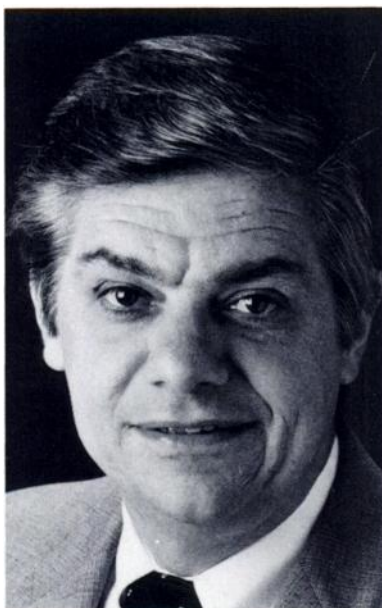


WILLIAM C. ECKELMAN TO BE HONORED FOR ACHIEVEMENT IN BASIC SCIENCE

The 1988 Paul C. Aebersold Award for Outstanding Achievement in Basic Science Applied to Nuclear Medicine will be presented to William C. Eckelman, PhD, at the Society of Nuclear Medicine's (SNM) Annual Meeting in June in San Francisco, California. The honor is in recognition of his achievement involving the use of radioactive nuclides in biomedical research and patient care.

"Dr. Eckelman's work reflects precisely what it was that Dr. Aebersold was trying to accomplish and continues those significant contributions of the previous awardees," wrote Richard C. Reba, MD, director of nuclear medicine at George Washington University Medical Center, Washington, DC, in his nominating letter to the SNM Awards Committee. "Furthermore, Dr. Eckelman has done so not only by his outstanding research record, but in simultaneously contributing directly to patient care in accepting responsibility for the clinical radioassay laboratory and routine radiopharmaceutical preparation; by teaching undergraduate, medical and PhD students, technology students, postgraduate medical and post-PhD students; by working in the academic administration structure of the university; by contributing to the efforts of national societies and agencies dedicated to biomedical uses of radioactive tracers, e.g., the Society of Nuclear Medicine, the American Chemical Society, the Radioassay Society, the National Institutes of Health and the Department of Energy, so that his accomplishments to further the Aebersold tenets should be viewed in the context of a complete academic."

He added that Dr. Eckelman was the co-inventor of the process incor-



William C. Eckelman, PhD

porating technetium-99m in a radiopharmaceutical using stannous ion as a reducing agent with the pertechnetate ion containing the radionuclide. This is believed to be the most widely used method of reducing pertechnetate so that it can be incorporated into clinically useful pharmaceuticals.

'Instant' Kits for Technetium-99m

In addition, Dr. Eckelman was involved in the development of the first "instant" technetium-99m kit, permitting this radionuclide to be formulated on-site within hospitals. He and Powell Richards, a previous Aebersold Award winner, received a patent covering the preparation of instant technetium-99m kits, with specific examples of his work with technetium-99m labeled DTPA, red blood cells and serum albumin.

Dr. Eckelman has been involved in

the development of the field of bi-functional chelates as a method of incorporating radioactivity into biologically active compounds so as not to disturb their physiological functions. Dr. Reba noted that his work led to intact biologically active labeled steroid analogues, antibodies, and other proteins. Dr. Eckelman was also one of the early workers in the field of receptor binding radiotracers, and his publications and lectures helped create the widespread acceptance of the potential for useful *in vivo* receptor studies in patients.

Mathew Thakur, PhD, professor and director of radiopharmaceutical research at Thomas Jefferson University Hospital in Philadelphia, explained in a 1984 letter that Dr. Eckelman contributed to the use of such cyclotron-produced radionuclides as thallium-201, indium-111 and iodine-123. "His work with indium-111 bleomycin is as well known as his studies with radioiodinated estrogens, which later led him to the development of receptor binding radiotracers," he wrote.

"Today, receptor binding radiotracers have become a new class of radiopharmaceuticals in their own right since many of such compounds labeled with carbon-11, fluorine-18, and iodine-123 have been successfully prepared and evaluated," Dr. Thakur added. "Recently he and his colleagues prepared iodine-123 labeled QNB for the external imaging of cerebral muscarinic acetylcholine receptors which will lead them and others to the better understanding of many physiological and behavioral changes caused by a variety of neurological diseases. His creativity and productivity have, thus far, earned

(continued on page 587)

(continued from page 586)

him, well deserved, over \$3 million in grant money."

Recently appointed as vice president of diagnostics research and development of the Squibb Institute for Medical Research in New Brunswick, New Jersey, Dr. Eckelman was born in Houston, Texas, in 1941. He received his BS degree in chemistry from St. Louis University in Missouri in 1963, and did his graduate work at Washington University in St. Louis, where he earned the PhD in chemistry in 1968. His first position was at Mallinckrodt Nuclear, St. Louis, Missouri, where he worked on the commercial development of T-3, T-4 and insulin radioimmunoassay techniques.

Young Investigator Award Winner

From October, 1969 through March, 1972, Dr. Eckelman was associate chemist at the Brookhaven National Laboratory in Upton, New York. It was there that he did his major work with technetium-99m, and he received the Young Investigator's award of the Greater New York Chapter of the Society in 1971. Later he served as associate professor in radiology at George Washington University Medical Center in Washington, DC, and as chief of the radiopharmacy and radiochemistry department at Washington Hospital Center. Immediately prior to joining Squibb in March of 1985, Dr. Eckelman was head of the radiopharmaceutical chemistry section at the National Institutes of Health.

Dr. Eckelman said he has worked in nuclear medicine because, after completing his PhD in "hot atom" chemistry, he began looking for a place where he could apply his knowledge. He became involved in nuclear medicine at Mallinckrodt. "The non-invasive use of isotopes in diagnosis has been a big step forward in the medical world and one of the

all-time great peaceful uses of the atom," he said. "Most of the fun of this is to see these things appear in the clinic as part of a non-invasive diagnostic procedure."

Pointing out that science has become so vast that no one person can have a working knowledge of it all, Dr. Eckelman expressed the hope that nuclear medicine will continue to attract individuals with specific expertise who can then work with others in collaborative arrangements. "We should not try to create an amalgam, a Renaissance man," Dr. Eckelman

said. "We need good collaboration, and I think that's the way nuclear medicine has gained what it's gained."

In addition to admiring his scholarly accomplishments, colleagues of Dr. Eckelman appreciate his gentleness and generosity. In the words of one nominating letter: "Dr. Eckelman is a soft spoken, warm individual who is always willing to listen to his friends and peers, as well as other investigators—young and old, new and established alike."

Karla Harby

E&R Foundation Approves Research Grant

The Education and Research (E&R) Foundation of the Society of Nuclear Medicine has approved funding for one pilot research grant and eight student fellowship projects. The pilot research grant for \$3,000 was awarded to Maleah Grover-McKay, MD, Division of Nuclear Medicine and Cardiology, V.A. Medical Center, Long Beach, California, for "Measurement of Regional Myocardial Blood Flow."

Student fellowships for \$2,000 were awarded to:

- John L. Musachio, Johns Hopkins University, Baltimore, Maryland, "Examine Potential of Two New Alkylating Agents to Serve as 'Shelf-Reagents' for Facile Radioiodination."
- Sayed Jovkar, University of Montreal, Quebec, Canada, "Quantification of Dopaminergic Receptors in the Brain with PET using ¹⁸F-Ethylspiperone."
- Mark W. Wilson, University of Michigan, Ann Arbor, "Development of a Coordinate System for Localization of Neuroanatomy on a Radionuclide Brain Image."
- Edward Gosfield, University of Pennsylvania, Philadelphia, "Radioligand Studies of Human CNS Dopamine Receptors Using SPECT."
- Anthony Apicella, University of Miami in Florida, "Multimodality Anatomical and Functional Image Matching."
- Wayne Strauss, Columbia University and Mount Sinai Medical Center, New York City, "Application of a Renal Deconvolution Program of Dynamic Scintigraphy Data for Parameter Displays."
- Lynn E. Digby, University of Pennsylvania, Philadelphia, "Correlate Abnormal Regional Cerebral Glucose Metabolism in Alzheimer's Patients with Functional Cortical Deficits and Reduced CSF and Brain Levels of Certain Neurotransmitters."
- Heidi Jayne Bixby, Albany [New York] College of Pharmacy, "Incorporate ^{99m}Tc Labeled Antibodies onto Surface of Liposomes to Provide a Tracer Delivery System with Rapid Clearance from the Blood."