JOHN G. MCAFEE TO RECEIVE SNM HEVESY NUCLEAR MEDICINE PIONEER AWARD

"John McAfee has done a great deal in almost every aspect of nuclear medicine, particularly in the development of brain and renal imaging agents and bone-scanning agents, as well as in cell labeling."

John G. McAfee, MD, has been designated the 30th recipient of the Georg Charles de Hevesy Nuclear Medicine Pioneer Award by the Society of Nuclear Medicine. Dr. McAfee has held the position of professor of radiology and director of the division of radiological sciences at the State University of New York Health Sciences Center, Syracuse since 1978, and this award reflects not only his work in cell labeling and in the development of bone-scanning agents, but also a lifetime of achievement in the field of radiology.

In discussing the award, Society President Barbara Y. Croft, PhD, reflected on Dr. McAfee's many achievements. "John McAfee has done a great deal in almost every aspect of nuclear medicine, particularly in the development of brain and renal imaging agents and bone-scanning agents, as well as in cell labeling." Dr. Croft, associate professor of radiology at the University of Virginia Hospital, emphasized that the award was explicitly targeted for "pioneers."

During his time in medical school at the University of Toronto, and through his internships in London, Ontario—first at Victoria Hospital and later Westminster Hospital— Dr. McAfee had ample opportunity to become accustomed to the pioneer label he had already carved for himself. Radiology, a relatively new field at that time, was one that intrigued him immediately. Yet he found little recognition for the field until he took a position of instructor of radiology at Johns Hopkins University in 1953. "[At Toronto] radiology was considered the worst specialty," Dr. McAfee recalls. "Everybody was laughing." By the time he arrived at Johns Hopkins, however, he noted that "people were not laughing anymore."

From Radiology to Nuclear Medicine

He credits then Chief of Radiology Dr. Russell Morgan with providing the impetus for his work at Johns Hopkins. Under the late Dr. Morgan's influence, Dr. McAfee moved from service to research radiology and became involved in the development of instrumentation. While chief of diagnostic radiology there in 1958, he decided upon a career shift to nuclear medicine. Dr. Morgan provided him with the opportunity to investigate the field more fully, and he spent one year of training in radioisotope methodology at various centers. He returned to Johns Hopkins where he assumed a position of associate professor of radiology, in charge of the division of nuclear medicine. There he met Henry N. Wagner Jr., MD, a

John G. McAfee, MD

past president of the Society, who had done work in nuclear medicine in Britain and they collaborated on numerous projects from 1958 to 1963.

Dr. Wagner, professor of medicine, radiation, and environmental health sciences at Johns Hopkins Medical Institutions, noted that this teaming occurred during the first five years of nuclear medicine at Johns Hopkins. "We came at it from different ends. He was approaching the field from radiology, and I was coming to it through internal medicine." Their collaboration included work with technetium compounds, kidney imaging, and later spleen and lung work.

(continued on page 578)

(continued from page 577)
During this time, Dr. McAfee made significant strides in rectilinear scanning—a relatively new field in 1960. This "included experimentations with 3-in crystals, then 5- and 8-in crystals until the cameras made them obsolete," Dr. McAfee noted.

In 1965, Dr. McAfee was offered the position of professor and chairman of the department of radiology for the newly constructed SUNY Upstate Medical Center (now called Health Science Center, Syracuse). After staffing the facility in just two short weeks, he embarked on pioneering research with radiopharmaceuticals—a new quantity at the time.

Dr. McAfee's intellectual stature receives high marks among his peers, who reverently refer to him as "Big John." He has had several works published as historical papers in the *Journal of Nuclear Medicine* and has been named the author of most frequently cited papers in Radiology from 1955–1986. Among the various honors accorded to him are the Paul C. Aebersold Award from the Society of Nuclear Medicine, the Johns Hopkins Alumni Award in Nuclear Medicine, and the Herrmann L. Blumgart Award from the New England Chapter of the Society of Nuclear Medicine. His Society memberships include The Society of Nuclear Medicine, the New York Academy of Medicine, the Radiological Society of North America, the Association of University Radiologists, and The American Roentgen Ray Society.

The Nuclear Medicine Pioneer Award was established in 1960 with selection of the recipient to be determined by the SNM President. In 1979, the name was modified to commemorate Georg Charles de Hevesy, PhD DcSci, the Hungarian chemist and developer of radiotracer technique. The award will be presented to Dr. McAfee at the 36th Annual Society of Nuclear Medicine Meeting next month in St. Louis, Missouri.

Richard J. Arnold

(continued from page 576)
emission computed tomography (SPECT) images of a human myocardium, using an Anger camera, a rotating turntable, and an external source for attenuation measurements.

In 1975, Dr. Budinger embarked on an ambitious project to build a dynamic positron emission tomography (PET), to take images of the blood flow in the living heart. Continuing his instrumentation developments, Dr. Budinger—with his colleagues Dr. Ronald Huesman and Dr. Stephen Dorenzo—completed an instrument enabling 2.6 mm resolution in human 3D tomography imaging, surpassing the previous approximately 5 mm limitation. This instrument is now being used in studies of Alzheimer's disease, stroke, epilepsy, heart disease, and other areas.

He has also investigated the light flashes observed by U.S. astronauts during heavy ion exposure in space and was able to reproduce this effect. Additionally, he has contributed to the development of a strontium-82/rubidium-82 generator for imaging of the human heart and determining the integrity of the blood brain barrier.

"Perhaps the single most important characteristic of Tom Budinger's accomplishments in the context of the Award is the fact that his approach to nuclear medicine has always been that of a pioneer whose interest was the application of basic science to the discipline," wrote Michel M. Ter-Pogossian, PhD, professor of radiology at the Mallinckrodt Institute of Radiology at Washington University Medical Center, in his nomination paper to the Society. "Indeed, the enormously broad scope of his activity was, in most instances, dictated by Tom's interest in blazing new trails based on his superb scientific background."

Dr. Stephen E. Dorenzo, senior biophysicist at Lawrence Berkeley Laboratory, notes a strong devotion to medical research: "Dr. Budinger has consistently and untiringly demonstrated an enthusiasm for basic medical science research throughout his professional career, and has frequently turned down offers of prestigious positions at more clinical institutions because of his dedication to basic medical research. His grasp of important developing topics and his ability to communicate their medical significance to others is recognized world-wide, and this is evidenced by the many lectures he is asked to deliver. His research activities have covered and continue to cover a wide spectrum of research medicine—always at the forefront of basic medical science.

The Paul C. Aebersold Award is named for a pioneer in the biologic and medical application of radioactive materials, the first director of the Atomic Energy Commission's Division of Isotopes Development at Oak Ridge. It was first awarded in 1973 and honors outstanding achievement in basic science applied to nuclear medicine. The award will be presented to Dr. Budinger at the 36th Annual Society of Nuclear Medicine Meeting to be held June 13–16 in St. Louis, Missouri.

Richard J. Arnold