

## ANESTHESIOLOGY REFLECTIONS FROM THE WOOD LIBRARY-MUSEUM

### From Coenzyme R to “Arfonad” and from Vitamin H to Hypotension



Using his employer-facilitated Swiss passport to pass through Nazi-occupied France, Croatian-born Leo Henryk Sternbach, Ph.D. (1908 to 2005), escaped anti-Semitism and sailed from Portugal to America in 1940. At the Nutley, New Jersey, laboratories of Hoffman-La Roche, he perfected the world's first commercially successful synthesis of biotin, otherwise known as vitamin H, B<sub>7</sub>, or even “coenzyme R.” A related synthesis resulted in Dr. Sternbach's discovery of trimethaphan camsylate (trimetaphan camsilate), which was trademarked as “Arfonad” in 1952. Roche advertised Arfonad as a ganglionic blocker for “controlled hypotension” and nearly “bloodless surgery,” especially for neurosurgery. Boxed as an “Experimental Preparation,” the 10cc ampoule (*right*) of Arfonad is labeled as from “Lot 001.” Lowering blood pressure was followed by lowering anxiety, as Dr. Sternbach then discovered benzodiazepines. Before he passed away in North Carolina in 2005, this unassuming “Father of Valium,” Sternbach, had been granted 241 U.S. patents. (Copyright © the American Society of Anesthesiologists' Wood Library-Museum of Anesthesiology.)

George S. Bause, M.D., M.P.H., Honorary Curator and Laureate of the History of Anesthesia, Wood Library-Museum of Anesthesiology, Schaumburg, Illinois, and Clinical Associate Professor, Case Western Reserve University, Cleveland, Ohio. UJYC@aol.com.