

Obituary

Frank M Berger

Neuropsychopharmacology (2008) **33**, 3251;
doi:10.1038/npp.2008.100



BACHRACH

Dr Frank M Berger, aged 94 years, died in Manhattan on 18 March 2008. A Life Fellow of the ACNP, he is best known for his introduction in 1955 of meprobamate, also known as Miltown or Equanil, a prescription drug described as a tranquilizer that would relieve tension, and as such was a forerunner of more potent drugs, such as the benzodiazepines. Berger observed that throughout history, mankind sought relief from tension by means of alcohol, opium, hashish, peyote etc. and that meprobamate was unique in that it offered relief from tension free of the excitation, hallucinations, and addiction of the ancient remedies, which compromised their use in our daily lives. Meprobamate became the most frequently prescribed drug in the United States soon after its release and prevailed into the 1960s.

Berger was born in Pilsen, West Bohemia, in 1913 and completed his medical training at the University of Prague in 1937. He then worked as a bacteriologist in the Czechoslovak Institute of Health until the German occupation in 1939. He fled to England, where he initially served as a refugee camp physician, and eventually returned to research at a government laboratory on the industrial production of penicillin. While in search of chemical agents that would block penicillinase produced by Gram-negative organisms, he came upon an efficacious agent that had an unanticipated additional action. Mephnesin, a phenylgly-

ceryl ether, not only preserved penicillin, but when injected into mice, rats, or guinea pigs, produced profound muscle relaxation: a sleep-like state from which they could be roused, which he described in a 1946 publication as 'tranquilization.' Mephnesin was an effective muscle relaxant and was prescribed for spasticity and hyperkinetic disorders, even though it had a short metabolic half-life following oral administration. It was nevertheless prescribed much more than had been predicted, attributable to a relaxing, often euphoric response. Berger came to the United States in 1947 as an assistant professor of Pediatrics at the University of Rochester Medical School, where he pursued the search for a more slowly metabolized mephnesin-like drug. In 1949, he moved to Carter-Wallace Laboratories as the Director of Laboratories and was joined by a talented chemist, Bernard Ludwig. Together, they found the desired properties in meprobamate. A patent was filed in 1950 and eventually granted in 1955. Positive clinical studies and their publication followed. The drug was marketed as Equanil by Wyeth and as Miltown by Carter-Wallace (after Milltown, a New Jersey hamlet near the Carter Wallace Laboratory in Cranbury). Promoted for its antitension and antianxiety actions, it was an immediate commercial success and also opened a dialog regarding its use among pharmacologists, psychiatrists, and other psychotherapists that extended into professional journals as well as into public media. He continued his research at Carter Wallace until his retirement in 1975. Berger is especially remembered for a symposium he organized under the auspices of the New York Academy of Sciences in 1956, which brought together eminent biologists, psychologists, clinicians, and even Aldous Huxley, the celebrated author of *Brave New World*, to discuss and better define the new medical and cultural niches that meprobamate had created and occupied.

Among his many accomplishments and honors, his career was the focus of the first Oakley Ray ACNP History Lecture presented at its 2005 annual meeting. On a personal level, Frank Berger was often opinionated, but always friendly, enthusiastic, and knowledgeable, not only about science, but also about life itself, including the enjoyment of good food and wine. His wife, Christine, two sons, Franklin and Thomas, and a stepson Harry Bath, survive him.

BW Agranoff¹

¹*University of Michigan, Molec and Behav Neurosci Inst, Ann Arbor, MI, USA*