

In Memoriam

Irwin J Kopin

Neuropsychopharmacology (2017) 42, 2656. doi:10.1038/npp.2017.208



Dr Irwin J 'Irv' Kopin, Scientist Emeritus, retired Scientific Director of the NINDS, and former President of the ACNP, died on Tuesday, 1 August, 2017, at age 88.

Kopin was a giant in catecholamine research. His groundbreaking findings on the characteristics and metabolism of catecholamines provided the backbone for major advances in neurological and psychiatric disorders. Born in 1929, Kopin graduated from The Bronx High School of Science in New York in 1946. He attended the City College of New York for 2 years and then transferred to McGill University in Canada, where he earned his Bachelor of Science in Biochemistry in 1951 and his medical degree in 1955. He began his NIH career as research assistant in the Laboratory of Clinical Science (LCS) at NIMH in 1957, under the direction of Seymour Kety. After a 1-year residency in New York, he returned to NIMH's LCS as a clinician scientist. In 1969, he became Chief of the LCS, a position he held with distinction until 1983. He led the lab during the early days of neuropsychopharmacology, side by side with luminaries such as Julius Axelrod. With Axelrod and others, Kopin published numerous original research articles dealing with the disposition and metabolism of catecholamines. He first proposed the notion of false neurotransmitters, a chemical compound that mimics the action of a neurotransmitter. He also showed that the chemical 1-methyl-4-phenyl-1,2,5,6-tetrahydropyridine (MPTP) rapidly produces a 'time-telescoped' form of Parkinson's disease. This finding was pivotal for Parkinson's research. In 1983, he was appointed as Scientific Director of NINDS, a position he held for 11 years, until 1994. According to Dr Mark Hallett, whom Irv brought on as clinical neuroscience director, 'He used to say that he needed to be honest all the time because his memory wasn't good (not true of course), so that he

wouldn't ever contradict himself. His intelligence came out in interesting ways. For example, he was in charge of controlled substances in NINDS which were kept in a safe. When he went on vacation, I (DSJ) was his deputy, so I had to know how to open the safe. The code was the first part of the 'Fibonacci sequence.'

Kopin was quite active in the ACNP serving in various roles on Council from the mid-1980s through the mid-2000s. Irv initially served as ACNP Councilor and eventually became President of the ACNP in 1991. He subsequently served as ACNP Treasurer from 1995 to 2005. Under Irv's stewardship, the ACNP experienced a steady growth in its assets. At the annual business meetings, Irv's Treasurer's reports were famously known as being brief and to the point beginning with the admonition 'not to worry, the ACNP is in great shape.' At the 1999 annual ACNP meeting, Irv was interviewed by Thomas Ban as part of the 'Oral History of Neuropsychopharmacology' project. This interview can be found in the Oral History Books (Volume 3) within the Publications section of the ACNP website.

After his retirement in 1999, Dr Kopin continued as a Scientist Emeritus and active participant in the Clinical Neurocardiology Section in NINDS, until just before his death. Throughout his career, Kopin demonstrated an unflagging commitment to the NIH mission and more generally to advancing medical scientific knowledge. His awards included the PHS Distinguished Service Medal in 1980 and 1990, honorary membership in the Royal Society of Medicine, and the Paul Hoch Award for Distinguished Service in 2004. He authored or co-authored >730 articles, reviews, and book chapters. He continued to publish papers vigorously during his retirement.

Kopin was a mentor and role model for scores of postdoctoral researchers, many of whom now occupy key positions in academic medicine or the pharmaceutical industry. One of us, Dr David S Goldstein, whom he supervised and mentored for over 35 years, remembers their typical style of communication was debate, in the Talmudic tradition of the 'chevrusah,' or learning partner. Goldstein recalls, 'Together we argued about interpretations of the data, experiments that should be done, conceptual models, getting the historical facts straight, and most recently about how to link genetics and molecular biology with integrative physiology. I look at his empty desk in the lab and while of course saddened, I also feel thankful and honored that he was my medical scientific chevrusah for so many years.'

Kopin is survived by his wife Rita, son Alan, daughters Gail and Judy, and eight grandchildren. Memorial contributions may be made to Congregation Beth El, the Dana-Farber Cancer Institute, or to MAZON—a Jewish response to hunger.

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