



# James G. Kereiakes, PhD – Cincinnati's Charter Medical Physicist

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## Abstract

Dr. James "Jim" Kereiakes was a beloved mentor and scientist. Known as a modest man who set high professional standards for himself and others, he led a distinguished career, with significant contributions in radiation dosimetry and nuclear medicine.

Dr. Kereiakes was a charter member of the American Association of Physicists in Medicine (AAPM) and organized the AAPM's first dinner, held in Cincinnati (1959). Throughout his career he helped foster professional development of a large number of students initiating training programs in nuclear medicine technology, radiology administration, and radiological sciences (medical physics).

Dr. Kereiakes desired to impress the importance of active participation in professional affairs, "be involved and set an example." For his efforts and offerings, he was awarded the highest honors from the AAPM, the Radiological Society of North America (RSNA), and the University of Cincinnati (UC). His example continues to illuminate the path of our profession.

## Origin & Family



Jim was raised by Greek immigrants in Bowling Green, Kentucky. When Jim entered grade school, he spoke little English but quickly overcame this barrier, impressing his teachers with his intelligence.

The image to the left (~1930) shows Jim as a young child between his two sisters, Angie and Kay; not shown is his brother Spero.



In Cincinnati, Jim met and married the love of his life, Helen (nee Christy), whom he was described as inseparable from. Shown above (August 1950) with their parents.



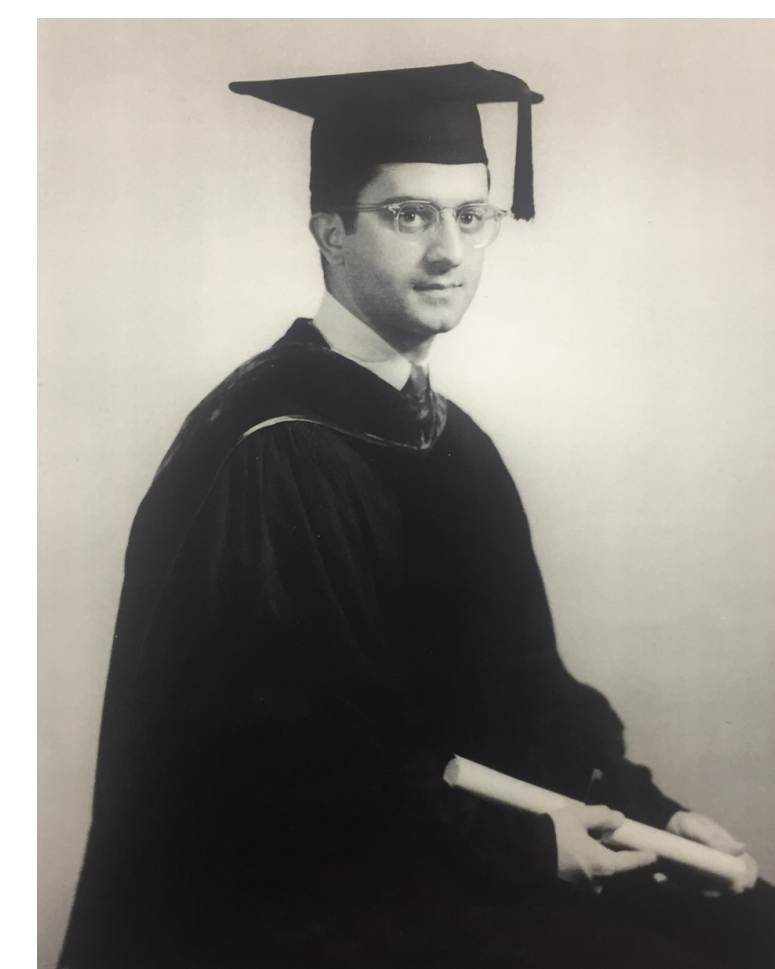
Jim and Helen had four children, shown in the photo to the left (~1963); clockwise from top: Dean, Beth, Penny and Tom – both sons would eventually become practicing physicians in Cincinnati, Ohio

Family was incredibly important to Jim and Helen. By 2018, the Kereiakes family had grown to include eighteen grandchildren and more than six great grandchildren; many of whom are shown below in this photo taken on Jim's 90<sup>th</sup> birthday (2014)



## Education

B.S. Physics (1945), Western Kentucky College (to become Western Kentucky University) Bowling Green, Kentucky  
M.S. Physics (1947), University of Cincinnati Cincinnati, Ohio  
Ph.D. Physics (1950), University of Cincinnati Cincinnati, Ohio



Jim's graduation photo (1945)



Jim enjoyed sports very much but was not tall enough to play for the basketball team in college, so instead he was the team manager. Seen in solid white on the far right of the photo to the left.



Above is a postcard showing the UC campus when Jim attended and became Dr. Kereiakes

## Work

Army Medical Research Laboratory  
Fort Knox, KY

Physicist, Environmental Medical Department  
(1950-1953)

Supervising Physicist, Radiobiology Department  
(1953-1957)

Deputy Director, Radiobiology Department  
(1957-1959)



The first nine years of Dr. Kereiakes' career was spent at the Army Research Laboratory where he worked on multiple projects including conjugating a biological test package for one of the earlier non-orbital space flights. He also demonstrated his leadership ability. Photographs from this period of his life are shown to the right and above.



College of Medicine  
Cincinnati, Ohio

Assistant Professor of Radiology  
(1959-1962)

Associate Professor of Radiology  
(1962-1968)

Professor of Radiology  
(1968-1991)

Professor Emeritus  
(1991)



The rest of Dr. Kereiakes' career was spent at the University of Cincinnati, College of Medicine where we worked on a large number of projects and started multiple graduate programs focused on radiological physics and radiological health. He quickly rose through the ranks, achieving full professor in less than 10 years. He is shown in the front row far left with department members including physician colleagues in lab coats, department chair Ben Felson, MD and Jerome Wiot, MD (far right).



Dr. Kereiakes is seen on the right between Stephen Thomas, PhD (2<sup>nd</sup> from left) who first worked with him as a post-doctoral student before joining the UC faculty and Eugene Saenger, MD (far right) who was instrumental in recruiting him to the University. Jerome Wiot, MD is on the left.

## Achievements

-Active research programs in all areas of medical physics with an emphasis on nuclear medicine

-Highlights include contributions to radiopharmaceutical dosimetry and the first dynamic function studies with a gamma camera

-Leadership in pediatric radiation dosimetry

-170 scientific publications, 30 book chapters

-Co-authored a number of books including "Handbook of Radiation Doses in Nuclear Medicine and Diagnostic Radiology" (CRC Press 1980)

-Educational programs established/nurtured for: Medical Physicists, Radiologists, Radiology Administrators, Radiological Health, and Nuclear Medicine Technology

-Postdoctoral training in Medical Physics

-78 MS and PhD Medical Physics degrees awarded



Dr. Kereiakes is seen above with several of his students on the occasion of his acceptance of the RSNA Gold Medal; from left to right, Steve Thomas, Howard Elson, Jim Deye, Cliff Born, Guy Simmons, Dr. Kereiakes, and Joe Windham

## Service

American Association of Physicists in Medicine

Founder/Editor of the Quarterly Bulletin (1967-70)

President (1970)

Chair, Local Arrangements Committee, AAPM Annual Meeting, Cincinnati (1977)

Chair, Awards and Honors Committee (1984-87)

Program Director 1986 Summer School

Radiological Society of North America

Member, Scientific Program Committee (1975-81)

Coordinator, RSNA/AAPM Symposium (1978-81)

Member, Strategic planning Committee (1980-82)

Vice-President (1981-82)

Research & Education Foundation Board of Trustees – Founding Member (1984-88)

Health Physics Society

Ohio State Radiological Society

American College of Radiology, Fellow

Society of Nuclear Medicine & Molecular Imaging

American Society of Therapeutic Radiation Oncology

American Board of Radiology - 25 years as an item writer and examiner



Dr. Kereiakes is seen above receiving the AAPM presidential gavel in 1970 from outgoing president Bob Gorson.

## Honors

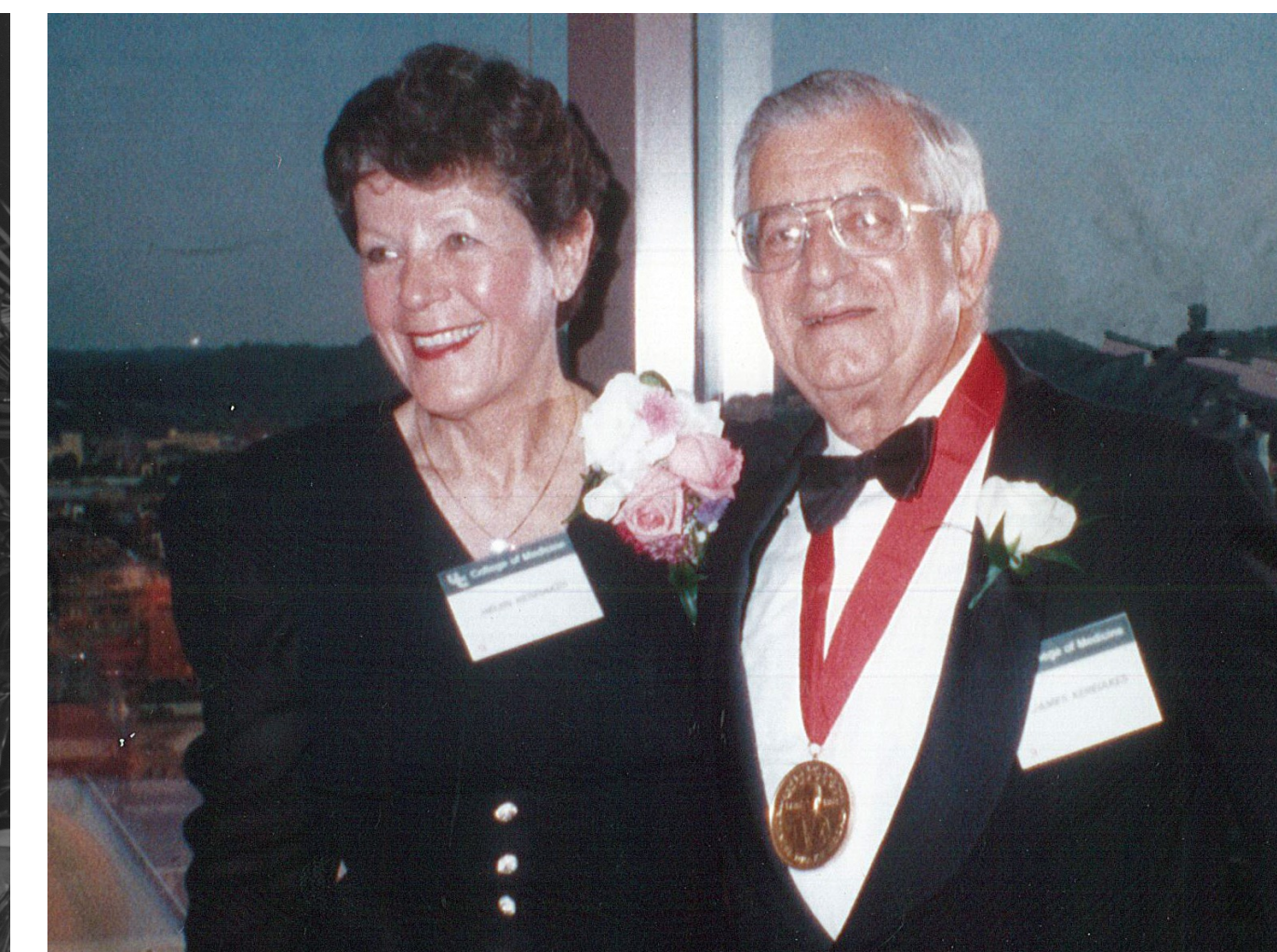
AAPM, William D. Coolidge Gold Medal (1981) (bottom left)

RSNA, Gold Medal (1988) (bottom center)

University of Cincinnati, Daniel Drake Medal (1994) (bottom right)

Western Kentucky University, Hall of Distinguished Alumni (2000)

Ohio River Valley Chapter; AAPM, James G. Kereiakes Lecture (2006)



Calvin Coolidge said it best, "No person was ever honored for what he received. Honor has been the reward for what he gave."

Dr. Kereiakes gave considerably and we will continue to honor his memory.

## Bibliography

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