Aebersold Award Presented to Hank F. Kung

Hank F. Kung, PhD, professor of radiology and pharmacology at the University of Pennsylvania (Philadelphia), was presented with the 2004 Aebersold Award for outstanding achievement in basic science applied to nuclear medicine at the 51st Annual Meeting of the SNM on June 20 in Philadelphia. Kung is known for his work in the development of radiopharmaceuticals. He was instrumental in developing PET and SPECT imaging agents for dopamine and serotonin neurotransmitters, and his laboratory group's research activities cover a wide spectrum of scientific disciplines including drug design, organic synthesis, radiochemistry, receptor pharmacology, pharmacokinetics, and PET and SPECT imaging.

"I am dedicating this award to my wife, Dr. Mei-Ping Kung, who is the real scientist in the family," said Kung in accepting the award. "She is the best-kept secret of my lab. I also want to thank the Society of Nuclear Medicine and my current and former lab members. Especially, I want to thank Dr. Robert Mach, professor of radiology, Washington University, St. Louis, for his friendship and long-standing collaboration. Our work is built on the contributions of many colleagues and collaborators around the world."

Hank Kung, PhD, and spouse, Mei-Ping Kung, PhD, with the Aebersold Award at the Society of Nuclear Medicine meeting in Philadelphia, June 20.

The Aebersold Award is named for Dr. Paul C. Aebersold, a pioneer in the biologic and medical applications of radioactive materials and the first director of the Atomic Energy Commission's Division of Isotope Development at Oak Ridge, TN. The first Aebersold Award was given by the SNM in 1973.

Kung was trained as a medicinal chemist at the School of Pharmacy, State University of New York at Buffalo. After postdoctoral training under Monte Blau at Roswell Park Memorial Institute, Kung joined the department of nuclear medicine at Roswell. He became a member of the department of radiology at the University of Pennsylvania in 1987.

The work of the Radiopharmaceutical Chemistry group at Penn covers an extraordinarily wide range of selective radiotracers and potential applications. The development of ^{99m}Tc-TRODAT-1, the first site-specific dopamine transporter-binding agent, under Kung's direction was widely heralded as a milestone in efforts to achieve both qualitative and quantitative imaging of neurodegenerative processes. The first use of the agent in human brain imaging was selected as the image of the year at the 1996 SNM annual meeting. The article on in vivo characterization of the agent received the Springer award for the best science paper for the *European Journal of Nuclear Medicine* (1997;24:372–380). Clinical studies have validated the use of the tracer as a diagnostic tool for Parkinson's disease and other neurodegenerative diseases.

In the past decade, a number of new ^{123}I-labeled neuroreceptor imaging agents for SPECT were developed in Kung's laboratory. Several have been or are being used successfully in clinical trials, including TISCH (D1 receptor); IBZM, IBF, and FIDA2 (D2 and D3 receptors); and IPT (dopamine transporter). The D2-imaging agent IBZM is currently available commercially in Europe, and the D2 receptor-imaging agent IBF is being developed in Japan. In March of 2003, the first human study of ^{123}I-ADAM, a new serotonin transporter tracer, was performed in the department by Dr. Andrew Newberg. The group reported on early results of biodistribution and imaging with the agent in *The Journal of Nuclear Medicine* (2004;45:834–841) earlier this year.

A look at the Web site of Kung's group (http://sunmac.spect.upenn.edu) shows the range and scope of work in the lab, as well as the multidisciplinary nature of work that characterizes the development of new tracers. Among the dozens of current research projects are the development of imaging agents for β-amyloid plaque, imaging agents that target breast tumor cells, and research into cardiac neuronal functioning.