

IN MEMORIAM

William L. Woolverton, Ph.D.



Dr. William L. Woolverton, Billy S. Guyton Distinguished Professor and Vice Chair for Research in the Department of Psychiatry and Human Behavior at the University of Mississippi Medical Center died after a brief illness at the age of 62 on June 13, 2013. Prof. Woolverton, a member of ACNP, was a leading scientist and educator in the behavioral pharmacology of drugs of abuse.

An Alabama native, Bill attended the University of the South in Sewanee, Tennessee, graduating Phi Beta Kappa in 1972. He did graduate work at the University of Chicago, studying pharmacology under the mentorship of Dr. Charles R. Schuster, graduating with a Ph.D. in 1977. Although Bill received his formal training as a pharmacologist, he was strongly influenced by the behavioral sciences, conducting his doctoral research in the Psychiatry Department with a psychologist. Thus, many of Bill's major scientific contributions were on the behavioral determinants of the abuse-related effects of drugs. He did most of his research using nonhuman primates.

From 1977-1980 Bill did postdoctoral work at Virginia Commonwealth University primarily in

the laboratories of Dr. Robert Balster in the Department of Pharmacology and Toxicology. Bill wanted to understand better how the reinforcing effects of drugs were altered by the context of their availability. This led him to a series of complex choice studies in which rhesus monkeys were given opportunities to select cocaine or food reinforcement and how various manipulations, such as concurrent drug treatment, altered this choice behavior. The results of this line of work convinced Bill that drug taking behavior was not "impulsive" and "out of control" as has often been proposed, but rather is directly determined by the context of its availability, providing a nuanced understanding of drug-behavior interactions.

In 1980, Bill returned to the University of Chicago as an Assistant Professor in the Department of Psychiatry in the research group headed by Charles R. Schuster. When Bob Schuster left to become NIDA Director in 1986, Bill replaced him as the Director of the Drug Abuse Research Center. While in Chicago, Bill showed that activation of both D1-like and D2-like dopamine receptors were involved in the reinforcing effects of cocaine. He also continued his studies with drug choice and drug-food choice paradigms with the purpose of studying the reinforcing efficacy of stimulant drug administration. He utilized these models for studying potential pharmacotherapies that might reduce the strength of cocaine reward, but of equal importance, he found that he could reduce cocaine-reinforced behavior just as easily by manipulating environmental variables, such as the value of alternative reinforcers. This work is consistent with the view that combined pharmacotherapies and behavioral therapies may offer the best hope for stimulant abuse treatment.

In 1993 Bill was recruited to the University of Mississippi Medical Center (UMMC) at the rank of Professor and served as Vice Chair for Research in the Department of Psychiatry and Human Behavior. In 2010, he was awarded the Billy S. Guyton Distinguished Professorship, the highest honor that is bestowed upon researchers at UMMC. While at UMMC, Bill's long-standing interest in how environmental circumstances shape the choice to take drugs gave rise to some of his most innovative work, including a foray into behavioral economics. He investigated the effects of delay of reinforcement on the choice to self-administer cocaine when non-drug alternatives were available. In 2007, Bill and his colleagues demonstrated hyperbolic discounting of delayed drug injections. He followed this study with others examining delay discounting of non-drug reinforcers in monkeys and found that monkeys discounted delayed drug injections less steeply than non-drug reinforcers providing further insight into how drugs can come to control behavior

Bill Woolverton was much admired by his colleagues and students. He had a very inquisitive mind and liked to challenge accepted scientific beliefs. He had a gentle way of guiding the development of his trainees and in engaging his research peers in the field. He loved to play and sing in the ever-shifting band of friends and colleagues that he cultivated primarily during his Mississippi years. He will be greatly missed. He is survived by his loving wife Candy Woolverton, and his son Chris and daughter Lucy.

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