

## Stephen L. Bacharach, PhD, Honored with SNMMI de Hevesy Award

**S**tephen L. Bacharach, PhD, a physicist known for his research in cardiac and PET oncology imaging, was named on July 12 at the 2020 SNMMI Annual Meeting as the recipient of the Georg Charles de Hevesy Nuclear Pioneer Award. Bacharach was recognized for his inception of and contributions in the areas of gated cardiac blood pool imaging, informatics, and data processing and analysis. He and his colleagues were the first to apply the technique of cardiac function evaluation at rest and stress, a test that was the mainstay of nuclear medicine for many years.

“Dr. Bacharach is considered to be one of the premier physicists in the area of nuclear medicine and cardiology and is nationally and internationally known for his research on gated cardiac blood pool imaging,” said 2019–2020 SNMMI president Vasken Dilsizian, MD. “Dr. Bacharach is a brilliant teacher, a thoughtful investigator, and a prolific writer. He makes the most difficult concepts in physics, nuclear medicine, and statistics easy to understand. An intellectual with marvelous human values, he is most deserving of the Georg Charles de Hevesy Nuclear Pioneer Award.”

Bacharach received his undergraduate and master’s degrees in engineering physics from Cornell University (Ithaca, NY), where he went on to earn his doctorate in applied physics. For nearly 40 years, he worked at the National Institutes of Health (NIH; Bethesda, MD). He was appointed as a senior tenured research scientist at NIH and was head of the Imaging Science Group until his retirement in 2005. He then moved to San Francisco, CA, where he was appointed visiting professor of radiology at the University of California, San Francisco (UCSF). He retired from UCSF in 2017.

During his career, Bacharach was invited to serve in many short-term appointments around the world, including as a consultant with the World Health Organization at the Bhabha Atomic Research Centre (Mumbai, India), chief medical worker at the University of Utrecht (The Netherlands), and visiting professor in the joint MD/PhD Program at the Massachusetts Institute of Technology and Harvard

University (Boston, MA). He also held the Chair of Excellence at the University Carlos III in Madrid, Spain.

Bacharach served on the editorial board of *The Journal of Nuclear Medicine* for more than 20 years and on the editorial boards of the *Journal of Nuclear Cardiology* and the *Journal of the American College of Cardiology*. He has published more than 200 papers in cardiology, PET, oncology, and image processing. He has served on multiple SNMMI committees and councils and received the SNMMI Hermann Blumgart Award in 2005.

“As a physicist, I am especially honored and humbled to receive the de Hevesy Nuclear Pioneer Award,” said Bacharach. “Although de Hevesy was primarily thought of as a chemist, his degree was in physics, and he worked with some of the greatest names in physics of all time, including Ernest Rutherford and Neils Bohr. I sincerely thank everyone at the SNMMI and all my collaborators for helping me get to this pinnacle at the end of my career.”

Each year, SNMMI presents the Georg Charles de Hevesy Nuclear Medicine Pioneer Award to an individual for outstanding contributions to the field of nuclear medicine. De Hevesy received the 1943 Nobel Prize in chemistry for his work in determining the absorption, distribution, metabolism, and elimination of radioactive compounds in the human body. His work led to the foundation of nuclear medicine as a tool for diagnosis and therapy. SNMMI has given the de Hevesy Award every year since 1960 to honor groundbreaking work in the field of nuclear medicine. The list of previous recipients of this award includes numerous Nobel laureates—including Ernest Lawrence, who built the world’s first cyclotron for the production of radionuclides, and Glenn Seaborg, who discovered more than half a dozen new elements.



**Stephen L. Bacharach, PhD**