Anderson Recognized with SNMMI 2020 Aebersold Award

arolyn J. Anderson, PhD, was named on July 12 as the 2020 recipient of the prestigious Paul C. Aebersold Award from SNMMI during its Annual Meeting. She is the Simon-Ellebracht Professor of Medicinal Chemistry and Professor of Radiology at the University of Missouri (Columbia), where she recently moved with a leadership role in molecular imaging and theranostics research.

"Dr. Anderson has been a trailblazer in the translation of novel PET agents for the imaging and targeted radiopharmaceutical therapy of cancer and other diseases in humans," said Bennett S. Greenspan, MD, chair of the SNMMI Committee on Awards. "She pioneered the development of radiometal-labeled receptor-targeted PET imaging agents, leading to the first human study of ⁶⁴Cu-labeled octreotide in patients with neuroendocrine tumors. Her contributions to basic science in the field of nuclear medicine and molecular imaging are well deserving of the SNMMI Aebersold Award."

After an undergraduate degree in chemistry from the University of Wisconsin Superior, Anderson earned her doctorate degree in inorganic chemistry from Florida State University (Tallahassee). She spent more than 20 years developing PET tracers at Washington University in St. Louis (MO) and most recently was a professor in the departments of medicine, radiology, bioengineering, chemistry, and pharmacology and chemical biology at the University of Pittsburgh (PA). There she was also director of the Molecular Imaging Laboratory and codirector of the In Vivo Imaging Facility at the UPMC Hillman Cancer Center.

Anderson's research interests center on the development and evaluation of novel radiometal-based radiopharmaceuticals for diagnostic imaging and targeted radiotherapy of cancer and other diseases. Her recent research has focused on development of imaging agents for upregulated receptors on immune cells involved in inflammation related to lung diseases, including tuberculosis, primary tumor growth, cancer metastasis, and sickle cell disease. Her research also capitalizes on the effects of targeted radiopharmaceutical therapy on both tumor cells and immune cells in the tumor microenvironment. "What is most exciting and interesting about research in radiopharmaceutical development is multipurposing tracers for diseases that range from cancer to pulmonary ailments to vascular diseases," she said. "I've had

the honor and pleasure of working with a highly diverse group of clinicians and scientists by being part of the nuclear medicine research community."

Anderson has received numerous honors throughout her career, including the Michael J. Welch Award from SNMMI in 2012 and the Distinguished Investigator Award from the Academy of Radiology Research in 2014. In 2019, she was inducted as a fellow of SNMMI, as well as of the



Carolyn J. Anderson, PhD

World Molecular Imaging Society. She has mentored many students and researchers throughout her career and has developed multiple training programs in radiochemistry and molecular imaging. She has coauthored more than 185 publications, most in the area of developing radiopharmaceuticals for oncologic imaging and therapy.

She is a past president of the SNMMI Center for Molecular Imaging Innovation and Translation and has served on many committees and councils throughout the organization, including the SNMMI Board of Directors and the PET Center of Excellence. She is also a member of the American Chemical Society, American Association of Cancer Research, Society of Radiopharmaceutical Sciences, Academy of Molecular Imaging, and World Molecular Imaging Society.

The Aebersold Award is named for Paul C. Aebersold (1910–1967), a pioneer in the biologic and medical application of radioactive materials and the first director of the Atomic Energy Commission's Division of Isotope Development. It recognizes outstanding achievement in basic science applied to nuclear medicine and was first presented in 1973. The SNMMI Committee on Awards selects the recipient. Anderson is the 47th Aebersold Award honoree and the third woman to receive the recognition. "Words cannot describe how honored I am to receive the Aebersold Award and join the prestigious group of previous awardees," she said. "This award is shared with my past and present collaborators and trainees, and our accomplishments are greatly enhanced by the support of the SNMMI community."