

## In Memorium

# B. Kenneth Koe

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B. Kenneth Koe died on 7 October 2015 at the age of 90 due to cancer. Ken was born in Astoria Oregon on 15 April 1925 to Chinese immigrants who raised him in Portland where they operated a laundry. Coming from a family with few resources, a timely scholarship along with weekend jobs enabled him to enroll as an undergraduate majoring in chemistry at Reed College in 1942. Unable to enter military service during the war, he obtained a M.S. in chemistry from the University of Washington in 1948, and then traveled to Cal Tech where he obtained his Ph.D. in chemistry in 1952 and completed a postdoc. He obtained his first job in 1954 as an organic chemist with The Southwest Research Institute and taught organic chemistry at San Antonio College. He joined Pfizer Research Laboratories the following year and worked on antibiotics for several years before being assigned to a group tasked with developing psychotherapeutic drugs at Groton. Working with Albert Weissman in the 1960s, they published two of the most seminal discoveries in the formative years of neuropharmacology. First, they developed alpha-methyl-para-tyrosine, a drug that inhibits brain catecholamine synthesis, and used it to show how amphetamine produced its psychostimulant effects by facilitating the release of catecholamines in the brain. The following year, Ken's group introduced parachlorophenylalanine as an inhibitor of serotonin synthesis

and showed how it could be used to deplete selectively serotonin in brain. These two drugs have been used by dozens of neuropharmacology laboratories for understanding the critical role of biogenic amines in psychopharmacology and behavioral health.

Ken is most famously known for his work as a co-inventor of the antidepressant sertraline or Zoloft at Pfizer. In the late 1970s, Ken began working with Willard Welch on a series of tametraline derivatives that were monoamine reuptake inhibitors. Ken had a central role in identifying one compound that turned out to be a selective serotonin reuptake inhibitor named sertraline hydrochloride that was later developed into the antidepressant Zoloft. Sertraline was shown to block the reuptake of serotonin into presynaptic neurons, thereby increasing its synaptic concentrations and eventually elevating a depressed person's mood. Over 100 million people have been treated with sertraline for depression, as well as obsessive-compulsive disorder, panic and social anxiety, and post-traumatic stress disorder. Ken held 14 US patents and wrote or co-wrote 150 technical articles and abstracts during his time at Pfizer. In 2006, the American Chemical Society gave Charles A. Harbert, Reinhard Sarges, Albert Weissman, Koe and Welch the prestigious Award for Team Innovation. Two years later, he received the Howard Vollum Award for Distinguished Accomplishment in Science and Technology for developing sertraline. Speaking at the awards ceremony, Ken, widely respected for his modesty, attributed his success to a solid technical background, a willingness to learn and adapt, a prepared mind, perseverance, congenial colleagues and luck. As a dedicated neuroscientist and member of the ACNP since 1980, Ken attended ACNP meetings long after his retirement in 1995.

Ken was active in local Connecticut politics serving as a councilman in Ledyard for three terms and the town's Democratic Town Committee. He also served on the board for the Thames Valley Music School at Connecticut College and loved singing in choirs at the United Methodist Church and the Eastern Connecticut Symphony Chorus. Ken was the beloved husband to his wife Jo Ann, who died in 1995. He is survived by his daughters, Kristin (husband, Gregory K. Steinberg) of Shrewsbury, MA and Karen of Long Beach CA, his sister Virginia and five grandchildren.

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