# American Association of Physicists in Medicine



Awards Ceremony

July 28, 1997
Hyatt Regency Milwaukee
Regency Ballroom
Milwaukee, Wisconsin
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 interes 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	1997	James A. Purdy

# Award for Achievement in Medical Physics

The Achievement Award denotes outstanding career achievement in medical physics practice, education, or ogranizational 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.

# 1997 Program

#### **Welcome and Presentation of Awards**

Stephen R. Thomas, Ph.D., FAAPM AAPM President

# **Young Investigators Competition**

#### **AAPM/IPEM Travel Award**

Donald E. Herbert, Ph.D., FAAPM

# **AAPM Medical Physics Travel Award**

Rodica Alecu, Ph.D.

### **Farrington Daniels Award**

Marek J. Maryanski, Ph.D.
Geoffrey S. Ibbott, Ph.D., FAAPM
Peter K. Eastman
Robert J. Shulz, Ph.D., FAAPM
John C. Gore, Ph.D.

# Sylvia Sorkin Greenfield Award

Michael S. Westmore, B.Sc. Aaron Fenster, Ph.D. Ian A. Cunningham, Ph.D.

#### **AAPM Fellows**

Suresh K. Agarwal, Ph.D., FAAPM
James A. Deye, Ph.D., FAAPM
Jerald W. Hilbert, Ph.D., FAAPM
Edward L. Nickoloff, D.Sc., FAAPM
Walter Nikesch, Ph.D., FAAPM
Azam Niroomand-Rad, Ph.D., FAAPM
David W. O. Rogers, Ph.D., FAAPM
Martin L. Rozenfeld, Ph.D., FAAPM
Prakash N. Shrivastava, Ph.D., FAAPM

George Starkschall, Ph.D., FAAPM
K. David Steidley, Ph.D., FAAPM
Marilyn Stovall, Ph.D., FAAPM
Randall K. Ten Haken, Ph.D., FAAPM
Johannes van de Geijn, Ph.D., FAAPM
Jacob Van Dyk, M.Sc., FAAPM
Martin Yaffe, Ph.D., FAAPM
James A. Zagzebski, Ph.D., FAAPM

# Award for Achievement in Medical Physics

Robert O. Gorson, M.S., FAAPM

# William D. Coolidge Award

James A. Purdy, Ph.D., FAAPM

# **Closing Remarks**

Reception immediately following in the Executive Ballroom



# AAPM William D. Coolidge Recipient for 1997 James A. Purdy, Ph.D.

James A. Purdy was born in Tyler, Texas in 1941. He received a B.S. in Math and Physics from Lamar University in 1967 and an Master of Arts (Physics, 1968) and Doctoral Degree (Nuclear Physics, 1971) from the University of Texas at Austin. Dr. Purdy's interest in Medical Physics was ignited by a lecture by Dr. Robert Shalek, a distinguished leader in the profession. Dr. Shalek convinced him to enter M.D. Anderson's biophysics program where Dr. Purdy served as a research assistant for one year before returning to the University of Texas at Austin to complete his doctorate. It was this year's experience with Dr. Shalek that led him to return to M.D. Anderson in 1972 for one more year as a Fellow in Medical Physics, thereby launching his truly exceptional career. Dr. Purdy left M.D. Anderson in 1973 and went to Washington University School of Medicine where he is now Professor in Radiation Physics in Radiology and Chief of the Physics Section of the Division of Radiation Oncology.

Dr. Purdy has served as AAPM President, a member or chair of seven AAPM Task Groups, on numerous AAPM committees, and has been the director of an AAPM summer school. Dr. Purdy is also very active in other scientific and professional organizations including the American Society of Therapeutic Radiology and Oncology, the American College of Radiology, the Radiation Therapy Oncology Group, the American Board of Radiology, the American Board of Medical Physics, the American College of Medical Physics, and the American Institute of Physics. Dr. Purdy has been Chair of the Board of Chancellors of the American College of Medical Physics and currently serves on the ASTRO Board of Directors. He also serves as a senior editor (Physics) for the International Journal of Radiation Oncology, Biology, and Physics.

Dr. Purdy is a Fellow in the American College of Medical Physics, the American College of Radiology, and the American Association of Physicist in Medicine. He has received many prestigious awards including the ACMP Marvin M.D. Williams Professional Achievement Award.

Dr. Purdy continues to exert a significant influence upon the scientific practice of Medical Physics. Besides his 101 peer-reviewed publications over the past twenty years, Dr. Purdy has 84 invited national and international publications and symposium proceedings, 154 published abstracts, 65 invited professorships and lectureships worldwide, and has edited 5 books. He has been the principal investigator on nine funded research grants totaling several million dollars.

Special recognition must be given to the numerous contributions that Dr. Purdy has made as a pioneer and advocate of 3-D treatment planning. His major achievements in this area are making a substantial impact upon the field of radiation oncology. The abundant contributions that Dr. Purdy has made through his participation with numerous committees, scientific organizations, and editorships are immeasurable. His ardent enthusiasm and dedication to his career field have not only left a lasting impression upon Medical Physics and radiation oncology, but also upon his colleagues, students, and friends.

# **AAPM Award for Achievement in Medical Physics**

Robert O. Gorson, M.S.

After serving in the Navy during World War II, Robert O. Gorson returned to the University of Pennsylvania where he obtained his Bachelors and Masters Degrees in Physics. While a graduate student, he became the University Health Physicist which led to an appointment in Radiological Physics in the Department of Radiology under R.H. Chamberlain and E.P. Pendergrass, where he joined John Hale. In 1959 he joined P.J. Hodes and Simon Kramer at Thomas Jefferson University



to develop a strong Medical Physics program with associates N.Suntharalingam and Benjamin M. Galkin. Serving as Associate Director of the Stein Research Center, he became tenured Professor of Radiology, Radiation Therapy and Nuclear Medicine (1966), retiring in 1989. Besides being certified by all three boards, he served as an examiner for the ABR, Chair of the ABHP, and Treasurer of the ABMP. He became a charter member of the NCRP (1964) and served on numerous committees until retiring as an Honorary Member 23 years later. Mr. Gorson served as President of the AAPM in 1968 and became a Fellow of the AAPM, the ACR, and the ACMP. He received the Professional Achievement Award of the ACMP (1993). Over the years he has served as a consultant to or member of numerous committees of the ACR, RSNA, AAPM, ICRP, NCI, USPHS, NAS, WHO, PAHO, and IAEA. Still serving as videographer of the AAPM History Committee, Mr. Gorson has conducted videotaped interviews of over 70 senior Medical Physicists for the AAPM-AIP Archives.

#### **New AAPM Fellows**

Suresh K. Agarwal, Ph.D.

Suresh Agarwal received his doctoral degree from Lucknow University, India in 1966 and his ABR certification in Radiological Physics in 1972. He has served on many AAPM and ACR committees. Dr. Agarwal is a reviewer for several medical journals in India, a member of the Association of Medical Physicists of India, and has given over a dozen lectures in India. He has authored or co-authored 37 referred papers and over 60 abstracts. He is a fellow of the ACR and the ACMP.



Dr. Agarwal has served as President, and Board Representative for the Mid-Atlantic Chapter, AAPM. He is a devoted teacher and has sponsored many symposia and workshops at the University of Virginia, including the AAPM Summer School on Digital Imaging, and the Fluoroscopy Workshop. Dr. Agarwal has taught Radiological Physics to radiology residents and physicists for many years, and has helped many residents pass their board exams.

James A. Deye, Ph.D.

James A. Deye received his doctoral degree from Vanderbilt University and pursued further Medical Physics studies at the University of Cincinnati. He has served on numerous AAPM committees and task groups. Dr. Deye has been a reviewer for the ACR's Patterns of Care Studies and Radiation Therapy Accreditation Program, a member of the Radiological Devices Panel (FDA-CDRH), and a founder of the AAPM Tri-Lateral Committee. He presently serves as a member of AAPM's Ethics



Committee, Medical Physics Data Group, and Regional Organizations Committee, and is the chair of NCRP's Therapy Shielding Design Committee. He has been Secretary-Treasurer of the Southern California Chapter, President of the Mid-Atlantic Chapter, and Chair of the HPS Baltimore-DC Chapter Legislative-Regulatory Committee. He has been the Director of Medical Physics at Fairfax Hospital for over 17 years, and previously worked at the George Washington University and City of Hope Hospital.



Jerald W. Hilbert, Ph.D.

Jerald Hilbert received his doctoral degree in Medical Physics from the University of California-Los Angeles in 1968. After several years in the Department of Radiation Oncology at the University of California-San Diego, he formed Medical Physics Associates, Inc., which has provided Medical Physics services in San Diego for over 22 years. Dr. Hilbert has served in various capacities in the American Association of Physicists in Medicine, including being the chair for the 1973 National

Meeting, and serving two terms on the Board of Directors. He is certified by the American Board of Radiology in Radiological Physics, and has been involved in the ABR certification process since 1982, both as an examiner and as a member of committees preparing written and oral physics exam questions. He has also been active in the American College of Radiology, including being a member of the first ACR Commission on Physics.



#### Edward L. Nickoloff, Ph.D.

Dr. Nickoloff is a Fellow of the American College of Medical Physics and a Fellow of the American College of Radiology. He has served on numerous committees relating to AAPM administrative and educational activities and has extensive involvement in leadership roles with related committees such as ACR, ABMP, RAMPS, and JACHO. Dr. Nickoloff has supervised several graduate students and has made contributions to continuing education courses and refresher courses in Medical Physics.

In addition to the above administrative roles, Dr. Nickoloff has published numerous papers in the field of Medical Physics including both nuclear imaging and diagnostic x-ray imaging.



#### Walter Nikesch, Ph.D.

Walter Nikesch received his doctoral degree from the University of California, Los Angeles in 1974. He is a distinguished educator in the training of medical physicists, medical students, radiology residents and allied health personnel. He has taught Medical Physics and Medical Physics related courses at Saint John Hospital, School of Radiologic and Nuclear Medical Technology (Detroit, Michigan). Dr. Nikesch is board certified by the American Board of Radiology and American Board

of Medical Physics and is a Fellow of the American College of Radiology. He has held numerous leadership positions in the Medical Physics community. He has served as President of the AAPM-Great Lakes Chapter, as a member of the AAPM Board of Directors, ABR Oral Board Examiner and as a Committee Member at the Michigan Department of Public Health. Dr. Nikesch is currently the Chief Physicist and Radiation Safety Officers at Saint John Hospital.



#### Azam Niroomand-Rad, Ph.D.

Azam Niroomand-Rad received her doctoral degree from Michigan State University and did her postdoctoral training in Medical Physics at the University of Wisconsin-Madison. She is now Professor and Clinical Physics Director at the Department of Radiation Medicine at Georgetown University. Dr. Niroomand-Rad is board certified by ABR and ABMP. She has served AAPM in many capacities. She is currently Chair of Radiation Therapy Task Group 55 for Radiochromic

Dosimetry, Chair of the Medical Physics Committee, and Chair of International Scientific Exchange Programs which organizes courses for developing countries. Dr. Niroomand-Rad serves as President of the Mid-Atlantic Chapter of AAPM. She is active in IOMP and has been Editor for Medical Physics World and now serves as the AAPM Delegate to the IOMP. Dr. Niroomand-Rad has published numerous research articles of which 28 have appeared in peer-reviewed journals.

#### David W.O. Rogers, Ph.D.

David W.O. Rogers received his doctoral degree in physics from the University of Toronto in 1972. After completing postdoctoral studies at Oxford University he joined the Ionizing Radiation Standards group of the National Research Council of Canada in 1973, where he has been Group Leader since 1985. Dr. Rogers has published 77 peer-reviewed papers and various book chapters which play a prominent role in dosimetry protocols and in particular to the new generation protocols based on absorbed-dose standards. His development of the EGS4 and BEAM codes



and the many courses he has organized and taught have helped make Monte Carlo a widely used tool in radiotherapy physics. Dr. Rogers has served the AAPM as an Associate Editor of Medical Physics, as a long standing member of the Radiation Therapy Committee and as a member of various task groups. He has also been Chair of the Canadian Organization of Medical Physicists.

#### Martin L. Rozenfeld, Ph.D.

Martin Rozenfeld received his doctoral degree in Medical Physics from the University of Health Science-Chicago Medical School in 1980. However, he entered the field of Medical Physics in 1951, publishing his first paper in 1955 on the beam characteristics of a Van de Graaff accelerator. Except for one year in Sheffield, England, he has spent his career in Chicago; at the Argonne Laboratories, the University of Chicago, Rush-Presbyterian-St. Lukes Medical Center, and St. James Hospital. He is presently Professor at Rush-Presbyterian and Medical Physicist at St.



James Hospital. One of his major contributions to the field of Medical Physics was the improvement in the precision of dosimetry by making national standards readily available through traceable calibrations from the Accredited Dosimetry Calibration Laboratories (ADCLs). He was a charter member of the accrediting body (AAPM Task Group 3) serving continuously for 25 years including 16 years as chair.

#### Prakash N. Shrivastava, Ph.D.

Prakash Shrivastava received his doctoral degree from the University of Texas in 1966. Following a Medical Physics Fellowship at the University of Toronto with Drs. Harold Johns and John Cunningham he established the Department of Physics at the Allegheny Health and Research Institute, Pittsburgh, where he established and directed the Mideast Center for Radiologic Physics, the National Hyperthermia Physics Center, and the Allegheny Accredited Dosimetry Calibration Laboratory. Dr. Shrivastava is recognized for his research contributions in radiotheraphy,



mammography, and hyperthermia with over 100 publications. Presently he is Professor of Radiation Oncology at the University of Southern California and Chief Physicist at the Los Angeles County Medical Center. Dr. Shrivastava has trained many medical physicists and post-doctoral fellows. He has served the AAPM as Board member and as chair of several committees. He has been an examiner for the American Board of Radiology and served on NIH sponsored international clinical trials.

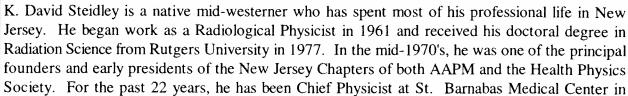
#### George Starkschall, Ph.D.

George Starkschall received his doctoral degree from Harvard University in Chemical Physics. He completed his post-doctoral training in Medical Physics at the University of Chicago and later moved to the University of Kansas. He is currently Physicist and Associate Professor of Radiation Physics at M.D. Anderson Cancer Center in Houston. Dr. Starkschall has served on many committees of the AAPM both nationally and in local chapters, on several task groups, and as a Guest Associate Editor of Medical Physics. His chief research interest continues to be Chemical



Radiotherapy Physics with an emphasis on treatment planning systems, on which he has published widely. He has edited two monographs and is active in ACR and the ACMP, and was named a Fellow of the ACMP in 1991. Dr. Starkschall has over 40 published articles in peer-reviewed journals and book chapters, and has trained many dosimetrists and medical physicists.





Livingston, New Jersey, where he has taken an active part in training of numerous medical physicists, residents, and therapists. He is currently Vice Chair of the New Jersey Medical Radioactive Waste Disposal Facility Siting Board. Dr. Steidley is certified by the American Board of Radiology, American Board of Medical Physics, and American Board of Health Physics. He is a Fellow of the American College of Radiology.

# Marilyn Stovall, Ph.D.

Marilyn Stoval received her doctoral degree from the University of Texas School of Public Health in 1996 after working many years in the Department of Radiation Physics at the M.D. Anderson Cancer Center. Robert Shalek hired Ms. Stoval in the 1950's and they produced some of the seminal work on dosimetry around sealed radioactive sources for brachytherapy procedures. She has published over 60 articles in refereed journals and almost as many books, chapters, and abstracts.

Dr. Stoval serves as Director of the Late Effects Research Group and Director of Radiation Dosimetry Services at M.D. Anderson. In addition, she directs the Radiation Physics Short Courses. She has served on several AAPM committees and task groups, and the editorial board of Medical Physics. Dr. Stoval was elected president of the Southwest Chapter of the AAPM in 1995 and received the Robert J. Shalek Award from the Chapter in 1993.

# Randall K. Ten Haken, Ph.D.

Randall K. Ten Haken received his doctoral degree from the University of Wisconsin in 1978. After completing the Clinical Medical Physics Residency Program at Tufts-New England Medical Center, he joined the Fermi National Accelerator Laboratory in 1980. He is currently Professor of Radiation Oncology at the University of Michigan Medical School. Dr. Ten Haken has served on many AAPM committees. He has had a distinguished career in educational activities, especially in the training of

medical physicists, medical students, medical residents, and allied health personnel at the University of Michigan, and for various professional societies including AAPM, RSNA, ASTRO, and ESTRO. He has served on both the American Board of Radiology and the American Board of Medical Physics. Dr. Ten Haken has published more than 120 papers in peer-reviewed journals.

# Johannes van de Geijn, Ph.D.

Jan van de Geijn obtained his doctoral degree in Experimental Physics and Astronomy from the University of Utrecht, The Netherlands, in 1957. He served at the H. Johannes de Deo Hospital, The Hague, and as Chief Physicist, Radboud Hospital, Nijmegen. In 1977 he emigrated to the United States to become Director of Radiation Physics at the University of Wisconsin Hospitals in Madison. In 1980 he became Head, Radiation Physics and Computer Automation Section at the

Radiation Oncology Branch, NCI, and retired in 1995. Dr. van de Geijn is the author or co-author of 60 peer-reviewed papers. He was a charter member of the Dutch Society for Clinical Physics and was elected its first honorary member in 1974. Dr. van de Geijn has been an Associate Editor of Medical Physics since 1988 and served on the Radiation Therapy Committee, TG-23, TG-24, TG-45, and TG-47.







#### Jacob Van Dyk, M.Sc.

Jacob Van Dyk has worked in Medical Physics for 26 years, 24 of which were at the Princess Margaret Hospital in Toronto. In the last two years, he has been the Head of Clinical Physics at the London Regional Cancer Centre and an Associate Professor at the University of Western Ontario. He obtained a Masters degree from the same university in 1971 on Charge Deposition from High Energy Electron Beams. Since then he has involved in treatment planning issues including the implementation of CT scanning for radiotherapy planning in the late 1970s. This



evolved into research on lung dosimetry and the radiobiological analysis of fractionation and volume effects in both humans and rats. He has been involved in professional organizations including the AAPM and the Canadian College of Physicists in Medicine of which he was the President from 1991-1995. He has published over 90 papers in peer-reviewed journals.

#### Martin Yaffe, Ph.D.

Martin Yaffe studied Medical Physics at the University of Manitoba and received his doctoral degree in Medical Biophysics from the University of Toronto. After joining the Medical Biophysics faculty he worked on the improvement of QC techniques for radiology, quantization of scatter characteristics, and studied the feasibility of digital and dual-energy mammography. He moved to the Imaging Research Program, Sunnybrook Health Science Centre, Toronto in 1990 where his research interests include analysis of radiographic image quality, modelling of imaging



processes, development of digital x-ray detectors for mammography, and quantitative uses of medical images in mammography for the purpose of risk prediction and in coronary angiography for assessment of stenosis. He has participated on or chaired several AAPM committees, and served on NCRP Scientific Committee 72 on mammography, ACR Task Groups on Equipment Recommendations and on Phantom-Clinical Image Correlation, as well as the ICRU Committee on Mammographic Image Quality Assessment.

#### James A. Zagzebski, Ph.D.

James A. Zagzebski received his doctoral degree in Radiological Sciences from the University of Wisconsin in 1972. He joined the Departments of Radiology and Human Oncology as a post-doctoral fellow. He rapidly established a research program in ultrasound, joining the faculty in 1977. As Professor of Medical Physics, Human Oncology, and Radiology at the University of Wisconsin, Dr. Zagzebski's guidance of dozens of doctoral and Masters degree students is reflected in 80 refereed publications and a dozen books or chapters. His participation in AAPM



activities includes membership in the Science Council and chair of the Ultrasound Committee. Dr. Zagzebski served on the National Council on Radiation Protection's Scientific Committee 70 on quality control and the International Commission on Radiation Units and Measurements committee on ultrasound. Dr. Zabzebski is responsible for graduate education and serves as Vice-Chair of the Department of Medical Physics at the University of Wisconsin-Madison.

# **Farrington Daniels Award**

The Farrington Daniels Award for the best paper on Radiation Dosimetry published in *Medical Physics* in 1996 is presented to:

Marek J. Maryanski, Ph.D. Geoffrey S. Ibbott, Ph.D. Peter K. Eastman Robert J. Schulz, Ph.D. and John C. Gore, Ph.D.

for their paper entitled "Radiation therapy dosimetry using magnetic resonance imaging of polymer gels," *Med. Phys.* 23 (5), May 1996, pp. 699 - 705.

# Sylvia Sorkin Greenfield Award

The Sylvia Sorkin Greenfield Award for the best paper (other than Radiation Dosimetry) published in *Medical Physics* for 1996 is presented to:

Michael S. Westmore, B.Sc. Aaron Fenster, Ph.D. and Ian A. Cunningham, Ph.D.

for their paper entitled, "Angular-dependent coherent scatter measured with a diagnostic x-ray image intensifier-based imaging system," *Med. Phys.* 23 (5), May 1996, pp. 723 - 733.