored by the ACNP. Should we be doing more of that? Well, you know we are running into a little bit of a problem because one year we lobbied for increased research funding and next year we lobbied for increased training research funds and then we went back and lobbied for research funding and then for training funding and eventually, people got a little tired of us. Moreover, almost no professional society can compete with the lobbying firms now in Washington. Of course our politicians say that lobbyist have no influence on them whatsoever. So, I do not believe that academic societies per se can do very much to influence matters but I do believe that personal relationships with our Congress, House and Senate members is very important. If I were president of the ACNP, I would make every effort to testify on critical issues and ask Congress members to use us as expert witnesses wherever that's appropriate, of course, because that's the only way we could be really heard. Lobbying usually means not just presenting an idea, but promising support to a Congressman, financial support or visibility and we are too small to provide visibility and certainly not rich enough to provide economic support. So that expert witnessing is probably the best way to exert our influence.

*Kupfer:* What's your favorite memory of a meeting? Do you have a funny story of something that happened to you at the ACNP?

**Detre:** Actually, you ought to know that neither neuroscientist nor psychiatrists, with few exceptions have a sense of humor. I mean, the two of us are reasonable exceptions. We are not known to be very funny just as cab drivers in Puerto Rico told me, "you guys are the poorest tippers we have ever seen."

*Kupfer:* There were some sad moments too

**Detre:** When I was president, for instance, one of our colleagues who strongly believed that running is a good thing, collapsed and died, and he did this running, despite my concerted effort to stop him from doing so. I told him that if he's a biologist and he was a very fine biologist that we are biologically derivatives of monkeys and monkeys don't run three to five miles. Monkeys run

twenty or thirty steps, then stop, scratch themselves, or eat a little something and swing maybe on trees, but they have absolutely no intention of doing what we are doing. I don't believe that our organism is suited for these long runs. Ah, the only reason we encourage it as physicians because there is a medical center and these runners are candidates for orthopedic surgeons.

*Kupfer:* Anything we should say to the fiftieth anniversary that is coming up?

**Detre:** Yes. You are a young old and I'm a nearly old-old and we have predecessors and we should first congratulate our predecessors, especially those that are still alive, because they have done something wonderful by creating the College. And I believe that the leaderships throughout the years have done a magnificent job. But they will also have to think about how the future is going to evolve because nothing is stable in science and academic societies also lose their original characteristics and my plea, solely, that part of it needs to be restored, not all of it. Congratulations on your fiftieth anniversary ACNP and congratulations to all of our colleagues who made this fiftieth anniversary possible. You were all fabulous people. You were even likeable. And, I only wish everybody would be still around, but of course, that's not in the cards. I'm sure the next fifty years are going to be very interesting and it's truly regrettable that I won't be present to witness it.

(Thomas Detre interviewed by David J. Kupfer; Volume 10.)

### 1995 KUPFER

*Schatzberg:* What thoughts do you have about the notion of dose? We have gone from low dose under prescribing in the late sixties to realizing these are serious illnesses and need more aggressive management.

**Kupfer:** This is the kind of topic where an organization like the ACNP can be a terrific forum to present clinical information and also basic neuroscience findings.

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*Schatzberg:* What about the ACNP's influence on clinical practice? You raise these issues about the presentations; that this is a somewhat elite professional group. Do you think the materials that get generated or presented here have an influence on the field?

**Kupfer:** That's an interesting and not a simple question. There have been times we have not taken our responsibility to heart. We have sometimes not been conscious of our need to do that and other organizations have assumed that responsibility. Right now we are in a cycle where we have more clinicians on the ACNP council than in a long time; hence there is a great deal of emphasis on dissemination through education.

*Schatzberg:* What about the role of the ACNP on professional identity? What has the college meant to you as an investigator, as a chair, as a professor?

**Kupfer:** I don't know of a single organization that has had as much impact on my thinking about the linkages that a department of psychiatry should have with other scientific enterprises. That has certainly had an impact on the intellectual development of Western Psychiatric Institute and an influence on what clinical research centers funded by NIMH need to do. It has influenced my own research career, both in terms of the sleep and biological rhythm side, as well as the treatment and long term understanding of mood disorders.

*Schatzberg:* I have the same impression. The ACNP, of all professional organization's I belong to, has had the greatest impact on my sense of belonging and of professional identity, in terms of both investigation and administration. Do you think the society is too small and a little too elitist?

**Kupfer:** I don't think so. If we got much bigger we would lose our ability to invite people to present and to make sure fresh ideas come in; we might also lose the specialists. We probably range between eleven to fourteen hundred people at the meeting. If we get much larger we become akin to a small American Psychiatric Association meeting. We would lose any opportunity of giving traveling fellowships for young people or any sense that young people can come to a meeting and find somebody they have read and would like to talk to. We are at a threshold where, if we increase the number of members, I believe we would have to decrease, in proportion, the number that can attend the meeting. Once you go much above one thousand people, you have a very different meeting and, since it is almost a week long, something would be lost. Having said that we come to something else we have grappled with; is the society simply a meeting that happens annually or an organization that operates throughout the year? This is something the whole College has wrestled with on an up and down basis. What is our obligation with respect to education throughout the year as much as the annual meeting, and would that come through CME activity which is something we all work with? Even the origin and the development of a journal was a response to how does one keep the identity of the College and disseminate information.

*Schatzberg:* What about the influence of pharmaceutical companies on the College? What kinds of thoughts do you have in 1996 and moving forward?

**Kupfer:** I think the College has struck a wonderful balance at this point; there is no question the pharmaceutical industry has been extremely generous in helping us with unrestricted educational grants. I think of the teaching day, and I think of other advantages we have to bring people in for special lectures and other events that have been extremely helpful. I think some of the things like newsletters and some of the CME work has been very helpful. They recognize, just as we do, that this exposure to a more high class way of thinking about neuropsychopharmacology can help create a better educated public and a set of policy makers regarding the positive aspects of what is going on in the

field. Are there risks? There are certainly risks, but these can be minimized as long as we control the educational content and avoid special sessions that are auctioned off, the way it sometimes happens in other societies. That is the best defense, not only for ourselves but for the pharmaceutical industry; they gain much more if this partnership is a very open one and the scientific content is left to the College to determine. There are going to be not easy times ahead and unless these partnerships continue to be present between the pharmaceutical industry and the College, the various advocacy groups and the College and with other organizations there will be financial trouble. Many of us favor putting our other hats on, which is, it would be nice to balance the budget. On the other hand, the closer you come to balancing the budget the less discretionary income will be present for science. And that will begin to impact on what the College can do intellectually.

*Schatzberg:* Final thoughts about the future of neuropsychopharmacology, psychopharmacology and the ACNP?

**Kupfer:** The future of all three is tied together. When Floyd and I were putting together what would be the new developments there were five or six chapters at the end of the book. Not surprisingly, there were chapters that ranged from ethical treatment issues when we know more about the genetics of disorders, to what will happen in terms of designer drug strategies as we take advantage of new insights and the techniques. Those are the kind of issues that are going to drive the College over the next five or ten years. We need to have people join the college, who have expertise in those areas, and we have to be aware that it is not going to be a straight shot. Some of the things that have come up in the last couple of years that the College and I have wrestled with, in my time as president, is this whole issue about informed consent, the use of placebo and what will we be able to do in future clinical trials. We will have to face what to do in the area of neuropsychopharmacology and genetic testing. What will be the coupling between the genetic origins of diseases and the design of certain interventions? How will we deal with that and what will be the interdisciplinary expertise necessary? These issues may influence not only the kind of membership, but what kind of training and what kind of educational responsibilities the college needs to undertake in the next five to ten years. We won't be able to hide our head in the sand and I don't think we should, but it's exciting.

(David J. Kupfer interviewed by Alan F. Schatzberg; Volume 7.)

### 1997 NEMEROFF

*Ban:* What has the ACNP meant to your work and your career in this field?

**Nemeroff:** When I look back at the career that I have had, I have been lucky. I have been fortunate to have a fabulous family. I have had a fabulous team of colleagues, support staff, junior faculty and, perhaps, most importantly in

relationship to this current interview is the remarkable friendships that I have made with ACNP members. These individuals, just to name a few, include Jack Gorman, Ned Kalin, David Rubinow, John Newcomer, Jeffrey Lieberman, Dennis Charney, Marty Keller, Dwight Evans, and Alan Schatzberg. These individuals have become best friends to me and my family because we all travel a great deal to a variety of meetings; one's friends are not necessarily geographically contiguous to where you are living. This is one reason why the American College of Neuropsychopharmacology isn't just a professional society like the American Medical Association or the American Psychiatric Association. In contrast, the ACNP is a college, meaning that the individuals are collegial, and I could probably name twenty or thirty individuals, who I feel sufficiently close to in this college, that I could go to with any personal or professional problem that might arise, either, in my department or in my personal life. And, I believe that's why the ACNP means so much, to so many of us. Of all the organizations we belong to, and we have multiple affiliations with a variety of organizations, this is the organization I feel closest to, and I know that my colleagues would echo these sentiments as well. I was an ACNP travel awardee and became a member - though, my membership application was rejected the first time I applied for membership, a not unusual occurrence, as you know - eventually to become a fellow, a member of the council and was elected president. The ACNP is very important to me. And, not only have my relationships with members blossomed, but with their spouses and children as well. In life it is not only the good work that we do, which hopefully translate into better care of the patients that we have spent so much time caring for over time, is important, but, also the friendships we have, which, in fact, contributes a great deal to the quality of our lives. It is for that reason that so many individuals have put so much time and effort, without remuneration, into this college. We have lived through fabulous times here at the college and we witnessed tragedies. Morrie Lipton, one of my mentors, suffered a CVA at an ACNP meeting in Puerto Rico several years ago. I think of the ACNP, as a family, usually functional, but occasionally dysfunctional, with occasional squabbles among its members, as one would expect from a talented, intelligent and strong-willed group of family members. There isn't any other organization that combines excellence in neuroscience, clinical psychopharmacology, epidemiology, genetics, molecular neurobiology and brain imaging that this college does. It suits my needs because I can come to these meetings and learn about areas that I simply don't know enough about, and try to take my own research to the next level. I don't know any other organization like this.

(Charles B. Nemeroff interviewed by Thomas A. Ban; Volume 8.)

**1998 AKIL**

*Meador-Woodruff:* You've had leadership roles in many organizations, including the ACNP. Can you talk a little about those organizations and how you see them and your role in them?

**Akil:** As a basic scientist, I try to understand the issues clinicians deal with and try to bridge the issues basic scientists and clinicians deal with. The ACNP is an amazing organization, because it sits at the interface between basic neurobiology and psychiatry at a time when the two should be coming together. I think they have come closer together but they are not sufficiently integrated and I think it has a unique role to play in that transformation. There is a lot of soul searching that we should have more neurosurgeons or neuropathologists. Of course, I would be happy to see them involved, but it is OK really as it is. It's already a big thing to bite the interface between the science of the brain and the science of mind and how it goes wrong in psychiatric disorders. It's great to have a society that tries to bring the science of the brain and the science of the mind together. I hope that we will get to the point integrating what we still hear on parallel sessions, one on glutamate another on serotonin, a third on genetics and so on.

(Huda Akil interviewed by James H. Meador-Woodruff; Volume 3.)

**1999 PAUL**

*Ban:* I suppose this was all in the 1980s.

**Paul:** I was a lab chief 1984, '85, '86, '87 and '88. It was probably one of the better years of my career. I actually won I think that year, the Efron Award of the ACNP which was one of the better awards that I won.

*Ban:* When did you become a member of ACNP?

**Paul:** I must have joined the ACNP early 1980s, maybe 80-81. I'm embarrassed to say I don't know. I really, this is a fantastic organization. I've come to virtually every meeting for 20 maybe 23, 24, 25 years. I've served on Council twice. I've served as the President of the ACNP. That was a great honor. I've served on the Credentials Committee. I've served on the Program Committee. So I've really been fortunate to have been able to do a lot of things for this organization, this College.

*Ban:* Is there anything you would like to add that we have not covered?

**Paul:** I think it's a great college. When I was President, one of the things I wanted to do was figure out a way to keep it vigorous, intellectually vigorous, to make sure that we were bringing in the young, the brightest people so that we were continuing to evolve so that we wouldn't become extinct and we've done some good things along that route. I'm very pleased with the quality of the new members that have been announced and the Fellow promotions, etc. I think it's a great, great organization.

*Ban:* Just one more question. What are your thoughts about the future of the field and the *College*?

**Paul:** I believe that fundamentally we'll be able to understand the brain in a way that, you know, it clearly is the most complex organ in the body. Right? And it's not going to be easy to understand soon, so I think we've made some extraordinary progress and this College has done a remarkable job as a catalyst for that.

(Steven M Paul interviewed by Thomas A. Ban; Volume 3.)

## **2000 SCHATZBERG**

*Ban:* When did you get involved with the American College of Neuropsychopharmacology?

**Schatzberg:** I think it was in the early 1980s that I became a member, and I've been coming to these meetings for 20 years and it's the highlight of my academic year. The College is an incredible place. It truly is a College. We've witnessed transformation over time. We've been able to grow, and it's been just a wonderful, wonderful experience.

*Ban:* You were president of the College.

**Schatzberg:** I was President in 2000 and after the business meeting in a couple of hours, I will be the immediate Past President and Chuck O'Brien will be President. I was on the council for three years, then I was a year off, before becoming president elect. Seven out of the last eight years, I've been very involved with the running of the organization. It's a unique place. It is a place of tremendous friendship, tremendous collegiality. You see your friends, and you see them working on scientific issues that are important to the field. The College, I think, has been enormously successful, obviously. The Nobel Laureates this last year are important additions to Julie Axelrod. It's been an organization that has meant a lot to me in my professional life. It's a place that, I've been on the program many times, although not every year; we usually present every two or three years. And, as you know, Tom, we usually do a panel every couple of years. This year we're on two or three panels because I organized one on substance P. We have a panel on delusional depression this afternoon. We also have a few posters. But it's just a wonderful place to see people; it's the one meeting I look forward to. I go to a lot of meetings every year, but this is the one meeting that really means something to me.

*Ban:* Is there any other organization that you have been involved with?

**Schatzberg:** Sure. I belong to the American Psychiatric Association, the American College of Psychiatrists, and the International Society of Psychoneuroendocrinology. I serve as their Secretary General. But, the International Society of Psychoendocrinology is a much smaller Society. It's very, very specialized. It certainly fits an area of my interests, but I have other

interests as well. But there's nothing like ACNP. It's small enough to have fabulous meetings but large enough to include people of many different disciplines. And one of the things that Steve Paul, when he was President, started was the question of looking at the holes in the College as to trying to fill in and we've been trying to do that pretty actively this year, adding some child psychiatry people, child researchers, and adding some people on research methodology and statistics. I think we need to get some people in certain areas, to keep us ahead of the cutting edge and I think we'll do it. It's a College that you're involved with, and Jon Cole, Frank Ayd, a number of you folks, and Heinz Lehmann were involved in founding and we owe all of you guys a tremendous debt of gratitude for having the vision of coming up with it. Since 1961, science has changed, but the quality of the College hasn't. The quality always was superb and continues to be superb.

(Alan F. Schatzberg interviewed by Thomas A. Ban; Volume 4.)

### 2001 O BRIEN

*Hollister:* So, I know one of your great interests has been the translating of Abe Wikler's conditioned avoidance hypothesis into clinical practice, but, am I correct you never knew Wikler, did you?

**O Brien:** Another mentor was Bob Heath, one of the founding members of this society. At the anniversary celebration last year, or the year before, here in Puerto Rico, when I looked at a list of deceased members and saw Bob Heath on that list, I said, my God, I didn't think Bob had died. And I called up, and, in fact, he didn't die. He's still alive, so we got that fixed. So, as a matter of fact, Bob Heath is an ACNP member, who probably hasn't been to a meeting in many years. He was a prominent psychiatrist, who was ahead of his time.

(Charles P. O'Brien interviewed by Leo E. Hollister; Volume 6.)

### 2002 COYLE

*Bunney W:* Roles in the ACNP?

**Coyle:** I've been on council and I served as a President in two thousand and one. I served on a number of committees; most recently, the Publication Committee with Sam Enna and I think we've been able to make some important changes in terms of the Journal. Hopefully, we will be able to develop a much more robust website and moving from Generations of Progress to the new Annual Review of Neuropsychopharmacology.

*Bunney W:* Was that your initiative?

**Coyle:** Yes. I chaired the committee that selected Nature Publishing Group to be the publisher of the Journal of Neuropsychopharmacology. Then, when we developed this Review of Neuropsychopharmacology concept, they came in with a gang-buster proposal, so they are publishing that. I think that was very

good, because we are now up to a several hundred thousand dollars in income from our publications.

(Joseph T. Coyle interviewed by William E. Bunney, Jr; Volume 8.)

### **2003 CHARNEY**

*Tone:* Do you feel that the ascendancy of biological psychiatry has advanced the field?

**Charney:** Yes, definitely. And there are many things that go into it; the role of biological psychiatry is important, the role of prominent people being role models is very important, being TV is important, whether it be the advertisements that we were talking about or it being portrayed in positive ways on TV shows or in movies, all that helps. That's been very important, very gratifying. So doing what I can with the advocacy groups to get the word out, to support their mission, to break down stigma, is one of the most enjoyable things that I do. The ACNP is more of a scientific organization, so in that sense we work to help the advocacy organizations do their job by providing advice to them, by giving our opinions about the important issues of the day that relate to treatment.

(Dennis S. Charney interviewed by Andrea Tone; Volume 8.)

### **2005 WEINBERGER**

(Daniel R. Weinberger interviewed by Steven Potkin; Volume 2.)

### **2006 DAVIS K**

*Watson:* So, you worked on Alzheimer's disease and it turned out to be useful to you. Do you want to talk a little bit about that?

**Davis:** We continued our work with physostigmine that led to many fruitful efforts. I was awarded for it with one of the first NIH funded Alzheimer's Disease Centers, as well as I was recipient of the Elkes and Efron Awards from the ACNP, and receiving this year, the Hoch Award for service to the College.

(Kenneth L. Davis interviewed by Stanley J. Watson; Volume 8.)

### **2007 CARPENTER**

*Ban:* Could you tell us about your activities in ACNP? When did you become a member? What would you consider your most important contribution to the organization?

**Carpenter:** Well, I probably became a member around 1978 or 1979, after coming to the MPRC. I became a fellow in 1981. I enjoy the meetings and have served on several committees, but don't know if I contributed much. I have now started serving on Council, and this work seems very important. I am particularly interested in how we manage relations with industry, address

conflict-of-interest issues, and how we establish credibility as an independent source of expertise on neuropsychopharmacology issues.

(William T. Carpenter, Jr. interviewed by Thomas A. Ban; Volume 5.)

### **2008 RAPOPORT**

*Healy:* How we view the history of psychiatry would be changed.

**Rapoport:** You're interviewing many clinicians as part of this process. This organization has played a golden leadership role and the ACNP has had a wonderful influence on me, but I hope that they work very hard to encourage the kind of clinical research that couldn't be done within a CRO, but would be beneficial to the scientific field.

(Judith L. Rapoport interviewed by David Healy; Volume 7.)



## THE MEMBERSHIP AND THE STORY OF ACNP

In this section excerpts relevant to the story of ACNP are presented from 30 interviews conducted with 30 members of the College. The information in the excerpts is restricted to the personal involvement of interviewees in the activities of the College. Although many statements read like testimonials, they also assist in providing the social background and academic rationale as to why the College is so attractive to young scientists. The general tone reflects the fact that being part of the College is unlike simply being a member of a scientific association but through its social aspects and unique collegiality, it opens new pathways for one's career. In case a member acknowledges personal roles in the College or contact with other well-known members who served as mentors, but only refer to the College, tangentially, the extract of his/her interview is presented in Appendix Three.

Interviewees are identified by their surname and the year they were elected a members of ACNP. At the end of each excerpt the name of the interviewee and the interviewer, as well as the volume in which the full transcript appears is noted.

### *The Excerpts*

#### **ANGRIST (1975)**

*Janowsky:* Did you present it?

**Angrist:** Sam suggested I present it at the annual meeting of the Society of Biological Psychiatry. I think it was in 1969 in Miami. It was my first meeting, and my first presentation. I thought the senior people in the field would be wise old men who would say, who's this kid, but they were enormously supportive, positive and enthusiastic, and said, "You're doing a nice work, kid. Keep it up". And, that gave me such a boost that it really, really, made an enormous impact and big difference to me. And, the ACNP has done the same thing, you know. It charges your batteries every year.

(Burt Angrist interviewed by David S. Janowsky; Volume 5.)

#### **ARANGO (1997)**

*Tone:* How welcoming have scientific psychiatric associations been to you as a non-psychiatrist?

**Arango:** Oh, very welcoming. I have been coming here since 1988, I was accepted for membership in 1994, and I really love this meeting. I have always had a very good reception from the psychiatric community. And, I think it's a very good mix.

(Victoria Arango interviewed by Andrea Tone; Volume 7.)

**BEASLEY (2007)**

*Potter:* How did you get involved with the ACNP?

**Beasley:** That's an interesting story. I was actually at the twenty-fifth anniversary meeting in Washington, DC. As you recall, this was a huge meeting. The residency training programs had been encouraged to have at least one resident attend. Dave Garver was the biological psychiatrist at Cincinnati and the only ACNP member from Cincinnati. I was invited by him to attend. So, that was my first meeting, 22 years ago, and that was a major exciting event for me, with all of the major names and individuals in the field speaking at the meeting. Many of the NIMH folks, including you, being very prominent at that time. So, that was a very, very positive experience for me.

*Potter:* I would be interested in tracking how you interacted with the ACNP over those years and what and how that played into what you were doing. And also, when did you actually become a formal member?

**Beasley:** I attended almost every ACNP meeting from that original Washington 25th anniversary meeting through the current meeting. I always viewed myself, having been in the industry, as really not a major player. And, I did not apply for membership in the ACNP until 2005 and was elected in 2006.

*Potter:* So, just for the sake of history, was there any work you have been doing that you felt would be of merit for becoming a member of ACNP?

**Beasley:** The initial development of olanzapine and my involvement with the topic of the relationship between pharmacotherapy and suicidality have been very important matters. Also, my effort to try to very accurately characterize, in a clinical framework, the safety profiles of molecules has been important, certainly to me. I thought, perhaps, the College might consider these things appropriate basis for membership consideration.

*Potter:* Of course, they were. Clearly you were attending the annual meetings even though you were not a member for many, many years. Was there any special ACNP event that comes to mind in the respect of our history?

**Beasley:** One of the most memorable moments was the first debate on the matter of antidepressants, specifically SSRIs, and suicide. It was an evening study group and John Mann was chairing the meeting. This would have been the 1991 meeting I believe. Marty Teicher spoke and I presented the Lilly data. This meeting was held just before the major reception, out at the fort behind the Caribe. I spent most of the evening at the reception chatting with Marty although I firmly disagreed with some of his positions. I would not describe that as a comfortable evening. So, that was probably my most memorable ACNP experience but not my best memory. This has been a great place to come to share ideas.

(Charles M. Beasley interviewed by William Z. Potter; Volume 8.)

**BLACKWELL (1970)**

DR: How did that change the trajectory of your career?

BB: I began the job in the fall of 1968 at the age of 34. It provided all the resources necessary to learn about America and the pharmaceutical industry. Frank Ayd was a consultant to the company and took me under his wing, introducing me to the ACNP and to leading researchers in the field. We collaborated in convening a meeting of all the leading researchers who had made the original discoveries in psychopharmacology and published their personal stories in our book, *Discoveries in Biological Psychiatry*.

DR: Were you able to continue your own research interests?

BB: Frank and I presented several workshops at ACNP meetings and published two papers together on the scientific and ethical problems with psychotropic drug research in prison volunteers. Working with a colleague in another company we wrote an article about the roles and tasks of an industry physician. I published some Phase I clinical pharmacology on the cardiovascular effects of tricyclic compounds and on comparisons of the anticholinergic properties of different compounds using a technique to measure salivary flow.

(Barry Blackwell interviewed by Donald S. Robinson, Volume 4.)

**BLAZER (2004)**

*Tone*: Is there anything that you wanted to add, any final thoughts?

**Blazer**: I have one final thing that's kind of interesting. This is my first year as a member of ACNP. I'm glad to get in. I'm a psychosocial epidemiologist. Why would you want somebody like me around? But I think the ACNP has widened its spectrum, I'm not your traditional member. It's not only very important and very rewarding to me personally, because I've had a thoroughly enjoyable time at this meeting, but I think it's probably good for the organization. They need people like me.

(Dan G. Blazer interviewed by Andrea Tone; Volume 7.)

**BOWDEN (1987)**

**Bowden**: So, I start working in anxiety and depression and ended up as part of this NIMH collaborative study of the psychobiology of depression that has influenced my career. Some of the members of the ACNP were part of that clinical collaborative study.

(Charles L. Bwden interviewed by Andrea Tone; Volume 4.)

**COOPER (1983)**

*Ban*: How did you get involved with the ACNP?

**Cooper:** We did that in 1971 and we published after we presented our findings at the ACNP. It was the first presentation I made at the ACNP.

*Ban:* When was that?

**Cooper:** I gave my first paper here in 1972, and then pretty much presented a paper every year at the ACNP. They are wonderful meetings where one can interact with people and scientists, both at the basic and the clinical level.

*Ban:* What year did you become a member?

**Cooper:** I became a member in 1983.

(Thomas B. Cooper interviewed by Thomas A. Ban; Volume 7.)

### **DUNNER (1976)**

*Ban:* When did you join ACNP?

**Dunner:** I went to my first ACNP meeting in 1972, and joined the College around 1974. I don't remember the exact date, but at that time meetings were mostly in Puerto Rico, though occasionally California. I met people like Max Hamilton. Our group at Columbia was right next door to Joe Zubin, a wonderful person who had tremendous influence on American psychiatry. He was a psychologist who helped to develop the DSM-III system and Bob Spitzer had worked in his lab. Joe was very sympathetic toward research and less so to analytic psychiatry. We were doing research that made sense to him so we became friendly. I remember having lunch with Joe and Max Hamilton, and meeting this grumpy, old English man who never seemed to have a nice thing to say but with a little twinkle to his sneer. It was exciting for me as a very young person. ACNP at that time had maybe 200 members. It was easy to have lunch with a basic scientist or another clinician, and much less complicated than it is now where you have to hunt for people or make appointments to see them. There were fewer sessions, and a coffee break that everybody went to so one could easily find people to chat with.

*Ban:* Were the meetings still at the Sheraton?

**Dunner:** At the Caribe Hilton more than the Sheraton. While at Columbia I wrote about 50 papers and started to do national talks. I always tried to present at Biological Psychiatry, the APA and ACNP. Those were meetings I targeted, and I tried to write a paper for each occasion.

*Ban:* Let me ask you about your activities in ACNP?

**Dunner:** ACNP has always had the problem that we don't know how to appoint new members. When I was elected they created a category of scientific associate that I became. A few years later they decided that didn't make any sense because some really prominent people were scientific associates, and so they made all the scientific associates members. I have been on a bunch of committees, and I like to do that when I am part of an organization. So I set up a symposium, I was on committees but in order to be a committee chair you had

to be a fellow. In the early 1980s I was appointed chair of the education training committee. I was really excited by that because I knew it meant I had been elected to fellowship. I have only missed one meeting since 1972 and I think I presented at each meeting I attended. For the last several years I have usually nominated someone for membership, and I have been on a number of committees and task forces for ACNP. I love coming here. The organization is a lot bigger than the original 200 people, but you learn an awful lot coming, sitting and talking with people.

*Ban:* Is there anything else that you would like to add?

**Dunner:** I think family is something that never gets covered. My wife didn't come with me during the early times when we were in New York because we had young kids at home and it was right before Christmas. But since we moved to Seattle Peggy has come to just about all the meetings and that has been a very integral part of enjoying them. You structure your life around meetings and this one is on my calendar for the next couple of years.

(David L. Dunner interviewed by Thomas A. Ban; Volume 7.)

### **ENDICOTT (1975)**

*Regier:* That was an incredibly important period for classification, the defining of disorders, and for the development of methods for assessing disorders in large scale studies.

**Endicott :** During that period, also, I was very lucky. First, I got to come to ACNP a lot as a guest of Joe Zubin or Bob Spitzer. Of course, I was attending the ACNP meetings, and it was partially because of that FDA experience that I became a member of the ACNP. I always say I was very lucky that I came along in the seventies because when I look at who is getting into the ACNP now it probably wouldn't happen to me.

*Regier:* Were there any honors, awards or distinctions that came along with any of this work?

**Endicott:** I considered becoming a member of the ACNP one of the best.

(Jean Endicott interviewed by Darrel A. Regier; Volume 7.)

### **FIBIGER (1976)**

*Ban:* If you could say something about the ACNP. When did you become a member?

**Fibiger:** I joined ACNP very early in my career. I felt very privileged to get into the ACNP. I think I must have been one of the very few Canadians who were accepted for membership, and I think I was accepted in 1976, so 17, 18 years ago. And I think I have attended just about every meeting since then. Without question, if I could only go to one meeting every year, it would be the annual meeting of the ACNP. I had the privilege of serving as the journal editor

for Neuropsychopharmacology for a few years. Unfortunately, I had to give that up when I joined industry. But I enjoyed doing that very much, and I was honored to contribute in that way. And I've been on Council for the last three years. Today, in fact, is my last Council meeting. And that's been a lot of fun too. So, I felt very close to the College and I've, without exception, enjoyed my interactions.

(H. Christian. Fibiger interviewed by Thomas A. Ban; Volume 3.)

### **FUXE (1994)**

*Ban:* You started to attend ACNP meetings quite a number of years ago?

**Fuxe:** Yes, thanks to my old friend Menek Goldstein. He brought me into the ACNP.

*Ban:* Do you remember when approximately?

**Fuxe:** I became a member in 1994 but Menek invited me to participate in ACNP panels already in the 1960s, and 1970s. The ACNP meeting was in Puerto Rico at the time when I was young. I still remember how much I enjoyed the meetings.

(Kjell G. Fuxe interviewed by Thomas A. Ban; Volume 4.)

### **GALLANT (1963)**

*Ban:* How did you become a member of ACNP?

**Gallant:** We had published about 25 papers at that point in 1963. I guess that's what helped me to be admitted to the ACNP.

(Don Gallant interviewed by Thomas A. Ban; Volume 4)

### **GARDOS (1987)**

*Ban:* When were you elected a member to the ACNP?

**Gardos:** In 1987, I am honored to be a member of ACNP and I look forward to attending the Annual Meetings. I think this organization has done tremendous work for science and patients.

(George Gardos interviewed by Thomas A. Ban; Volume 4.)

### **GOLDSTEIN (1967)**

*Ban:* Tell us something about the different organizations you are involved with?

**Goldstein:** I often get asked which, is my most important organization, when people come into my office, and I say, "It's the one where I don't have a diploma hanging up, the American College of Neuropsychopharmacology".

*Ban:* Of all your contributions, which one do you think was the most important?

**Goldstein:** My work with symptomatic volunteers. I think that at the national level, my involvement has been very much with the ECDEU and with the ACNP.

I've been on various committees at the College over the years. I tend to be a sort of low-key person.

(Burton J. Goldsein interviewed by Thomas A. Ban; Volme 4.)

### **GREDEN (1985)**

*Ban:* You have also been active in the ACNP.

**Greden:** I have been on the council now for several years and before that I was serving on the advocacy and the publications committees. I was also asked by the council to be a senior administrative editor and help to revise and restructure the college's publications. I was involved in the selection of the right people as editors for *The Fifth Generation of Progress*. We brought in Ken Davis, Dennis Charney, Joe Coyle and Charlie Nemeroff to edit the book and Jim Meador-Woodruff in doing the scientific web site of the ACNP Journal. I ended up having Bob Lenox in the role of journal editor. Now Charlie Nemeroff is doing it.

*Ban:* When did you become a member of the ACNP?

**Greden:** It was sometime in the '70s. I became a Fellow, probably, about a decade ago.

*Ban:* Would you like to comment on the annual meetings?

**Greden:** The annual ACNP meetings have always been highlights for me. I remember when the teaching days started. The college has much to be proud of when it looks back on its past and membership.

(John F. Greden interviewed by Thomas A. Ban; Volume 5.)

### **HOGARTY (1982)**

*Tone:* You're so enthusiastic about the introduction of new medications.

**Hogarty:** These treatments wouldn't have been possible without medication, so, that's why I've always stayed close to ACNP. I've always had a soft spot in my heart for ACNP. It's been a privilege and it's been fun, for the most part.

(Gerard E. Hogarty interviewed by Andrea Tone; Volume 4.)

### **HOLZMAN (1994)**

*Ban:* When and how did you get involved with ACNP?

**Holzman:** That was through Danny Freedman. I had been invited to give a talk at an annual meeting. I forget what it was on, and I saw Danny holding court here, and I liked the people. I liked the activity. I liked the knowledge-exchange that was going on here. It was exciting. I thought, I want to be part of this. Danny said, "Not yet. You're not ready". But then I was ready, and I was so pleased to become a member and then a fellow, and it has been of enormous importance to me.

(Philip S. Holzman interviewed by Thomas A. Ban; Volume 2.)

**IVERSEN (1984)**

*Ban:* When did you attend the first meeting of the ACNP?

**Iversen:** I think in the 1970s. I was invited to one of the catecholamine sessions, but I wasn't a member until the mid-1980s. And since then I've been a fairly regular attendee. And, I find it very beneficial, coming just to hear what's going on in the field. It's one of the best places for finding out what's going on.

(Leslie L. Iversen interviewed by Thomas A. Ban; Volume 3.)

**JESTE (1984)**

*Ban:* When did you become a member of ACNP?

**Jeste:** A long time back. I do not remember the year; it was the early 1980s, maybe 1983 or so. I was very fortunate to be selected a member the first time I applied. The ACNP is a wonderful organization. It makes you very humble because you see how smart other ACNP members are.

*Ban:* Am I correct that you are the president of a new organization?

**Jeste:** Yes. I wanted something that was like ACNP but international, and focusing on geriatric psychiatry. So, we founded the International College of Geriatric Psychoneuropharmacology, While similar to the ACNP in being restricted to researchers, it will not be so exclusive in terms of the membership selection.

(Dilip V. Jeste interviewed by Thomas A. Ban; Volume 7.)

**KAUFMAN (1982)**

*Ban:* When did you become a member of ACNP?

**Kaufman:** Maybe 15 years ago.

*Ban:* Have you participated in the activities of the College?

**Kaufman:** I regret to say I have not.

*Ban:* Did you attend the annual meetings?

**Kaufman:** Yes, I attend the meetings religiously.

*Ban:* Did you present at the annual meetings?

**Kaufman:** I was invited several times. I presented a few years ago at the symposium on tyrosine hydroxylates. Steve Paul organized it and I gave a lecture. (Seymour Kaufman interviewed by Thomas A. Ban; Volume 7.)

**KREEK (1986)**

*Gold:* When did you actually become a member of the ACNP? And, tell us a little bit about serving on some of the committees of the College.

**Kreek:** Sure. Having served twice on the Credentials Committee, I'm almost embarrassed to say into the camera, but I'll say it, that I did not know how formidable and difficult it was to become a member, but I was nominated by

some very strong people and I became a member in 1985, and I became a Fellow in 1993. I'm completing my second tour on Council. The first tour was a short tour, filling in for someone, but this has been a full elected tour. I also have been on, not only the Credentials Committee twice, but also on the Liaison Committee and the Patient Advocates Committee, and I'm happy to let everyone know that I'm now on the Human Research Committee, so I've been very active. I think ACNP is just an incredibly important organization with very exciting science and proper sharing, but like CPDD, they also, I think, perceive the need, and we constantly need to remember this, to nurture young scientists, both bench and clinical, and those do both.

(Mary Jean Kreek interviewed by Lisa Gold; Volume 6.)

### **LAL (1987)**

*Bromley:* Educate the public about that. You ended up doing something different than you planned. You didn't become a physician. You didn't go back to India. Do you have regrets?

**Lal:** No, I'm very pleased and grateful. I'm very pleased with my life. There are so many hardships and accidents that contributed to my maturity and progress. I wish there were twice as many. I am pleased my colleagues, my supervisors, people who hired me, appreciated my habits. At an ACNP meeting a long time ago in Maui, I organized a symposium to report my research on the effectiveness of clonidine in drug abuse. Well, nobody ever thought a drug for hypertension would be useful in drug abuse. The ACNP appreciated my seminar proposal. They accepted it and we had a symposium. Similarly, I organized a symposium on The Brain Reactive Antibodies in Aging which was a new idea at the time. At a Neuroscience Society meeting in Miami a symposium of my work on animal models of anxiety was held to recognize my research. The professional community appreciated me a lot. I am pleased, flattered and very thankful.

*Bromley:* I don't have any other questions for you. Are there important things we haven't talked about?

**Lal:** No, except if I have a chance to put a word in that I think the ACNP is an excellent organization. It contributed positively to my life and the life of many scientists. There is a drawback also. It is not open to many scientists. It is difficult to become a member and then it is not affordable to attend meetings, it is a high cost meeting. Those without large grant support are unable to afford to attend. I know that ACNP has been trying to permit added categories of associate members. Still, it is not enough and it is difficult to get a level of funding to afford to attend.

(Harbans Lal interviewed by Elizabeth B. Bromley; Volume 3.)

**LANGER (1984)**

*Bunney:* When did you become a member of the ACNP?

**Langer:** If my memory is correct, in 1984. I looked at my own CV and I discovered that I had forgotten to put the ACNP in my membership list, which is a shame. But, now that I found out I will correct this omission.

*Bunney::* OK, who do you think were the key people in the ACNP at the time you joined?

**Langer:** Well, at the time I joined, one of them is talking to me right now the other one was Solomon Snyder, for whom I have a lot of admiration. Of course, Menek Goldstein, whom I knew for many years and, who unfortunately is no longer with us and, of course, Arvid Carlsson who has always been an inspiration for my work in this field and to whom I feel really indebted for advice throughout those many years.

*Bunney::* Why were some of these people key, do you think?

**Langer:** Well, in many ways, they were inspirational because of their creative research. Also, the fact that I was coming every year to the ACNP meetings which were very stimulating and motivational events, because they allowed me the opportunity to listen to excellent science and to present, as well, but also to discuss informally, with plenty of time, many issues that were relevant to ongoing research and to future projects, as well.

*Bunney:* Were you ever on any committees, ACNP committees?

**Langer:** No, I don't think so. Probably, as I was a foreign member, I wasn't involved in committees.

*Bunney::* So, was there any impact, you've mentioned sort of the impact of the ACNP on your work?

**Langer:** I presented my work at the ACNP on several occasions at panel sessions and I think one was a plenary lecture for Earl Usdin. So, I gave the first, Usdin memorial lecture many years ago.

*Bunney::* Are there any other areas that you would like to cover that I haven't asked you about?

**Langer:** Oh, I think that we've covered everything that I had in mind and it only remains to add among the people from the ACNP that were influential in my career George Aghajanian who from very early on, was interested in my work and he, himself, did work to characterize the somatodendritic autoreceptors pharmacologically in the mid-1970s and it is always a source of stimulation and motivation to be able to discuss science with him.

(Solomon Z.Langer interviewed by William E. Bunney; Volume 3.)

**LEVINE (1972)**

*Carpenter:* What is your plan for the immediate future?

**Levine:** I probably will retire sometime in the next five years. I am delighted about how many young people have come into the field and the growth of the ACNP. There certainly are people who have taken over and will make the field prosper.

(Jerome Levine interviewed by William T. Carpenter; Volume 9.)

### **McNAIR (1966)**

*Hollister:* Earlier in this meeting there was a big session on how to study drugs in multi-clinic trials. It could have been the same damned thing we were talking about 40 years ago.

**McNair:** I had told my wife I had seen that title over and over.

*Hollister:* It was exciting then because nobody knew for sure what the answers or proper procedures were.

**McNair:** One great thing the ACNP did was provide the mechanism for all these people to come together.

*Hollister:* The ACNP has been a wonderful organization for cross fertilization between disciplines. I'm fearful we are going too much toward the neuroscience side and concerned for what a psychologist can get out of this years meeting.

**McNair:** That concerns me, too. There are many papers where I can't even understand the title. But I've never spent time trying to predict the future, so I don't know where it's going.

*Hollister:* But you've never had any regrets about the course you took?

**McNair:** No, I think I'm lucky. I've certainly had regrets about doing things I don't like, but they have been minor, compared to the fact I was able to do something I like and make a decent living doing it. I suppose if I had known how to make a living from statistics and quantification mathematics I might have considered doing that. Once I got into the field one of the people who influenced me most was Ben Wiener, who wrote that famous book on experimental design. He was a professor at Chapel Hill when I was there and I got interested in analysis of variance because he showed what we could do with it. When I came to ACNP the first time it seemed clinical psychology was closer to being a good hard science than at present. There were a lot of people like Jim Klett, me, and John Overall with psychology training, who were into quantification.

*Hollister:* People I would call psychometricians, biostatisticians.

**McNair:** Yes, I think we contributed something to the development of study designs.

*Hollister:* Yes, from the statistical point of view.

**McNair:** But I don't think this is the place any longer for psychology. It bothers me there are not more people with the orientation and background we had

coming into this organization. I believe they are not coming because they don't see their place in it any longer.

*Hollister:* That's been one of the great concerns among some of us that ACNP is getting imbalanced. I wonder who is going to replace the people you mentioned like Klett, Overall, you and several others.

**McNair:** Probably so.

*Hollister:* Where do you envision the place of psychologists will be in the ACNP, in the next ten years? We're both worried about the fact the role has diminished in the last ten years. Is it going to improve in the future?

**McNair:** I honestly don't know. If the job needs to be done and the psychologists aren't there to do it, somebody else is going to pick it up. In the last 30 years or so, there has been a decline in the number of psychologists working with the field. Some psychiatrists have become extremely good at data analysis, so they may pick it up. Or they will hire people who are more real statisticians than psychologists ever were. I think it helps to know something about the field where the data come from that you're dealing with.

(Douglas M. McNair interviewed by Leo Hollister; Volume 4.)

### **OXENKRUG (1989)**

*Ban:* How did you get involved with ACNP?

**Oxenkrug:** Sam Gershon invited me to the annual meeting in 1982, and, since that time, I probably didn't miss any of the meetings.

*Ban:* When did you become a member?

**Oxenkrug:** In 1989. I'm very proud of being a member. The annual meetings of ACNP are the best meetings I attend.

*Ban:* Are you active in the College?

**Oxenkrug:** Well, I'm trying to be active. I was on a committee, and also I presented papers and posters at annual meetings.

(Gregory F. Oxenkrug interviewed by Thomas A. Ban; Volume 5.)

### **PERT (1985)**

*Hollister:* But, you had the insight to think of using the antagonist, rather than the agonist.

**Pert:** That was indeed a key and it was a really amazing story. Here the ACNP, which has been interweaving in my life for so many years, comes into play. I was chosen as one of the fifty or sixty graduate students from across the country to come to the ACNP summer camp in 1972, at Vanderbilt in Nashville, where all the big famous pharmacologists flew in, and it was very exciting. But, for me, I had been plugging away for months in the lab and it gave me the chance I needed to think. I came there with a huge stack of papers I had gathered that I

hadn't had time to read. I'd been so busy doing one failed experiment after the other. And, the one that really helped me crack it was Patton's paper.

*Hollister:* Who's Patton?

**Pert:** Patton is the famous Chairman of Oxford University's pharmacology department.

(Candace B. Pert interviewed by Leo Hollister; Volume 3.)

### **POST (1974)**

*Ban:* When did you get involved with ACNP?

**Post:** I was very fortunate that Fred Goodwin, right early on, brought me to one of these ACNP meetings. I was just like a kid in a candy store. I went to every session meeting and thought everyone had new and exciting findings. The ACNP has always been the key meeting in my professional life and continues to be that right now.

*Ban:* When did you attend the first annual meeting?

**Post:** Probably in the late seventies or early eighties, something-like that. It's a long time ago and it's been a consistently wonderful experience.

*Ban:* Have you been active at the meetings presenting papers?

**Post:** Yes, I have been a presenter or a discussant many times, and always an interested and active participant.

*Ban:* Have you been active in committees?

**Post:** I've been totally absorbed in clinical research. So, I haven't been very active in the college. I was only on one of the training committees, earlier, about getting young investigators to the ACNP, and now I am on the liaison committee.

*Ban:* Weren't you the recipient of one of the ACNP research awards?

**Post:** I received the ACNP Daniel Efron Research Award a number of years ago, and it's one of the awards that I'm the most proud of. To get the award from my colleagues has just been totally wonderful. .

(Robert M. Post interviewed by Thomas A. Ban; Volume 5.)

### **POTTER (1983)**

*Ban:* When did you become a member of ACNP?

**Potter:** I don't know, may be, in the late 1970s or early 1980s. I guess it must have been early '80s.

*Ban:* Have you been active in the College?

**Potter:** Oh, yes.

*Ban:* Do you remember your first presentation at an annual meeting?

**Potter:** I do not remember what my first presentation was but it had to do with pharmacokinetics. When I first came to ACNP, people were actually misinterpreting the meaning of protein binding.

(William Z. Potter interviewed by Thomas A. Ban; Volume 5.)

### **RICHELSON (1979)**

*Ban:* When did you become a member of ACNP?

**Richelson:** When I went back to Hopkins to work with Sol Snyder, Sol got me invited to ACNP.

*Ban:* What year was that?

**Richelson:** It was probably around 1972. And I never missed any of the annual meetings. Well I may have missed one or two but not many. I became a member in 1976 or 1977. But also I got involved in the Society of Biological Psychiatry. I don't know if I should talk about that?

*Ban:* Please do.

**Richelson:** I have been so active with the Society of Biological Psychiatry that I may have neglected the ACNP a bit but I'm now the incoming Chair of the Credentials Committee.

*Ban:* You mentioned it before that you got the Bennett Award of the Society of Biological Psychiatry.

**Richelson:** Yes.

*Ban:* Any other awards you have received?

**Richelson:** Well the Daniel Efron Award of the ACNP; I shared that with Bob Post. It was quite an honor to get that award.

(Elliott Richelson interviewed by Thomas A. Ban; Volume 5.)

### **SANBERG (1989)**

*Wayner:* When did you present first at ACNP?

**Sanberg:** My first presentation at ACNP, although I was not there, was in 1977 as a masters student. Chris Fibiger came down here to present our work, and I was an author on it. So, that was my first indication of what ACNP was. I think he was just elected a member, and came down here to give a presentation. I saw him today at the meeting here and we had a nice talk. When they asked me "who do you want to do the interview", I wanted you to interview me. You have been a very strong influence on me personally. I met you when I was a Travel Fellow here at the ACNP. I was selected as a Travel Fellow in 1984, in the second class of Mead Johnson Travel Fellows. I felt honored since I had applied from a relatively small university that I moved to. So, I came here as a Travel Fellow, and during that time I met you. And I had always been impressed by your work. You became a good mentor in my life, especially through our talks here at the ACNP.

*Wayner:* Are you looking forward to the next ten years?

**Sanberg:** Oh, I'm looking forward to it! As I said, I feel I'm fairly young and the ACNP shouldn't be asking me these questions right now. But, on the other hand twenty years from now...

*Wayner:* Might be different.

**Sanberg:** It could be different and I could be sitting here interviewing someone else. I'll be coming to meetings, of course, because I love the ACNP. And it'll be interesting to see what's happening in the field.

*Wayner:* So, you have any advice you might want to pass on to younger individuals coming into the College?

**Sanberg:** Well, the College is such a unique place. I think the college is the right name for it. It's collegial and although there are sometimes with my transplantation work that it feels a little off base, I think so many people are interested in many aspects of neuroscience here that it's a nice forum. And, I enjoy being a travel fellow, alumni. The fact that there are a few of us that have been travel fellows, became members, became fellows of the College, been on committees is inspiring. To be on the committee that picks travel fellows was a highlight of my ACNP experience. So, I think the College makes you feel part of it, makes you feel involved by allowing you opportunities like this. And to look at someone like Dr. Charlie Nemeroff, who was also a travel fellow before me, and became President of the College is great. It's a nice organization for that and I would encourage anyone to get involved. Especially nowadays with so many more travel fellowships available. And let's hope in ten or twenty years there's even more available for these people. The College provides a great opportunity for professional and self growth.

(Paul R. Sanberg interviewed by Matthew J.Wayne; Volume 3.)

### **SANDLER (1976)**

*Healy:* So after that you began to come to the ACNP meetings?

**Sandler:** Yes, I came first in the 1970s and very soon after, I was elected a foreign corresponding member of the ACNP. It was around the swimming pool at an ACNP meeting that although, there is some dispute about this, as you know, that we hatched the British Association of Psychopharmacology.

*Healy:* Was this the model you wanted to reproduce?

**Sandler:** Yes, ACNP meeting has always been the leader in the field. There is no question in my mind that it represents the advancing front of Psychopharmacology. The program committee has the right formula and they are good.

*Healy:* Do you think we have moved too far down the neuroscience route?

**Sandler:** No I do not. I think it has become clear this is the only way to make progress; and now we have the human genome mapped. So, it's a new ball game completely, isn't it? We don't have all the pieces in the jigsaw yet, but

we can be much more confident in our predictions than before. These ACNP meetings are an eye opener now, where basic science rules. OK!  
(Merton Sandler interviewed by David Healy; Volume 3.)

### **SNYDER (1969)**

*Bloom:* Let me ask you to think back about your earliest reminiscences of coming to ACNP, how you got down there to Puerto Rico?

**Snyder:** I was very fortunate at Johns Hopkins with a hybrid residency in psychiatry and pharmacology. I've never left, Joel Elkes was one of the founders of ACNP and very enthusiastic about it. Early on, perhaps in my third year of residency, he said to me "you must attend the ACNP" and I attended as his guest...and I've talked at many ACNP meetings after that.  
(Solomon Snyder interviewed by Floyd Bloom; Volume 4.)

### **SOKOLOFF (1976)**

*Ban:* When did you become a member of ACNP?

**Sokoloff:** I am not sure, but I believe it was some time in the 1970s.

*Ban:* Have you been attending the annual meetings regularly?

**Sokoloff:** Oh, yes, I usually come to the meetings, at least two of every three years, and have participated in many sessions.  
(Louis Sokoloff interviewed by Thomas A. Ban; Volume 2.)

### **SPECTOR (1965)**

*Sulser:* Well, Sydney, I think it is evident that you have made many major seminal contributions to the field of neuropsychopharmacology and I think the College has been greatly enriched by what you have done, both, in terms of research and the training of people.

**Spector:** Thank you. I must say that the College has also been a great source of inspiration for me.

(Sydney Spector interviewed by Fridolin Sulser; Volume 3.)

### **VAN KAMMEN (1980)**

*Ban:* Was Joel Elkes the chairman of the department of psychiatry at Hopkins at the time?

**Van Kammen:** He was there during my first two years and then left. Joel Elkes and Frank Ayd sponsored me later for the College.

*Ban:* When did you get involved with the American College?

**Van Kammen:** When I was at NIMH.

*Ban:* How did you get to NIMH?

**Van Kammen:** When I left Hopkins, I did a fellowship with Dennis Murphy at NIMH. It was at that time I first attended an annual meeting of ACNP, in 1973 or 1974.

*Ban:* Have you been active in the ACNP?

**Van Kammen:** I have been on the Membership Committee, in the Committee of Government Industry Relations, and on the Protection of Animals Committees. The ACNP has always been my intellectual center. I hope to remain active. It is hard to believe that it ever would stop.

[Daniel P. Van Kammen interviewed by Thomas A. Ban; Volume 5.],

### **VINAR (1975)**

*Hollister:* Any comment on ACNP?

**Vinar:** The very big congresses could be good experiences for young colleagues just to get acquainted with the great stars. But, for me, the ACNP, has still been the best meeting bringing the new scientific findings that can be discussed and keeping the social events at the margin.

(Oldrich Vinar interviewed by Leo E. Hollister; Volume 4.)

### **WAYNER (1977)**

*Sanberg:* I guess we can end by asking you, is there anything you want to say for this archive?

**Wayner:** Well, I have enjoyed being a member of ACNP. I believe it is one of the best Societies to which I belong. I enjoy the meetings and they have been an important source of information enabling me to keep up to date in my teaching. I like the informality of a small but still high quality meeting.

*Sanberg:* Do you remember the year you became a member, or first came to a meeting?

**Wayner:** No. My first meeting was in Puerto Rico but I do not remember when. I did attend several meetings before becoming a member. I believe that was a requirement. A candidate had to show a proven interest in the Society. The College needs to maintain those types of requirements for membership. Do you agree with that or not?

*Sanberg:* Oh yes, absolutely.

(Matthew J. Wayner interviewed by Paul R. Sanberg; Volume 6.)

### **WEISSMAN (1976)**

*Ban:* When did you get involved with the ACNP?

**Weissman:** When the maintenance study results came out and we presented them at the meeting. People were really interested.

*Ban:* Have you served on any of the committees?

**Weissman:** I have been on many different committees and on Council. I rarely miss an ACNP meeting. It's like family.

(Myrna M. Weissman interviewed by Thomas A. Ban; Volume 7.)

**WHEATLEY (Not affiliated with ACNP)**

*Hollister:* I expect you've been happy with what you've been doing?

**Wheatley:** I've spent a wonderful life and one of the nicest things about it is traveling, meeting colleagues like you, in various places. I remember when we met in Yugoslavia; I know you will remember that too. What I always liked about ACNP meetings in the old days was the informal discussion around the swimming pool from about 2:00 to 4:00 where I met people and talk to them. Perhaps I'd say, "I'm looking for someone to write a chapter in a book", and a colleague would reply, "I'm just the guy". Nowadays I think they've got the timing wrong, to finish at 10:30 and not start again until 2:30. It would be much better to go through to 1:00 o'clock and then have the break, with an evening session, perhaps at 7:30. Now they have two evenings for posters and a late evening session.

*Hollister:* A number of years ago some of us old timers sat down over a drink and decided we should try to organize a session the way it used to be, before we had to carry all these formal papers and slides. It was just people talking.

**Wheatley:** Yes, exactly.

*Hollister:* Just people exchanging opinions about a particular subject. One other thing about the program is the increasing time spent with pure science.

**Wheatley:** This is what has bothered me most at this meeting. Most of it is beyond me.

*Hollister:* That's right. We used to have topics that would be appealing to sociologists and psychologists.

**Wheatley:** Now, it's dominated by basic research and this isn't even research on humans. It's mostly on rats and, admirable though the rat may be, it's not quite the same thing. I agree with you, but it happens in all societies. In our own, BAP, the British Association of Psychopharmacology, exactly the same thing has occurred.

*Hollister:* But, you haven't had a split off as we have, with the formation of the American College of Clinical Psychopharmacology.

**Wheatley:** I didn't know that. I'm not against having disciplines mixed. In fact, that's one of the big educational advantages of these organizations. You do need some input from basic science.

*Hollister:* But you need a balance.

**Wheatley:** I couldn't agree more. It's losing sight of what the objective is. The objective is treating a patient.

*Hollister:* It all boils down to that and it's a very difficult task to get a balance.

**Wheatley:** It's interesting to know the mechanism of action of these drugs and it's certainly important for developing new drugs, but when we are sitting with our patients, we are interested to know how to make them better. We want to know the best ways of doing that.

(David Wheatley interviewed by Leo Hollister; Volume 4.)

## MISSION OF THE COLLEGE: BASIC AND TRANSDISCIPLINARY SCIENTISTS

The excerpts in this chapter contain comments from 18 interviews with Founders and other members that appear relevant to the concept of the ACNP's mission as originally formulated by the Founders group. They are drawn from all ten of the volumes in the series. A reading of them provides an overview of how the ACNP mission, originally articulated has been sustained and what parts of it have changed or evolved over the past 50 years.

As indicated before, those excerpts from the group of Basic and Transdisciplinary Scientists are separated from the group of Clinical Scientists. The separate files provide distinct vantages on the College, its history, mission and likely future directions. This section includes only the comments from Basic and Transdisciplinary Scientists.

To illustrate these comments, Ross Baldesserini, for example is *impressed with a sharp biphasic distribution of topics being presented ranging from the most esoteric basic molecular studies all the way to clinical trials*, in the annual meetings. This breadth of interests, he further notes *suggests that the College continues to be broad enough for all sorts of bedfellows*. Huda Akil, elaborating on the mission theme articulated at its founding by Joel Elkes, comments in 2007 on the essential components, noting that the ACNP *“sits at the interface between basic neurobiology and psychiatry at a time when they should be coming together*. Alan Frazer sees the ACNP as *“functioning at multiple levels, quality of science, political activism, trying to facilitate young people coming into the field”* and that the College consists of the *most prestigious group of people in the field, the mix of pre-clinical and clinical people who could speak each other's language, including representatives of the pharmaceutical industry*. Others in the group like Barry Blackwell, however, acknowledging the marked increase in the volume of basic science over the years, view the *topics becoming more remote from clinical findings and even esoteric. The number of clinicians and innovative clinical research having seemed to decline*. Arnold Mandell in another but similar vein, sees the College as moving from *a revolutionary place of respite and generation of new thinking about brain biology to conservative inertia*. Floyd Bloom interprets the trend differently: *It's hard for the clinicians to keep up with the pace of discovery in the basic sciences and it's hard for the basic scientists to keep up with the evolution of thinking about the kinds of mental illnesses*. *...that it has forced apart the cohesive elements the intermingling between basic scientists and clinical scientists*. He wants to see the Progress volumes as *giving them the hooks they could use if their scholarly interests awaken them to the opportunities* so as to maintain

the mission. In this spirit, Conan Kornetsky wants to *maintain ourselves as a multidiscipline organization and not an organization of multidisciplines*”.

### **The Excerpts**

#### **AKIL (1984)**

*Meador-Woodruff*: You’ve had leadership roles in many organizations, including the ACNP. Can you talk a little about those organizations and how you see them and your role in them?

**Akil**: As a basic scientist, I try to understand the issues clinicians deal with and try to bridge the issues basic scientists and clinicians deal with. The ACNP is an amazing organization, because it sits at the interface between basic neurobiology and psychiatry at a time when the two should be coming together. I think they have come closer together but they are not sufficiently integrated and I think it has a unique role to play in that transformation. There is a lot of soul searching that we should have more neurosurgeons or neuropathologists. Of course, I would be happy to see them involved, but it is OK really as it is. It’s already a big thing to bite the interface between the science of the brain and the science of mind and how it goes wrong in psychiatric disorders. It’s great to have a society that tries to bring the science of the brain and the science of the mind together. I hope that we will get to the point integrating what we still hear on parallel sessions, one on glutamate, another on serotonin, a third on genetics and so on.

(Huda Akil interviewed by James H. Meador-Woodruff; Volume 3.)

#### **BALDESSARINI (1974)**

*Healy*: One of the things that I’ve heard from a few people here, and especially those with clinical interests, is that the ACNP has become overly interested in basic neuroscience, and much less in its clinical applications. When do you suspect we will return to clinical neuroscience?

**Baldessarini**: In going through the abstracts from this year’s annual meeting of the ACNP, I have been impressed with a sharp, biphasic distribution of topics being presented, ranging from the most esoteric basic molecular studies all the way to clinical drug trials. This breadth of interests suggests that the College continues to be broad enough for all sorts of bedfellows and that’s a good thing, in my opinion.

(Ross Baldessarini interviewed by David Healy; Volume 5.)

#### **BLACKWELL (1970)**

*Robinson*: Putting aside that very reasonable caveat do you have any observations about how the ACNP has evolved as an organization intended to link the clinical and basic science interface?

**Blackwell:** Two things strike me as someone who drifted away from the organization as my interests broadened. Firstly, the volume of basic neuroscience has increased markedly and the topics have become more remote from clinical findings and even esoteric. The number of clinicians and amount of innovative clinical research seem to have declined. Secondly, the role of clinicians has changed. They are less involved in finding creative new methodology or linkages and are almost exclusively interpreting clinical findings within existing paradigms and models.

*Robinson:* As someone who has been both an academic and industry researcher can you speculate why and how this has happened?

**Blackwell:** It begins with acknowledging a distinction between the goals of an industry focussed on profit and market share contrasted with the concern of academics and clinicians for accurate information, safety and education. When the ACNP was founded there was a strong mutual interest in discovering new and better drugs and how they affected the central nervous system. The first psychotropic medications were discovered by chance and little was known about mechanisms of action.

*Roninson:* That is rather a depressing litany of shortcomings. Do you have any final thoughts to share about either your own contributions to psychopharmacology or the role of the ACNP?

**Blackwell:** Two, one personal and the other organizational. As someone who has lived long enough to become a “secondary citation”, I hope that anyone interested in the scientific and secular implications of the cheese reaction will return to the original sources. The science is published in the British Journal of Psychiatry over forty years ago, in 1967, and the secular story is told in a chapter, “The Process of Discovery” in Discoveries in Biological Psychiatry published by Ayd Medical Communications in 1984.

*Robinson:* What are your thoughts concerning the ACNP?

**Blackwell:** They are almost those of an outsider. I have never participated in the governance of the ACNP and though I am an emeritus fellow have not attended meetings for many years. I believe the ACNP has lost touch with its original mission, not through any intentional actions of its members but because, as an American institution, it is embedded in the ideology of our national culture and politics. America is the only industrialized nation in which health care is treated as a commodity, like cars or clothes. This is costly, inefficient, sometimes ineffective and inaccessible or unavailable for many. Normal market forces and competition fail to control health care costs because people are willing to drive an inexpensive car or wear jeans, but will bankrupt themselves to stifle illness or delay their inevitable death. Secondly, a constitution designed by refugees from tyranny created a citizenry that shuns government

(Barry Blackwell interviewed by Donald S. Robinson; Volume 4.)

**BLOOM (1968)**

*Kupfer:* Now, how would you best epitomize “your thing” at that time?

**Bloom:** The problem now is that there is so much knowledge that just discussing the new discoveries crimps the amount of mental time that you can devote to trying to put those together. And, I suppose, my view is a little biased because the political involvements and the time commitment to other things constrains how many sessions I can go to. But, it’s hard for the clinicians to keep up with the pace of discovery in the basic science and it’s hard for the basic scientists to keep up with the evolution of thinking about the kinds of mental illnesses that are distinct categories where you can look for unique mechanisms of prevention or treatment or diagnostics. If there’s any regret I have, it’s the sheer dent of discovery has forced apart what was always the cohesive element, which was the intermingling between basic scientists and clinical scientists. As you and I have discussed many times that’s what we tried to achieve with the latest ACNP fourth progress volume - to try to give them the hooks they could use if their scholarly interests awaken them to the opportunities that are out there.

(Floyd E. Bloom interviewed by David J. Kupfer; Voume 2.)

**FRAZER (1981)**

*Koslow:* How did the development of new technology influence the direction you took in research?

**Frazer:** I don’t know if it was those results as much as it was the development of techniques that had more of an impact. For example, moving from homogenate binding to the development of autoradiography developed in part by people like Tom Rainbow and others coming out of Bruce McEwen’s lab so as to be able to use that technique to look for neuroanatomical specificity among antidepressants was a big advance for us. So using techniques that have anatomical specificity is a way that we went. These techniques weren’t necessarily developed by people who were looking for chronic effects. These were other people asking other questions and we fairly quickly used their techniques for the questions that we were interested in. Now, for example, we use the technique of in vivo voltammetry to look at transporter function in vivo on a millisecond time scale and we do that in the hippocampus. We’re one of the few labs in the country that do it for serotonin. Again, this was developed out of a chemistry lab at Kansas and people like Greg Gerhardt, and I apologize for blocking on the name of the individual in North Carolina, are probably the biggest proponents of this methodology, but they use it primarily for dopamine. With Dr. Gerhardt’s help, another member of the ACNP, we have adapted it for serotonin and find it very useful. So I would say, it wasn’t so much those advances as much as other kinds of basic science advances and

techniques, such as the cloning of transporters, by people like Randy Blakely, Susan Amaro, ACNP members, which allowed the whole transporter field to expand tremendously in terms of transporter regulation, proteins involved in that regulation, trafficking. It's more those kinds of advances that have influenced how I proceeded with my research.

*Koslow:* Why did you decide to become a member?

**Frazer:** I felt for the area in which I was carrying out research, this was far and away the most prestigious group of people in that field. It was, again, what I liked was this mix of pre-clinical and clinical people who could speak each other's language. It also had the representatives from the pharmaceutical industry, who were knowledgeable about drug development, had drugs, some of which I would like to get my hands on. It was a good networking place and it was quite prestigious, so, for me, it was a very easy decision. This was the organization that I wanted to be a member of.

*Koslow:* So, it was the content of the ACNP and the people who were at the ACNP?

**Frazer:** Absolutely.

*Koslow:* Who will you name as some of the key people who attracted you to be here?

**Frazer:** There was just about, I guess, everybody in my field or the kind of people who, they weren't in my field, but were doing research that I would want to adapt to my own research. So, it could be people like Julie Axelrod, Sol Snyder, clinically and pre-clinically, people such as Herb Meltzer, Al Schatzberg. There was just about everybody who were, for lack of a better word, in biological psychiatry were here and I felt if I could interact with those people it would be a benefit to my career.

*Koslow:* So does attending the annual meeting enhance your career?

**Frazer:** I think it has; I think it has from presenting my science at the meetings, getting feedback from these people, but just as importantly the networking opportunity to meet with these people and chat with them about the issues that they have or the issues that I have, outside the meeting halls, has been very, very useful, particularly in the informal atmosphere that we certainly used to have at the ACNP. It's been a little more difficult to maintain that informality as the size of the meeting and the membership has grown, but we still have it here, certainly as much as any other major meeting and that has been very helpful to me.

*Koslow:* So do you think we should go back to smaller meetings with small groups like we had in San Juan at sometime?

**Frazer:** You know, there's a natural evolution of things. I don't know if we can go. I don't think we can go back there unless we start to form a different society. I still think we haven't yet reached, what I will call, the tipping point,

in terms of the meeting, starting to feel more like, for example, a Society for Neuroscience on an EB meeting. We're nowhere close to that. My guess is you don't have to get to twenty thousand, however, where you start to have a very different meeting. I don't know if it occurs at twenty-five hundred or four thousand. We're not there yet and I still think the ambiance of this meeting is closer to what we had when I first started, but I am concerned about its growth changing the nature of the meeting. Obviously, one thing that has occurred already, that I think is unfortunate, is our growth has made us too large to go to the Caribe Hilton, which did play such an important role, I believe, in the whole history of the ACNP and having that venue for the meeting, I think led to ...

*Koslow:* We've talked a lot about how you've interacted with the ACNP. Has the ACNP had an impact on your working experience?

**Frazer:** Yes, I think in different ways. The ACNP, and being a member of the ACNP, has absolute academic bona fides and academic advantages associated with it, so when you say at your institution you're a member of the ACNP, every once in awhile somebody has to find out what that is, but when they find out what it is, there's sort of an "Oh". That's something. It's not like the Society for Neuroscience; you pay your money and you're a member of Neuroscience, so I think there's a certain stature that you get at your institution by being a member. But the most important thing for me has been just the wonderful people that I have developed personal friendships with, such as yourself. The professional associations that I have here, it's been a very important part of my life, and it has been very good to me, in terms of helping me with my science.

*Koslow:* Changing the tone, there are a lot of elements that feed into the field of mental disorders and drug development, industry, government, other organizations, what do you think about those influence?

**Frazer:** It is a prestigious group of people that have, not only focused on the science, which is very important, but they have taken public policy positions. They have gone to Capitol Hill to lobby for things that are relevant. They have good interactions with advocacy groups, so I think they have been politically responsible, not always getting their way, but politically responsible and, again, the quality of the science of its members and the quality of the science that's presented here has been excellent. We've also taken, I believe, a leadership role in trying to attract new people into this discipline through our Travel Awardee program, which has been sponsored in part by industry, and, yet, with no strings attached, to get outstanding junior people, residents, young faculty, to come to this meeting, put them together with a mentor, and try to make sure they can have successful careers in neuropsychopharmacology, so I think the ACNP has functioned at multiple levels, quality of science, political activism, trying to facilitate young people coming into the field and I think it has done an

excellent job in all areas. We can certainly do better, but I think that's what I really like about this organization.

(Alan Frazer interviewed by Stephen H. Koslow; Volume 3.)

### **GEORGE (2000)**

*Post:* Did the ACNP play any role in your career?

**George:** Oh absolutely, especially with trying to obtain legitimacy for brain stimulation and TMS. I remember the first workshop at ACNP. It was a study group at night where we had Bob Belmaker and a few other people who had been doing TMS around the world come together and share ideas. I remember coming to ACNP meetings and arranging to meet other scientists who were doing TMS. There were some groups in Israel who were publishing and I was looking for external verification of the signal I was getting. As a scientist, you are worried that you are putting your thumb on the scale and deceiving yourself, so it is nice when you see other groups replicate your findings. I used the ACNP meetings to hook up with people that I had read about in other places. I remember one meeting in Hawaii where I went dead set on meeting with Ahud Kline who had just published a very rigorous study which seemed to confirm what I was seeing. So, the ACNP has been really important as a community to fall back on.

*Post;* Yes, a lot of interchange. I don't know if you know this, but about eight years after you left our program my boss at the NIH said he knew that TMS was not going to work.

**George:** There was resistance!

*Post:* What role did the ACNP play in getting you turned into the pharmacology part of it? You've told us about the collaborations and the intramural aspects of trying to get RTMS going. Are there other elements and how many panels and other symposia, have you been ou here?

**George:** I love this meeting and the organization has reinforced one of your key lessons of using critical science to answer questions; to be open minded but skeptical, to be a colleague, to share and work with other people. I learned that from you, early on, and this meeting, over the years, has reinforced the ACNP as a place where you can get away from everything else and find the real experts in an area to talk openly, informally and critically about a question. I've said to my wife, who has sometimes been able to come, that I get more work done the week that I'm here than the whole entire rest of the year. She doesn't understand that, but it is true. I have conversations that lead to grants. I have discussions; I have an epiphany; and somebody says something in a poster session that sparks an idea. It's been very crucial down through the years, scientifically, especially around collaboration that you don't get working in your

office far away or at study sections. The idea of a community of scientists has been critical to me.

*Post:* Same here, it's always been the most exciting meeting of the year for me. (Mark S George interviewed by Robert M. Post; Volume 7.)

### **HENINGER (1980)**

*Ban:* Let me switch and ask you about your activities in ACNP. Do you remember the first meeting you attended?

**Heninger:** I came to the first meeting in 1961, with Al, and then I came in 1964 or '65 again and intermittently thereafter

*Ban:* When did you become a member?

**Heninger:** I became a member in 1980 or something like that.

*Ban:* Have you served on any of the committees?

**Heninger:** I've been on the credentials committee a couple of times. And I'm on the History Committee now; and on the Ethics Committee next year. I think those are the main ones.

*Ban:* I just have a couple of more questions to ask. Is there anything you would like to see to happen in the field in the future?

**Heninger:** Oh, well, yes. But they're all fanciful.

*Ban:* Tell us.

**Heninger:** I would like to see an organization that would be above the FDA that would have health as its main concern, not just the regulatory issues, and that that organization would be able to order the FDA to give individual investigators access to proprietary information that is on file with the pharmaceutical companies. So, if I want to get an individual IND for any drug I should be able to get all the information on it. You know, there are lots of things that just shut the individual investigator out, and I think that has really injured the rate of progress in research. I would like to see also that that organization forces all clinical studies to be public domain information. The pharmaceutical companies conduct extremely expensive and sometime dangerous studies, and none of that data is ever available to the public, to anybody. It's locked away. And there are children who are getting pharmacologic trials, little kids, and if the drug isn't effective, none of that information is available to any investigator, to anybody else. It's invisible.

*Ban:* These are important issues.

**Heninger:** It's essentially an industry that is polluting the environment. And if you do that in a steel mill and you kill people with smoke, it's against the law. Yet, the pharmaceutical lobby will squash any attempt to change the system. So there needs to be a new organization that rewrites the law in order to make all the original information public. The information has already been obtained; it's already there. But you can't see it.

*Ban:* Do you think ACNP should get involved in these issues?

**Heninger:** I'd just put a plug in for the ACNP. The ACNP is not as important in some areas as it thinks it is, but it's more important in some other areas than it thinks it is. The Society for Neuroscience is a much bigger organization, and it produces humongous advances. There are 30 to 40,000 people in their meetings and not just hundreds as we have here. I would think the ACNP could do a little bit better by sort of enlarging itself to a little on the model of neuroscience. (George E Heninger interviewed by Thomas A. Ban; Volume 8.)

### **KESSLER (2002)**

*Tone:* You're a radiologist in the ACNP.

**Kessler:** Yes.

*Tone:* How has that been? How welcoming has it been for your field?

**Kessler:** Because of my background in pharmacology and interest in behavior, I think I speak the language reasonably well and it's very transparent and very open and very welcoming.

*Tone:* What do you feel you give to people here and what do sort of take home from the other side of the fence?

**Kessler:** What I've given is development of pharmaceuticals, radiopharmaceuticals enriching that has helped imaging in psychiatry. I've helped people get started at a number of institutions on imaging in psychiatry. I tend to serve as a facilitator to people at other institutions. And, in turn, I get a lot of biological and pharmacological insights. They're hard to get anywhere else and I think this organization promotes a multidisciplinary approach. Clearly, there are basic scientists here; there are clinicians; there are people like myself, who are in imaging and there are people, who come in from different disciplines. And, that cross-fertilization is incredibly beneficial for everyone. My principal benefit from being here is from accessing the minds of many creative people in many different areas. And, it gets you thinking in a different way. It jolts you out of your complacency.

(Robert M. Kessler interviewed by Andre Tone; Volume 2.)

### **KILLAM K (Founder)**

*Killam E:* Well, as you speak I think of the similarity between that and what we had at the early ACNP meetings. We were among the founders of the ACNP. As a pharmacologist when I went to the meetings of the American Psychological Association, or to Basic Science meetings, I was unable to find among the thousands of people anyone interested in drugs for mental disease, or interested in exchanging ideas. And, we found that the ACNP meetings were a place where we could talk to people and exchange ideas. The meetings were small with not too many people, and in those early days nobody was worrying

about that somebody is going to steal his/her ideas. Everybody came with a few slides they could project or something they could show to the others. It was something similar to that we had at UCLA. That was a wonderful period in the history of this society.

**Killam K :** We have been very fortunate in our careers that we have worked with groups which, as Eva pointed out, have come from multiple directions; practicing psychiatrists could come and work in our laboratories and we could be educated by them concerning what are their general problems and needs and what are the shortcomings of our models. We have been able to provide solid data regarding drug toxicity. With respect to the future, we believe that it looks dim and not because we don't have bright students or bright people, but because of the problem of maintaining funding at levels where you can have an interplay from anatomists and molecular biologists to physiologists and psychologists. Is there anything else you'd like to add?

*Killam E.:* No, except that we didn't say very much about the history of ACNP, but other people will do that. We were among the people who joined the organization and we strongly believe, despite the fact that we live on the other side of the continent that the rules about coming to every meeting is right. .

**Killam K:** We feel proud that our colleagues elected both of us to be president of this organization. The amazing thing that we've seen is the ability of people to pull together, work together and accomplish things without any major remuneration other than the fact that it was done for the college. That kind of spirit still remains within the college, in spite of expectations that in the future external pressures on our field and on the college are more likely to increase than decrease. I wish we had twenty more years to help you all.

(Keith F. Killam interviewed by Eva K. Killam; Volume 2.),

### **KOPIN (1968)**

*Ban:* What direction do you think the College will take in the future?

**Kopin:** There is a unique perspective of seeing the carryover from the old pharmacology to the new molecular genetics and to look ahead to see that molecular genetics is not going to be the total answer. It's going to raise more questions than we can answer and the pendulum is going to swing back towards the intact animal research, the polymorphisms, the genomics, the informatics that we have now. The future direction of the College is going to be fun to follow. Many of the people that I've talked about are members of the ACNP; some are foreign corresponding members from abroad. There are also those who are in other professional organizations, such as in neurology, anesthesiology, internal medicine, and some others who are working in drug companies.

*Ban:* What has been the role of the ACNP and your participation in influencing NIMH research?

**Kopin:** All these people contributed immensely to the intellectual environment of NIH and have had a major impact on medicine, psychiatry, neurology and anesthesiology in the United States and abroad. It's been such a great pleasure to work with them, and, the many, many friends that I've made at ACNP. I am a Past President of ACNP, so I keep going to the Past Presidents luncheons. I have also continued for many years as Treasurer.

*Ban:* When did you become a member of ACNP?

**Kopin:** In 1968, Sid Udenfriend and Seymour Kety were the people that urged me to join this group. It was very fortunate for me that I did.

*Ban:* When did you become president?

**Kopin:** In 1992. The theme that year was to put the "Neuro" back into Neuropsychopharmacology. As president, I tried to do that. It may have been premature, but I think that it is also the theme of the current president, Steve Paul. Steve is another Laboratory of Clinical Science alumnus, as was his predecessor at Eli Lilly, Gus Watanabe.

(Irwin Kopin interviewed by Thomas A. Ban; Volume 3.)

### **KORNETSKY (Founder)**

*Koob:* How do we keep the College from losing its direction as the science gets even more complex?

**Kornetsky:** Well, the College should never lose sight of the fact that it is a major multi-disciplinary organization. And, if it becomes and moves too much in one direction or the other, it will be in trouble. A lot of the basic science in the field has become very molecular. Now, molecules change in the brain and, as people say, you can't even have a thought without molecules changing in the brain. There's no magic up there. And, so, we can't become overboard one way or the other. We have to keep a balance in this organization and that includes more integrated types of panels. By integrated, I mean, not all the molecular here, and then all the clinical here, we have got to get the clinical people going to the molecular people and they have to be willing to explain it so the non molecular scientist can understand the significance. I sometimes am on a PhD. student's graduate committee, probably the 3<sup>rd</sup> or 4<sup>th</sup> reader, whose thesis is very molecular. I usually do not understand too much of the thesis. I try to get them to explain it so I understand its implications, etc. After a few question that give me answers that still do not explain the significance in a way I can understand the problem.

*Koob:* I have always felt that disciplines that can only talk to it are not very helpful. Any discipline needs to be able to talk to the reductionist at least one step below it and to the expansionist at least one step above it. I think it is important that we maintain the original intent of the organizing committee of

ACNP that we maintain ourselves as a multi-discipline organization and not an organization of multi-disciplines.

(Conan Kornetsky interviewed by George F Koob; Volume 6.)

### **KOSLOW (1977)**

*Ban:* The Collaborative Study had great impact in psychopharmacology. How do you see its role in the ACNP and on your career?

**Koslow:** That is true. The study was very rewarding in terms what we learned from it. We published our findings and the ACNP provided an excellent forum for discussing with other scientists about what our findings meant. At the time that study was conducted I still had other responsibilities of stimulating and funding grants in biological psychiatry at the Institute. But while coordinating the study I was also able to return to my major interest: how basic brain functions operate.

*Ban:* Are we in the late 1970s?

**Koslow:** I have been fortunate and honored to have the opportunity to work and interact with many great scientists and leading researchers. I already mentioned my mentor at the University of Chicago, and Marty Katz and NIMH who taught me a lot. But, also working with Mimo Costa was a marvelous experience. He is a great scientist and intellectually engaging. He is a very warm person who taught me a lot about how to think about how the brain works and how to design critical experiments to answer questions. It was a great shaping effect about the way I thought about the brain. So, he was terrific. In the collaborative program I established great working relationships and friendship with some of the outstanding scientists in psychiatric research like Jim Maas, Peter Stokes, John Davis, and a whole bunch of people who are now mainstream like Charlie Bowden, Regina Casper, Alan Frazer and Jim Kocsis. The ACNP has given me the opportunity to meet a lot of top researchers in the field and to learn from them and to take what I've learned from them and apply it to my job to try and help move the field forward. It has been a great opportunity to work at the Institute and to have the opportunity to impact on the field in a unique way. From my perspective it's been just as enriching as working in a laboratory and pursuing your own interests and understanding how the brain works.

*Ban:* Could we switch to your involvement with ACNP? When did you become a member?

**Koslow:** I have been a member of the ACNP since 1976 or 1977. This has been one of my favorite organizations. I have served on many ACNP committees.

*Ban:* On which committees did you serve?

**Koslow:** I chaired for one year the program committee and I served also on the credentials committee. And Marty Katz and I, in the late 1970s and '80s,

convinced the ACNP to start its own journal. It is rewarding to see that the Journal now has its own life and is doing well.

*Ban:* So, it was you and Marty who suggested that ACNP should have a journal?

**Koslow:** Yes, we suggested and talked to a lot of people to help make it happen.

*Ban:* Would you like to mention some other organizations you have been involved with?

**SK:** I participate in Neuroscience but not to the same degree.

*Ban:* Are you involved with any of the neuroscience journals?

**Koslow:** I sit on a number of editorial boards. I was on the editorial board of the ACNP journal at the beginning and now serve on the board of an imaging and a pharmacology journal. There are a couple of computer journal editorial boards I also serve on. It is always fun. But, it is hard to see what kind of impact you have on those journals.

(Stephen H. Koslow interviewed by Thomas A. Ban; Volume 8.)

### **MANDELL (1973)**

*Healy:* Can you give some examples of how dynamical systems thinking might be applicable to a practicing psychopharmacologist?

**Mandell:** I have three favorite examples, though I could give you many. Most psychopharmacologists are probably familiar with both phenomena but don't think of them from this perspective. The first involves nonlinear dose-response curves. By that, I don't mean "S" shaped curvilinear functions but a result of a nonlinear function, or operator  $f(x)$  defined by what it is not. In a linear operator  $2 \text{ times } f(x) = f(2x)$ . In a nonlinear system,  $2 \text{ times } f(x)$  doesn't =  $f(2x)$ . In such systems, in some drug dose regimes, more drug leads to less effect and/or less drug leads to more effect. Back in the tricyclic days, before the popularity of the SSRIs, much work was done with tricyclic blood levels in relationship to clinical efficacy looking for "the therapeutic window". This is quite a general property of psychotropic drugs which may even demonstrate iterative saturation plateaus. This implies that one might be able to treat a psychiatric disorder optimally with very low doses of drug, then again at median doses of drug and then again at high doses of drug. This also means that if one is not getting the desired effect, there are dynamical arguments for lowering the dose as well as increasing it. Of course, with respect to side effects, finding the lowest effective dose would be desirable. I would also say in this context that PDR recommended doses for psychiatric drugs have less meaning than in more simple systems. The second example is what might be called the fallacious "curse of polypharmacy". Since the dynamics of complex nonlinear dynamical systems representationally simplify more and more parameters, a patient with a complex psychiatric illness whose personal pharmacopoeia reads like a drug store pharmacy is not necessarily being poorly treated. A carefully followed

patient with whom a physician is using drug choice and dosage range on a trial and error basis may eventuate in a treatment program that includes, for a real example, three antihypertensives, two or three antidepressants, a  $\beta$ -blocker, a calcium channel blocker, a bone saving bisphosphonate, a personality changing antiepileptic, a stomach saving H<sub>2</sub> transport blocker, aspirin, a prostaglandin blocker, lactoferrin, ascription, a calcium-magnesium supplement and some herbal preparations. Two generally true circumstances underlie the theory of thoughtful, therapeutic polypharmacy: (1) Drugs given for a single somatic locale act on biochemical mechanisms throughout the body in such a way that their nonlinear interactions can produce an unknown, except empirically global physiological state of health; (2) The more independent variables, “handles” to manipulate, the greater the likelihood of finding and stabilizing even a small available parametric space of healthy function while minimizing unwanted effects. Rene Thom, Chris Zeeman and their students studying discontinuities, “bifurcations,” “catastrophes”, in real dynamical systems such as the regulation of thyroid function and immunology can mathematically prove that the more dimensions, “controls”, “handles” one adds to a nonlinear system, the easier it is to find and stabilize a very small island of health totally surrounded by oceans of disease. The third example is the remarkable observation we made on the saturation kinetics of brain tyrosine hydroxylase, the rate-limiting enzyme for dopamine and norepinephrine. We saw iterative saturation plateau with bifurcations, discontinuities between sequential regimes. We saw different sizes of dose response curves suggesting for some brain systems that there is very low dose efficacy as well as very high dose efficacy. . This confirms some clinical experience. I truly believe that for given patients and under propitious circumstances, one can obtain remarkably good clinical results with very low doses, far below the recommended dose. What one is looking for is the therapeutic island, not a sufficient amount. Dynamical systems give the practitioner a context for many counter-intuitive but phenomenologically observable clinical procedures.

*Healy:* Why did we lose this kind of view of things during the ‘60’s and 1970’s? Did we lose it because we have gone down into a very phenylketonuric view of the psychiatric disorders and that’s the way they’ve been leveled here. It’s a very antibacterial view, almost. What you’re actually describing is something much more subtle and nuance, which has risen its head under various rubrics every so often over the years, but we’ve lost it, haven’t we?

**Mandell:** And the painful part is that the ACNP membership has, in my lifetime, moved from being a revolutionary place of respite and generation of new thinking about brain biology applied to psychiatric disorders to what I see as a source of conservative inertia. The group feels comfortable mimicking what current basic science found legitimate by internal medicine and other physician

groups, but refuses to see itself as a potential font of another whole vision of the human body given by dynamical systems. We who study what we call “dynamics”, we who are interested in the “whole person” have resisted the mathematical-physical system of nonlinear global dynamical systems. One of the important mathematicians in this area, Ralph Abraham at UC Santa Cruz, says it will take a hundred years for what I think of as the real underlying scientific basis of psychiatry and psychopharmacology to be acknowledged as such.

(Arnold J. Mandell interviewed by David Healy; Volume 8.)

### **MATH (1979)**

*Hollister:* Well, you are a foreign corresponding fellow.

**Math :** No, I’m not.

*Hollister:* How did you get here?

**Math :** Well, I get always an invitation from someone.

*Hollister:* Well, you should have some membership status.

**Math :** Yes that would be great.

(Aleksander A. Mathé interviewed by Leo E. Hollister; Volume 8.)

### **McKINNEY (1979)**

*Ban:* With all the recent advances and changes, how do you think the College can maintain its focus?

**McKinney:** I think this is a very exciting time for the field right now. So many new developments are going on. I would like to see basic and clinical developments, to see these domains stay in touch with each other. The areas are getting so specialized that to do it on an individual basis can be awfully hard. One person can no longer bridge this any more. We’ve got to think through new ways for it to happen, for the interaction to occur. This is where I think the College has played an increasingly important role, because you’ve got in the same organization, clinician researchers and highly skilled basic neuroscience researchers. Things have changed so much that we’ve got to find other structures to help to do this.

(William T. McKinney interviewed by Thomas A. Ban; Volume 7.)

### **MELTZER (1972)**

*Koslow:* How do you assess the quality of the ACNP over the years?

**Meltzer:** It’s going to sound like an advertisement for the ACNP, but it’s really a fantastic group and I think it’s getting better, the quality of the science and the interaction between people.

*Koslow:* Anything you would like to say about your contributions to ACNP?

**Meltzer:** People don't know this; I was the person who started the poster sessions at the ACNP when I was chairman of the Program Committee. I had to fight for two or three years to get them to accept posters and you know what's going on in the poster room now.

*Koslow:* We could probably talk for a very long time. You've had a very rich career. Is there anything you would like to add or say that we haven't touched on that you think would be important to document?

**Meltzer:** Well, I really feel it's just a privilege to have had this career in psychopharmacology. I think having the opportunity to really understand brain and behavior, as we said this morning, from the molecule to the mind, there's nothing more exciting and it's just great to be part of it.

*Koslow:* How did you become aware of the ACNP and when did you become a member?

**Meltzer:** It was the Shangri La we all wanted to go to when it was starting and Dan Freedman brought me here first, probably in the 1970s. I'm not sure exactly when I became a member, but probably 1975 or so. I was treasurer for a year, probably 1982 or 1983. Then I was the youngest President of the ACNP. I also chaired the Program Committee twice and was the person that introduced posters to the ACNP.

(Herbert Y Meltzer interviewed by Stephen H. Koslow; Volume 5.)

## **MELTZER (1972)**

*Tamminga:* That was important.

**Meltzer:** I had seen poster presentations at the Neuroscience meetings and thought we ought to do it here. So the presidency was a tremendous opportunity.

*Tamminga:* What year was that?

**Meltzer:** It was 1985. I always look toward this meeting as a pivotal calendar event, an opportunity to learn the latest research, and see old friends.

*Tamminga:* Both of those things.

**Meltzer:** Yes.

*Tamminga:* You've been involved in other major organizations also?

**Meltzer:** The other major one was the CINF. I was president between 2004 and 2006, culminating in a huge meeting in Paris. They're very different experiences, being president of the CINF and the ACNP. In the CINF you could be part of a broader international community of neuroscientists. You get some of that at the ACNP, but not enough. From the CINF I made contacts and established research relationships that would never have happened had I not had that international exposure.

(Herbert Y Meltzer interviewed by Carol A. Tamminga; Volume 9.)

**NEMEROFF (1983)**

*Ban:* What has the ACNP meant to your work and your career in this field?

**Nemeroff:** When I look back at the career that I have had, I have been lucky. I have been fortunate to have a fabulous family. I have had a fabulous team of colleagues, support staff, junior faculty and, perhaps, most importantly in relationship to this current interview is the remarkable friendships that I have made with ACNP members. These individuals, just to name a few, include Jack Gorman, Ned Kalin, David Rubinow, John Newcomer, Jeffrey Lieberman, Dennis Charney, Marty Keller, Dwight Evans, and Alan Schatzberg. These individuals have become best friends to me and my family because we all travel a great deal to a variety of meetings; one's friends are not necessarily geographically contiguous to where you are living. This is one reason why the American College of Neuropsychopharmacology isn't just a professional society like the American Medical Association or the American Psychiatric Association. In contrast, the ACNP is a college, meaning that the individuals are collegial, and I could probably name twenty or thirty individuals, who I feel sufficiently close to in this college, that I could go to with any personal or professional problem that might arise, either, in my department or in my personal life. And, I believe that's why the ACNP means so much to so many of us. Of all the organizations we belong to, and we have multiple affiliations with a variety of organizations, this is the organization I feel closest to, and I know that my colleagues would echo these sentiments as well. I was an ACNP travel awardee and became a member - though, my membership application was rejected the first time I applied for membership, a not unusual occurrence, as you know - eventually to become a fellow, a member of the council and was elected president. The ACNP is very important to me. And, not only have my relationships with members blossomed, but with their spouses and children as well. In life it is not only the good work that we do, which hopefully translate into better care of the patients that we have spent so much time caring for over time, is important, but, also the friendships we have, which, in fact, contributes a great deal to the quality of our lives. It is for that reason that so many individuals have put so much time and effort, without remuneration, into this college. We have lived through fabulous times here at the college and we witnessed tragedies. Morrie Lipton, one of my mentors, suffered a CVA at an ACNP meeting in Puerto Rico several years ago. I think of the ACNP, as a family, usually functional, but occasionally dysfunctional, with occasional squabbles among its members, as one would expect from a talented, intelligent and strong willed group of family members. There isn't any other organization that combines excellence in neuroscience, clinical psychopharmacology, epidemiology, genetics, molecular neurobiology and brain imaging that this college does. It suits my needs because I can come to these meetings and learn about areas that I simply don't

know enough about, and try to take my own research to the next level. I don't know any other organization like this.

(Charles P Nemeroff interviewed by Thomas A. Ban; Volume 5.)

### **PAUL (1982)**

*Ban:* When did you join the ACNP?

**Paul:** I must have joined the ACNP early 1980s, maybe '80-'81. I'm embarrassed to say I don't know. I really, this is a fantastic organization. I've come to virtually every meeting for 20 maybe 23, 24, 25 years. I've served on Council twice. I've been the President and served as the President of the ACNP. That was a great honor. I've served on the Credentials Committee. I've served on the Program Committee. So I've really been fortunate to have been able to do a lot of things for this organization, this College.

*Ban:* Is there anything you would like to add that we have not covered?

**Paul:** I think it's a great College. When I was President, one of the things I wanted to do was figure out a way to keep it vigorous, intellectually vigorous, to make sure that we were bringing in the young, the brightest people so that we were continuing to evolve so that we wouldn't become extinct and we've done some good things along that route. I'm very pleased with the quality of the new members that have been announced and the Fellow promotions, etc. I think it's a great, great organization.

*Ban:* Just one more question. What are your thoughts about the future of the field and the College?

**Paul:** Well I think the field is going to be as good as the science we can bear and I think we're, that psychiatry, frankly I think to comment more on psychiatry because I'm a psychiatrist, I think we've gone from an era really and, Tom, you've seen it as well as anyone, where it was hard to even know anything about nosology. It was hard to know anything about the disease processes we're talking about, not unlike what happened with cancer back a few years ago too and clinicians that came into the field, I don't think were as interested in applying rigorous scientific methods to kind of understanding what was going on. It may have been such an overwhelming problem going back 50 years, I don't know, but I think we've made a lot of progress and I think we will continue to apply sound scientific methods and will be able to tease out the genetic and the non-genetic factors for diseases. We'll be able to study disease like we study all diseases. What's the etiology, what causes it? What's the pathophysiology? What's going on in your brain that causes the signs and the symptoms of the disease and then treatment interventions will occur at the various stages, like all diseases? So I believe that fundamentally we'll be able to understand the brain in a way that, you know, it clearly is the most complex

organ in the body. Right? And it's not going to be easy to understand soon, so I think we've made some extraordinary progress and this College has done a remarkable job as a catalyst for that.

(Steven M. Paul interviewed by Thomas A. Ban; Volume 3.)



## MISSION OF THE COLLEGE: CLINICAL SCIENTISTS

The excerpts in this Chapter are drawn from interviews with 27 of the Founders and other members who commented on the mission of the ACNP from its establishment in 1961 through 2008. The comments excerpted are, statements that appear to have relevance to or to be directly associated with the member's vantage on the evolution of the mission over the history of the College. They are from members identified as clinical scientists and include statements from Brown, Carpenter, Charney, Cole, Feinberg, Davis, Fink, Gazner, Gershon, Goodwin, Greden, Hollister, Itil, Katz, D. Klein, Klett, Kupfer, Lehmann, Levine, Lieberman, Meyer, Salzman, Schatzberg, Schuckit, Shader, Simpson, and Tollefson.

In this section, divergent views are expressed not so much on the concept of the mission as formulated by the Founders, but on how well it has been adhered to over the years. They reflect the members' views of the concept and on its influence in the structuring of programs at the annual meetings. Walter Brown reflects on the changes over the years but believes that *although there is a little less clinical now, that the program committee worked very hard to make sure clinical things are included and there is a move towards molecular genetics but probably that is appropriate* . At the same time, he has concerns that *"the selection process not get politicized,...that good clinical researchers have as much access to membership as those working in the basic sciences* . Several of the members show great concern that the mission has changed over the years with John Davis' words, *not in a good direction. Back in the early days there were about a third of basic scientists, maybe a third were psychologists, and a third, psychiatrists. There was pretty much a mixture, clinicians might have been in the minority but there were plenty attending. Now its changed, mostly basic scientists are attending* . Max Fink thinks that *"Molecular neuroscience has dominated our field during the past decades. What I see, at the present time, is that we have missed in this society, what we were originally brought together for ..Somewhere the brain chemicals and the chemicals in the animal took over. We have literally, lost the human being in this society.* Leo Hollister, in the same vein, is concerned that *the ACNP in recent years, has become a kind of secondary society for neuroscience, the neuroscience advances have been so enormous, there has been an eclipse in the clinical emphasis* . And Turan Itil feels that, *These meetings don t even accept clinicians any longer .People, to be accepted, have to have publications and a reputation* and is concerned, *" how does the clinician in the battlefield get the necessary reputation* .

David Kupfer, however, sees the role of the clinicians as *having a very robust effect on dissemination of knowledge with implications for clinical*

*practice, and translational science as something departments of psychiatry should all be about. They should be at one level, departments of clinical neuroscience and behavior.* Jerome Levine emphasized the role of the ACNP, with the NIMH, *contributing through many members the book on Principles and Problems in Establishing the efficacy of Psychotropic Agents*” as the first guide for clinical investigators in designing clinical trials. Jeffrey Lieberman in turn saw the meetings *as playing an instrumental role in many people’s career by providing a forum where they can get exposed to all the scientific information relevant to their career development*. Others, as Rogers Meyer, were supportive of the College’s significant role in enhancing research on addiction, and, as Carl Salzman, of its important teaching program.

### **The Excerpts**

#### **BROWN (1983)**

*Greden:* The annual meetings of the College have provided the best blends of basic and clinical scientists for fertile discussions. How do you see this?

**Brown:** A lot of people say, and I think that it is true, that there is a little less clinical stuff now, but I think that is okay. I think that the program committee works very hard to make sure that clinical things are included. There is very much a move towards molecular genetics but probably that is appropriate.

*Greden:* What impact do you think the ACNP has on our field and, specifically on psychiatry and what would you predict for the future?

**Brown:** I think that the ACNP has provided a tremendous source of information for people and in that sense it nourishes the field. And, I think that it will probably continue to do that. One complaint I have, however, about the ACNP is how they select members. I am a little bit concerned that sometime the process gets politicized. I think it would be good to make sure that people who have primary clinical background and are doing good clinical research have as much access to the advantages of memberships as those working in the basic sciences. I think it is important to keep these annual meetings small and allow a lot of time for discussion.

(Walter A Brown interviewed by John Greden; Volume 5.)

#### **CARPENTER (1981)**

*Ban:* What would you consider your most important contribution to the organization?

**Carpenter:** I have now started serving on Council, and this work seems very important. I am particularly interested in how we manage relations with industry, address conflict-of-interest issues, and how we establish credibility as an independent source of expertise on neuropsychopharmacology issues.

(William T Carpenter interviewed by Thomas Ban; Volume 5.)

**CHARNEY (1986)**

*Tone:* You feel that the ascendancy of biological psychiatry has advanced the field. What is your other major interest?

**Charney:** I truly am in this, to a major degree, to help patients. So doing what I can with the advocacy groups to get the word out, to support their mission, to break down stigma, is one of the most enjoyable things that I do. The ACNP is more of a scientific organization, so in that sense we work to help the advocacy organizations do their job by providing advice to them, by giving our opinions about the important issues of the day that relate to treatment. But I also like being directly involved with the advocacy groups themselves.

(Dennis H. Charney interviewed by Andrea Tone; Volume 8)

**DAVIS J (1967)**

*Healy:* What were the meetings like in the early days?

**Davis:** I think they were very exciting. Since then the ACNP has changed tremendously and I don't think it's changed in the good direction. Back in the early days there were about a third of basic scientists, maybe a third were psychologists and a third, psychiatrists. But, some of the psychiatrists were involved also in basic science. There was pretty much of a mixture; clinicians may have been in the minority, but they were plenty clinicians attending. Now, it's changed; mostly basic scientists are attending. It's really changed quite substantially. My feeling is that unless they make an effort to involve more clinicians, ACNP is going to change to a basic science organization. It's very hard for now for clinicians to get in. If somebody makes a basic science discovery it is considered to be a real important thing and people think he needs to get in. I think there is a bias in the selection committee.

*Healy:* When you guys were meeting here first psychiatric disease was not considered to be biological. DSM III changed all that, didn't it?

**Davis:** No, I don't think so. Discovery of the biochemistry of mental illness would decide who is right and who is wrong. In the meantime much of the basic science work is trivial and waste of money

*Healy:* Those are pretty strong words. You feel that strongly about it?

**Davis:** Oh, definitely.

*Healy:* Is that right?

**Davis:** I fault the federal authorities for not supporting clinical research more vigorously and supporting a lot of trivial stuff, which I think is worthless. I remember when I started, the diagnostic criteria for depression were very vague and there was no distinction between psychotic depression and non-psychotic. And, then, a group at Pittsburgh showed that depressed patients needed both an anti-psychotic and an antidepressant for good response. Sandy Glassman had the insight that psychotic depression did not respond to tricyclic

antidepressants alone, and I thought that was a major discovery. The psychotic depression is a different animal than the non-psychotic. And, recently, we did a meta-analysis of the DST test and found that people with psychotic depressions had also, a cortisol abnormality. There's a much higher incidence of the cortisol abnormality in psychotic depression than in no-psychotic depression. The division between psychotic and non-psychotic was more relevant to the cortisol abnormality than the division between endogenous and non-endogenous. I think psychotic depression is a different animal. In schizophrenia and depression, I bet if you counted, there would be ten thousand abnormalities reported in the literature, most of which died of old age, just like old soldiers they faded away. And, the federal authorities never set up a requirement in basic research to prove your findings with blind analysis. People are looking for an abnormality, they find something promising, and they report it.  
(John Davis interviewed by David Healy; Volume 5.)

### **FEINBERG (1981)**

*Hollister:* Well, I have been just a little bit discouraged about the way that programs of this ACNP organization are being driving toward neuroscience exclusively. I was going to propose to the Program Committee that they send around an announcement to all the members and say, "Look, if you want to be on the program, send a one page summary of what you want to talk about, either work you have in progress, work you've done or for review for the whole field that you know", and see what comes out of it. You know something like a summary of what we've just talked about. I think it would be a very eye opening experience for a lot of people.

**Feinberg:** Well, I would certainly love to do that but I don't think it will happen.

*Hollister:* Well, I would change it from the top down model to the bottom model.

**Feinberg:** When you can, I will be happy to be a part of it.

(Irwin Feinberg interviewed by Leo Hollister; Volume 2.)

### **FINK (Founder)**

*Cole:* What is your picture of how the College has evolved?

**Fink:** Without trying to be critical, the reality is that somewhere in the 1970s, American Psychiatry adopted this neuroscience approach. The Society of Neuroscience was very successful in the late nineteen-sixties, when it was created. Molecular neuroscience has dominated our field during the past decades and not only in this society, but also in the Society of Biological Psychiatry, and the American Psychiatric Association; they've all been contaminated by it. What I see, at the present time, is that we have missed, in this society, what we were originally brought together for. The original group consisted of psychia-

trists, psychologists, and laboratory scientists. And, if I remember correctly, Jon, it was one-third, one-third and one-third, in the original group.

*Cole:* Yes.

**Fink:** And, in the first decades, I'm not sure how long, the meetings and the intent of this group to study the effect of chemicals on the mind has changed. Somewhere, the chemicals, the brain chemicals and the chemicals in the animal took over. We have, literally, lost the human being in this society. It sounds like sour grapes. It's not sour grapes. It is merely as I see it.

*Cole:* I think it's true, there is usually, in any given session of half a day one session that I have some interest in. And, there used to be a choice of three or four and I'd have to decide which one I wanted to go to. From the George Zubenko's talk yesterday in my honor I didn't understand a word he was talking about and I wasn't sure whether I wanted to or not. I mean, it was gene expression and what not.

**Fink:** Well, I think your session yesterday was in the old style. The only problem was that they didn't give me and others a chance to raise some questions. But, I would say, in the next five years, this society will either be changing its' direction or become a molecular science society that is going to lose all the clinicians. The clinicians are going to go out.

*Cole:* They're going to go to Don Klein's Association and they're going to Paul Wender's.

**Fink:** .The neuroscientists are rather glib about schizophrenia. They're rather glib about all the terms that we use in clinical psychiatry and that's unfortunate. Schizophrenia is a complex disorder and it's not easy to diagnose it, and it's not easy to follow its course, and it's not very stable. And, it's hard to know the difference between manic-depressive insanity, or a bipolar disorder and schizophrenia. And, what's going to happen in the next few years? I would think that if the clinicians bring themselves together and, maybe as you just mentioned, with Fuller Torrey, urge that clinical work, rather than laboratory work as the core issue, be supported, then, we might come back. If not, I think that we will have to have a new explosion, a new interest somewhere, but it will not be here.

*Cole:* You may well be right. Schatzberg and I are rewriting our "Handbook on Clinical Psychopharmacology" with a new guy, named Chuck DeBattista. He is doing about a third of the work and getting some money for it. I was both amused and horrified when I was reading, what must be his section, on Mood Stabilizing Drugs and he's got about four pages in on all we don't know how lithium works. I'm not sure it's worth putting four pages into second messengers and calcium channels when we really don't know how it works. It's unclear how to apply the fantasies that are sort of metapsychopharmacology

that he's propounding. By trying to be more scientific than we can be is causing confusion. Do you see this effect on other organizations?

**Fink:** I believe that the APA has now been taken over fully by industry. They say they're trying to change that, but I have my doubts because the APA is so beholden to industry to support their exhibits and the thousands of people they bring from overseas. The ACNP has made an attempt, I understand, to deal with this issue but the leaders of the society are intimately tied to industry. This morning I walked into a paper session. A member of this society put up a slide showing his association with industry for conflict of interest reporting and the audience roared, there was big laughter. Michael Thase offered the list of his consultancies and research grants, there must be forty, maybe fifty on the list. And what did he say when showing the list; "Because I work for every company, nobody influences me!", and the audience roared again. That defense is silly. Leaders of this organization are intimately tied to industry and they do not provide data that would permit a reasonable clinician to evaluate the benefits and risks of the drugs, in order to prescribe optimally. I am known to have said, publically, that I have stopped using any drug produced after 1980. None have been tested independently and with time their inefficacy and risks are better understood. I will not recommend any drug unless it was tested before 1980. That's not altogether true. There are some new drugs in medicine that are fantastic, like etanercept (Embril) for psoriasis, but in psychopharmacology I know of no new drug that has been effectively tested and for which we know the positive and negative aspects with confidence. The data are very strongly compromised and I am sorry that this society has not taken a stronger position. They say they're doing it and I hope so but the fact that three former presidents have gained notoriety in the newspapers, and a few others probably will, makes me very nervous. I also am concerned that the DSM-III and DSM-IV have been very poor models for diagnosis and treatment and I am trying very hard to get DSM-V to consider catatonia as a separate entity. For catatonia we can make the diagnosis based on behavior, verify it by laboratory tests, validate by treatment with an outcome of ninety percent or better. The same is true for melancholia. That's what I think should be done, but as I've talked to people today, I am met with skepticism. I am tilting at windmills and I suppose that's a good way to end this interview. I've been a Don Quixote figure.

(Max Fink interviewed by Jonathan Cole; Volume 2.)

### **GASZNER (Not affiliated)**

*Tone:* At ACNP we have a lot of sessions devoted to small parts of the brain. If you think about the future do you think psychotherapy will return out of necessity?

**Gaszner:** No. I don't think so. The future is in genetic research. In the future we should be able to examine patients.

(Peter Gaszner interviewed by Andrea Tone; Volume 8.)

### **GOODWIN (1970)**

*Detre:* Since you were the highest ranking official in the government, the role you could play in the ACNP was somewhat limited. But you have been a very active member. Would you tell me what you have done?

**Goodwin:** I've watched this organization grow and I get uncomfortable when people say that basic science is the source of everything. In fact, much of what we understand about the synaptic connections of the central nervous system, as you know, came out of efforts to understand how imipramine worked. And, it seems to me that it was the effort to understand psychoactive drugs that created functional neuroscience. The meetings have grown and grown and I worry that they are getting a little too big. But, I've never missed any of the annual meetings of the organization in thirty years. And, I have never learned as much about my field and the people in it as in these meetings. When I come to meetings in December, it's also associated with a lot of sadness because some of the people that aren't with us anymore like Danny Friedman and Morey Lipton. I also come to these meetings for....

*Detre:* ....for the camaraderie.

**Goodwin:** For the camaraderie. When I was a young scientist it meant a lot to me to go out and have some drinks with Danny or go out for dinner with Morey. It was an enormously important event. I remember the enormous influence that those men had on me. It was very subtle and it wasn't just about what they taught me about science. And these meetings are structured in a way that informal interactions around the pool, in the hallway, at the restaurant are as much what the meeting has been about as the scientific sessions, themselves. It's important that these meetings don't get so big that they become a place where people are just sitting around listening to lectures because, then, it wouldn't be ACNP any more. I love this organization.

(Frederick K. Goodwin interviewed by Thomas Detre; Volume 5.)

### **GREDEN (1985)**

*Ban:* Would you like to comment on the annual meetings?

**Greden:** The annual ACNP meetings have always been highlights for me. I remember when the teaching days started. The college has much to be proud of when it looks back on its past and membership.

(John Greden interviewed by Thomas A. Ban; Volume 5.)

**HOLLISTER (Founder)**

*Ayd:* Do you recall how you first entered the ACNP?

**Hollister** So that was my early career in psychopharmacology. By that time, of course, I had been fairly well known. I was one of the first members of ACNP, but I never attended a meeting of the ACNP for the first two years, which should have gotten me kicked out, according to the rules. Ted Rothman had to prevail on me to get me to join, because it appeared to me there were enough organizations now, and we didn't need another one, about which I was dead wrong. So I did attend the third one, and as we were checking out of the hotel, I walked over to Ted and I said, "Ted, I was dead wrong. This is a great organization. I'm awfully glad you persuaded me to join." Since then, I've never missed a meeting.

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*Ayd:* There were a number of psychiatric scales produced in those studies even before the ACNP. You were associated with the BPRS.

**Hollister:** And of course, since then there have been scads of scales.

*Ayd:* OK, now, predict what you see for the future of psychopharmacology and, also the ACNP.

**Hollister:** Well, the ACNP, in recent years, has become a kind of secondary society for neuroscience, at least, in terms of the program content. Neuroscience advances have been so enormous, especially in molecular pharmacology and all the explicit techniques that are now used for genetic analysis. So as we have your lexicon for psychiatric terms, we need now a lexicon for the terms in molecular biology, and this hurts some of our members. There's been an eclipse in the clinical emphasis. Now, whether this will continue indefinitely or not, I don't know, but I think maybe we, as clinicians, need to try to develop some new approaches of our own in evaluating these drugs and seeing if we can find some ways to reduce the time and the cost of getting them on the market. What most people don't realize is that these new drugs are terribly expensive. It costs you eight dollars a day to be on Risperdal (risperidone). It'll cost you about eight cents a day to be on haloperidol, a vast difference. Now there are all kinds of pharmaeconomic studies being promoted these days, but they show that they come out even. I had a little trouble believing that, and it doesn't matter anyway because hospital pharmacies don't have the money to spend on these drugs and patients can't get them, so we've got to find a way to reduce that cost. As far as psychopharmacology itself is concerned, it looks as though we're beginning to move into an era of designer drugs in the true sense of the word. We are looking for drugs for either specific pharmacological profiles or, even more importantly, with structures that would fit different transporters or receptors. So we may be able to have even more specific drugs than we now have. Beyond that, there's a possibility that we can even influence

some of the genetic factors that would play a role. It's a terribly exciting time that we're in. It's kind of frustrating to us old timers, who have to learn all the new stuff. I always give up or I feel depressed about what I don't know, but, by the same token, that's a good sign.

*Ayd:* It is a very good sign. As a matter of fact, I share with you the belief that this is an extremely exciting time. You know, there is a lot yet to be learned.

*Ayd:* Fair play, yes. Leo interviewed me, two years ago, wasn't it? Yes, I think it was two years ago. But, actually, on behalf of the ACNP members, I want to thank you for what you did for us; you did for us a lot.

(Leo E. Hollister interviewed by Frank J. Ayd; Volume 1.)

### **ITIL (1966)**

*Tone:* How come when we go to conferences we don't hear that? I think I know the answer, but I want to hear what you have to say. We go to conferences like the ACNP and the CINP; there are no panels devoted to a drug vs. the treadmill. It's all about this pill, that pill and another pill.

*Itil:* Because these meetings don't even accept clinicians any longer. You have to make a significant scientific contribution to get accepted. I did not know that.

*Tone:* I did not know that.

*Itil:* People, to be accepted, have to have publications and a reputation and how can a clinician in the battlefield get the necessary reputation? They say those who don't have it should be with the American Psychiatric Association, the Psychological Association, etc. I disagree with that.

(Turan Itil interviewed by Andrea Tone; Volume 2.)

### **KATZ (1963)**

*Koslow:* So the NIMH Committee was your first foray into psychopharmacology and getting things done at the federal level. Was this about the same time the ACNP got started and did you get involved in that?

*Katz:* The society was quite small at the time and had relatively high standards for membership based mainly around the great clinical drug developments and basic work underpinning it. It was very well balanced in terms of basic and clinical work and seems very different from today where the balance has shifted well over into the basic area. The clinical side seems to be much reduced, but at that time it was central to the society's action and mission. One of the people on the NIMH Advisory Committee on the clinical side was Heinz Lehmann who introduced chlorpromazine to North American psychiatry. There were all these major figures in science around, and it was an inspiring time.

(Martin M. Katz interviewed by Stephen H. Koslow; Volume 9.)

**KLEIN D (1965)**

*Hollister:* You have had a very interesting association with the ACNP. How do you see the picture?

**Klein:** I certainly hope so. It was also fun being involved with ACNP; it's a very elite organization. People, who are in it are very smart successful people. One of the problems, I believe, with being successful is that it makes you somewhat conservative you don't want to rock the boat too much, because, after all, you've done all right. But there have been a number of developments recently that I think should shake us up in terms of how psychopharmacology is going to go research wise in ensuing years, both, from the point of federal support and from the point of view of pharmaceutical industry support. I think the ACNP could play some proactive roles there. I hope it will do.

*Hollister:* Well, you've been a creative thinker in this line, on the more general political line, too. What do you think the ACNP should do?

**Klein:** Well, I think, for one thing, the ACNP ought to try to formulize a relationship with the various heads of the federal agencies, including the FDA and NIH and so forth, and to meet with them regarding their agendas. Like, for instance, I'm the head of a mental health clinical research center and I'm not at all certain as to whether mental health clinical research centers are viewed favorably as being a sensible way to spend money. I personally think that psychiatry is in a relatively primitive state as compared to, say, internal medicine. They're way ahead of us in objective measurements and physiological understanding. Are RO1s by independent investigators a really good sensible way of funding. (Donald F. Klein interviewed by Leo E. Hollister; Volume 4.)

**KLETT (Founder)**

*Hollister:* Well, I was going to ask you, what do you see the chances of replacing people like you and John Overall, the pivotal pioneers in the field of statistics in applied to psychopharmacology? Are we getting enough new people in the field to keep it alive and flourishing, or should the ACNP take a little more liberal policy toward admitting people in this discipline?

**Klett:** Well, yes. I think it is important to have people represented in the membership and it doesn't always work out that way. I sponsored Phil Lavori on two occasions.

*Hollister:* He's good.

**Klett:** Oh, he's outstanding.

*Hollister:* But, he is a member now.

**Klett:** I'm not sure of that. My two attempts to get him failed. I don't know if he is a member, currently.

*Hollister:* Oh, that's a pity. He's a solid citizen. some others because the organization needs it. Remember, these teams that we used to have, with you and

John and Gene Caffey and myself. Phil is working with Klerman and others on the depression studies. ACNP needs those people who can work together with clinicians, but bring together a lot of expertise in quantitative work, and there should be some outreach to get them in. Now, they're not replacing people like John Overall. These positions are now, I think, being filled by biostatisticians, PhDs in statistics, and that's alright. That's fine. They don't come with the background in psychopathology that the psychologists tended to have or as much of an interest in the subject matter, per se.

*Hollister:* But, people cross disciplines all the time, as you did, so I think that even if they came from a purely statistical background you could give them enough know how in time.

**Klett:** Oh sure, in time, especially if they make a commitment to working on psychopharmacology problems. Who's the woman at Palo Alto?

*Hollister:* She's doing the history of the VA?

**Klett:** Oh, no, that's Margarita Hayes. There's a woman statistician at Palo Alto, Stanford, Helena Kramer. She's now a member of ACNP, I believe.

(James Klett interviewed by Leo E.Hollister; Volume 4.)

### **KUPFER (1975)**

*Schatzberg:* What was the role of the Academic Consortium for the ACNP?

**Kupfer** The academic consortium advocacy groups are working with us to soften the fact that the ACNP once had to be the only elite scientific voice. I don't think we have that single role anymore. I feel historically, when one looks at what we were doing in the mid nineteen eighties, what we are doing now is much better. On the other hand, I feel sometimes we get complacent and think other organizations will take care of it with their hotlines, will get in touch with representatives and not make use of the unique characteristics of the scientists that belong to this organization. We need to be public advocates, not just private advocates for the kind of science we stand for.

*Schatzberg:* You had thoughts about drugs in multiple therapies. What about the notion of dose? We have gone from low dose underprescribing in the late sixties to realizing these are serious illnesses and need more aggressive treatment.

**Kupfer:** This is the kind of topic where an organization like the ACNP can be a terrific forum to present clinical information and also basic neuroscience findings. We were all taught you could be aggressive in acute depression but, once things were under control, you did your best to find the minimum dose. This is what we were taught and what we practiced. The only problem was that it was wrong and, later on, we began to find out that the dose that got you better would keep you better, a notion we didn't embrace until the late eighties. A full dose strategy for long term was not only applicable but gave you a much

better outcome. You then put more of a burden on convincing the physician, patient and family that it was good to stay on a high dose.

*Schatzberg:* What about the ACNP's influence on clinical practice? You raise these issues about the presentations; that this is a somewhat elite professional group. Do you think the materials that get generated or presented here have an influence on the field?

**Kupfer:** That's an interesting and not a simple question. There have been times we have not taken our responsibility to heart. Clinicians can have a very robust effect on dissemination of knowledge that has implications for clinical practice. We have sometimes not been conscious of our need to do that and other organizations have assumed that responsibility. Right now we are in a cycle where we have more clinicians on the ACNP council than in a long time; hence there is a great deal of emphasis on dissemination through education. The positive influence of the pharmaceutical industry for the College has been to present much more information than can be readily comprehended by the broader public or even a young basic scientist or clinician investigator.

*Schatzberg:* What about the role of the ACNP on professional identity? What has the college meant to you as an investigator, as a chair, as a professor?

**Kupfer:** This may go back to the feeling I had in 1975 of being elected to a very prestigious organization to which all of my intellectual heroes belonged; people who have mentored me, both close and afar. That never really changes and I still felt that way through the early eighties. Translational science is something departments of psychiatry should be all about. They should be, at one level, departments of clinical neuroscience and behavior. Sometimes, there are appropriate criticisms we don't take into account enough of the behavioral sciences in what goes on at ACNP. That is always the kind of dialectic that is in play. But, if one were to ask where is the society that most fits the academic mission of a department of psychiatry, certainly that would not be the ACNP. But, in many ways, it does embrace a lot of that academic mission. It has retained a prestigious value that is well justified and, with respect to other societies, it has been a jewel.

*Schatzberg:* I have the same impression. The ACNP, of all professional organizations I belong to, has had the greatest impact on my sense of belonging and of professional identity, in terms of both investigation and administration. Do you think the society is too small and a little too elitist? The young people coming up and the young faculty really enjoy the meeting. They all strive to become members and it's something they think is going to be important. As you said, it's a small jewel, but are there downsides to that?

**Kupfer:** I don't think so. If we got much bigger we would lose our ability to invite people to present and to make sure fresh ideas come in; we might also lose the specialists. We probably range between eleven to fourteen hundred people at the

meeting. If we get much larger we become akin to a small American Psychiatric Association meeting. We would lose any opportunity of giving traveling fellowships for young people or any sense that young people can come to a meeting and find somebody they have read and would like to talk to. We are at a threshold where, if we increase the number of members, I believe we would have to decrease, in proportion, the number that can attend the meeting. Once you go much above one thousand people, you have a very different meeting and, since it is almost a week long, something would be lost. Having said that we come to something else we have grappled with; is the society simply a meeting that happens annually or an organization that operates throughout the year? This is something the whole college has wrestled with on an up and down basis, depending on whether the issue had to do with advocacy or with what we think scientifically needs to happen locally. Or what is our obligation with respect to education throughout the year as much as the annual meeting, and would that come through CME activities, which is something we all work with? Even the origin and the development of a journal was a response to how does one keep the identity of the college and disseminate information.

*Schatzberg:* Let's talk about the social aspects of the ACNP/ What kinds of things come to mind either here in Hawaii, or occasionally in Washington?

**Kupfer:** We were there in Washington for the twenty fifth anniversary, and this is the thirty fifth anniversary so we shouldn't forget it's been ten years already since Washington. When I first came to an ACNP meeting, I am almost positive it was 1970; I was told this was a good meeting because it was a sunny meeting that took place in winter. The allure of being able to be outside for five to seven days has a lot to do with not simply social events but the exchange of intellectual ideas. If one were to walk along the sand and record the conversations they are often about science. Young and promising faculty members can interact with senior people, giving them a sense of what it would be like to work with some of them and vice versa. There is no question that the ACNP always was, and continues to be, a job market as long as there continue to be jobs. Which is something the ACNP hasn't tackled yet; which is what is the future of the academic departments of psychiatry, neurology and clinical neuroscience. That is something for us put on the agenda over the next couple of years. I don't think we should interfere with the activities going on now where young people are looking for jobs that do exist, involving advanced fellowships, whether they be psychiatrists or post docs. That is one of the positive sides of having this kind of social environment. It is also a place for old friends to get together, and I don't want to underestimate that, but it's not the only place where that happens. What is special about this meeting is more interaction between young and older individuals.

(David J. Kupfer interviewed by Alan Schatzberg; Volume 7.)

**LEVINE (1972)**

*Gershon:* How did your work connect with the ACNP and the kinds of organizations forming around the world with an interest in neuropsychopharmacology?

**Levine:** That happened because we were involved with organizations that got created like the Collegium International Neuropsychopharmacologicum (CINP) and the ACNP, the American College of Neuropsychopharmacology (ACNP). All of us were used to working in an extramural way, participating in these organizations. One of the things that I did when we were developing guidelines and ways of doing clinical evaluations, was to sit on the ACNP Government Industry Liaison committee. I asked Burt Schiele, the chair of that committee, to help put together a set of guidelines of how to evaluate psychiatric drugs. He liked that idea and, jointly, the NIMH and the ACNP, produced a book contributed to by many members. We called it, Principles and Problems in Establishing the Efficacy of Psychotropic Agents, but a lot of people referred to it as the Blue Book. That began the process of guidelines for trials and the ACNP and NIMH worked very closely together. Then, there was the whole series of Decade of Progress reports. For the First Decade of Progress book Dan Efron was extremely involved and saw that the government published it; although the ACNP held the meetings, requested the manuscripts, and put the book together. There was a very close cooperative relationship. Jonathan Cole became president of the ACNP and there was a very close working relationship between staff in the PSC, who had their own expertise and qualified to be members because of their own accomplishments.

(Jerome Levine interviewed by Samuel Gershon; Volume.4.)

**LIEBERMAN (1989)**

*Koslow:* Now, how has the ACNP been a part of your career? When did you first join? What are the different roles you've played within the organization?

**Lieberman:** Well, the ACNP has really been a most prominent, prestigious and influential organization within the field and not just neuropsychopharmacology, but psychiatric neuroscience.

*Koslow:* In the world?

**Lieberman:** Certainly, in the United States and possibly the world.

*Koslow:* One could say in the world, yes.

**Lieberman:** So anybody who aspires to a career in this field wants to become involved with it as soon as possible.

*Koslow:* So, when did you first come to the ACNP?

**Lieberman:** Well, it's when I first got an invitation, because it's a closed meeting. And when I got an invitation, I actually don't recall the year, but it was probably in the early 1980s.

*Koslow:* And, who invited you?

**Lieberman:** It must have been Friedhoff.

*Koslow:* OK. Do you remember what you presented?

**Lieberman:** I don't think I presented anything. I just came to the meeting as a guest.

*Koslow:* And, what was your experience?

**Lieberman:** It was unbelievable. It was like being a kid in a toy store, in terms of having all this wonderful material and, then, having these icons parading all around and so you got into a real hero worship kind of thing and, at the time, you know, these were like the great people in psychiatry, Gerry Klerman and Sol Snyder and Joseph Schildkraut and George Winokur. Everybody came to that meeting, annually.

*Koslow:* And, have you subsequently come annually?

**Lieberman:** I've come every year. I haven't missed one year. And, I had data to present the next time and, then, eventually I was elected to membership and became involved in a variety of capacities with the college over the years on committees. I also served on the executive council...

*Koslow:* Pre-Christmas, between Thanksgiving and Christmas.

**Lieberman:** The timing has always been something of an issue, but I've attended, nevertheless.

*Koslow:* What's your most memorable meeting, or what was the most memorable event in your ACNP meetings?

**Lieberman:** There's probably not a single one. They're all sort of characterized by a certain set of personalities and presentations. You know, there's a topic or a series of studies that sort of pervades and dominates each meeting.

*Koslow:* But, when you look back on your ACNP attendance, is there a year and a meeting that just stands out in your mind, maybe for personal reasons, not necessarily for the science of it?

**Lieberman:** Well, Oakley Ray was a tremendous personality, sort of larger than life, and he became synonymous with the ACNP, so anybody who was involved with the ACNP got to know Oakley. And I remember that he organized at ACNP's twenty-fifth anniversary an event at the National Press Club at which a group of the senior members held forth and reminisced and told anecdotes. That was a very memorable event. And, the ACNP usually rotates between the Hilton Hotel in Puerto Rico and the West Coast location and, frequently, Hawaii, and I have a memory of a meeting in Hawaii that was one of my most successful meetings, in terms of having two panels and a study group and some posters.

*Koslow:* How do you view the current scene?

**Lieberman:** Well, I think there is a lot going on with the pharmacology. The problem is that we have a lot of theories that lead to targets for developing new drugs, but getting the drugs is not an easy process, because it is something that academic investigators and the large majority of the members of the ACNP can not do by themselves. We need to partner with the pharmaceutical and biotechnology industries, and we're caught up in a process of engaging with the private sector and also dealing with the regulatory agencies. And this process is one which has become probably heavy going, in terms of a scientific enterprise, because it's not simply, where does the science lead you, but how do you get the grant to do the study? It's working within the bureaucracy of a private corporation that has clear responsibilities to their fiduciary responsibilities to their shareholders and the administrative and governing structure and, then, you have the regulatory agencies.

*Koslow:* Fair enough, but you know drug companies have always been in it for the overall benefit of their shareholders. The regulatory agencies have always regulated drugs. But, where do you see us going in the next ten years? We're in 2008 now. If someone were to look back at this in 2018, ten years from now, they'd want to know what Jeff was thinking about the future.

**Lieberman:** I think of two areas. First, I think, the sequencing of the genome, the explosion, of our knowledge and methodology, to sort of probe genetic mechanisms is going to be tremendously important. By identifying genes, this will enable us to do what's called personalized medicine. Right now we treat people based on their diagnosis; we don't treat people based on who they are, necessarily, even though we know that there's tremendous variation within a diagnostic category. . So, with genetics, we'll be able to genotype individuals to determine what the particular risk genes are for developing a disorder or what their particular genetic characteristics are that would predetermine their therapeutic and adverse response to a particular type of treatment.

*Koslow:* Personalized medicine, in theory, what you have said is unimpeachable. I mean, it is the rational logical outcome of what we're doing. The question is, in what timeframe? How quickly do you think will a doctor seeing a patient walking in the clinic be using genetics to make meaningful decisions about the care of the patient?

Now how would you describe the impact of the ACNP on the careers of others like yourself?

**Lieberman:** Well, I think the ACNP has played an instrumental role in the formation of so many people's careers by providing a forum where they can get exposed to all the scientific information relevant to their career development. They also get to see at the annual meetings of the organization who their peers are going to be and given an opportunity to interact with the leaders in the

field, firsthand. ACNP has a tremendous history and tradition; I think it's one of the most important institutions in our field that needs to be preserved and sustained in a way that it maintains its vital role.

(Jeffrey A. Leiberman interviewed by Steve Koslow; Volume 4.)

### **MEYER (1973)**

*Kosten:* How do you view your role in the evolution of the ACNP?

**MEYER.** I have been privileged to be part of a great research renaissance in the addiction field and alcoholism. I have been pleased to watch the impact of our field on ACNP over the past four decades. From very small numbers, in the late 1960s, ACNP now includes many distinguished behavioral and neuroscientists and clinical investigators who receive their primary funding from NIAAA or NIDA. Several ACNP Presidents and a number of ACNP Council members have had very distinguished research careers in the addiction field.

*Kosten:* What can be done to advance developments in the field of addiction?

**Meyer:** I think it's going to be terribly important to interest industry in developing drugs to treat addictive disorders. Virtually all drug development in this field outside of heroin addiction and recently nicotine addiction has come from studies of off-label use of drugs originally developed for other disorders in psychiatry and neurology. If the impact of managed care discourages young psychiatrists from entering the addiction field, and the treatment environment thus remains dominated by addiction counselors unreceptive to new drugs, it is going to be a huge task for ACNP and for others to stimulate industry interest in developing drugs to treat addictive disorders based on the exciting developments in science.

(Roger E. Meyer interviewed by Thomas Kosten; Volume 6.)

### **SALZMAN (1975)**

*Meyer:* What do you see as the major obstacle in advancing our field?

**Salzman:** I think that the one thing that always troubles me about the ACNP meeting when listening to the clinical research presentations is that there is not enough attention paid to real life human beings. It is almost as though the human beings are described as a collection of receptors or second messengers or gene expressions and other "neuroscience stuff" rather than suffering human beings. And, that makes sense if you're doing research. But taking the research results from these meetings back to the real-life clinical world, and, applying them to patients, requires a shift in understanding and application of the complexity of people's lives, because the diagnoses and treatment results are not as clear as it might appear when presented at these meetings. Depression is not just hypercortisolemia or what shows up on Hamilton's rating scales. That's not what depression is. And, yet, we sometimes think in simplistic

ways because Meyer we're trying to understand basic disease mechanisms which may require temporarily reductionistic thinking. But I sometimes worry that, in our psychopharmacology research field, we are creating a generation of younger investigators who don't quite understand the clinical application or the complex realities of clinical treatment with these drugs. If there was one area I would hope the ACNP might want to explore in its teaching role, as it did with the model curriculum, is creating a series of model teaching cases, based on real people, to illustrate some of the most exciting research areas that we're involved in right now, say, the new antipsychotics or the new mood stabilizers, the gene transcription potential theories, and, illustrate them through a patient. But, I think that's the way to do it, and, of course, the ACNP is such a fantastic organization. If you bring someone who has any interest in psychopharmacology to one of these meetings, they're hooked. I mean, they say: "this is the best meeting I've ever attended," which it is. It is for me and that's why I do it for them.

*Meyer:* : Can you elaborate somewhat more on these issues?

**Salzman:** I thought you were going to ask me what I thought about the organization and how it's developed and what's good and what's not so good, some of the things we've talked about at our "annual beach" talk. I've given it a lot of thought to those things and I don't know the answer. I'm also afraid that my comments are going to be misunderstood, so I have to be careful in how I phrase them. I have very mixed feelings about the relationship between our organization and the pharmaceutical industry. On the one hand, it certainly supports many scientific activities. And, I also think that the meeting between the academic research community and the pharmaceutical research community is a tremendous area of cross pollination and fertilization that has led to great discoveries; I think it would be nihilistic and cynical to say otherwise. But, I think there's another side to it. I think we are all, me too, influenced by industry in sometimes very subtle ways. It's rarely vulgar: nobody from industry ever says, "say this and don't say that" about our product. That would never happen, but the influence is much more subtle in terms of how we understand the clinical application of drugs, how we compare drugs and how we gather the data and present the data. You can see it here at the meeting. If you look at some of the posters, for example, in which studies of drug comparisons or drugs vs. placebo are presented, you know that the study is, in part, been funded by industry. You know it because you already are familiar with the work, so you have some basis of judgment. And you can see that there are statements that are not made, and information that is not presented - so there are data errors by omission. It's not necessarily lying, but there's subtle inference that is given that this particular drug is, say, better than that particular other drug for these particular patients, and here are the data. When you have had

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some experience with the drugs, or carefully examine the methodology, you say to yourself: “that’s really not true”. So it requires in all of us, a need to maintain a high level of scientific and clinical rigor in evaluating, drug company data, because what we learn here at the meetings may, in fact, not always be, in fact, applicable or correct in the clinical world. Remember, in my work at NIMH with Jonathan Cole, I was running the ECDEU program, and as Jonathan originally created it and I participated in, there were no drug company people who participated in the investigator meetings. It was a small group of very gifted and sensitive investigators, who met several times a year to discuss their work without fear of interference or the consequences of what they were going to say, from industry; I don’t think that’s possible to do any more. The world was different then with fewer drugs and a smaller number of investigators; it was very special time. And, the discussions around those tables changed when there were drug company people in the room. I saw it with my own eyes. I wouldn’t say scientific rigor, but the level of openness changed; hard questions would not get asked when industry reps were in the room, because you might be stepping on somebody’s company toes or because there might be financial or professional repercussions later on. Again, I want to emphasize that I don’t think only “the good old days” are the only good days, but there has been something a little bit lost. I was wondering, in preparation for this interview, what would I want to do? I made a comment to the FDA Advisory Committee last Thursday, which I think would apply here, as well. We were discussing a post marketing survey of side effects at this advisory committee meeting, and the question of how do you get good reliable and valid information about side effects, once a drug is out? Mainly, if it’s not lethal and doesn’t make the media, you get it from what the industry collects, as well as from spontaneous reporting to FDA. And, it occurred to me that we should resurrect the old ECDU model. We should have, say, ten or twelve designated gifted clinicians, Heinz Lehmann type people, from around the country, who observed the drugs in their clinical use, monitored the emerging side effects and, then, came together to discuss and compare and share observations. Did you see sexual dysfunction with SSRI’s? Did you see weight gain with the new generation of psychotics? Those kind of discussions; would provide a very effective early warning system. Taking that model and bringing it into ACNP would mean to have a small group of designated clinical researchers or, even, basic scientist researchers, meet, informally, maybe three times a year, maybe in conjunction with this meeting, to discuss amongst themselves, what they’ve observed, and the clinical implications of their research. The information shouldn’t become public, but the scientific community could then be informed about it without the influence of the industry. It might not be expensive and it might be practical.

*Meyer:* So, one of the functions that the ACNP could have in the future would be to try to foster this kind of unrestricted, uninfluenced research discussion.

**Salzman:** Right, and I'm concerned that the new society, the American Society of Clinical Psychopharmacology, grew up because the ACNP wasn't doing enough of this clinical work and I think that's regrettable. We need to keep the rigor in our work and that's what I think the ACNP does, to its' credit, but it has somehow abandoned a little bit of rigor on its' more clinical side, and that's reflected in these annual meetings

(Carl Saltzman interviewed by Roger E. Meyer; Volume 8.)

### **SCHATZBERG (1983)**

*Ban:* When did you get involved with the American College of Neuropsychopharmacology?

**Schatzberg:** I think it was in the early 1980' that I became a member, and I've been coming to these meetings for 20 years and it's the highlight of my academic year. The College is an incredible place. It truly is a College. We've witnessed transformation over time. We've been able to grow, and it's been just a wonderful, wonderful experience.

*Ban:* You were president of the College.

**Schatzberg:** I was President in 2000, and after the business meeting in a couple of hours, I will be the immediate Past President and Chuck O'Brien will be President. I was on the council for three years, then I was a year off, before becoming president elect. Seven out of the last eight years, I've been very involved with the running of the organization. It's a unique place. It is a place of tremendous friendship, tremendous collegiality. You see your friends, and you see them working on scientific issues that are important to the field. The College, I think, has been enormously successful, obviously. The Nobel Laureates this last year are important additions to Julie Axelrod. It's been an organization that has meant a lot to me in my professional life.

*Ban:* How does it compare with other scientific organizations?

**Schatzberg:** But there's nothing like ACNP. It's small enough to have fabulous meeting but large enough to include But there' nothing people of many different disciplines. And one of the things that Steve Paul, when he was President, started was the question of looking at the holes in the College as to trying to fill in and we've been trying to do that pretty actively this year, adding some child psychiatry people, child researchers, and adding some people on research methodology and statistics. I think we need to get some people in certain areas, to keep us ahead of the cutting edge and I think we'll do it. It's a College that you're involved with, and Jon, Frank Ayd, a number of you folks, and Heinz Lehmann were involved in founding and we owe all of you

(Alan F. Schatzberg interviewed by Thomas A. Ban; Volume 4.)

**SCHUCKIT (1976)**

*Tone:* I'm going to push you on this point. If you look at the programs at ACNP or CINP, there's not a lot of intellectual space being devoted to alcoholism. Why is that?

**Schuckit:** I don't know. Let me give you some theories and I'm not saying any of these are correct. The same people, who are on the program committee and got the education in their PhD program or their MD program on alcohol or drugs, is the average person out there, so they don't, necessarily, come from institutions that have trained them about how exciting and important alcohol and drugs are, but as they put together programs, they fall back on, and I would, as well, what's most interesting to them. And, I think that has a major contribution. Then, if we were to take a look at, well, at least up until very recent years, is it likely that some corporation would help fund a major symposium on genetics of alcoholism or alcoholism treatment? Up until very recent years, there hasn't been a tremendous amount of interest or very exciting findings regarding treatment of alcoholism, drug dependence a little better, but not a lot of interest. There's not a lot of corporations out there strongly interested, a pharmaceutical company strongly interested in alcohol or drug treatment. I think that's changing and I think we may see some symposia, not just ACNP, but like American Psychiatric Association and other meetings, of focusing more on alcohol and drug treatment. From the standpoint of the interest of other researchers in the alcohol and drug field, I don't know what's going to happen. I don't know if they're able, first of all, of course, I might be overvaluing what it is I'm seeing

(Marc Schuckit interviewed by Andrea Tone; Volume 6)

**SHADER (1970)**

*Saltzman:* Over the years the organization became more political, starting to work with advocacy issues. What is your experience?

**Shader** We got very involved in promoting advocacy groups at the time and I would say that the highlight for me was, in fact, the year of my presidency when the Secretary of Health and Human Services, Louis Sullivan, came to our meeting.

*Saltzman:* I remember.

**Shader:** And, that took over a year of very hard work and preparation. It was an acknowledgement of the role of the society as a group of scientists, who could make positive contributions to government decisions. But, then, I think there were many members who felt we went too far and that we had become too involved in the political process. And, we seemed to pull back, at that point, as a group. And, there was a movement during my presidency from the American Psychological Association to give prescribing privileges to psychologists who

were in the Army because of an MD shortage. I did not see that as a solution to a very real need and was very actively involved in trying to make sure that what was done was done so that no one was put in jeopardy, by trying to insure that all the psychologists who would get prescribing privileges goes through a very rigorous kind of education in his psychopharmacology training. Since then, of course, as you know, lots of people have prescribing privileges now with much less education than the trained psychologists did. I have mixed feelings about that.

(Richard L. Shader interviewed by Carl Salzman; Volume 8.)

### **SIMPSON (1965)**

*Ban:* Would you like to mention any of the people you collaborated with?

**Simpson:** Well, Philip May I met, I guess, through the ACNP, just like, perhaps, seeing a lot of people at the ACNP that influenced me, because you got a chance to talk with them at our meetings, and with Philip, we became friendly and, then, we worked on chapters for Freedman and Kaplan and that time. I think we wrote a couple of other things.

*Ban:* What were the chapters on?

**Simpson:** It was on the Treatment of Schizophrenia, yes, and, again, it was so nice to work with somebody who was stimulating, so that I learned from him more things.... I also collaborated with him and the present ACNP president. I chaired the Education Committee and worked with them there.....I also worked with Bob Kellner a bit, because he was somebody I met in the anatomy department at Liverpool and I guess he, Philip May and Don Gallant were the closest friends I had in this country. So, I used to meet Bob Kellner at the ACNP and maybe one other meeting and, then, we occasionally visited, but if he'd hear a good joke he would always phone me and tell me.

*Ban:* When did you become a member of the ACNP?

**Simpson:** It was, I think, in the mid 1960s, and Nate Kline suggested to me that I should apply for membership and it was easy to be a member then, relative to today, so, anyway, I became a member and the meetings were just very unique, because you got a chance to meet nearly everybody. But, a meeting like the APA, you have to search out people and if you want to see them, you probably have to have lunch or dinner with them. At the ACNP, you could have a half an hour or an hour with somebody without having to assess the great picture with them. You could do that, as well. So, you got to see and meet a lot of people in the field and who were doing different things.

*Ban:* You were president of the ACNP?

**Simpson:** Right.

*Ban:* When?

**Simpson:** That was, I think, in 1995. I've forgotten. I guess I served on the Council for 3 years and, then, I was on the Council as the president elect and, then, there's the president. It was, again, a useful experience. There are some things that we are engaged in that are unique and novel and I don't know how productive, like going up to Washington and going up on the hill, as we said, but that brought to the floor the sort of activist needs in science and our whole field. But, you know as well as I do, it's really just a very unique organization. (George M Simpson interviewed by Thomas A. Ban; Volume 9.)

### **TOLLEFSON (1997)**

*Braslow:* What would be your final thoughts on these developments?

**Tollefson.** I think the future of psychiatry and psychopharmacological research is at a kind of crossroads. A lot of the enthusiasm about the early discoveries in neuroscience has waned, because we haven't really been able to translate some of that into clinically meaningful information. A guy had raised the question how many articles have you read over the last two to three years in the American Journal of Psychiatry, or the Archives of General Psychiatry that changed the way you practice medicine, and the answer of the vast majority is: "zero". That is the issue. That is the issue: our research is not making as much of an impact on improving the quality of care and dealing with unmet needs we have in the field as it should. And, that's one of the challenges that we face going forward -- to make research more relevant for clinical care. I do think that does come through translational work. I think our colleagues in oncology have done a nice example of making that happen. Everybody is sort of shifting and placing their bets now on cancer and oncology products. That is a hot area and neuroscience and psychiatry is becoming less and less interesting as a target for research. So, let's just look forward and say that the drug industry, by and large, significantly reduces the funding for research into psychiatric disease ten years from now; what is that going to mean for the College and for the people working in neuropsychopharmacology? I think there are some issues that are really going to be quite challenging for us.

(Gary D. Tollefson interviewed by Joel Braslow; Volume 8)



## APPENDIX I

### *Founders*

In Appendix 1 the names of the 105 founders (charter fellows) of the College are listed in alphabetical order:

1. Leo G Abood\*
2. Julius Axelrod\* +
3. Frank J Ayd\* +++
4. Laretta Bender\*
5. Ivan F. Bennett\*
6. Lorraine Bouthilet\*
7. Joseph Brady\* +
8. Henry Brill\*
9. Bernard B. Brodie\*
10. John J. Burns\*
11. Enoch Callaway III +
12. C. Jelleff Carr\* +
13. Lincoln D. Clark\*
14. Mervin L. Clark\*
15. Berman D. Cohen\*
16. Jonathan O. Cole\* +++
17. Leonard Cook +
18. Erminio Costa\* +
19. Jose M.R. Delgado +
20. Peter B. Dews +
21. Alberto DiMascio\*
22. James M. Dille\*
23. Edward F. Domino +
24. Daniel H. Efron\*
25. Joel Elkes ++
26. David M. Engelhardt\*
27. Guy M. Everett\*
28. Paul Feldman\*
29. Max Fink ++
30. Barbara Fish +
31. Seymour Fisher
32. Herbert Freed\*
33. Alfred M. Freedman\* +
34. Daniel X. Freedman\*
35. Harry Freeman\*

36. Fritz A. Freyhan\*
37. Arnold J. Friedhoff\* +
38. Ralph W. Gerard\*
39. Bernard C. Glueck\*
40. Douglas Goldman\*
41. Louis A. Gottschalk\* ++
42. Milton Greenblatt\*
43. Paul Greengard
44. Thomas E. Hanlon
45. Robert G. Heath\*
46. Harold E. Himwich\*
47. Paul H. Hoch\*
48. Ebbie C. Hoff\*
49. Abram Hoffer\*
50. Leo.E. Hollister\* ++
51. Sael Irwin\*
52. Harris Isbell\*
53. Murray E. Jarvik\* +
54. Samuel C. Kaim +
55. Alexander G. Karczmar +
56. Seymour S. Kety\* +
57. Eva K. Killam\* +
58. Keith F. Killam\* +
59. John Kinross-Wright\*
60. Gerald D. Klee +
61. Gerald L. Klerman\*
62. C. James Klett +
63. Nathan S. Kline\*
64. Werner P. Koella\*
65. Conan Kornetsky ++
66. Else B. Kris
67. Albert A. Kurland\* +
68. Heinz E. Lehmann\* +
69. Stanley Lesse\*
70. W.T. Liberson\*
71. Sidney Malitz
72. Lester H. Margolis\*
73. Amadeo S. Marazzi\*
74. Philp R.A. May\*
75. Roger K. McDonald\*
76. Sidney Merlis\*

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77. James Grier Miller\*
  78. Benjamin Pasamanick\*
  79. Carl C. Pfeiffer\*
  80. Albert J. Plummer\*
  81. Benjamin Pollack\*
  82. Lowell O. Randall
  83. Max Reiss\*
  84. Karl Rickels +
  85. Sherman Ross\*
  86. Theodore Rothman\*
  87. Anthony Sainz\*
  88. Gerald J. Sarwer-Foner ++
  89. Burtrum C. Schiele\*
  90. Jurg Schneider
  91. Charles Shagass\*
  92. Ernest B. Sigg
  93. R. Bruce Sloane\*
  94. Joseph M. Tobin\*
  95. James E.P. Toman\*
  96. William J. Turner\* +
  97. E.H. Uhlenhuth +
  98. George A. Ulett\*
  99. Klaus R. Unna\*
  100. Heinrich Welsch\*
  101. Louis Jolyon West \*
  102. N. William Winkelman\*
  103. John Richard Wittenborn\*
  104. Arthur Yuwiler
  105. Joseph Zubin\*

\*Deceased

+Interviewed (number of interviews)



## APPENDIX II

### *Presidents*

In Appendix II, the names of the first 50 Presidents of the College are listed with the year of their Presidency in chronology:

- 1962 Joel Elkes ++
- 1963 Paul Hoch\*
- 1964 Milton Greenblatt\*
- 1965 Heinz E. Lehmann\* + & Bernard B. Brodie\*
- 1966 Jonathan O. Cole\* +++
- 1967 Nathan S. Kline\*
- 1868 James Toman\*
- 1969 Henry Brill\*
- 1970 Daniel Freedman\*
- 1971 Joseph Zubin\*
- 1972 Alfred M. Freedman\*+
- 1973 Richard Wittenborn\*
- 1974 Leo E. Hollister \*++
- 1975 Philip May \*
- 1976 Keith F. Killam\* +
- 1977 Morris Lipton\*
- 1978 Arnold J. Friedhoff\* +
- 1979 Fridolin Sulser +
- 1980 Louis Lasagna\* +
- 1981 Donald F. Klein ++
- 1982 Leonard Cook +
- 1983 William E. Bunney +
- 1984 Seynour Fisher
- 1985 Herbert Meltzer ++
- 1986 E. H. Uhlkenuth +
- 1987 Arthur J. Prange +
- 1988 Eva K Killam\* +
- 1989 Floyd Bloom +
- 1990 Richard I Shader +
- 1991 George M. Simpson ++
- 1892 Irwin J. Kopin +
- 1993 Roger E. Meyer +
- 1994 Thomas Detre ++
- 1995 David J. Kupfer +
- 1996 Benjamin S. Bunney

1997 Charles Nemeroff +  
1998 Huda Akil +  
1999 Steven M. Paul +  
2000 Alan J. Schatzberg +  
2001 Charles P. O'Brien +  
2002 Joseph Coyle +  
2003 Dennis Charney +  
2004 Carol Tamminga  
2005 Daniel Weinberger +  
2006 Kenneth L. Davis +  
2007 William T. Carpenter +  
2008 Judith L. Rapoport +  
2009 David J. Braff  
2010 David R. Rubinow  
2011 Eric J. Nestler

\*Deceased

+Interviewed (number of interviews)

## **APPENDIX III**

### *Reference to ACNP*

In Appendix III excerpts are presented from 21 interviews conducted with 21 members of the College in which reference is made to ACNP. The members acknowledge personal roles in the College or contact with other well-known members who served as mentors, but only refer to the College, tangentially.

#### **ADLER (1976)**

*Stein:* Tell us how the College on Problems of Drug Dependence began and tell us about your role in directing that College.

**Adler:** Well, the CPDD began as a committee and is actually the oldest research group on drug abuse, I think in the world, certainly in the United States. It began as a committee of the National Academy of Sciences and it was started in 1929. It split off and became independent in 1976, and was sponsored by twelve organizations, including ACNP, The American Society for Pharmacology and Experimental Therapeutics, The American Chemical Society, the AMA and so on. Let's call it a very close sister organization to ACNP in many ways, with the primary concern being drug abuse, as opposed to being more general psychopharmacology.

(Martin W. Adler interviewed by Larry Stein; Volume 6.)

#### **ALEXOPOULOS (1993)**

*Tone:* And, then, when you came to the United States?

**Alexopoulos:** I started my psychiatric residency at New Jersey Medical School in Newark. Dilip Jeste, another ACNP member, who subsequently had a similar career in geriatric psychiatry, was a resident at New Jersey Medical School at the same time.

(George Alexopoulos interviewed by Andrea Tone; Volume 7.)

#### **BARONDES (1970)**

*Tone:* So they set up the foundation that made...

**Barondes:** I was just at a session here at the ACNP about new drug discovery, and people were bemoaning the fact that with all the modern molecular and genetic technology, it is still really hard to make a new drug.

*Ban:* Working on cell interactions?

**Barondes:** And so I was recruited and promised great resources in terms of lab development and recruitment of faculty, and so I came to be chair there and wound up recruiting a number of excellent young faculty people, like Rob Malenka and a number of other young people, some of whom are now members of the ACNP.

(Samuel H. Barondes interviewed by Andrea Tone & Thomas A. Ban; Volume 3.)

### **BROWN (1983)**

*Greden:* He did some research with air traffic controllers.

**Brown:** George Heninger at Yale was a mentor to me. I came for some time to ACNP meetings as his guest. He was really very much a mentor and I worked closely with him initially on my research projects.

(Walter A. Brown interviewed by John F. Greden; Volume 5.)

### **CARROLL (1977)**

*Hollister:* And, that was due to its use as a salt substitute for congestive heart failure.

**Carroll:** Exactly, and that's all being written up in Frank Ayd's book, the *History of Psychopharmacology*. But, I now have in my possession actual photocopies, glossy photograph copies of John Cade's original case notes of the first patients that he treated with lithium and, at sometime, I will donate them to the ACNP Archives.

(Bernard J. Carroll interviewed by Leo E. Hollister & Thomas A. Ban; Volume 5.)

### **CHARALAMPOUS (1965)**

*Ban:* When did you become a member of the ACNP?

**Charalampous:** I think my application went in, in 1964, and I think I'm officially in the book since 1965. I became a member of CINP more recently, but I have been a member of The Society of Neuroscience and of Biological Psychiatry from the '60's.

(Kanellos D. Charalampous interviewed by Thomas A. Ban; Volume 6.)

### **EBERT (1980)**

*Bunney:* Quite a group of ACNP members!

**Ebert:** Yes. Some of the individuals whom I recruited, that are active in the ACNP, were Peter Martin, Rick Shelton, Bob Kessler, Herb Meltzer, and Ariel Y. Deutch.

(Michael H. Ebert interviewed by Benjamin S. Bunney; Volume 8.)

### **ENNA (1983)**

*Bromley:* Was that the new frontier at the time?

**Enna:** It was kind of developing. At that time Park Shore was a professor at the University of Texas Southwestern Medical School in the Department of Pharmacology. I believe he was one of the original members of the ACNP

*Bromley:* So, what was exciting about what he was doing?

**Enna:** Among my contemporaries in Sol's lab were Henry Yamamura, Ian Creese, David Bylund, Jim Bennett and Gavril Pasternak, all of whom were

either pre- or postdoctoral fellows. Junior faculty in the group at that time included Joe Coyle, Mike Kuhar and Elliott Richelson. Most of these individuals are now members of the ACNP.

(Salvatore J. Enna interviewed by Elizabeth Bromley; Volume 3.)

### **KLEBER (1982)**

*Tone:* Was it specific to Jefferson, or do you think it was part of a larger bias in the medical curriculum across the United States then?

**Kleber:** Gerry Klerman, who was one of the great scientists in ACNP and one of my mentors after I finished my residency until he left Yale and went back to Harvard, was also an analyst. Danny Freedman, who was the president of ACNP, one of its founders and one of the pioneers of biologic psychiatry, was my key mentor during my residency days and for many years after, and he was an analyst as well.

*Tone:* But it required Senate confirmation.

**Kleber:** At the same time, a number of scientific organizations began to write letters supporting my nomination: ACNP, APA, AMA, CPDD, and thousands of school superintendents among many other groups. In any event, the White House, the President, did nominate me finally.

(Herbert D. Kleber interviewed by Andrea Tone; Volume 6.)

### **KLEINMAN (1987)**

*Bromley:* Was your research, then, around schizophrenia?

**Kleinman:** And I convinced one of the former presidents of the ACNP, Daniel X. Freedman, to write a letter for me to help me to get into the NIH.

(Joel E. Kleinman interviewed by Elizabeth Bromley; Volume 8.)

### **OVERALL (1968)**

*Ban:* Would it be fair to say that your relationship with Leo Hollister played an especially important role in directing focus of your career toward clinical psychopharmacology research?

**Overall:** Yes, he was instrumental in moving my career toward clinical psychopharmacology and membership in the ACNP, as well. He was a charter member of ACNP, helped organize the first formal meeting, and later became President of the organization. I was not a charter member, but under his shadow I attended the early meetings and was voted into membership by the 3rd or 4th annual meeting, I believe.

*Ban:* You made passing some reference to both the ACNP and ECDEU. Could you say something about your involvement in both?

**Overall:** My recollections are more from participation in the Early Clinical Drug Evaluation Units. I was not a charter member of either organization, but I believe that I became affiliated with the ECDEU as a collaborator of Leo Hollister no later than its second or third meeting. Actually, “membership” was not as clearly defined, at least in my mind, as it was for the ACNP, which was organized more like a college fraternity.

*Ban:* Can you remember who the original ECDEU investigators were when the meetings were held around that single table on the NIMH campus in Bethesda?

**Overall:** It has been a pretty long time now, and it is quite possible that I will confuse memberships in the ACNP and ECDEU, in particular.

*Ban:* Can you recall some of the early recipients of the NIMH grants that were a foundation for the ECDEU program?

**Overall:** Richard Wittenborn was a psychologist identified with the earliest days of the ECDEU program. He later held the office of Secretary-Treasurer of the ACNP for many years. Another psychologist that figured prominently in ACNP history was Albert DiMascio, in whose name an annual memorial lecture is presented at Tufts University

*Ban:* I think George Simpson and Don Gallant were there from the beginning.

**Overall:** I have undoubtedly named a number that were not in that group in the beginning, but I remember them all as contributing in recognizable ways to shaping the course of early clinical psychopharmacology research through participation in the ECDEU, ACNP, or most likely in both.

*Ban:* We have talked about your early involvement in ECDEU/NCDEU. You did mention the importance of relationships that you developed with European psychiatrists and psychopharmacologists through your affiliation with the CINP. Would you enlarge on that a bit more?

**Overall:** The CINP has not been just another organization to me. While my difficulty in distinguishing between the important early associations in ECDEU and ACNP has been apparent, that is much less true of the early influences on my personal and professional career that can be attributed to affiliation with the CINP

(John E. Overall interviewed by Thomas A. Ban; Volume 4.)

### **PAYKEL (1981)**

*Ban:* You have given several prestigious lectures.

**Paykel:** Well I was the annual guest lecturer some years ago for the ACNP and, as you might guess, I spoke about antidepressants

[Eugene S. Paykel (1981,) interviewed by Thomas A. Ban; Volume 4.]

### **RASKIN (1970)**

*Hollister:* Yes and a lot of your material came from the NCDEU.

**Raskin:** Right, actually, the ACNP for a while, but now they have cut that out. (Allen Raskin interviewed by Leo E. Hollister; Volume 4.)

### **SCHILDKRAUT (1966)**

*Healy:* How it was going to go, right?

**Schildkraut:** But my sense was it could end up happily for me either way and its very gratifying thirty plus years later to see that it wound up where it did, being interviewed by David Healy for the archives of the ACNP and good talking with you. (Joseph J. Schildkraut interviewed by David Healy; Volume 5.)

### **SCHUCKIT (1976)**

*Tone:* I'm going to push you on this point. If you look at the programs at ACNP or CINP, there's not a lot of intellectual space being devoted to alcoholism. Why is that?

**Schuckit:** I don't know. I think that's changing and I think we may see some symposia, not just ACNP, but like American Psychiatric Association and other meetings, of focusing more on alcohol and drug treatment (Marc A. Schuckit interviewed by Andrea Tone; Volume 6.)

### **SCHUSTER (1970)**

*Ban:* Wasn't Len Cook there at the time?

**Schuster:** Well, Len Cook was there. We got technicians and, suddenly, the board of directors said, wait a minute, who's in charge of that program and they said, well, this guy and Mr. Schuster, and they said, we don't have PhD in charge; we've got to get somebody in there, you know, and, so, they decided that they needed to get a doctorate person with a doctorate, so that was Roger Kelleher, who is now deceased, but he was a member of ACNP.

*Ban:* At the University of Chicago?

**Schuster:** And, in the laboratory, at that time, were some important people, who are members of ACNP, one of whom also happens to be my wife and that is Dr. Chris-Ellen Johanson, who was a Fellow this Society and was a graduate student at the University of Chicago and did research in the primate laboratory there. Dr. Marian Fischman was also a Fellow in this Society, who first did animal research, looking at the neurotoxicity of methamphetamine, a topic that we're going to discuss here in 1999, tomorrow night. I'm part of a panel to discuss that, and many, many other people, but those are just two of the people that popped to mind (Charles R. Schuster interviewed by Thomas A. Ban; Volume 6.)

### **STAHL (1984)**

*Tone:* Tell who your mentors were at this time, or do you see yourself as participating in any kind of larger collaborative effort?

**Stahl:** At the University of Chicago I picked up two important mentors, one of which was my PhD supervisor, Herb Meltzer. I got my PhD with Herb and, also, during that period of time, I was sort of adopted by Danny Freedman, who's a distinguished past leader of the ACNP and other organizations.

(Stephen M Stahl interviewed by Andrea Tone; Volume 8.)

### **SUGERMAN (1967)**

*Ban:* When did you become a member?

**Sugerman:** I must have become a member about 1964 and became a fellow in '67.

*Ban:* So, it was about 38 years ago. Have you served on any of the committees?

**Sugerman:** No, I never volunteered for anything.

(A. Arthur Sugerman interviewed by Thomas A. Ban; Volume 4.)

### **TOLLEFSON (1987)**

*Braslow:* Are you sure?

**Tollefson:** I think maybe one thing that I would like to end with: and that is about future. So, let's just look forward and say that the drug industry, by and large, significantly reduces the funding for research into psychiatric disease ten years from now; what is that going to mean for the College and for the people working in neuropsychopharmacology? I think there are some issues that are really going to be quite challenging for us.

(Gary D. Tollefson interviewed by Joel Braslow; Volume 8.)

### **WAY (1969)**

*De Lisi:* Since this is an interview for the ACNP, I was wondering when you became a member of the ACNP?

**Way:** In 1969 and I'm, a Life Fellow Emeritus.

*De Lisi:* Were you one of the founding members?

**Way:** No, ACNP started in 1961.

(Leong E. Way interviewed by Lynn de Lisi; Volume 6.)

### **WENDER (1975)**

*Ban:* When did you become a member of ACNP?

**Wender:** I think 1975, I'm not sure.

(Paul H. Wender interviewed by Thomas A. Ban; Volume 7.)

**Thomas A. Ban**

POSTSCRIPT TO THE SERIES

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Acknowledgments



## POSTSCRIPT TO THE SERIES

An Oral History of Neuropsychopharmacology is based on the transcripts of 235 videotaped peer interviews with 213 clinicians and basic scientists who contributed to the field during the first epoch of its development. The original collection of videotapes is stored in ACNP's Archives in Los Angeles.\*

The transcripts in this series and the videotapes are not identical. To clarify ambiguous information in the interviews, the transcripts of the videotapes were edited. Furthermore, to ascertain that the edited transcripts express interviewees' contributions and thoughts as closely as possible, interviewees were allowed to correct and if necessary, revise the text. Additions had to be restricted to research contributions or events that occurred before the date of the interview.

The interviews cover a wide range of topics.

To sort out the great variety of information on the videotapes, each transcript was assigned to one of ten volumes, each volume dedicated to a different area of research. In each volume the story of neuropsychopharmacology is told from a different vantage point. The differences in perspective on the history of the field are also reflected in the introductions of the volume editors which pull together the individual presentations in each volume.

Each volume in the series is connected to the next by the preface of the series editor. By identifying interviewees' salient research contributions and placing this work in the context of the development of the field, they draw together the information in the interviews into a *macro- and micro-history* of neuropsychopharmacology from the early 1950s to the end of the 1990s. An overview of this history is provided in a chronological list of selected publications presented in Appendix A that supplements the series.

The interviews were not restricted to contributions to research but included also personal information on the interviewees. Biographic data, *dramatis personae* and a characteristic quotation extracted from each transcript presented in Appendix B, together with the contributions, make A History of Neuropsychopharmacology, a comprehensive source book for the first fifty years of the field.

### ***Neuropsychopharmacology***

Neuropsychopharmacology studies the relationship between neuronal and mental events with centrally acting drugs. The birth of the field in the late 1950s

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\* ACNP's Archives is at the UCLA-ACNP Center for the Study of the History of Neuropsychopharmacology in the Louise M. Darling Biomedical Library of the University of California in Los Angeles.

was triggered by the introduction of a series of therapeutically effective psychotropic drugs in mental illness and by the development of a technology for tracking in the brain the relevant molecular changes to their mode of action. Progress in the field depends on interaction between basic scientists and clinical researchers.

To facilitate progress in the field by the early 1960s two major neuropsychopharmacology associations were founded: the Collegium Internationale Neuro-Psychopharmacologicum in 1957 and the American College of Neuropsychopharmacology in 1961. The objective of both associations was “to encourage and promote scientific study, teaching and application of neuropsychopharmacology” by providing a platform for neuropharmacologists and psychopharmacologists to interact.\* It was envisaged that interaction will narrow the gap and harmonize activities between the two disciplines, but this did not happen. Instead, as time passed, the gap between basic and clinical research widened. By the mid-1980s it was so wide that communication between neuropharmacologists and psychopharmacologists became difficult. By the end of the 20<sup>th</sup> century, for the clinical researchers, the technical language spoken by basic scientists became virtually incomprehensible, and for the basic scientists the clinical information generated by psychiatrists did not provide the necessary feedback. The breakdown in communication interfered with progress in neuropsychopharmacological research and the development of drugs for the treatment of mental illness.

### ***Psychotropic Drugs***

Pharmacotherapy in psychiatry began in the second half of the 19<sup>th</sup> century with the use of morphine, apomorphine and hyoscine for controlling excitement, agitation and aggression; paraldehyde and chloral hydrate for calming and inducing sleep; and potassium bromide for relieving restlessness, anxiety and tension. As a result of the introduction of these drugs, by the 1890s the milieu in psychiatric hospitals was transformed. In the first half of the 20<sup>th</sup> century a series of sedative barbiturates and stimulant amphetamines were introduced, followed by two vitamins, nicotinic acid and thiamin, an antibiotic, penicillin, and an anticonvulsant, diphenylhydantoin. By virtually eliminating cerebral pellagra and cerebral syphilis and markedly reducing the number of institutionalized patients with epilepsy and the Wernicke-Korsakoff amnesic syndrome, the introduction of these drugs transformed the diagnostic distribution of hospitalized psychiatric patients.

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\* In the initial membership of both Colleges clinical researchers were in majority. This is no longer the case in the ACNP; researchers with representation from a wide variety of disciplines from molecular biology to social epidemiology, outnumber clinical researchers in the membership.

The story covered in this series begins after this prelude, with the introduction of the first set of psychotropic drugs for the pharmacological treatment of mental illness in the 1950s. It included lithium for manic-depressive disease, chlorpromazine for psychoses and especially for the schizophrenias, meprobamate for anxiety states, and iproniazid and imipramine for depressive illness. The commercial success of these drugs stimulated the pharmaceutical industry to further develop psychotropic drugs and by the end of the 1950s there were 22 similar drugs available for use in psychiatry. In the years that followed their number grew and by the end of the 20<sup>th</sup> century, when our story ends, they were 53 psychotropic drugs, including 28 anti-psychotics, 13 antidepressants, 10 anxiolytics, and three mood stabilizers available for clinical use in Canada, with a few more in some European countries and a few less in the United States. In the course of this process the primary site of psychiatric practice shifted from the hospitals to the community.

The therapeutic success of the first set of psychotropic drugs in *some patients* stimulated research to study their mode of action in the hope that it would provide the necessary information on the pathophysiology of mental disease for developing more selective and effective psychotropic drugs. This, again, did not happen. None of the newer drugs were more effective or selective than the prototypes introduced in the 1950s. In fact, as time passed, the clinical indications of individual psychotropic drugs widened instead of narrowed. By the end of the 20<sup>th</sup> century the indication of many antipsychotics was extended to bipolar disorder, and the indication of many antidepressants to anxiety disorders.

### **Neuropharmacology**

The driving force in these developments was first behavioral pharmacological research by developing behavioral screens for identifying similar drugs to the prototypes, and then, neuropharmacological research by studying the mode of action of psychotropic drugs in the brain. The idea was that a better understanding of the action of these substances would lead to more effective drugs with fewer side effects.

Instrumental to the shift in pharmacological research from behavioral pharmacology to neuropharmacology in the early 1960s was the detection of chemical neurotransmitters in the brain, the recognition of chemical transmission in the central nervous system and the introduction of the spectrophotofluorimeter. The new instrument had the resolution power to show that the administration

of reserpine decreased, whereas the administration of iproniazid increased the level of serotonin, norepinephrine and their metabolites in the brain.\*

Early neuropharmacological research with psychotropic drugs was focused on the mode of action of antipsychotics and antidepressants.

Research with antipsychotics began in the mid-1950s discovering a linear relationship between the sedative and peripheral antiserotonin effect of chlorpromazine and its congeners. As well, a linear relationship was discovered between their mg/kg potency in pharmacological tests (and corresponding dose requirement in treatments), and their extrapyramidal effects. The turning point in anti-psychotic development was the finding that the nialamide-induced accumulation of O-methylated metabolites of dopamine and norepinephrine was increased in mice treated with chlorpromazine and haloperidol. The postulation in 1963 of a relationship between an assumed dopamine receptor blockade and neuroleptic effects, led to a shift from chlorpromazine-type neuroleptics to haloperidol-type neuroleptics which have greater affinity to dopamine receptors. By the time the dopamine hypothesis was formulated in the mid-1970s, haloperidol-type neuroleptics dominated the treatment of schizophrenias. Then, to undo the harm done by extrapyramidal side effects and especially tardive dyskinesia, haloperidol-type neuroleptics were by and large replaced during the 1990s by clozapine and clozapine-type neuroleptics, which have a low propensity to induce extrapyramidal signs (at the price of producing metabolic side effects). Since clozapine-type neuroleptics, similar to chlorpromazine, have stronger affinity to serotonin receptors than to dopamine receptors, by the end of the 20<sup>th</sup> century, the control of psychosis and treatment of schizophrenia, was back to square one, where it started in the early 1950s.

Neuropharmacological research with antidepressants ran a parallel course with antipsychotics. It began in the late 1950s discovering that imipramine has noradrenergic, serotonergic and anticholinergic properties. Then, in 1960 research with antidepressants in the brain began with the demonstration that imipramine and amitriptyline blocked norepinephrine re-uptake into neurons. It continued with the finding that imipramine's reserpine-reversal was suspended after depletion of catecholamines. The formulation of a catecholamine hypothesis of depression in the mid-1960s encouraged the replacement of imipramine-type, non-selective, but prevalingly norepinephrine reuptake inhibitors, with selective, desipramine-type, norepinephrine re-uptake inhibitors in the treatment of depression. The turning point in antidepressant development was the recognition that norepinephrine re-uptake inhibitors become serotonin re-uptake inhibitors by halogenation, that an intact serotonin system is

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\* At the time of these experiments were conducted it was already known that the monoamine neurotransmitters, serotonin and norepinephrine are present in the brain. It was also known that iproniazide inhibits monoamine oxidase and produced euphoria in some tubercular patients, and reserpine produced depression in a few hypertensive patients.

prerequisite for  $\beta$ -adrenoreceptor down regulation, and the demonstration of a correspondence in 1980 between imipramine binding sites and serotonin binding sites in the human platelet and in the hypothalamus of the rat. The shift from tricyclic antidepressants to selective serotonin re-uptake inhibitors began in the 1980s and by the end of the 1990s selective serotonin re-uptake inhibitors dominated treatment of depression. While their dominance in prescription practices continued, with the introduction of venlafaxine a non-selective, but prevalingly serotonin re-uptake inhibitor, a full circle in antidepressant development was completed; with the introduction of reboxetine, a selective norepinephrine re-uptake inhibitor, the circle that had opened in the early 1960s with desipramine, was reopened in the late 1990s without offering a single antidepressant that was clinically more effective or selective than imipramine, the prototype of monoamine uptake inhibitors, introduced in 1957. Yet, by the time the circle was closed, the conceptual framework of psychiatry was transformed from psychological to biological.

While neuropharmacological research failed to drive psychotropic drug development, it provided the missing link to understand, by the late 1950s, that the neuronal network of the brain, charted out at the turn of the 20<sup>th</sup> century, functioned by monoamine neurotransmitter release from vesicles at the pre-synaptic site of the synaptic cleft. The subsequent mapping of neurotransmitter pathways in the neuronal network in the 1960s together with the accumulating knowledge on the role of the different pathways in mental activity, made it feasible to start studying the relationship between neuronal and mental processing in the brain. In the years that followed, a steadily growing number of neurotransmitters were detected in the brain and interest shifted from norepinephrine, serotonin and dopamine to glutamate and  $\gamma$ -aminobutyric acid, the most extensively distributed excitatory and inhibitory neurotransmitters in the central nervous system. Furthermore, it was recognized that some of the neuropeptides function in the brain as neurotransmitters, that glial cells also are involved in neurotransmitter re-uptake, and not only nerve cells, and that communication within the brain is not restricted to wiring - synaptic transmission that uses chemical transmitters, but also includes a volume transmission occurring in the extracellular fluid that uses trophic factors, ions and gases as neurotransmitters.

During its first fifty years, neuropharmacology research moved from the study of psychotropic drugs in pre-synaptic events in the 1960s to the study of membrane receptors in the 1970s, to second messenger mediated activation of protein kinases in the 1980s, and to early gene expressions in the 1990s.

By the end of the 20<sup>th</sup> century it was recognized that the primary targets of psychotropic drugs in the brain are all encoded by genes that have been identified. Thus, at this point, the neurotransmitter era, the first epoch in the

history of neuropsychopharmacology ended, and a new epoch the molecular genetic era in neuropsychopharmacology began. As the populations within psychiatric diagnoses have remained pharmacologically heterogeneous, neuropsychopharmacologists in the new era were confronted with the dilemma whether to follow a pharmacogenomic approach guided by the genome or to follow a pharmacogenetic approach guided by a prior identification of pharmacologically homogeneous psychiatric populations, a dilemma, similar to the one that confronted us 50 years before.

### ***Clinical methodology***

The dilemma of methodology first arose in the late 1950s, when early psychotropic drugs focused attention on the pharmacological heterogeneity within psychiatric diagnoses. To meet the requirements of neuropsychopharmacological research, there was a need for a re-evaluation of psychiatric diagnostic concepts. Yet, this did not happen. Instead, a statistical approach, the randomized clinical trial, was adopted for the demonstration of therapeutic efficacy in pharmacologically heterogeneous populations.

A randomized trial requires reliable clinical end points and instruments for the assessment of change. To meet these requirements consensus-based diagnoses and psychiatric rating scales were adopted. The methodology was further strengthened by the adoption of power statistics to prevent Type II or  $\beta$ -error error owing to insufficient sample sizes. By the 1990s multi-center clinical investigations designed with power statistics replaced single-center trials in the development of psychotropic drugs. This clinical methodology was eminently suited for the demonstration of therapeutic efficacy in a pharmacologically heterogeneous diagnostic population even if only a small proportion of patients in the sample were responsive to the drug. It was with the help of this methodology that pharmacotherapy became the primary form of treatment for the schizophrenias in the 1960s, for depressions and bipolar disease in the '70s, for anxiety disorders in the '80s, and for the dementias in the 1990s. By the end of the 20th century pharmacotherapy with psychotropic drugs dominated treatment in psychiatry.

As the use of psychotropic drugs developed with this methodology increased, psychopathology was gradually replaced by psychiatric rating scale variables and psychiatric nosology gave way to consensus-based diagnostic algorithms.\* This led to an enlargement of the psychiatric populations within

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\* By the end of the 20<sup>th</sup> century, a new generation of psychiatrist grew up well founded in molecular genetics and brain imaging without any knowledge in psychopathology and psychiatric nosology, the disciplines that provide the foundation of modern psychiatry. As a result neuropsychopharmacology research, as well as research in the molecular genetics of psychiatric disorders, is conducted increasingly without psychiatric input.

diagnostic groups and an extension of the scope of psychiatry to include, in addition to pathologies in mental processing, also behavioral anomalies with compromised social functioning. Simultaneously, treatment in psychiatry became evidence-based, albeit the evidence for demonstrated efficacy that was stipulated by regulatory authorities has made drugs available for clinical use even if only 1 in 4 patients was expected to respond favorably. As the pharmacological heterogeneity within psychiatric diagnoses precluded the linking of pharmacodynamic action of drugs to their effect on mental pathology, in the selection from drugs for treatment the primary consideration was their differential propensity for inducing side effects.

Dissatisfaction with the inadequacy of diagnostic concepts in classifications of mental illness led initially to attempts to replace clinical diagnoses by biological indicators, e.g., biochemical and endocrine measures; then, it was recognized in the mid-1980s that without being linked to a well defined clinical entity, these measures “hang in the air”. Re-conceptualization of mental illness in terms of discrete neurobiological deficits offered promise, but the alternative phenotypes of schizophrenia identified, as the abnormality of smooth pursuit eye movements and P-50 evoked response deficit, were encountered several times more frequently in the general population than the schizophrenias. On the positive side: “pharmacological dissection” using iproniazid and other non-selective monoamine oxidase inhibitors led to the delineation and separation of “atypical depression” from the other depressions, and with imipramine to the delineation and separation of panic disorder from the other anxiety disorders. “Composite diagnostic evaluations” provide a capability to detect therapeutic effects in prototype-based diagnoses, covered up by consensus-based diagnoses, as for example “vital depression”, the form of endogenous depression that helped to discover imipramine’s antidepressant effect, and “affect-laden paraphrenia”, the form of schizophrenia in which more than 4 in 5 patients were found, in the mid-1960s, highly responsive to neuroleptics. Finally, “nosologic homotyping” provides the most homogeneous populations of illness, in terms of psychopathology and psychiatric nosology that psychopharmacology can offer for neuropsychopharmacologic research.

### ***Psychopharmacology***

Meanwhile research in all other areas of psychopharmacology continued, to move psychopharmacology from the neurotransmitter into the molecular genetic era.

The roots of psychopharmacology are in the observation in the mid 1840s that “dawamsec,” an electuary of hashish, had a different effect on the melancholic, than on the regressed (“aliéné stupide”) and on the demented. This

observation translates in our current frame of reference into the hypothesis that the proteins encoded by genes in the different diagnostic populations in psychiatry are different, as they respond differently to the same psychotropic drug. The clinical identification of these differently responding populations to the same drug has remained to-date a target of psychopharmacology research.

The scope of the field was extended with the introduction of pharmacopsychology in the 1890s, to the study of the effects of drugs on performance tests. Then, with the introduction of phenomenological psychopathology in the early years of the 20<sup>th</sup> century, the study of psychomimetics on the subjective experiences of mental life began. While phenomenologic explorations with psychomimetics so far has not contributed to psychopharmacology, psychometrics, at the core of pharmacopsychology, was instrumental in developing the clinical methodology used in the past fifty years in the testing of the therapeutic efficacy of psychotropic drugs.

The scope of psychopharmacology was further extended to study the effects of psychomimetic and psychotherapeutic drugs. Studies with psychomimetics began in the early years of the 20<sup>th</sup> century. By the end of the 1950s it was recognized that the psychopathology-induced by mescaline, lysergic acid diethylamide, dimethyltryptamine and phencyclidine resembled the schizophrenias, whereas the psychopathology-induced with Ditan resembled the organic psychoses. In the 1960s studies on the psychopathology induced by psychomimetics was complemented with studies on their neuropharmacology. As interest in neuropharmacology shifted from monoamine to amino acid neurotransmitters, research with phencyclidine, an ant glutamate that blocks NMDA receptors, was intensified.

Studies with psychotherapeutics ran parallel with psychomimetics. Research with these drugs started in the mid-1930s with the discovery that intravenous sodium amobarbital in a low dose could relieve transiently catatonic stupor and psychogenic mutism. Subsequently, it was revealed that those unresponsive to treatment with amobarbital might respond to intravenous methamphetamine, or parenteral chlorpromazine. By the end of the 1930s it was discovered that d, l amphetamine was effective in both, the treatment of narcolepsy and the control of hyperactive children. It was also reported that it could induce psychosis. In the mid-1950s it was recognized that the majority of amphetamine-induced psychosis resemble paranoid schizophrenia.

In the 1970s, a new area of psychopharmacology research emerged: the testing of neuropsychopharmacological hypotheses. The few findings in this area of research are supportive of the dopamine hypothesis of schizophrenia and the serotonin hypothesis of depression. Administration of methylphenidate, a dopamine agonist, produced exacerbation of psychopathology in some patients with chronic schizophrenia, and administration of

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p-chlorophenylalanine, a serotonin synthesis inhibitor, reversed the therapeutic effect of tricyclic antidepressants in some depressed patients, whereas the administration of  $\alpha$ -methylparatyrosine, a catecholamine synthesis inhibitor, did not. Furthermore, physostigmine, an acetylcholinesterase inhibitor improved memory in normal subjects. This finding - together with the early discovery that tetrahydroacridine, another acetylcholinesterase inhibitor, reversed the mental disintegration induced by Ditrane, an anticholinergic substance, and with the demonstration of decreased acetylcholine levels in the brain in Alzheimer's disease - triggered the development of acetylcholinesterase inhibitors for the treatment of Alzheimer's dementia. The first acetylcholinesterase inhibitor "cognitive enhancers" for Alzheimer's disease, were introduced in the 1990s.

Today, molecular genetic research is moving rapidly ahead in the hope of developing new treatments for psychiatric disorders. We hope our series will help preventing the repetition of what went wrong in the first fifty years, and that neuropsychopharmacology in its second epoch will enjoy new success.



## **APPENDIX A**

### *Chronological List of Publications\**

1804

Trotter T. *Essay Medical, Philosophical and Chemical on Drunkness and its Effects on the Human Body*. London: Longman, Hurst, Rees and Orme; 1804.

1806

Sertürner FW. *Darstellung der reinen Mohnsäure (Opiumsäure) nebst einer Chemischen Untersuchung des Opiums mit vorzüglicher Hinsicht auf einen darin neu entdeckten Stoff und dahin gehörigen Bemerkungen*. *Journal der Pharmacie für Ärzte und Apotheken* (Leipzig) 1806; 14: 47–93.

1832

Liebig J. *Über die Verbindungen welche durch die Einwirkung des Chlors auf Alcohol, Aether, Oelbildendes Gas und Effiggeist Entstehen*. *Liebigs Annalen der Pharmazie* 1832; 1: 182–230.

1845

Griesinger W. *Die Pathologie und Therapie der Psychiatrischen Krankheiten*. Stuttgart: Krabbe; 1845.

Moreau de Tours J. *Du Hachich et de L'Aliénation Mentale*. *Etudes Psychologiques*. Paris: Fortin & Masson; 1845.

1849-1851

Huss M. *Alcoholism Chronicus*. Stockholm: CE Fritze; 1849-51.

Baudelaire C. *Du vin et du haschisch*. Paris: Le Messenger de l'Assemblée; 1851

1855

Wood A. *A new method of treating neuralgia by the direct application of opiates to the painful points*. *Edinb Med and Surg J* 1855; 82: 265–81.

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\* Selected list of publications referred to in the series.

1857-1860

Ludlow FH. *The Hashish Eater*. New York: Harper & Brothers; 1857.

Garrod AB. *Gout and Rheumatic Gout*. London: Walton and Moberly; 1858.

Briquet P. *Traite clinique et therapeutique a l'hystérie*. Paris: JB Baillière; 1859.

Baudelaire C. *Les Paradis Artificiels. Libro I*. Paris: Poulet-Malassis et de Broise; 1859-1860.

1864-1865

Thudichum JWL. *A Treatise on the Chemical Constitution of the Brain*. London: Balliere, Tindall and Cox; 1864.

Bernard C. *Introduction a l'étude de la médecine expérimentale*. Paris: Baillière; 1865.

1869

Liebreich MEP. *Das Chloralhydrate, ein neues Hypnoticum und Anaestheticum, und dessen Anwendung in die Medizin. Eine Arzneimittel-Untersuchung*. Berlin: Müller; 1869.

1871

Hammond WA. *A Treatise of Diseases of the Nervous System*. News York: Appleton; 1871.

1881-1882

Wernicke C. *Die acute hemorrhagische Poliencephalitis superior*. In: Wernicke C. *Lehrbuch der Gehirnkrankheiten für Ärzte und Studierende*. Bd II. Kassel: Fischer; 1881. p. 1176-8.

Cervello V. *Über die Physiologische Wirkung des Paraldehyds und Beiträge zu den Studien über das Chloralhydrate*. *Arch Exp Path Pharmacol* 1882; 16: 265–90.

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1884

Freud S. Über Coca. Zentralblatt für die ges Therapie 1884; 2: 289-314.

1886-1887

Lange C. Om Periodiske Depressionstilstande ofderes Patogenese. Copenhagen: Jacob Lunds Forlag; 1886.

Edeleano L. Ueber einige Derivate der Phenylmethacrylsäure und der Phenylbuttersäure. Berl Deutsch Chem Ges 1887; 20: 616-22.

Korsakoff SS. Disturbances of psychic functions in alcoholic paralysis in relation to the disturbances of the psychic structure in multiple neuritis of non-alcoholic in origin. Vestnik klinicheskoi i sudebnoi psikhiiatrii i nevropatologii (St. Petersburg) 1887; 4: 1-102. (In Russian)

1892

Kraepelin E. Über die Beeinflussung einfacher psychischer Vorgänge durch einige Arzneimittel. Jena: Fischer; 1892.

1897

MacLeod N. Morphine habit of long standing cured by bromide poisoning. BMJ 1897; 2: 76-7.

1903

Fischer E, Mering von J. Über eine neue Klasse von Schlafmittels. Ther Ggw 1903; 44: 97-101.

1903

Elliott TR. The action of adrenalin. J Physiol 1905; 32: 401-2.

1909

Bonhoeffer K. Zur Frage der exogenen Psychosen. Neur Zlb 1909; 32: 499-505.

1913-1914

Knauer A, Maloney WM. Psychic action of mescaline. *J Nerv Ment Dis* 1913; 40: 425-40.

Dale HH. The action of certain esters and ethers and choline, and their relation to muscarine. *J Pharmacol* 1914; 6: 147-90.

Nascher IL. *The Diseases of Old Age and Their Treatment*. Philadelphia: P. Blackstone's Sons & Co; 1914.

1920-1921

Macht DL. Contributions to psychopharmacology. *Bull Johns Hopkins Hosp* 1920; 31: 167-73.

Loewi O. Über humorale übertragbarkeit der Herzenwirkung. *Pflügers Archiv* 1921; 189: 232-42.

1925-1929

Shonle R. Peyote, the giver of visions. *American Anthropologist* 1925; 27: 53-75.

Jansen BCP, Donath WF. On the isolation of antiberiberi vitamin. *Proc K Ned Akad Wet* 1926; 29: 1390-400.

Alles GA. The comparative physiological action of phenylethanolamine. *J Pharmacol* 1927; 32: 121-33.

Beringer K. *Mescaline Intoxication*. Berlin: Springer; 1927.

Kliver H. *Mescal: The Divine Plant*. London: Kegan; 1928.

Fleming A. On the antibacterial action of cultures of penicillium with special reference to their use in the isolation of B influenzae. *Br J Exp Pathol* 1929; 10: 226-36.

1931

Bernheim NLC. Tyramine oxidation. II. The course of oxidation. *J Biol Chem* 1931; 155: 299-309.

Freeman W. Psychochemistry: Some physicochemical factors in mental disorders. *JAMA* 1931; 97: 293–6.

Lewin L. *Phantastica: Narcotic and Stimulating Drugs. Their Use and Abuse.* London: Routledge; 1931.

Von Euler US, Gaddum JH. An unidentified depressant substance in certain tissue extracts. *J Physiol (London)* 1931; 1: 72-4.

#### 1932-1933

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## **APPENDIX B**

### *Selected Quotation from Each Transcript\**

#### **Editors Team**

“You can do the same kind of research in internal medicine as in psychiatry. The neurotransmitters play just as much a role in hypertension as in mental illness.” - Manfred Ackenheil (8)

“Asking the right questions is the key to productive and meaningful research.” - Martin W. Adler (6)

“Probably all schizoprenias are not the same.” - George Aghajanian (2)

“If you are going to homogenize the brain, you have lost every hope of finding out what’s going on.” - Bernard W. Agranoff (3)

“I want my students to feel that they can be free to disagree, to engage me in discussions and that they will build enough self confidence and kind of individual style that they can inspire the next generation.” - Huda Akil (3)

“If you publish in the United States the whole world knows about it.” - Hagop S. Akiskal (7)

“Clinical biology without application in community based care is empty, and services research not rooted in clinical biology is blind.” - George S. Alexopoulos (7)

“So, imaging tools, at this moment, in psychiatry are very important because they’re helping us understand the ways that the brain isn’t working right, in general, but they’re not telling us that this illness or this person should have this treatment.” - Nancy Andreasen (2)

We call a guy who is hyperaroused, referential and fearful, paranoid, and we also call paranoid a guy who is completely delusional but indifferent and says, oh, yes, the Mafia has been after me for fifteen years. They must be different.” - Burt Angrist (5)

“The brain is an almost sacred realm, the protected organ.” - Victoria Arango (7)

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\* Number in parenthesis indicates the volume in which the transcript is included.

“.....I think until we can develop better ways of treating drug abuse we are going to have an ongoing problem.” - Joseph Autry III (4)

“Most of the experiments don’t work out.....But once an experiment works, there is nothing like it!” - Julius Axelrod (3)

“I was sort of a St. John the Baptist in the wilderness preaching the gospel of the psychopharmaceuticals and their potential value for people.” - Frank J. Ayd Jr (1)

“Sometimes it isn’t just science which produces something but a series of coincidences.” - Frank J Ayd Jr (9)

“If you had experience with insulin coma therapy you know that you have to be extremely careful because you can easily induce severe, perhaps, irreversible hypoglycemia.” - Frank J. Ayd Jr (10)

“The new psychopharmacological treatments were just beginning to be considered, but with great reluctance and ambivalence at best, and were not used routinely until well into the 1960s.” - Ross J. Baldessarini (5)

“It is difficult for me to see how research could contribute to the development of a field if it is not done in a historical context.” - Thomas A. Ban (4)

“.....the meaningfulness of biological, including psychopharmacological findings, depends upon whether they can be linked to a prior, valid diagnostic category based on psychopathology and psychiatric nosology.” - Thomas A. Ban (9)

“.....this next fifty years is going to be unbelievable because we finally have real genetic tools, real imaging tools and real biochemical tools to study the multitude of systems and neurotransmitter systems.” - Jack D. Barchas (3)

“I brought the attitude of molecular science to psychiatry.” - Samuel H. Barondes (3)

“Intoxication is a way to be dependent on alcohol or another drug and, at the same time, to deny one’s pharmacological dependence.” - Herbert Barry III (6)

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“Dictionaries are a necessary evil within clinical trials.....necessary to bring order to verbatim or free text descriptions of signs and symptoms to allow analysis.” - Charles M. Beasley Jr (8)

“.....one of our major problems in psychopharmacology is that a large percentage of what we find can't be replicated.” - Robert H. Belmaker (5)

“What is called anxiety in schizophrenia might be fear. The schizophrenic is afraid of the content of his hallucinations.” - Frank M. Berger (3)

“In medical science everything should be published. It should be public so that other people can use it to develop even better drugs.” - Frank M. Berger (9)

“America is the only industrialized nation in which health care is treated as a commodity, like cars or clothes.” - Barry Blackwell (4)

“Substance use often dramatically and negatively impacts on the individual's daily functioning; Clinicians and researchers must develop medications and behavioral therapies that control addiction and facilitate rehabilitation to more functional lives.” - Jack Blaine (6)

“The pharmaceutical revolution has led to the false assumption that, because we have drugs, treating mental illness is simple.” - Dan G. Blazer (7)

“The problem now is that there is so much knowledge that just discussing the new discoveries crimps the amount of mental time that you can devote to trying to put those together.” - Floyd E. Bloom (2)

“One of the things that have been particularly gratifying in working in bipolar disorder is the intellectual and emotional investment in this illness of families and patients with the disorder.” - Charles L. Bowden (4)

“At a meeting in Geneva in 1964 I proposed the hypothesis that chlorpromazine had an action in the brain stem, similar to that of de-afferentation, and this could explain its clinical actions but it did not arouse much interest.” - Philip B. Bradley (2)

“No matter what new fad comes along, whether it is microwaves, whether is electroshock, whether it is drugs, whether it is space, everybody wants to know what the effect is upon behavior.” - Joseph V. Brady (1)

“The antipsychotics work, I think, a little bit better for positive symptoms of schizophrenia than the antidepressants for depression.” - Walter A. Brown (5)

“The residents don’t have to become scientists but they should learn to read a paper and they should know how to evaluate new treatments, new thoughts about diagnosis, and I think science is the way to learn that.” - William E. Bunney Jr (5)

“Well, at that time I thought that different neurotransmitters were associated with different kinds of processes in the brain. I thought that there is a grand scheme of things that causes different neurotransmitters to be associated with different cognitive operations.” - Enoch Calloway III (2)

“I think if we look a little bit more ahead, may be, ten years from now, I wouldn’t be surprised if the glutamate area is going to be very important in the field of psychosis.” - Arvid Carlsson (3)

“Our studies led to an appreciation that there are different components of schizophrenia that run different courses.....and that reality distortion symptoms, even special forms of it, are common in psychosis and not of much prognostic significance.” - William T. Carpenter Jr (5)

“It was believed for hundreds of years that when people got crazy that was the end of it. Now we were saying that one can give them a pill and they will get better.” - Charles Jelleff Carr (1)

“.....having an abnormal DST is, by and large, a pretty bad thing to have for longitudinal course. The data are that it predicts suicide.” - Bernard J. Carroll (5)

“You can’t teach if you don’t like to communicate.” - Eva Ceskova (8)

“A balance has to exist in academic psychiatry between clinical work and research. You cannot just teach psychiatry in theory. Research has to move concurrently with clinical excellence.” - Kanellos D. Charalampous (6)

“.....you did have to keep learning as a scientist, to be able make the right decisions. - Dennis S. Charney (8)

“I started a lab that spanned the whole spectrum but focused on the needs of patients with neurodegenerative disease. Now it’s called translational research.” - Thomas N. Chase (7)

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“My main goal in research has been to improve the immediate treatment of patients.” - Guy Chouinard (5)

“Kraepelin was our bible. We were only taught evidence based psychiatry.” - Paula J. Clayton (7)

“I’d like to see psychodynamic therapy and pharmacotherapy brought together.” - Robert Cohen (1)

“I modeled the ECDEU program on a program Nathan Eddy was running for problems of drug dependence.” - Jonathan O. Cole (4)

“I would like to see clinicians and basic scientists getting closer together.” - Jonathan O. Cole (9)

“.....if you’re working with a drug in 100 patients and few of them hadn’t said, ‘Wow, do I feel better’ then you probably haven’t missed anything and it probably isn’t going to turn out better than the placebo.” - Jonathan O. Cole (10)

“Parents and teachers are the natural measuring instruments for assessing the impact of a drug.” - C. Keith Conners (7)

“Whatever pharmacological action selectively inhibits the conditioned avoidance it’s strongly correlated and probably reflective of the psychotherapeutic effect in schizophrenia and severe mental and emotional disorders.” - Leonard Cook (1)

“One receptor does many other things than the one you are interested in.” - Erminio Costa (7)

“.....we’ll find there will be whole new ways of categorizing disorders and that the treatments will really be much more focused on etiology, genetic ideology, but also to a certain extent, environmental contributions.” - Joseph T. Coyle (8)

“.....if you understand how the receptor is built, 3-dimensionally, then you can understand its function.” - Svein G. Dahl (7)

“I think my most important contributions were the mapping of the monoaminergic pathways in the brain, and almost equally important, was the discovery of the axonal transport mechanism.” - Annica Dahlström (3)

“I did my internship at Mass. General in 1960 and '61, residency from '61 to '64. It was in the psychoanalytic era. Drugs were just coming into use.” - John M. Davis (5)

“I worry a great deal about the future of our field and about the future of medicine. I think we have to speak much more loudly and effectively for what are the long term benefits of scientific breakthroughs of medicine.” - Kenneth L. Davis (8)

“.....I decided that I will continue doing something which is, perhaps, even more important than research, and that is thinking about ethics, about the philosophical implications of research implanting electrodes, injecting chemicals into the brain.” - Jose Delgado (2)

“It is acknowledged that the addition of lithium potentiates the therapeutic effect of antidepressants in treatment refractory depression.” - Claude de Montigny (5)

“No matter how seductive we are, how well we teach, and what good role models we are, 80% of our graduates are going into private practice and it is important that we teach them how to remain up to date and to evaluate what they do.” - Thomas Detre (1)

“I felt time has come to establish a department of psychiatry which would first and foremost concentrate on translational and strictly clinical research to improve the management of the patients.” - Thomas Detre (10)

“I've never generated hypotheses. I followed Isaac Newton to not make hypotheses.” - Peter B. Dews (1)

“Discussing the importance of a hypothesis, Dr. Brodie made the remark that you always have to start with a hypothesis that is so simple that it almost has to be wrong to begin with because any simple wrong hypothesis will, ultimately, evolve in a more accurate complex hypothesis.” - James V. Dingell (3)

“Who would have believed that a goofy compound like PCP would be abused?” - Edward F. Domino (1)

“I was always in the right place at the right time.” - David L. Dunner (7)

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“I developed a technique for cannulating the lateral ventricle of the chaired rhesus monkey and collecting continuous samples of CSF for days or weeks at a time.” - Michael H. Ebert (8)

“It seemed at the time that everything we touched was statistically significant.” - Burr S. Eichelman (7)

“I tried to be a good gardener and cultivate transdisciplinarians.” - Joel Elkes (1).

“.....I had experimented with the term ‘experimental psychiatry’ in my head for some six months; a department which brings experiments to psychiatry, and I called the department, Department of Experimental Psychiatry.” - Joel Elkes (10)

“From the beginning I was interested in science and doing experiments. I wanted to see what would happen if I planted seeds from beans in my father’s worm bed.” - Jean Endicott (7)

“You can manipulate genes all you want, but are missing important insights unless you can phenotype the animal as well.” - Salvatore J. Enna (3)

“.....to find out that those patients that had committed suicide had elevated steroids just prior to their suicide was the first finding of hyperadrenal function preceding suicide.” - Jan A. Fawcett (5)

“It became evident to me that the change in sleep across adolescence was one component of a major brain reorganization that is taking place during adolescence.” - Irwin Feinberg (2)

“Let’s get rid of these useless concepts or syndromes, useless for research purposes. Let’s start focusing on endophenotypes!” - H. Christian Fibiger (3)

“...catatonia is a different entity than schizophrenia, which doesn’t ordinarily respond well to ECT.” - Max Fink (2)

“.....human pharmaco-EEG became a predictor of clinical effects of psychoactive drugs.” - Max Fink (9)

“We’re supposed to be taking care of people, not making money.” - Barbara Fish (6)

“I kind of got here by accident. I had good library and writing skills.” - Ellen Frank (8)

“I have always tried to go back and forth between the clinical domain, the pre-clinical domain, and design preclinical experiments that have some therapeutic relevance.” - Alan Frazer (3)

“.....the Akerfeldt test might well be based on differences in activity levels or on diet, as patients in state hospitals weren’t regularly given orange juice.” - Arnold J. Friedhoff (5)

“We cannot emphasize sufficiently the enormous contribution psychopharmacology has made to the care of the seriously mentally ill.” - Alfred M. Freedman (1)

“In the 1960’s, we mapped the major DA, NA and 5HT pathways. I believe it was the dawn of chemical neuroanatomy.” - Kjell Fuxe (3)

“.....we came to the conclusion that tardive dyskinesia really was not as malignant as usually perceived. After five or ten years, patients managed well and got better rather than worse.” - George Gardos (4)

“In order to progress we need to find a way to dissociate the development of the drug from the question of profit.” - Silvio Garattini (3)

“Everybody is criticizing consensus-based classifications, but keep on using them.” - Peter Gaszner (8)

“My whole career can be summed up with one basic question, where is the lesion?” - Mark S. George (7)

“The central thing we found with lithium is that its efficacy is restricted to pure bipolar disease.” - Samuel Gershon (1)

“.....another interesting part of this story is the ‘antidepressant’ effect of sleep deprivation in depressed patients. - J. Christian Gillin (2)

“Depression is a disease of the whole body.” - Alexander H. Glassman (7)

“I tend to be a sort of a low-key person, someone that’s part of the team, rather, than, necessarily, the team leader.” - Burton J. Goldstein (4)

“We got all of these useful drugs in the 1960s and ‘70s and, then, there’s been a gradual drop off.” - Ira D. Glick (8)

“.....we found that they were cyclic depressed patients, regardless of polarity, who responded to lithium.” - Frederick K. Goodwin (5)

“I’ve been occupied with developing or asking for the best and most precise and ingenious methods of measurement.” - Louis A. Gottschalk (1)

“Psychiatry is not just a biological science, but involves a person’s behavior in society.” - Louis A. Gottschalk (9)

“The hope that DST could become the first laboratory test in psychiatry for deciding whether one deals with a depressive illness that requires medication for intervention or not created a great deal of excitement in the US about the test.” - John F. Greden (5)

“It’s clear that the synapsins play a very critical role in the formation of synapses and in the stabilization of synapses.” - Paul Greengard (3)

“.....hydroxybupropion inhibits norepinephine reuptake whereas bupropion itself inhibits dopamine reuptake.” - Angelos Halaris (5)

“There is a negative correlation between the grants I got funded and how innovative they were.” - Uriel Halbreich (7)

“The future direction of research in the field of eating disorders now lies in the genetic research aspect.” - Katherine A. Halmi (7)

“I think that the dream-sleep cycle is a basic cycle of the body, and it relates not just specifically to a human need to dream for discharging thoughts.” - Ernest Hartmann (2)

“I would like to see an organization that would be above the FDA that would have health as its main concern, not just the regulatory issues, and that that organization would be able to order the FDA to give individual investigators access to proprietary information that is on file with the pharmaceutical companies.” - George R. Heninger (8)

“The brain is so damn complex.” - Fritz A. Henn (8)

“My only criticism of Kraepelin is that his idea that of nosological entities was too narrow.” - Hanns F. Hippus (1)

“The more managed care has taken over, the less likely clinicians or providers are to be able to implement evidence-based treatments.” - Gerard E. Hogarty (4)

“If you watch your patients, you can learn a lot.” - Leo E. Hollister (1)

“There are some things in psychiatric nosology that are completely overlooked and some that become myths, like the fact that the conventional antipsychotics don't affect negative symptoms. That's one of the biggest myths ever perpetuated.” – Leo E. Hollister (9)

“.....every science moves by correcting and changing even the great science of chemistry.” - Philip Holzman (2)

“.....drugs, which have certain therapeutic effect, show similar EEG changes.” - Turan M. Itil (2)

“Placebo is a wonderful drug; it has an effect in psychoses in about 30%, in anxiety 50%, and in depression 40%.” - Turan M. Itil (9)

“Having worked with neuropeptide pharmacology for thirty years, it was gratifying to see some practical outcome from all that.” - Leslie L. Iversen (3)

“We are going to make treatment so available that nobody can say they committed a crime because they couldn't get treatment.” - Jerome H. Jaffe (6)

“I proposed the adrenergic-cholinergic hypothesis of mania and depression.” - David S. Janowsky (5)

“I went into psychiatry, in part because psychopharmacology was a new frontier.” - David S. Janowsky (9)

“I think the One Trial Learning procedure which I worked out for mice, I consider important.” - Murray M. Jarvik (3)

“I think that addicts should be treated like anybody else who has a disease.” - Donald R. Jasinski (6)

“Right now we differentiate all these disorders on the basis of clinical symptoms. I think that is not going to stand the test of biology.” - Dilip V. Jeste (7)

“I firmly believe that drug development is going to be genetically directed.” - Lewis L. Judd (8)

“The drug therapies, also, have had some effect, except we perhaps reach twenty percent of addicts, at any one time, with a drug program like methadone. So, we are not winning this battle.” - Samuel Kaim (2)

“I am the delusional optimist and one of the reasons that I have enjoyed biology is that it is optimistic to the extent that’s delusional.” - Eric R. Kandel (3)

“.....I think very high quality clinical research is not given the recognition and support that it needs.” - John M. Kane (4)

“I am very satisfied with the advancements in our science.” - Shitij Kapur (5)

“All my scientific life I was in love with cholinergic mechanisms, and I am quite chauvinistic when it comes to cholinergic.” - Alexander G. Karczmar (3)

“We made the point that drugs, themselves, don’t work specifically on a disorder.” - Martin M. Katz. (4)

“Another problem is assuming that all classes of antidepressants we have now are initially affecting the same symptoms. That’s another of the myths in the field.” - Martin M. Katz (9)

“.....we still have not created those components that cross biological and behavioral spheres, a process that is necessary in order to understand how the drugs work.” - Martin M. Katz (10)

“I decided I would select an enzyme reaction where you couldn’t easily write the equation. If the reaction was so mysterious there might be something unknown, something interesting.” - Seymour Kaufman (7)

“I’ve seen a lot of patients with schizophrenia and just as a non-psychiatrist there seem to be a wide range in terms of life history, cognitive and behavioral differences among these subjects.” - Robert Kessler (2)

“.....I came home and I told Josephine that they wanted to give me a free psychoanalysis and she said, ‘If they offered to take your appendix out for nothing, would you let them do it?’” - Seymour S. Kety (2)

“We feel that primate research is an important bridge from preclinical to clinical studies.” - Eva and Keith Killam (2)

“If anyone tells you they have *the* therapy for addiction, they’re lying, either to you, themselves, or both; there is no one therapy.” - Herbert D. Kleber (6)

“In a way chlorpromazine was a real awakening for me as well as for the patients. I can’t think of a better eye opener than that for a young psychiatrist at the dawn of the psychopharmacology revolution.” - Gerald D. Klee (6)

“We did one of the first controlled studies on mepazine a drug that everyone said was terrific because it didn’t cause all those terrible side effects and mental confusion like other phenothiazines. The only trouble with it was that it didn’t work.” - Donald F. Klein (4)

“People become confused between pharmacological dissection and pharmacological amalgamation. They think if two conditions respond to the same drug it must be the same condition.” - Donald F. Klein (9)

“I’m not an easy believer and don’t join band wagons easily; that’s probably why I went into research.” - Rachel G Klein (7)

“There was a great deal of public opinion about what was considered the “medicalization” of behavior.” - Rachel G. Klein (9)

“We take people from every part of the planet, I don’t care if they have three heads or they’re purple, or if they’re hermaphrodites, we’re just looking for good scientists to discover something. That’s really what we’re supposed to do.” - Joel E. Kleinman (8)

“.....in those days, there wasn’t a single book on how to do a controlled trial or a multi-center trial. And, now, of course, you could have a five-foot shelf, easily, of books on how to do them.” - James C. Klett (4)

“Conformity between one’s innate abilities and acquired work-related drives is of key importance for lifelong equilibrium.” – Joseph Knoll (3)

“In many ways, the progress has been slow and there remains a lot to be done, but if you think about it, there’s been a complete change in the landscape of clinical psychopharmacology in my career over the last twenty-five years.” - James H. Kocsis (4)

“The people that have come through the NIH are a source of pride and we keep track of their progress and accomplishments. They are ‘family’.” - Irwin J. Kopin (3)

“Any discipline needs to be able to talk to the reductionist at least one step below it and to the expansionist at least one step above it.” - Conan Kornetsky (6)

“Basically I need a computer, a brief case and maybe half a lab tech.” - Conan Kornetsky (9)

“.....we also have to give rewards for people who create databases and contribute to databases, to people who create some of the algorithms for models and not just for publishing scientific results.” - Stephen H. Koslow (8)

“Addiction is a disease and is a treatable disease.” - Mary Jeanne Kreek (6)

“As we entered 1980 and the decade after, we began realizing that the issues were much more complex. There was more heterogeneity than we had previously thought and the treatments were not as effective as we believed they were in the sixties and seventies.” - David J. Kupfer (7)

“I exposed myself for a couple of years to analysis, and as I went along, I discovered that I was not considered a suitable candidate for psychoanalysis.” - Albert Kurland (1)

“It was the need to provide evidence that lead to the use of placebo in clinical trials.” - Paul Leber (8)

“I think scientists should live a life, at least the public part of their life, which reflects the concern for public health.” - Harbans Lal (3)

“.....the only way for me to survive was to make science a total priority, to be very close to the lab and to minimize and delegate the other activities to such an extent as to allow for the survival of creative research.” - Salomon Z. Langer (3)

“I hope we’re not seduced away from empirical clinical evaluation of drugs.” - Louis Lasagna (1)

“I think that a major problem we have today is the lack of clinical research.” - Yves Lecrubier (4)

“Nothing can match the unbelievable thing that there was a drug, chlorpromazine, first time in history that could in two weeks wipe out hallucinations and delusions.” - Heinz E. Lehmann (1)

“From the point of view of a clinician and a patient, what we want to know is that from the available pharmacologic armamentarium, what would be the best or leading treatment for a particular condition.” - Jerome Levine (4)

“When you see a patient and decide the best medication, treatment is still trial and error.” - Jerome Levine (9)

“.....you might be able to use bright light to manipulate biological rhythms in humans and, maybe, as a therapy, bright light therapy.” - Alfred J. Lewy (5)

“.....identifying genes will enable us to do what’s called personalized medicine.” - Jeffrey A. Lieberman (4)

“I’m trying to create a kinder, gentler ECT.” - Sarah H. Lisanby (7)

“.....serendipity, as we all know, plays an important role in advancement of research.” - Vincenzo G. Longo (2)

“I had the privilege of being one of the people who first used the very first Bowman.” - Roger Maickel (8)

“I saw the drug induced, long lasting changes in the biosynthetic and receptor proteins as representative of the chemical ‘characterological’ changes required to successfully defeat the pathophysiology.” - Arnold J. Mandell (8).

“.....by the time I completed my training I was totally disillusioned with psychiatry.” Alexander A. Mathé (8)

“Things are getting so specialized to do it on an individual basis is awfully hard.” - William T. McKinney (7)

“.....psychiatry pioneered in the development of clinical trial methodology.”  
- Douglas M. McNair (4)

“.....they are some exciting new drugs which are antipsychotic without having an effect on the dopamine-D<sub>2</sub> receptors.” - Herbert Y. Meltzer (5)

“I was the first person to report that clozapine could improve cognition.”  
- Herbert Y Meltzer (9)

“Scientific progress will ultimately depend upon our ability to craft multidisciplinary models that can be used to explain the phenomena at each level of observation.” - Roger E. Meyer (6)

“CRF receptor antagonists are a novel class of antidepressants and anxiolytics that are currently being developed.” - Charles B. Nemeroff (8)

“The discovery of the genetic component of alcoholism has helped people realize that this disorder is not an issue of moral weakness, but, rather, it is a disease like any other disease.” - Ernest P. Noble (6)

“My concern is with the development and evaluation of simpler methods for analysis from controlled repeated measurement designs that clinical investigators who do comparative treatment research can themselves understand.”  
- John E. Overall (4)

“In our hypothesis the emphasis was on the role of serotonin and tryptophan in the mechanism of action of antidepressants and not on the etiology of depressive disease. The two may or may not be related.” - Gregory F. Oxenkrug (5)

“.....when I give a drug to your brain, it may upregulate serotonin in your synapse but that’s going to cause ultimately a change in gene expression and it’s probably those genes that are changing, the protein products of those genes that are ultimately responsible for the drug’s effect.” - Steven M. Paul (3)

“My heart lies in the controlled trials of antidepressants and other treatments in depression.” -  
Eugene S. Paykel (4)

“I believe that these internal juices, of which there’s now over a hundred within their receptors, are the internal homeostatic molecules that give you mood states, and run every physiological system in your body.” - Candace B. Pert (3)

“There are gene-environment interactions, environment-environment interactions and also gene- gene interactions. We shouldn’t get too attached either to the genetics or to the environment; they really go together.” - Roy Pickens (6)

“I think that all of us are trying to make a contribution to society and making money should not be the primary objective.” - Alfred Pletscher (3)

“If you decide to go to work for industry you have to make some compromises.....You have to work on drugs that have a big market to generate money. But you can do wonderful research in the pharmaceutical industry, much more than at a university or in public and state institutions.” - Alfred Pletscher (9)

“There is a need to study complex combination therapies and how to put them into the appropriate algorithms.” - Robert M. Post (5)

“All through my professional career I have been interested in applying what I learned in pharmacology to more rational drug development” - William Z. Potter (5)

“I’ve always thought the North American style of doing things is very different from others. We end up with a small number of patients and with a more controlled design, a placebo group, double blind, crossover and the rest of it.” - Arthur J. Prange Jr (5)

“Addiction is a chronic re-occurring disorder.” - Beny J. Primm (6)

“.....if you got better in the first two weeks or if you had a fluctuating response, you probably were having a placebo response.” - Frederic Quitkin (4)

“You need people who are clinically skilled to do the observations, to recognize the new things that are happening.” - Judith L. Rappoport (7)

“The Raskin Scale was a crude effort to provide a screen, an entry screen, where you had to have a score of at least nine on three five point rating scales measuring severity of symptoms in verbal report, behavior and secondary symptoms of depression.” - Allen Raskin (4)

“You shouldn’t just do research.You have to see patients. I look illness in the eye.” - Barry Reisberg (7)

“It is clinically very important for predicting adverse effects and making it possible for clinicians to choose a treatment on the basis of the receptor binding profile of a drug.” - Elliott Richelson (5)

“If I take someone off a medication, I taper the drug down gradually.” - Karl Rickels (4)

“One could now conveniently follow the time course of platelet MAO inhibition in patients using the percent of platelet MAO inhibition as a surrogate marker for drug effect, analogous to measuring plasma levels with TCAs.” - Donald S. Robinson (5)

“.....depression is more than Hamilton ratings.” - Carl Salzman (8)

“Being able not to just put cells in the body, but to be able to engineer those cells to release various substances, is a key thing in the next few years.” - Paul R. Sanberg (3)

“I think if your graduates can't use all this information that we are learning from molecular biology and put it in the context of the whole animal, they will be missing an amazing opportunity.” - Elaine Sanders-Bush (3)

“...dopamine is largely metabolized by MAO-B in man, not by MAO-A. It just shows that man is not a rat!” - Merton Sandler (3)

“My approach to psychopharmacological research was based on ego defenses.” - Gerald J. Sarwer-Foner (1)

“The patient only gets 10 minutes and drugs when they see a psychiatrist. I'm the only one that gives them 45 minutes.” - Gerald J. Sarwer-Foner (9)

“I think the DSM has been helpful in having a cross-practitioner language that people could agree on, so it's reliable but it's not clear if it's valid.” - Alan F. Schatzberg (4)

“.....catecholamines are an important part of the path of physiology of depressive disorders but I think they are only a starting point for research.” - Joseph J. Schildkraut (5)

“I think there is an element of something deep within the core of society that makes it difficult..... accept the fact that substance abuse is an illness.” - Joseph C. Schooler (6)

“.....medication represents a kind of platform against which psychosocial treatment can operate.” - Nina R. Schooler (4)

“As a genetics researcher, I never forgot the importance of the environment because about half of how a genetically influenced characteristic relates to alcoholism operates through environmental influences.” - Marc Schuckit (6)

“.....it is the variable controlling the behavior of the intact organism in a constantly changing environment that is of importance in understanding the multiple problems of addiction.” - Charles R. Schuster (6)

“It is very disconcerting to me to see clinicians who don’t know the difference between being demoralized and being depressed, who don’t really recognize that some kinds of anxiety can be dealt with by reassurance.” - Richard I Shader (8).

“The NIH, as a device to provide scientists with their own individual and independent support, is really the best system in the world.” - Eric M. Shooter (7)

“.....saying that it doesn’t matter what type of depression there is, as long as there are depressive features give an antidepressant drug.....is not where we should be going.” - Baron Shopsin (5)

“I saw my patients every day and by rating them once a week I could confidently state whether the drug was active and whether it produced EPS with a sample size of ten patients.” - George M. Simpson (4)

“Data aren’t terribly important in belief systems.” - George M. Simpson

“Science is all about measuring things. If you can measure something readily that no one could do previously, discoveries will abound.” - Solomon H. Snyder (3)

“Our hypothesis was that the nitrous oxide method failed to show increases in energy metabolism during functional activation because it measured only the average in the whole brain while specific functional activities are localized to specific regions of the brain.” - Louis Sokoloff (2)

“.....many creative ideas are slain by the arrows of logic.” - Sydney Spector (3)

“I believe, you lose your touch with reality if you stop seeing patients.” - Stephen M. Stahl (8)

“Who dared to think that with as complicated an organ as the brain, the functions can be analyzed in terms of the actions and interactions of a small handful of neurotransmitters?” - Larry Stein (1)

“In the old days we wrote our own protocols. We picked our own measures. We saw the patients, all of them. We wrote up the results. All of that is gone.” - Arthur Sugerman (2)

“We moved from presynaptic events in the 60's to membrane receptors in the 70's, to second messenger mediated activation of protein kinases in the 80's, and now, we are moving to the last compartment, the nucleus!” - Fridolin Sulser (3)

“After you take LSD you feel that you are one with the whole world, with the whole universe.” - Stephen Szara (1)

“I don't think the ethics in being an industry scientist need to be different than the ethics of being an academic researcher. There should be a single set of ethics that are applied to anyone doing research.” - Gary D. Tollefson (8)

“I would hate for the medication aspect to override the humane.” - William Turner (1)

“.....the concept of overuse and the concern about overuse has remained in the air, first around one and then around another compound.” - Eberhard E. Uhlenhuth (4)

“.....we're going to see more of the data coming which will shift interest from dopamine to glutamate and GABA, with possibilities for glutamatergic antipsychotics.” - Daniel P. van Kammen

“If you don't have a system of diagnosis that is valid and reliable then your whole biological psychiatry is worthless.” - Herman M. van Praag (5)

“I'm something of a missionary. I like to preach and convince people of my ideas. But if they don't agree that's also fine.” - Herman M. van Praag (9)

“My major concern is that we should find ways to treat patients with drugs we already have with better knowledge about the differences among them.”  
- Oldrich Vinar (4)

“Studying the neurobiology underlying addiction is helping us understand the neurobiology that enables us to exert free will.” - Nora D. Volkow (6)

“Knowledge and experience applied with common sense result in wisdom.”  
- Leonge E. Way (6)

“New drugs are usually claimed to be very specific but as time goes by they become less specific and more side effects become noticeable.” - Mathew J. Wayner (6)

“These famous monozygotic quadruplets, all with schizophrenia taught us that whatever was genetic about them -they were identical quadruplets- it wasn't their symptoms but something else, because their symptoms varied across the whole spectrum of schizophrenia.” - Daniel Weinberger (2)

“If you have something that works for everything, you probably don't have anything.” - Myrna M. Weissman (7)

“I hit upon the idea of adoption to separate out the effects of nature and nurture.” - Paul H. Wender (7)

“.....it's interesting to know what the mechanism of action of these drugs is and it is certainly important to developing new drugs, but from your point of view and my point of view, when we are sitting with our patients, what we are interested to know how to make them better.” - David Wheatley (4)

“Behavior is not deterministic.” - Peter C. Whybrow (5)

“I think that twenty to forty years from now, we'll have completely new approaches to diagnosing, not replacing our clinical knowledge and skills, but supplementing them with other approaches, to solidify them by making much more substantive discreet diagnoses, and then formulating treatment plans based on a much more fundamental understanding of the disorder.” - Andrew Winokur (4)

“To pick out something common among classes of drugs may be a mistake because there are probably many differences in the way they function, even though they have a common reinforcing function.” - James H. Woods (6)

“It is the American style to measure everything and to think it is the measure that is everything without analyzing it.” - Joseph Wortis (1)

“I am interested in translation, that is, in taking the discovery out of the laboratory by developing products that may be useful for people.” - Richard J. Wurtman (3)



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In 2007, the ACNP's History Committee appointed a small voluntary team consisting of Thomas A. Ban, Jonathan O. Cole and George Gardos to start the correction of the transcripts. In the course of this process, it was recognized that to render the wealth of information covered in the interviews clearly comprehensible, the transcripts needed to be edited. To meet the challenge, Ban embarked on the editing of the transcripts. To extend the use of the material from purely historical research to educational goals, he assigned the transcripts on the basis of the areas of research and activities covered in the interviews, to various folders that were to become the ten volumes of the series.

Encouraged by Ronnie D. Wilkins, ACNP's Executive Director, Ban invited nine leaders in neuropsychopharmacology, each with a special expertise in a given volume, to coedit the series. Edward Shorter, Max Fink, Fridolin Sulser, Jerome Levine, Samuel Gershon, Herbert Kleber, Carl Salzman and Martin Katz, each generously contributed their time and effort to editing Volumes 1, 2, 3, 4, 5, 6, 8 and 10 respectively; Barry Blackwell edited volumes 7 and 9. Each volume includes an Introduction, Dramatis Personae and List of Abbreviations, prepared by the volume editor.

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Thomas A. Ban  
Editor

## EPILOGUE

*Tone:* Is there anything we left out and you would like to add?

**Charney:** No, I think you've done a good job asking questions, covered a lot of ground. What I would be interested in, you know, as a result of your project, is what role history can play in understanding our field? It's my understanding that if your history is correct you're supposed to not repeat that is bad. So if there are things that you uncover as a historian in looking at the field of psychopharmacology that would be good advice for avoiding, on one hand, or if you've identified things that worked out well so we should emphasize it in the future, I'd appreciate hearing about it.

*Tone:* We have to leave that for another occasion. Thank you very much.

**Charney:** You're welcome.

(Dennis S. Charney, interviewed by Andrea Tone, December 7, 2003.)



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## The College

The American College of Neuropsychopharmacology (ACNP), founded in 1961, is a professional organization of leading scientists. The core purpose of the College is to contribute to alleviating human suffering by advancing the dissemination of knowledge related to the biology of the brain as well as the biology, prevention, and treatment of brain disorders; by promoting emergence of pioneering young scientists as leaders within our College and within their fields of science; and by facilitating the collaboration among relevant organizations and agencies.

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In the first nine volumes of this series the development of different areas of research in neuropsychopharmacology is told in the biographic interviews of those who contributed to this development. In Volume 10, the story of the American College of Neuropsychopharmacology (ACNP) is pieced together from extracts of these interviews. ACNP was founded in 1961 and will celebrate its 50s anniversary in November 2011. This series was released at the anniversary celebrations. Volume 10 also includes a Postscript supplemented with a chronological list of selected publications that provides an overview of the history of the field, as well as a list of quotations extracted from the transcripts. Dedicated to the Memory of J. Richard Wittenborn, President ACNP, 1973, Volume 10 was edited by Martin M Katz, a prominent psychopharmacologist with a distinguished career in research and administration. Katz served as Executive Secretary of the first Advisory Committee on Psychopharmacology to the US National Institutes of Health.