ACNP

American College of Neuropsychopharmacology

"Why Is Neuroscience and Mental Health Research Important?"

Neuroscience and mental health research seeks answers to complex, critically important questions. What causes mental illness? How can we better treat these common and burdensome disorders? How can we prevent them? Scientific research is the best way to answer such questions, and hasten the development of new treatments.

Scientific research has led to tremendous progress in understanding and treating mental illnesses such as schizophrenia, dementia, bipolar disorder, depression, and anxiety disorders. Mental illnesses are brain disorders and real medical conditions. The brain is the most complex—and least understood—organ in the body and, not surprisingly, is vulnerable to a variety of diseases. Mental disorders cause more disability in people under age 45 than any other class of non-communicable diseases. Research has dramatically increased knowledge of how the brain works and what causes mental illness. Research has also led to new and effective treatments—medications, psychotherapy, and other forms of treatment. These treatments have enabled millions of people to lead fulfilling and productive lives.

Modern scientific research uses rigorous and ethically acceptable scientific methods to advance knowledge. Without research that meets these standards, we have only assumptions to guide us, which are likely to be inaccurate. For example, we may hope or believe that a new treatment works for dementia, but unless that treatment is studied, using scientifically acceptable research methods, we can't really know if it's effective. In addition, often times the studies take years, since it is important to determine if the brain or other parts of the body adapt to a new treatment, which could change its effectiveness or safety. This is particularly important for new treatments, which might have actions that are different from traditional medications.

Research studies that involve people (for example, studies comparing the effectiveness of different treatments) can be done only when volunteers generously agree to participate. Volunteers who participate in research have a unique and crucial role in advancing knowledge of diseases and finding more effective treatments.

Results from research studies are published in scientific journals, enabling scientists to communicate the findings from their studies to other scientists and the public. Journals that are "peer-reviewed" require that independent scientists agree that the research and the research report meet accepted scientific standards. Articles from scientific journals can be accessed in various ways, including PubMed, an on-line service of the National Library of Medicine, which provides access to millions of scientific articles.

Members of the ACNP, and the research they've done, have made seminal contributions to the tremendous advances that have been made in understanding brain disorders. The ACNP's mission is to further research and education in neuropsychopharmacology and related fields. Scientists are selected for membership in the ACNP primarily on the basis of their original research contributions to the field of neuropsychopharmacology. Their research may focus on a broad range of topics, spanning molecular biology to treatment research to epidemiology. More specific topics include behavioral pharmacology, brain imaging, chronobiology, neurochemistry, neuroendocrinology, neuroimmunology, neurology, neurophysiology, genetics, pharmacology, clinical psychopharmacology, psychiatry, and psychology. Much of this research (e.g., research on new treatments) has the potential to immediately and directly improve people's lives. Other research (e.g., molecular biology research) is critically important for understanding how the brain works. This knowledge, in turn, lays necessary groundwork for the development of more effective treatments and the prevention of mental illness.

Research can't be done without funding. Scientists may obtain funding from federal agencies (such as the National Institute of Mental Health, the National Institute of Alcohol Abuse and Alcoholism, the National Institute of Drug Abuse, the National Science Foundation), as well as private foundations and industry. *Continued research funding is vitally important.* Despite the wealth of new knowledge that research has generated in recent decades, mental disorders remain very common and often disabling.

The ACNP strongly supports increased funding for neuropsychopharmacology research. Current funding levels aren't sufficient to meet today's research needs. We are an Organizing Member of the American Brain Coalition (www.americanbraincoalition.org), a non-profit organization comprised of some of the United States' leading professional neurological, psychological, and psychiatric associations and patient organizations. ABC's mission is to reduce the burden of brain disorders and advance understanding of the brain. The ABC advocates for increased research funding so that better treatments, and even cures, may be found for disabling neurological and psychiatric disorders. It is only through scientific research that we can better understand the brain and improve the lives of people who suffer from these common disorders.