

OBITUARY

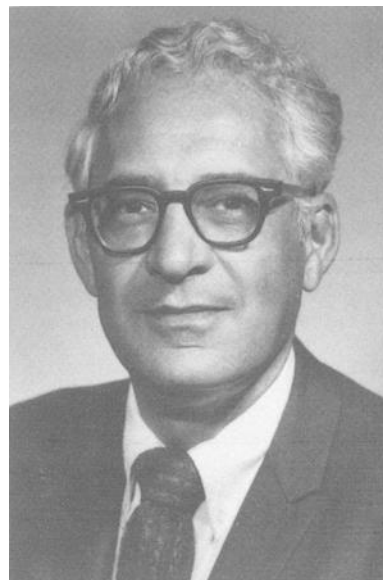
ROBERT BURNS FORNEY, SR., Ph. D. 1916–1997

The forensic science community and especially the toxicology profession lost one of their most beloved, accomplished and productive leaders with the death of Dr. Robert Burns Forney, Sr. on 6 September 1997 at the age of 81. A Hoosier by birth and choice, he grew up in Terre Haute, Indiana where he became an Eagle Scout, foreshadowing his many personal and professional achievements. He received his higher education at Indiana University—the A.B. (1938) and A.M. (1939) degrees in Chemistry at IU at Bloomington and the Ph.D. in Toxicology under Professor Rolla N. Harger at the Indiana University School of Medicine in Indianapolis in 1948, thus becoming the first person to receive a Ph.D. degree for graduate studies carried out on the Indianapolis campus of Indiana University.

Dr. Forney was one of a rapidly vanishing breed of academicians, those who have spent their entire career at one institution. He became a Research Associate at the IU School of Medicine in 1939 and rose to the rank of Distinguished Professor of Pharmacology and Toxicology in 1977, assuming Emeritus status in 1987. He also served with distinction as the first Director of the Indiana State Department of Toxicology—a position created for him by the Indiana Legislature—1954–87 and again as Interim Director 1989–91. Professor Forney's Indiana University career was interrupted only for active U.S. Army service in World War II, from which he returned in 1946 as a major.

Bob Forney's association with the legendary Professor Rolla N. Harger for most of their twin careers was itself a remarkable saga. Professor Harger had recently invented the Drunkometer—the first practical breath-alcohol analyzer—when Bob Forney joined him in 1939 at the IU Department of Biochemistry and Pharmacology, chaired by Professor Harger for twenty-three years. Bob Forney had no way of knowing at the time that he was entering into the 58-year Harger-Forney epoch, one of the stellar events during the golden decades of American forensic toxicology's development, 1920–1960, and beyond. The two scientists, working with a succession of associates, largely pioneered and developed the scientific and practical basis for forensic breath-alcohol analysis worldwide. In recognition of these and many other contributions to forensic toxicology, Professor Harger after World War II became the acknowledged, if unofficial, dean of American forensic toxicology, a status which devolved upon Professor Forney upon Professor Harger's retirement in 1960.

A world-class contributor to clinical and forensic toxicology in his own right, Doctor Forney developed many now-standard approaches for measuring and evaluating the effects of drugs on mental and psychomotor performance. These methods included studies in what is now called pharmacokinetics in man and in animals, measurements of visual stereoscopic acuity and fixation disparity, of body sway, complex reaction time measurements with divided-attention sharing tasks, and use of distracting delayed auditory feedback system for human performance testing. Applied first to alcohol and instrumental in establishing recognized impairment standards for driving and other critical tasks, these principles and techniques were then applied by Doctor Forney and his colleagues and students to many other drugs, including barbiturates, caffeine



and other stimulants, antihistamines, and others. Studies on alcohol interaction with other drugs were a particular and pioneering focus of their work. That work led to the first text on the subject, "Combined Effects of Alcohol and Other Drugs" by Robert Forney and Francis Hughes, published in 1968 and one of his 185 major professional publications. He also pioneered human studies on marihuana, being the first researcher legally to import foreign marihuana for scientific use into the United States, and he and his students were one of the first groups to isolate and quantitate its principal active parent drug, delta-9-tetrahydrocannabinol, and to study its effect on human subjects. In his studies of the effects of alcohol on human psychomotor, and mental, motor performance Bob Forney and his associates used innovative approaches far beyond the then-traditional laboratory studies. One such event was a sports car gymkhana, conducted in cooperation with the Indiana State Police at Stout Field in Indianapolis, using drivers with low blood-alcohol concentrations. The results published by the National Safety Council in 1961 demonstrated that even these very expert and highly motivated drivers were not immune to the impairing effects of low blood alcohol concentrations on motor vehicle operation.

In concert with his outstanding research, Doctor Forney was first and foremost an exceptionally talented and devoted teacher and mentor. The Toxicology Program he established at the Indiana University School of Medicine, with the first federal training grant in this field, produced more doctoral-level graduates (36) than any other toxicology program in this country in that era. His devotion to his students and his extraordinary leadership resulted in recognition of this program as one of the best worldwide. It ultimately produced many of the country's current generation of leaders and innovators in forensic toxicology, including his son, Robert B. Forney, Jr., Ph.D.—like his father a professor of toxicology. Doctor Forney also participated in short-course training on the subject

of alcohol and highway safety for several thousand law enforcement officers, judges, prosecutors, and scientists as a 17-year member of the faculty of the "Borkenstein Course" on the IU Bloomington campus, and as the director of a parallel short-course program at the IU medical school for many years.

As one of the world's foremost teachers and researchers in toxicology, Doctor Forney was naturally also exceedingly active in professional organizations. Among those he was elected to lead by his peers were The International Association of Forensic Toxicologists, the Society of Toxicology, the National Safety Council's Committee on Alcohol and Other Drugs, and the American Academy of Forensic Sciences. He was a founding Fellow of the Academy, Chairman of its Toxicology Section, and the sixteenth President of the Academy, 1965-66. For many years, Doctor Forney faithfully attended the annual meetings of the Academy accompanied by his wife Winnie and his son Robert, Jr. as a teenager and student. The Forney family, usually with Mrs. Helen Harger, were thus a fixture of the social life at AAFS meetings.

In addition, Doctor Forney served on numerous panel and study sections of the National Institutes of Health, the National Institute of Mental Health and the U.S. Food and Drug Administration. His decades-long leadership of the Human Factors Subcommittee of the NSC Committee on Alcohol and Other Drugs was marked, among other accomplishments, by his principal role in developing and documenting the scientific basis for the Committee's 1971 position on the 0.08 alcohol concentration universal threshold of driving impairment.

Doctor Forney also served in many state, national and international consultant positions. One of these led to his becoming the

highest military-ranked toxicologist ever, when the U.S. Army Surgeon General asked him to evaluate the problems of drug abuse and the military drug-testing program in Vietnam during that war, with the assimilated rank of Lieutenant General. His other military consultancies included service to the U.S. Air Force Science Advisory Board and the U.S. Army Medical Research & Development Command, the latter on various problems of biological and chemical warfare.

A most modest and unassuming person, Doctor Forney never mentioned the numerous high honors and awards he had received. Among these are the Distinguished Professor of Pharmacology and Toxicology chair at Indiana University in 1977, an honorary Doctor of Laws degree from Indiana Central College (1964), the Society of Toxicology's Education Award (1977) and DuBois Award (1983), the Rolla N. Harger Award of the American Academy of Forensic Sciences (1985), the U. S. Army Decoration for Distinguished Civilian Service (1988), and the National Safety Council's Robert F. Borkenstein Award (1990).

Though his giant accomplishments as a teacher, researcher, and practitioner in forensic toxicology will live on through his publications and the work of his students in academia and industry, his kindly presence, gentle leadership, sparkling wit, and warmth will be enormously missed by his many friends and colleagues. Doctor Forney is survived by his wife Winnie, a daughter, Judith A. Forney (Indianapolis), his son, Robert Burns Forney, Jr. and his wife Debra and five grandchildren (Toledo, Ohio), and one brother Ralph (Montana).

Kurt M. Dubowski, Ph.D.