

2013 Aegersold Award Honors Wong

Dean F. Wong, MD, PhD, professor and vice chair of radiology, and professor of psychiatry, neuroscience, environmental health sciences, and the Carey School of Business at Johns Hopkins University (JHU) (Baltimore) was named this year's recipient of the prestigious Paul C. Aegersold Award at the SNMMI Annual Meeting in Vancouver, British Columbia. The award was present on June 9 at the plenary session. "Dr. Wong is a well-known and respected researcher on a wide variety of neuropsychiatric illnesses, basic brain chemistry, and pharmacology," said George Segall, MD, chair of the SNMMI Awards Committee and past president of the society. "Over his career, he has been awarded more than 70 grants and has produced prolific amounts of research on the design, development, quantification, and application of radiopharmaceuticals imaged with PET and SPECT for the study of in vivo brain chemistry."

Wong received his medical degree from the University of Toronto Faculty of Medicine in 1977 and completed a nuclear medicine residency at JHU, where in 1990 he also earned a doctorate in radiation health sciences. He holds academic appointments at the University of Copenhagen in Denmark and continues to serve in various roles with the National Institutes of Health (NIH), including the Center for Scientific Review Neural Basis of Psychopathology, Addictions, and Sleep Disorders Study Section.

With more than 30 years of experience with PET brain imaging, Wong's research includes many firsts. As part of his doctoral thesis, he provided preclinical work, medical oversight, and data analysis for the first dopamine D₂ PET receptor imaging in humans. He was PI of the team carrying out the first aging study of D₂ receptors and the first study suggesting elevations of D₂ dopamine receptors in schizophrenia. His team developed one of the first human PET radioligands routinely used to target dopamine transporters and was among the first to document cocaine craving as measured by intrasynaptic dopamine release.

Wong and his lab at JHU collaborated with Avid Radiopharmaceuticals on early ¹⁸F-amyloid radiopharmaceutical (AV-45) imaging in humans. He and collaborators continue to develop new human PET and SPECT radiotracers. "The field has dramatically expanded to be a highly valued scientific approach for basic investigations of brain physiology, as well as translational studies in neuropsychiatry and early central nervous system drug discovery and development," said Wong. "The interdisciplinary approach to the basic sciences of nuclear medicine is especially needed for scientific advances in understanding brain neuroreceptors."

Wong has held several leadership roles in the American College of Neuropsychopharmacology (ACNP) and the



Peter Herscovitch, MD (left), and Michael Graham, PhD, MD (right), presented Wong with the award at the SNMMI Annual Meeting.

Academy of Molecular Imaging. He has authored or co-authored more than 200 peer-reviewed journal articles and more than 275 books, book chapters, monographs, and symposia proceedings. He has received numerous awards and honors, including the SNMMI Kuhl-Lassen Award, the National Alliance for Research on Schizophrenia & Depression Established Investigator Award, and the NIH-National Institute on Drug Abuse K24 Midcareer Award. He is a fellow of the ACNP and an honorary science and technology fellow of the Advanced Science and Technology Adjudication Resource Center.

"On this occasion of the 30th anniversary of the first PET human imaging of dopamine D₂/D₃ receptors, it is a tremendous honor to accept this award, which I consider also gives recognition to all the preclinical and translational investigators working to image and quantify neurotransmitter systems in vivo with molecular approaches as PET and SPECT," said Wong. "For my own work, it is most humbling to participate in a global field begun in part by icons in neuropharmacology and neuroscience, such as Solomon Snyder, MD, DSc, DPhil, and Michael Kuhar, PhD, and neurophysiologists such as Albert Gjedde, MD, DSc. Partnering with nuclear medicine pioneers like my mentor and friend, the late Henry Wagner, Jr., MD, to whom we pay tribute in memorial this year, has been an outstanding privilege and helped me shape my 3 decades of research focused on brain neuroreceptor imaging." He added, "I am thankful to be a member of a specialty that has enabled molecular and nuclear medicine brain imaging and positioned our discipline to help lead research highly responsive to the recent Brain Initiative proposed by the White House. Indeed, neurochemical mechanisms are at the heart of any understanding of brain connectivity and networking."