

*American Association
of
Physicists in Medicine*



Awards Ceremony

*July 22, 1996
Philadelphia Marriott Ballroom
Philadelphia, Pennsylvania
6:00 pm*

The American Association of Physicists in Medicine was founded in 1958 to promote the application of physics to medicine and biology, to encourage interest and training in medical physics and related fields and to prepare and disseminate technical information in medical physics and related fields.

William D. Coolidge Award

The AAPM's highest honor is presented to a member who has exhibited a distinguished career in medical physics, and who has exerted a significant impact on the practice of medical physics.

William D. Coolidge Award Recipients

1972	William D. Coolidge	1985	Jack S. Krohmer
1973	Robert J. Shalek	1986	Warren K. Sinclair
1974	John S. Laughlin	1987	Gordon L. Brownell
1975	Marvin M.D. Williams	1988	John R. Cunningham
1976	Harold E. Johns	1989	William R. Hendee
1977	Edith E. Quimby	1990	Peter R. Almond
1978	Lawrence H. Lanzl	1991	Moses A. Greenfield
1979	Herbert M. Parker	1992	Nagalingam Suntharalingam
1980	John R. Cameron	1993	Colin G. Orton
1981	James G. Kereiakes	1994	F. H. Attix
1982	Gail D. Adams	1995	Robert Loevinger
1983	Edward W. Webster	1996	Leonard Stanton
1984	Robley D. Evans		

Award for Achievement in Medical Physics

The Achievement Award denotes outstanding career achievement in medical physics practice, education, or organizational affairs and professional activities.

AAPM Fellowship

The category of Fellow honors members who have distinguished themselves by their contributions in research, education, and leadership in the medical physics community.

1996 Program

Welcome and Presentation of Awards

Bhudatt R. Paliwal, Ph.D., FAAPM
AAPM President

Young Investigators Competition

AAPM/IPSM Travel Award

Daniel A. Low, Ph.D.

AAPM Medical Physics Travel Award

Eugene Lief, Ph.D.

Farrington Daniels Award

Weimin Chen, Ph.D.
Ed Robert Blazek, Ph.D.
Ivan Rosenberg, Ph.D.

Sylvia Sorkin Greenfield Award

James T. Dubbins, III, Ph.D.
David L. Ergun, Ph.D.
Lois Rutz, M.S.
Dean A. Hinshaw, Ph.D.
Hartwig Blume, Ph.D.
Dwayne C. Clark, M.D.

AAPM Fellows

Benjamin R. Archer, Ph.D., FAAPM	Jatinder R. Palta, Ph.D., FAAPM
Bruce H. Curran, M.E., FAAPM	Ervin B. Podgorsak, Ph.D., FAAPM
Paul M. DeLuca, Jr., Ph.D., FAAPM	Lawrence N. Rothenberg, Ph.D., FAAPM
Benedick Fraass, Ph.D., FAAPM	James B. Smathers, Ph.D., FAAPM
Martin W. Herman, Ph.D., FAAPM	Perry Sprawls, Ph.D., FAAPM
F. Eugene Holly, Ph.D., FAAPM	Bruce R. Thomadsen, Ph.D., FAAPM
Geoffrey S. Ibbott, Ph.D., FAAPM	Jeffrey F. Williamson, Ph.D., FAAPM
Philip F. Judy, Ph.D., FAAPM	Joe P. Windham, Ph.D., FAAPM
Carolyn Kimme-Smith, Ph.D., FAAPM	Michael V. Yester, Ph.D., FAAPM
C. Clifton Ling, Ph.D., FAAPM	Robert E. Zimmerman, M.S.E.E., FAAPM

Award for Achievement in Medical Physics

Arnold Feldman, Ph.D., FAAPM

William D. Coolidge Award

Leonard Stanton, M.S., FAAPM

Closing Remarks

Reception immediately following



AAPM William D. Coolidge Recipient for 1996

Leonard Stanton, M.S.

Leonard Stanton, whose parents emigrated from Russia near Kiev about 1910, was born in 1917 and raised in Philadelphia. He won a scholarship to Temple University where he received his BA in Physics in 1939. For the next 10 years he worked in industry as an instrument design engineer.

In 1949 Leonard became the assistant physicist at the Philadelphia General Hospital (PGH) where he worked with Chief Physicist, Ted Sopp. His responsibilities included supervising the operation of the radon plant in the Radium Clinic. This radon plant was originally installed by Dr. Failla and operated for a time by Marvin M.D. Williams several decades earlier. While at PGH, Leonard took graduate physics courses at the University of Pennsylvania, obtaining his MS Degree in 1952. He then joined James Weatherwax at the American Oncologic Hospital to operate, service, and maintain the new 1.75 MV Van de Graaf therapy unit built by Dr. Trump at the Massachusetts Institute of Technology.

In 1958, Jim Weatherwax, one of the pioneers in medical physics and his professional mentor for many years, encouraged Leonard to seek a position in a medical school environment. Leonard became the first full-time physicist at Hahnemann Medical College Hospital, where he was responsible for all medical and health physics activities. The following year, Dr. Luther Brady arrived to greatly improve and expand the radiation therapy and nuclear medicine division, recruiting David Lightfoot and Dr. John Day to the physics staff. Thus began a very happy and productive working relationship that lasted more than two decades until Leonard retired in 1982 as Professor Emeritus in Radiation Oncology and Nuclear Medicine.

Leonard is best remembered by radiologists for the physics courses and refresher courses he gave for many years without charge to residents from hospitals throughout Philadelphia and vicinity, a tradition he inherited from Jim Weatherwax. He is best known in medical physics for his pioneering work on the physics of mammography including image quality and dosimetry, and development of breast imaging phantoms. Many of his original ideas were incorporated in present National Council on Radiation Protection and Measurements' (NCRP) Reports and the Food and Drug Administration's regulations for the Mammography Quality Standards Act.

Leonard, certified by the American Board of Radiology and the American Board of Health Physics, is a fellow of the American College of Radiology (ACR) and American Association of Physicists in Medicine (AAPM). In 1985 he received the highest honor of the Radiological Society of North America, the Gold Medal. Over the years he served on many committees of the American National Standards Institute, NCRP, ACR, American Society of Therapeutic Radiology, RSNA, and the AAPM. He is a charter member of the AAPM and served as Secretary from 1964 to 1971. Leonard has over 50 publications and a book entitled "Basic Medical Radiation Physics".

For the many friends and colleagues who know him personally, Leonard is the epitome of honesty, modesty, patience and perseverance, one reluctant to accept credit for his own achievements but quick to so honor others.

Award for Achievement in Medical Physics

Arnold Feldman, Ph.D.



Arnold Feldman received his BS degree from the University of Pennsylvania in 1944 and his MS degree from the California Institute of Technology in 1948. He served in the Manhattan project from 1944 until the end of World War II at Los Alamos, New Mexico. He started his career in medical physics in the Section of Biophysics and Biophysical Research of the Mayo Clinic. There he was inspired by Marvin M.D. Williams who became his friend and mentor.

In addition to performing typical medical physics functions at Mayo, he was active in cell culture radiobiology. In 1951, Arnold moved to the Radiology Department at the University of Colorado, where he received a PhD degree in physiology (Radiobiology) in 1960.

From 1962 to 1963 Arnold was a Fellow in the Radiotherapy Department at Churchill Hospital, Oxford, England. Afterwards, he returned to Colorado and later to the Mayo Clinic. He moved on to Washington University in St. Louis, Missouri, where he was a member of the team that developed custom-shaped blocks of a low-melting point alloy. Arnold is now with the Methodist Medical Center, Peoria, Illinois.

Dr. Feldman has served on numerous committees and commissions of the American Association of Physicists in Medicine including as chair of the Awards and Honors Committee, the American College of Medical Physics, and the American College of Radiology. He is truly a medical physicist of many talents, who has contributed to the physics of therapeutic radiology, diagnostic radiology, nuclear medicine, and radiobiology. He is dedicated to his work and is a person of high integrity. It is truly appropriate for Dr. Arnold Feldman to receive the first Achievement Award in Medical Physics from the American Association of Physicists in Medicine.

New AAPM Fellows

Benjamin R. Archer, Ph.D.



Benjamin R. Archer received his PhD in Biophysics from the University of Texas Graduate School of Biomedical Sciences. He is currently an Associate Professor of Radiological Science in the Department of Radiology at Baylor College of Medicine and Radiation Safety Officer for Harris County Hospital District. Dr. Archer's activities with the American Association of Physicists in Medicine have included At-Large member of the Board of Directors, Co-Chair of Diagnostic Task Group 13 (NCRP 49 Rewrite Committee) and member of the Diagnostic Imaging Committee, among others. He is a Fellow of the American College of Medical Physics and has served on the Board of Directors of that organization. Dr. Archer has also served as Councilor-at-Large to the American College of Radiology, member of International Electrotechnical Commission Advisory Group, member of the Radiological Society of North America Scientific Program Committee, and the National Council of Radiation Protection and Measurements Scientific Committee 9.



Bruce H. Curran, M.E.

Bruce Curran has been active in medical physics and the American Association of Physicists in Medicine (AAPM) for over 20 years. He has been involved in the use of computers in medical physics and serves as the chair of the American Institute of Physics' Database and On-line Services Subcommittee. Bruce has been Editor of the *AAPM Newsletter*, chair of the Membership Committee, Secretary of AAPM, and chair of the Local Arrangements Committee for the 1995 Annual Meeting. He has served on more than 20 committees. He initiated the AAPMnet Annual Meeting Networking Activities, and has been instrumental in the formation and activity of the AAPM Internet node. Bruce is currently a Special Projects Engineer for NOMOS Corporation and an Assistant Professor in Radiation Oncology and Radiology at the Tufts University School of Medicine. He has published over 30 articles and made numerous presentations.



Paul M. DeLuca, Jr., Ph.D.

Paul M. DeLuca, Jr., received his PhD in Nuclear Physics from the University of Notre Dame in 1971. He began his Medical Physics career as a Post-doctoral researcher at the University of Wisconsin. Paul is presently Professor of Medical Physics and in 1987 became the Chairman of the Medical Physics graduate programs at the Medical School at the University of Wisconsin. Even though the seeds for this program were sown by Dr. John Cameron, Dr. DeLuca has been instrumental in its growth. Dr. DeLuca has served on many committees of the American Association of Physicists in Medicine (AAPM) including the Committee on the Education and Training of Medical Physicists. He has participated in the review activities of the AAPM's Commission on Accreditation of the Medical Physics Graduate Programs. He is also a Review Committee member of the Commission on the Accreditation of Medical Physics Education Programs.



Benedick Fraass, Ph.D.

Benedick Fraass received his PhD from the University of Illinois—Urbana-Champaign in 1980. He then worked in the Radiation Oncology Branch of the National Cancer Institute (NCI), in Bethesda, Maryland. In July 1984 Dr. Fraass left the NCI to help build a new radiotherapy department at the University of Michigan. He is board certified in Therapeutic Radiological Physics by the American Board of Radiology, and Radiation Oncology Physics by the American Board of Medical Physics. He is currently chairman of Task Group # 53 (Treatment Planning Quality Assurance) of the American Association of Physicists in Medicine. He is the principal investigator of an NCI program project grant on conformal therapy, and has participated in numerous NCI activities. He is currently an Associate Editor for *Medical Physics*. Dr. Fraass has published 65 peer-reviewed papers, 44 book chapters and other papers, and has participated in 140 scientific meeting presentations.

Martin W. Herman, Ph.D.



Martin W. Herman received his BS in nuclear engineering from the University of North Carolina in 1964, his MS in Public Health from the University of California—Los Angeles (UCLA) in 1970 and his PhD from UCLA in 1973. He is an Associate Adjunct Professor at UCLA, a consultant in radiation oncology physics at Harbor-UCLA Medical Center and at Charles Drew-Martin Luther King Medical Center, and a consultant in radiology and radiation oncology physics at the St. Francis Medical Center. Martin has served as president of the Southern California Chapter of the American Association of Physicists in Medicine, president and secretary of the Southern California Chapter (SCC) of the Health Physics Society (HPS), and has received the Louis Silverman Award from the SCC of the HPS. He is a Fellow of the American College of Radiology.

F. Eugene Holly, Ph.D.



F. Eugene Holly received his PhD in Radiology (Medical Physics) from the University of California—Los Angeles (UCLA). He spent 15 years with the United States Air Force (USAF) directing space radiation research (bioastronautics) prior to joining the medical school faculty at UCLA 23 years ago. His primary interests have been in teaching, microdosimetry, total body irradiation, quality assurance, equipment purchasing techniques, and stereotactic radiosurgery. He installed the first clinically used gamma knife in 1980 and was active in the development of I-123 iodohippurate for renal scanning. He was honored by the American Institute of Physics and the USAF for discovery of electrons in the earth's radiation belts. He is a Fellow of the American College of Medical Physics. As Professor Emeritus (UCLA) and Adjunct Professor, he enjoys semi-retirement, teaching, and consulting in clinical medical physics.

Geoffrey S. Ibbott, Ph.D.



Geoff Ibbott started his career in medical physics with a summer job while still in high school. He received his MS degree from the University of Colorado in medical physics and in 1986 started his PhD studies at Colorado State University while working in radiation therapy at the University of Colorado Health Sciences Center. By the time he received his PhD, he had joined the staff of Yale-New Haven Hospital. In 1994 he joined the faculty of the University of Kentucky, where he directs the Section on Radiological Physics. Geoff has served in many positions in the American Association of Physicists in Medicine (AAPM). He presently chairs the AAPM's Professional Council and serves as liaison to the American College of Radiology's Commission on Physics and Radiation Safety. Dr. Ibbott has made many scientific contributions in therapeutic radiological physics and has been a leader in his contributions to professional and editorial activities.



Philip F. Judy, Ph.D.

Philip F. Judy received his PhD in medical physics from the University of Wisconsin in 1971 where he investigated the use of dual-energy x-ray for the in vivo measurement of bone mineral. This research was the basis of a patent awarded to NASA in dual energy x-ray absorptiometry. In 1973, Phil moved to Boston, Massachusetts, and the Brigham and Women's Hospital. He is an Associate Professor of Radiology at Harvard Medical School and Director of the Division of Physics and Engineering at Brigham and Women's Hospital. For the past 15 years, he has investigated how variations in image quality affect radiographic perception and is the author on over 140 scientific papers, articles, and reviews. He has also served on several Committees of the American Association of Physicists in Medicine. Dr. Judy chaired the committee that wrote AAPM Report No. 1, "Phantoms for Performance Evaluation and Quality Assurance of CT Scanners".



Carolyn Kimme-Smith, Ph.D.

Carolyn Kimme-Smith received her PhD from the University of California—Irvine in Radiological Sciences. She received her post-doctoral training at the University of California—Los Angeles before being appointed to the faculty there in 1984. Carolyn specializes in medical ultrasound and has worked with Larry Bassett, M.D. assisting in interpreting whole breast ultrasound images. She is also involved in mammography physics as a result of her introduction to breast imaging with ultrasound. Carolyn has served on the ultrasound and mammography quality control committees of the American Association of Physicists in Medicine (AAPM), is an Associate Editor of *Medical Physics* and is on the Editorial Board of *AJR*, serves as a member of the Commission on Accreditation of Medical Physics Educational Programs, and has been an at-large member of AAPM's Board of Directors. Dr. Kimme-Smith is currently on the American College of Radiology's Committee for the Accreditation of Stereotactic Breast Biopsy Units.



C. Clifton Ling, Ph.D.

C. Clifton Ling received his PhD from the University of Washington in Nuclear Physics in 1971. He served as a Post Doctoral Fellow in the Biophysics Division of the Sloan-Kettering Institute. His studies on cellular response to high intensity pulsed electrons yielded critical information on oxygen diffusion. Dr. Ling continued his pulsed radiation studies at the Massachusetts General Hospital (1974-79). His paper on the role of electrons in the build-up region won the Farrington Daniels Award in 1979. Dr. Ling has served as Head of the Physics Section at George Washington University (1979-1985) and in the Department of Radiology of the University of California Medical School as Professor and Vice-Chairman of the Department of Radiation Oncology. In 1989 he became Chair of Medical Physics and Head of the Biophysics Laboratory of the Memorial Sloan-Kettering Cancer Center.

Jatinder R. Palta, Ph.D.



Jatinder R. Palta earned his MS and PhD degrees in Medical Physics from the University of Missouri. He received postgraduate training at the M.D. Anderson Hospital, and then was employed at the University of Missouri, at Thomas Jefferson University, at St. Jude's Childrens Research Hospital, and at the University of Tennessee in Memphis before joining the Faculty of the University of Florida, Gainesville in 1993. He currently holds the rank of Professor and Chief of Physics in the Department of Radiation Oncology at Gainesville. Dr. Palta is involved in many activities of the American Association of Physicists in Medicine (AAPM). He is the current chairman of the Radiation Therapy Committee and a member of the Board of Directors. He has been and is currently involved with numerous AAPM Task Groups. He has published extensively in the field of medical physics, and has been an invited speaker both nationally and internationally.

Ervin B. Podgorsak, Ph.D.



Ervin B. Podgorsak was born in Vienna, Austria, and grew up in Slovenia. Subsequent to earning his degree in physics from the University of Ljubljana he received his MS and PhD degrees from the University of Wisconsin. He moved to Canada in 1974 and is presently Professor, Faculty of Medicine, and Director of the Medical Physics Unit at McGill University. He is also Director of the Department of Medical Physics at Montreal General Hospital. Ervin is being recognized for his significant involvement in professional organizations, his teaching, and his scientific publications. He has been a member of the American Association of Physicists in Medicine (AAPM) Board of Directors, serves as Associate Editor of *Medical Physics* and was President of the Canadian College of Medical Physics from 1987 to 1989. He is Director of the AAPM-Accredited educational programs in Medical Physics at McGill. Dr. Podgorsak is co-author of about 100 peer-reviewed medical physics articles.

Lawrence N. Rothenberg, Ph.D.



Lawrence N. Rothenberg received his PhD from the University of Wisconsin in 1970. He was a Post Doctoral Fellow at the Memorial Hospital, Department of Medical Physics in 1970. He joined the Medical Staff of Memorial Hospital the following year and became Associate Attending Physicist at Memorial and Associate Professor of Physics in Radiology at Cornell University Medical College. Larry is board certified by the American Board of Radiology and the American Board of Medical Physics. He has served the American Association of Physicists in Medicine in many capacities and is presently an Associate Editor of *Medical Physics*. Larry is a member of the Board of Directors of the National Council on Radiation Protection and Measurements. He has also been active in the American College of Medical Physics, the International Commission of Radiological Units, and the American College of Radiology. Dr. Rothenberg has published extensively on the applications of physics in diagnostic radiology.



James B. Smathers, Ph.D.

Jim Smathers started his career as a Nuclear Engineer and was thrust into medical research, courtesy of the U.S. Army, when he was assigned to the Walter Reed Army Institute of Research. After receiving his PhD, he moved to Texas A & M University where he became involved in the M.D. Anderson clinical neutron therapy program. In 1980 he moved to the University of California—Los Angeles (UCLA) as Professor of Radiation Oncology and Director of the physics section in the Department of Radiation Oncology. While there he had the challenge of constructing a neutron therapy facility and participating in the National Cancer Institute's clinical neutron therapy trials. He is an active participant in the Medical Physics Graduate Program at UCLA and is Treasurer of the American Association of Physicists in Medicine. He is board certified in radiation oncology physics and health physics, and is licensed as a Nuclear Engineer in several states.



Perry Sprawls, Ph.D.

Perry Sprawls received his PhD from Emory University. He joined the Emory University faculty in 1960 and is now Professor of Radiology and Director of the Division of Radiological Sciences. Perry's professional activities are in the field of medical imaging with an emphasis on image analysis. His interests and investigations in human learning, especially as it applies to physics, has led to the development of models for more effective learning. He is an educator and the author of several textbooks in the field of medical imaging. Much of his effort is now devoted to the improvement of medical imaging and our profession in developing countries. Perry created the Partners in Physics Program which is administered by the International Affairs Committee. He is Co-Director of the College of Medical Physics of the International Centre of Theoretical Physics in Trieste, Italy which is devoted to the improvement of physics in developing countries.



Bruce R. Thomadsen, Ph.D.

Bruce Thomadsen trained in one of the first medical physics residencies, at Henry Ford Hospital in Detroit. After working for a short time in Flint Michigan, spending a year obtaining his first Master's degree, and a year in New Jersey, Bruce came to the University of Wisconsin—Madison, which he would call home for the next 21 years. While at Wisconsin, Bruce spent much of his effort further developing the programs in brachytherapy and radiotherapy safety, and worked with fundamental dosimetry of external photon and electron beams. While much of Bruce's energy has been directed towards clinical problems, his main interest has been teaching, particularly sharing medical physics ideas with the graduate students, and helping them to discover medical physics for themselves.

Jeffery E. Williamson, Ph.D.

Jeffrey Williamson currently provides medical physics services for the Department of Radiation Oncology at the Mallinckrodt Institute of Radiology. He entered the academic world as a philosopher and then moved into medical physics first as a dosimetrist in Minnesota. Dr. Williamson has served the American Association of Medical Physicists in many capacities. In 1994 he directed the Summer School course on "Modern Brachytherapy Physics". Jeff has been invited by agencies such as the United States Nuclear Regulatory Commission and the International Atomic Energy Agency to speak on brachytherapy. He has over fifty peer-reviewed manuscripts to his credit. Dr. Williamson was awarded the Farrington Daniels Award for the best paper published in *Medical Physics* on radiation dosimetry in 1994.



Joe P. Windham, Ph.D.

Joe Windham received his MS and PhD degrees from the University of Cincinnati. Dr. Windham worked as a Health Physicist at Wayne State University in Detroit. In 1972 he joined the Medical College of Ohio and St. Vincent Hospital in Toledo. In 1984 he went to the Henry Ford Hospital in Detroit, Michigan to expand his research in image processing and analysis. There he continued his development of the Eigenimage Filter Technique with National Institutes of Health (NIH) support. He became head of the Division of Medical Physics, Department of Radiology in 1993. Joe is actively involved in NIH supported research in the application of image processing and analysis applied to neurologic disorders, such as stroke and tumors. He is certified in Radiological Physics by the American Board of Radiology. Dr. Windham has been very active in both the American Association of Physicist in Medicine and the American College of Radiology.



Michael V. Yester, Ph.D.

Michael Yester received his PhD degree in physics from Iowa State University. A postdoctoral fellowship at Carnegie Mellon University in Nuclear Chemistry led to a fellowship at West Virginia University in Medical Physics and Radiation Safety. He joined the University of Alabama at Birmingham in September, 1976 and is currently a Professor in the Department of Radiology. Michael is certified by the American Board of Radiology. He has served as president of the Southeast Chapter of the American Association of Physicists in Medicine (AAPM) and was recently elected to the AAPM Board of Directors. Michael served as Local Arrangements Chair and Co-Director of the 1989 AAPM Summer School and is currently on the Continuing Education Committee and the Summer School Sub-Committee. He also serves on the Commission on the Accreditation of Medical Physics Education Program's Residency Education Program Review Committee.





Robert E. Zimmerman, M.S.E.E.

Robert Zimmerman completed his BSEE at the University of Cincinnati and began his association with medical physics at the Radioisotope Lab of the General Hospital. He obtained an MSEE degree in 1967. After designing nuclear counting equipment in industry he moved to his present position at Harvard Medical School's Joint Program in Nuclear Medicine. He expanded his interests in gamma cameras, computers and their clinical application, and became involved in teaching of physicists and nuclear medicine residents at Harvard and the Massachusetts Institute of Technology. He has served as a consultant to the International Atomic Energy Agency and worked on nuclear medicine projects in Pakistan, Indonesia, Thailand, and South Korea. Robert has been active in the American Association of Physicists in Medicine, the Society of Nuclear Medicine, and the Institute of Electronic and Electrical Engineers at the local and national levels. He has authored of over 70 scientific publications.

Farrington Daniels Award

The Farrington Daniels Award for the best paper on radiation dosimetry published in *Medical Physics* in 1995 is presented to Weimin Chen, Ed Robert Blazek, and Ivan Rosenberg for their paper entitled, "The relaxation of supercoiled DNA molecules as a biophysical dosimeter for ionizing radiation: a feasibility study," *Med. Phys.* 22(9), September, pp. 1369-1375.

Sylvia Sorkin Greenfield Award

The Sylvia Sorkin Greenfield Award for the best paper (other than radiation dosimetry) published in *Medical Physics* in 1995 is presented to James T. Dobbins, David L. Ergun, Lois Rutz, Dean A. Hinshaw, Hartwig Blume, and Dwayne C. Clark for their paper entitled, "DQE(f) of four generations of computed radiography acquisition devices," *Med. Phys.* 22 (10), October, pp. 1581-1593