

*American Association  
of  
Physicists in Medicine*



*Awards Ceremony*

*July 27, 2009  
Platinum Ballroom  
Anaheim Marriott  
Anaheim, California  
6:00 p.m.*

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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.

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## 2009 Program

*Welcome and Presentation of Awards*

Maryellen Giger  
AAPM President

*Honoring Deceased AAPM Members*

*AAPM Fellowships and Grants*

*Research Seed Funding Initiative*

*AAPM-IPEM Medical Physics Travel Grant*

*Jack Fowler Junior Investigator Award*

*John R. Cameron Young Investigator Awards*

*Farrington Daniels Award*

*Sylvia Sorkin Greenfield Award*

*AAPM Honorary Membership*

*Fellows*

*Recognition of AAPM Service*

*Award for Achievement in Medical Physics*

*William D. Coolidge Award*

*Closing Remarks*

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Reception immediately following, just  
outside of the Platinum Ballroom

### *A Two Year Pre-Doctoral Fellowship*

This fellowship consists of \$13,000 per year, plus tuition support not exceeding \$5,000 per year, for the training of a doctoral candidate in the field of Medical Physics. This recipient is carefully selected by the Awards Selection Subcommittee (member of the Education and Training of Medical Physics) and funded by the AAPM Education and Research Fund. The winner of the RSNA/AAPM Two Year Pre-Doctoral Fellowship for 2009-2011 is:

**Courtney Knaup - University of Texas Health Science Center at San Antonio**

### *Summer Undergraduate Fellowships*

These fellowships consist of a stipend of \$4,500 USD with the purpose of providing opportunities for Undergraduate university students to gain experience in medical physics by performing research in a medical physics laboratory or assisting with clinical service at a clinical facility. These undergraduates are selected by the Summer Undergraduate Fellowship Program Subcommittee (member of the Education and Training of Medical Physics Committee) and funded by the AAPM. The 2009 winners are:

**Lena Bradley  
Jeremy Brown  
Fei Fei Chu  
Michael Derr  
Jennifer Dixon**

**Catherine Frame  
Morgan Gillie  
Benjamin Kandel  
Casey Kretzer  
Gregory Lazarz**

**Christopher Peeler  
Adrian Sanchez  
Daniel Smith  
Long Tong**

### *Minority Undergraduate Summer Experience*

This program is designed to expose minority undergraduate university students to the field of medical physics by performing research or assisting with clinical service at a U.S. institution (university, clinical facility, laboratory, etc). The charge of MUSE is specifically to encourage minority students from Historically Black Colleges and Universities (HBCU), Minority Serving Institutions (MSI) or non-Minority Serving Institutions (nMSI) to gain such experience and apply to graduate programs in medical physics. Each recipient is selected by the Minority Recruitment Subcommittee of the Education and Training of Medical Physics Committee and will receive a \$4,500 stipend, funded by the AAPM. The 2009 winners are:

**Mario Bencomo  
Deon Dick  
Tahisa Hamwright  
Christine Jones**

**Edward Kim  
Nivedh Manohar  
Yanisley Valenciaga**

### *Summer School Scholarships*

These scholarships are offered to applicants (up to 10 awarded) who are early in their careers in medical physics. The scholarship consists of registration fees waived for that year. The recipients are selected by the Summer School Scholarship Subcommittee and funded by the AAPM. The 2009 winners are:

**Robin Campos  
Jing Cui  
Jackeline Esteban  
Liang Liang  
Holly Lincoln**

**Geethpriya Palaniswaamy  
Bhavin Patadiya  
Ben Robison  
H. Omar Wooten  
Tianming Wu**

### *2009 ASTRO/AAPM Radiation Oncology Physics Residency Training Award*

The purpose of the Radiation Oncology Physics Residency Training Program Award is to promote the development of radiation physics residency programs leading to more graduates and more qualified professionals entering the workforce. This grant is to provide assistance to newly established programs working towards accreditation. Up to \$36,000.00 in total funding will be awarded by ASTRO and matched by AAPM (individual program grants will not exceed \$12,000.00 each). These awards are carefully chosen by the Awards Selection Subcommittee (member of the Education and Training of Medical Physics Committee). The 2008 recipients are:

**John P. Gibbons, Jr., Ph.D.  
Ning J. Yue, Ph.D.  
John W. Wong, Ph.D.  
Jay W. Burmeister, Ph.D.  
X. Allen Li, Ph.D.  
Cheng-Shie Wu, Ph.D.**

**Mary Bird Perkins Cancer Center  
Cancer Inst. of NJ, UMDNJ-Robert Wood Johnson Medical School  
The John Hopkins University School of Medicine  
Karmanos Cancer Center  
Medical College of Wisconsin  
Columbia University**

## ***2009 AAPM Support for Clinical Residency in Imaging***

One \$36,000 award granted to one institution for support of a clinical residency in medical physics (imaging). The grant of \$18,000 per year is granted to an approved institution in partial support of a full-time clinical residency. Per AAPM policy, any institution receiving award money from AAPM may not budget any of that money to Facilities and Administrative Costs (indirect or overhead expenses).

**To be announced**

### ***Research Seed Funding Initiative***

These awards provide start-up funds for research-oriented medical physicists. They are carefully selected by the Joint Working Group for Research Seed Funding Initiative (member of Science Council's Therapy Research subcommittee) and funded by AAPM Research Seed Fund. Each award consists of \$25,000 for a one-year term and the recipients for 2009 are:

**Kang-Hyun Ahn, Ph.D. - Stanford University**

**Dan Ruan, Ph.D. - Stanford University**

### ***AAPM-IPEM Medical Physics Travel Grant***

This grant is made annually to a U.S. AAPM member who shows evidence of an active scientific career in medical physics. The purpose of this grant is to promote communications and professional partnerships between U.S. AAPM members and IPEM members from the United Kingdom.

The grant is supported by a donation from Gammex, Inc. of up to \$1,500. In addition, this grant will include £400 from the Institute of Physics and Engineering in Medicine and \$1,250 from AAPM towards expenses incurred in the U.K. The 2009 AAPM-IPEM Travel Grant recipient is:

**Lili Chen, Ph.D.**

### ***Jack Fowler Junior Investigator Award***

An award for Junior Investigators has been established in honor of Dr. Jack Fowler, Ph.D., Emeritus Professor of Human Oncology and Medical Physics, University of Wisconsin. Junior Investigators were encouraged to submit abstracts for the competition. The top scoring Junior Investigator submission determined by abstract reviewers was selected.

**Zhibin Huang, Ph.D.**

### ***John R. Cameron Young Investigator Award***

Each year the AAPM conducts a Young Investigators' Competition for the Annual Meeting. Young Investigators were encouraged to submit abstracts for the competition. The 10 highest scored Young Investigator submissions determined by abstract reviewers are selected to be presented in a special symposium, in honor of University of Wisconsin Professor Emeritus John R. Cameron, Ph.D.

**To be announced**

### ***Farrington Daniels Award***

The Farrington Daniels Award for the best paper on Radiation Dosimetry published in Medical Physics in 2008 is presented to:

**April Nunn, Stephen Davis, John Micka and Larry DeWerd**

for their paper entitled "*LiF:Mg,Ti TLD Response as a Function of Photon Energy for Moderately Filtered X-ray Spectra in the Range of 20 to 250 kVp Relative to <sup>60</sup>Co,*" **Medical Physics** 35, No.5, pp. 1859 - 1869 (2008).

### *Sylvia Sorkin Greenfield Award*

The Sylvia Sorkin Greenfield Award for the best paper (other than Radiation Dosimetry) published in **Medical Physics** for 2008 is presented to:

**Rajiv Chopra, Nicole Baker, Vanessa Choy, Aaron Boyes, Kee Tang,  
David Bradwell and Michael Bronskill**

for their paper entitled "An MRI-Compatible Transurethral Ultrasound System for the Treatment of Localized Prostate Cancer using Rotational Control," **Medical Physics** 35, No. 4, pp. 1346 - 1357 (2008).

### *AAPM Honorary Membership*

Honorary membership into the AAPM is bestowed upon individuals to recognize distinguished service that they have done in other societies that supports medical physics. Thus the award not only honors the individual but also strengthens the links between the AAPM and the other society. This year, the AAPM will grant honorary membership to:

**George S. Bisset, III, M.D.**

### *Fellows*

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

**James M. Balter, Ph.D.  
Thomas R. Bortfeld, Ph.D.  
Geoffrey D. Clarke, Ph.D.  
Allan F. deGuzman, Ph.D.  
James T. Dobbins III, Ph.D.  
Lei Dong, Ph.D.  
John P. Gibbons Jr., Ph.D.  
Philip H. Heintz, Ph.D.  
Patrick D. Higgins, Ph.D.**

**Kenneth R. Hoffmann, Ph.D.  
Paul J. Keall, Ph.D.  
Dimitris N. Mihailidis, Ph.D.  
Martin J. Murphy, Ph.D.  
Nikos Papanikolaou, Ph.D.  
Matthew B. Podgorsak, Ph.D.  
Ehsan Samei, Ph.D.  
Stephen M. Seltzer, M.S.  
X. George Xu, Ph.D.**

### *AAPM Recognition of Service Awards*

AAPM Service Awards are given to outgoing officers of the organization to show appreciation for their time and efforts as an officer. This year the AAPM would like to recognize the work of:

**Gerald A. White, Jr., M.S.  
Gary A. Ezzell, Ph.D.**

### *Award for Achievement in Medical Physics*

This award recognizes AAPM members whose careers have been notable based on their outstanding achievements. The recipients for the 2008 Award for Achievement in Medical Physics will be given to:

**James A. Deye, Ph.D.  
Lawrence E. Reinstein, Ph.D.  
Raymond L. Tanner, Ph.D.**

### *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. The recipient of the AAPM William D. Coolidge Award is:

**Willi A. Kalender, Ph.D.**

## *Honorary Membership*

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### **George S. Bisset III, M.D.**

Dr. George Simpson Bisset III was born in Coral Gables, Florida. He went to undergraduate school at the University of Tennessee, where he majored in Zoology. After graduation, he attended medical school at the University of South Florida. Upon graduation he did a pediatric residency at Cincinnati Children's Hospital and followed with a fellowship in Pediatric Cardiology. This was followed by a 3 year stint as Chief of Pediatric Cardiology at Tulane Medical Center in New Orleans. After deciding to follow his interests in

imaging, he returned to the University of Cincinnati to complete a residency in Radiology, followed by a fellowship in Pediatric Radiology, again at Cincinnati Children's Hospital. He stayed on the faculty for several years before moving to Duke University, where he assumed the role of Division Chief of Pediatric Radiology. Fourteen years ago he took the position as Vice-Chairman of the Radiology Department at Duke, and is currently the Interim Chairman of the Department.

Several accomplishments of which he is most proud include: Serving as a member of several Boards: The Board of Directors of the Society for Pediatric Radiology, the American Board of Radiology, and the Board of Directors of the RSNA. Honors include receiving the Distinguished Alumnus Award from the University of South Florida (where he delivered a commencement speech) and being inducted as a Fellow of the American College of Radiology. His greatest achievement is having raised 2 successful children with his thoughtful, loving wife, Betsy.

## *New AAPM Fellows*

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### **James M. Balter, Ph.D.**

James Balter received his Ph.D. from the University of Chicago in 1992. He moved to the University of Michigan, where he has progressed from postdoctoral fellow through to his current professorial position. He has pioneered developments in image guided radiation therapy, and been highly active in national education efforts. Dr. Balter has supported AAPM through service on task groups, membership in therapy physics committee, directing the scientific program for the annual meeting, co-directing an AAPM Summer School, and creating and leading the Therapy Imaging Subcommittee. He is currently the chair of the ASTRO radiation physics committee. He has published over 75 peer-reviewed papers, and has directed or worked on several NIH-funded projects.





### **Thomas R. Bortfeld, Ph.D.**

Dr. Thomas Bortfeld is the Director of Physics Research in Radiation Oncology at the Massachusetts General Hospital (MGH) in Boston. He is also a Professor at Harvard Medical School. Dr. Bortfeld's main research interest is the optimization of photon and proton radiation therapy. He is one of the key developers of intensity-modulated radiotherapy (IMRT). Before moving to Boston in 2001, Dr. Bortfeld was a senior scientist at the German Cancer Research Center, and vice chairman of the department of Medical Physics. He received his M.S., Ph.D., and Habilitation in Physics from the University of Heidelberg, Germany. Dr. Bortfeld is the author of over 100 peer-reviewed papers in periodicals, and editor of 3 books.



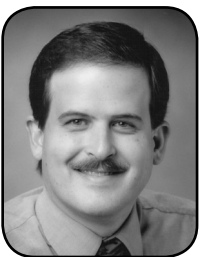
### **Geoffrey D. Clarke, Ph.D.**

Geoffrey Clarke received his Ph.D. degree from the University of Texas Health Science Center in Dallas in 1984. He then joined the Department of Radiology at Virginia Commonwealth University in Richmond where he managed a MRI lab. In 1989 he returned to Dallas, first as Chief Diagnostic Physicist at Parkland Memorial Hospital and later as a faculty member in the Radiology at his alma mater. He is now Professor of Radiology and Chief of the Graduate Program in Radiological Sciences at the University of Texas Health Science Center at San Antonio. Dr. Clarke is currently an Associate Editor of Medical Physics and JACMP. He is board certified by the American Board of Radiology in Diagnostic Physics and the American Board of Medical Physics in MRI Physics. Dr. Clarke is a Fellow of the American College of Medical Physics and has been active in the American College of Radiology's MRI Accreditation Program. Dr. Clarke has published 34 papers in peer-reviewed journals and 10 book chapters.



### **Allan F. deGuzman, Ph.D.**

Dr. deGuzman received his Ph.D. in BioPhysics from Syracuse in 1986 and did his Post Doc work at Yale University. He joined the faculty and remained at Yale until 1991. He then joined the Radiation Oncology faculty at Wake Forest University where he remains today. He is now the Department Vice Chairman as well as the Chief of Medical Physics. He has served the AAPM in many ways during his career, most notably as the Editor for the AAPM Newsletter for 6 years. Dr. deGuzman has published 5 book chapters and approximately 2 dozen peer-reviewed journal articles and has nearly a hundred lectures and published abstracts to his credit.



### **James T. Dobbins III, Ph.D.**

James Dobbins received his Ph.D. degree in physics from the University of Wisconsin-Madison in 1985, and is now tenured Associate Professor in Radiology and Biomedical Engineering at Duke University. Dr. Dobbins is the Founder and Director of the Medical Physics Graduate Program at Duke. He has focused his research career on advanced digital imaging, and has become one of the world's leading experts in tomosynthesis and the science of image quality metrology. He has authored 50 peer-reviewed publications, 29 archival proceedings papers, and has given 47 invited lectures at national and international meetings. He has mentored over 25 M.D., M.S., and Ph.D. students, and has taught physics to over 150 radiology residents. Dr. Dobbins co-chaired the SPIE Physics of Medical Imaging Conference from 1998-2000, served on over 20 study sections, chaired NIH Special Study Section 7 for one year, and recently became co-founder of the Society of Directors of Academic Medical Physics Programs, Inc.



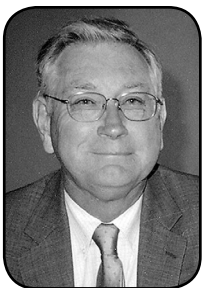
### **Lei Dong, Ph.D.**

Lei Dong received his Ph.D. in 1995 in Biomedical Sciences/Medical Physics at the University of Texas Health Science Center in Houston and the M.D. Anderson Cancer Center. He joined Baylor College of Medicine as a clinical medical physicist in 1998. In year 2000, he returned to M.D. Anderson as a faculty, where he is now a tenured Associate Professor and the Deputy Director of Research at the Radiation Physics department. Before coming to USA to pursue his Ph.D., he also worked as a field engineer for Siemens and General Electric in China. He has served on many AAPM task groups and was a member of the Public Education Committee to produce an introduction slide set for AAPM. He is currently the Chair of the AAPM Workgroup on Imaging for Treatment Verification. Dr. Dong has many research grants, and published more than 85 papers in peer-reviewed journals and 10 book chapters.



### **John P Gibbons Jr., Ph.D.**

John Gibbons received his Ph.D. degree in physics from the University of Tennessee in 1991. After completing the Medical Physics Residency Program at the University of Minnesota he remained on staff as an Assistant Professor before moving to Columbia, South Carolina in 1994. Since 2004, Dr. Gibbons has been Associate Professor in the LSU Department of Physics and Astronomy, and chief of clinical physics at the Mary Bird Perkins Cancer Center in Baton Rouge, Louisiana. Dr. Gibbons has served on a number of AAPM committees and subcommittees, has twice served on the AAPM Board of Directors, and is the current AAPM Secretary. He is board certified by the American Board of Radiology in Therapeutic and Diagnostic Physics and by the American Board of Medical Physics in Radiation Oncology Physics. He is a Fellow of the American College of Medical Physics. Dr. Gibbons has published over 31 papers in peer-reviewed journals.



### **Philip H. Heintz, Ph.D.**

Philip Heintz received his Ph.D. from the University of Washington in 1972. In 1973 he received ABR certification in therapeutic and diagnostic radiology. Dr. Heintz remained active in both specialties throughout his career. While in private clinical practice he taught physics to radiology, radiation therapy and veterinary residents at UC Davis as well as teaching physics to technologists through hospital based programs. In 1987 he founded a medical software company specializing in radiation therapy treatment planning. This product was sold internationally and gave him many opportunities to improve medical physics around the world. In 2002 Dr. Heintz became a full professor in the medical school at the University of New Mexico. In 2006 he began a new masters program in medical physics through the nuclear engineering. Throughout his career he has remained active in AAPM, ABR and ACR. Most recently he formed the AAPM subcommittee to revise the physics curriculum for diagnostic radiology residents.





### **Patrick D. Higgins, Ph.D.**

Patrick Higgins received his Ph.D. degree from the University of Notre Dame in 1978. From 1978 through 1994, he served in several capacities, including Assistant Professor, at the University of Wisconsin Medical School. After serving as the Director of Radiotherapy Physics at the Cleveland Clinic Foundation from 1986-1994, he joined the Department of Therapeutic Radiology at the University of Minnesota, in 1994, where he is now professor of Medical Physics. Dr. Higgins is a member of the American Association of Physicists in Medicine and the American Society of Therapeutic Radiologists. He is board certified by the American Board of Medical Physics. Dr. Higgins has published over 65 papers in peer-reviewed journals.



### **Kenneth R. Hoffmann, Ph.D.**

Kenneth R. Hoffmann received his Ph.D. from Brandeis University in Physics in 1984. He then joined the University of Chicago and the Kurt Rossmann Laboratories under the direction of Kunio Doi, Ph.D. In 1999, he joined the Toshiba Stroke Research Center and the Department of Neurosurgery at the University at Buffalo (SUNY). He uses his understanding of the physics of the imaging situation to tackle the imaging-related problems radiology, cardiology, and neurosurgery. He has published over 100 articles in journals and conferences in the fields of 2D/3D vascular analysis, self-calibration of imaging geometries (2D and 3D), and image segmentation. He is the principal investigator or investigator on a number of funded research projects.



### **Paul J. Keall, Ph.D.**

Paul Keall completed his B.S. degree at the University of Waikato and his M.S. and Ph.D. degrees from the University of Adelaide under Dr. Peter Hoban. In 1998 Dr. Keall joined Virginia Commonwealth University working under mentors Radhe Mohan and Jeffrey Williamson. Dr. Keall is currently Associate Professor and Director of the Radiation Physics Division at Stanford University. He is board certified by the ABR, ABMP and ACPSEM. Dr. Keall is a Fellow of the Institute of Physics and ACPSEM. He has published over 100 papers in peer-reviewed journals, predominantly in the areas of dose computation and accounting for temporal anatomic changes during the imaging, planning and delivery processes in radiotherapy. Dr. Keall has served in many capacities in the AAPM including four Task Group reports, Associate Editor of Medical Physics, Therapy Research Subcommittee and is co-chair of the Research Seed Funding Initiative. Dr. Keall is the Scientific Program Director, Therapy, for this AAPM meeting.



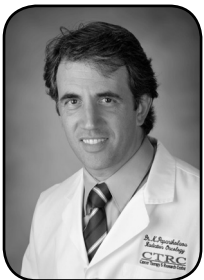
### **Dimitris N. Mihailidis, Ph.D.**

Dimitris Mihailidis received his Ph.D. in Nuclear Physics from the University of Minnesota in 1994. In 1996, he completed the Clinical Medical Physics Residency Program at the University of Minnesota. He joined the Department of Medical Physics at the Cross Cancer Institute-University of Alberta as Assistant Professor, until 1998. In 1999, he joined the clinical staff at Palmetto-Richland Memorial Hospital and South Carolina Cancer Center. In 2003, he joined Charleston Radiation Therapy as Chief Physicist. Dimitris has been serving AAPM and ACMP as member in many committees, subcommittees, working groups and task groups. He has served for five years as Associate Editor for Medical Physics and currently as, the Editor for Books and Publications for the journal. He holds certifications by the ABMP (Radiation Oncology Physics) and the ABR (Therapeutic Radiologic Physics). He has authored and co-authored several peer-reviewed articles, abstracts, notes and books reviews.



### **Martin J. Murphy, Ph.D.**

Martin Murphy received his Ph.D. in physics from the University of Chicago in 1980. Subsequently Dr Murphy held research posts in nuclear physics, astrophysics, and x-ray and gamma-ray astronomy at UC/Berkeley's Lawrence Radiation Laboratory, the University of Washington, and the Lockheed Space Sciences Laboratory in Palo Alto CA. In 1992 he became involved in development of the CyberKnife, a robotic image-guided radiosurgery system invented at Stanford University to treat central nervous system lesions. In 2003 he moved from Stanford, where he was a senior research scientist, to join the medical physics faculty at VCU. His research interests are in signal processing, computer-guided medical image segmentation, real-time image processing and registration, and machine vision guidance applied to radiotherapy. The goal of his research is to develop fast, automatic image-guided procedures for planning and delivery of radiation treatments via both external beams and brachytherapy.



### **Nikos Papanikolaou, Ph.D.**

Niko Papanikolaou received his Ph.D. degree from the University of Wisconsin in 1994. He joined the University of Texas in San Antonio (UTHSCSA) in 2005 as the director of the medical physics department. He is a tenured professor with the Departments of Radiation Oncology and Radiology and the chair of the therapy curriculum track of the graduate program in medical physics. Dr Papanikolaou is an active member of AAPM, ACMP, ASTRO and ESTRO. He is a fellow of ACMP and currently serves as the treasurer of that organization. He has served in many capacities in the AAPM where he continues to contribute through membership in Task Groups and Work Groups. He has been invited to present in a number of national and international meetings and he serves as an associate editor for the journals of Medical Physics and the Journal of Applied Clinical Medical Physics. He has authored and co-authored over 150 papers and abstracts in the area of radiation therapy physics.



### **Matthew B. Podgorsak, Ph.D.**

Dr. Matthew Podgorsak joined the faculty of Roswell Park Cancer Institute (RPCI) in 1993 and has been Chief Physicist in the Department of Radiation Medicine since 1998. He serves as Associate Professor in the Department of Biophysics in RPCI's Graduate Division of the State University of New York. Dr. Podgorsak earned his doctorate in medical physics from the University of Wisconsin, Madison, in 1993. He is Board-Certified in Radiation Oncology Physics by the American Board of Medical Physics and is licensed by the State of New York to practice Therapeutic Medical Physics. Dr. Podgorsak recently completed a 3-year term as Member-at-Large of the AAPM Board of Directors and currently serves on AAPM's Development Committee and Meeting Coordination Committee where he is Chair of the Education Program subcommittee. Dr. Podgorsak is Director of RPCI's Medical Physics Residency and Medical Dosimetry Training Programs, and has published over 140 papers, abstracts and book chapters.



### **Ehsan Samei, Ph.D.**

Ehsan Samei is an Associate Professor of Radiology, Medical Physics, Biomedical Engineering, and Physics at Duke University and the Director of Duke Advanced Imaging Laboratories. He was the co-founder of the Duke Medical Physics Program and currently serves as its Director of Graduate Studies. He has been involved with medical physics research, education, and clinical service at multiple institutions. His current interests include quantitative and molecular imaging, and medical image formation, analysis, display, and perception. He has been the recipient of multiple grants and has over 180 publications. He has held leadership positions in AAPM and RSNA. He has served as the Scientific Program Co-director of the AAPM meetings, the vice-chair of IPC, and the chair/member of multiple AAPM task groups. He currently serves on the AAPM Science Council, is the Chair of the SPIE Physics of Medical Imaging Conference, and is an Associate Editor of Medical Physics.



### **Stephen M. Seltzer, M.S.**

Stephen M. Seltzer joined the National Institute of Standards and Technology in 1962, after receiving his B.S. in Physics. He co-developed one of the first Monte Carlo calculations for coupled electron-photon transport to be applied in the energy of interest in medical physics and space-radiation effects. He obtained his MS in Physics in 1973 from the University of Maryland. In more than 175 publications, he has addressed a wide variety of application areas in the radiological sciences. He has been the Director of the NIST Photon and Charged-Particle Data Center since 1988, and the Leader of the NIST Radiation Interactions and Dosimetry Group, Ionizing Radiation Division, since 1994, responsible for the US national measurement standards for the dosimetry of ionizing radiation. He was elected to the ICRU in 1997, elected to membership in the NCRP in 1998. He received the Department of Commerce Bronze Medal in 1983 and the Silver Medal in 1999.



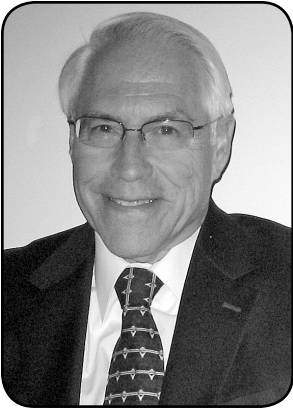
### **X. George Xu, Ph.D.**

X. George Xu received a Ph.D. in nuclear engineering from Texas A&M University in 1994. He then joined Rensselaer Polytechnic Institute where he rose to the rank of professor in nuclear engineering. He has graduated 11 Ph.D. and 10 M.S. students, many are now medical physicists. Within AAPM, Dr. Xu has served on several committees and task groups. Dr. Xu has authored 120 peer-reviewed papers and book chapters, 160 conference abstracts, and 70 invited seminars and plenary presentations. His research has been funded by NSF, DOE, NIST, EPRI and NIH, totaling 7 million dollars including two R01 grants. Dr. Xu received a prestigious NSF Faculty CAREER Award in 1998 and a Rensselaer Research Excellence Award in 2006. Dr. Xu is also a member of the HPS, ANS, and CIRMS (serving as the president in 1999). In 2008, he was elected to a 6-year term as a council member of NCRP.



## *Achievement in Medical Physics Award*

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### **James A. Deye, Ph.D.**

James A. Deye received his Ph.D. in nuclear physics from Vanderbilt University based on research conducted at the Oak Ridge National Laboratory and as a recipient of both Atomic Energy Commission Health Physics and Oak Ridge Associated University Fellowships. He held a faculty position at the University of Dayton before completing a post-doctoral position in medical physics at the University of Cincinnati under Dr. James Kereiakes. Subsequent to spending 2 years in his first position at the City of Hope Medical Center in Los Angeles, he became Associate Director of medical physics at George Washington University Medical Center with responsibility for the clinical implementation of the Mid-Atlantic Neutron Therapy program. In 1979 he became the first Director of Medical Physics at Inova Fairfax Association where he developed a department of 14 staff covering all areas of medical physics. He moved to the NCI in 2001 and is a Program Director in the Extramural Radiation Research Program.

During his career Jim has served in more than 30 appointments within the AAPM, ACR and ACMP including: AAPM Board of Directors, Chair of the Professional Council, the Physics Today Advisory Committee, creator and chair of the first Tri-lateral committee, President of the AAPM Mid-Atlantic Chapter and member of the Board of Chancellors of the ACMP. Jim examined for both the ABMP and the ABR and served on the FDA-CDRH radiological devices panel and MQSA advisory committee. He was Associate Editor of the JACMP and has 32 peer reviewed publications along with 8 Book Chapters and Monographs including chairmanship of NCRP Report 151 on therapy shielding. Jim is certified in Radiological Physics by the ABR and in Radiation Oncology Physics by the ABMP and has been elected to fellowship by both the ACMP and the AAPM.



### **Lawrence E. Reinstein, Ph.D.**

Lawrence Reinstein received his Ph.D. in Low Temperature Physics in 1975 from Boston University while conducting research at the MIT Bitter Magnet Laboratory. After completing a postdoctoral fellowship in Medical Physics at Memorial Sloan-Kettering Cancer Center he began his career in Radiation Oncology Physics at Rhode Island Hospital/Brown University working under Dr. Colin Orton. In 1984 Larry left Rhode Island to become the Director of the Division of Medical Physics, at Stony Brook University where he held the academic appointment of Tenured Full Professor in the Department of Radiation Oncology. At Stony Brook he helped establish the graduate program in Medical Physics. He also founded and was Program Director of an innovative four year BS/Certificate program in Medical Dosimetry, and established a CAMPEP accredited Radiation Oncology Physics Residency program. In 2006 Larry left Stony Brook with the new title Professor Emeritus, to become Chief Medical Physicist at St. Peter's Hospital in Albany, NY.

During his career Larry has had a significant impact on the technology and the practice of Medical Physics. Many of his original research contributions paved the way for new lines of research and the development of technologies that are important for successful radiation therapy treatment. His earliest publications while at Rhode Island Hospital set down the fundamental concepts of 3D graphic treatment planning using Beams Eye View techniques. His work in Megavoltage imaging (Portal Film) optimization brought

attention to what was an under-researched subject in the medical physics community. Larry was also a pioneer in bringing the principles of radiotherapy quality assurance to National Clinical Trials. He was the founding Physicist of the Quality Assurance Review Center (QARC) and published several papers that helped to establish procedures for writing and reviewing multi-institution RT protocols.

Larry also served the American Board of Medical Physics for many years as an oral-examiner and Head of the Radiation Oncology Exam Panel. As Chairman of the ABMP he played a vital role in achieving the harmonious integration of the ABMP and the ABR, resolving a contentious issue that had plagued medical physicists for more than a decade.

Larry is a Fellow of the American Association of Physicists in Medicine and of the American College of Medical Physics. He is a member of ASTRO and RAMPS. He has served the AAPM for more than 3 decades by Chairing and serving on numerous key scientific and professional committees and task groups. He served on the AAPM Board of Directors, Education Counsel, Science Counsel, and as an Associate Editor of the Journal of Medical Physics. He has published more than 60 scientific papers in peer-reviewed journals, and authored several chapters in Radiation Oncology/Physics textbooks.



### **Raymond L. Tanner, Ph.D.**

A native Memphian, Dr. Tanner is Professor Emeritus of the University of Tennessee Health Science Center. Previously he taught physics at Memphis State University (B.S., 1953). As an AEC Fellow he earned an M.S. from Vanderbilt University (Ultrasound Velocity in Liquids). Ray's Ph.D. is from UCLA (Proton Dose Distributions) where he was president of the first AAPM Student Chapter. He studied one year at Memorial-Sloan Kettering, is ABR Certified in Radiological Physics and examined for 25 years.

Ray was President of the AAPM, AAPM SE Chapter, Tennessee Academy of Science, and Tennessee Section AAPT. He was the first Physics ACR Chancellor, and an RSNA Vice-President. He secured joint AAPM sponsorship of the RSNA meeting, initiated the first AAPM grant (RPC Coordination), and established the Education and Professional Councils. Dr. Tanner obtained the original AAPM malpractice insurance and established the AAPM Educators Day. He originated the RSNA Radiobiology Syllabus and helped found the ACR Mammography Accreditation Program and CAMPEP. He recently received the Outstanding Achievement Award from the Southeast Chapter.

Ray authored over three dozen papers and book chapters in diagnostic imaging and radiation safety. He organized and lectured in national and regional mammography symposia for physicists and technologists. Ray was Director of the Winter Institute of Medical Physics for 28 years. He consulted in shielding design, diagnostic surveys, and therapy calibrations. He taught residents for 35 years and served on numerous department, college and university committees and the Board of Directors of the AAPM (twice), committees of the AAPM, ACR, RSNA, Health Physics Society (charter member), AIP, and others. For several years he was Assistant Dean of the Graduate School, Assistant Vice Chancellor for Academic Affairs and on the Executive Committee of the Radiology Department at UTHSC. Ray operated a personnel monitoring service for 16 years.

Ray and Margaret recently celebrated their 50th anniversary and have two sons and a daughter. His hobbies are woodturning, reading, photography, wine making, house construction, travel and racquetball.



## William D. Coolidge Award Recipients

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1972	William D. Coolidge	1991	Moses A. Greenfield
1973	Robert J. Shalek	1992	Nagalingam Suntharalingam
1974	John S. Laughlin	1993	Colin G. Orton
1975	Marvin M.D. Williams	1994	F. H. Attix
1976	Harold E. Johns	1995	Robert Loevinger
1977	Edith E. Quimby	1996	Leonard Stanton
1978	Lawrence H. Lanzl	1997	James A. Purdy
1979	Herbert M. Parker	1998	Bengt E. Bjarngard
1980	John R. Cameron	1999	Faiz M. Khan
1981	James G. Kereiakes	2000	Lowell L. Anderson
1982	Gail D. Adams	2001	Ravinder Nath
1983	Edward W. Webster	2002	Bhudatt R. Paliwal
1984	Robley D. Evans	2003	Kenneth R. Hogstrom
1985	Jack S. Krohmer	2004	C. Clifton Ling
1986	Warren K. Sinclair	2005	Gary T. Barnes
1987	Gordon L. Brownell	2006	Ervin B. Podgorsak
1988	John R. Cunningham	2007	Arthur Boyer
1989	William R. Hendee	2008	Paul L. Carson
1990	Peter R. Almond		

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## *AAPM William D. Coolidge Recipient for 2009*

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### **Willi A. Kalender , Ph.D.**

Willi A. Kalender was born on August 1, 1949. He received his Master's Degree and Ph.D. in Medical Physics from the University of Wisconsin, Madison, Wisconsin, USA in 1979. In 1988 he completed all postdoctoral lecturing qualifications (Habilitation) for Medical Physics at the University of Tübingen, Germany.

From 1979 to 1995 Willi Kalender worked in the research laboratories of Siemens Medical Systems in Erlangen, Germany. He was appointed head of the Department of Medical Physics from 1988 to 1995. Since 1992 he has been Visiting Professor of Medical Physics at the University of Wisconsin, from 1993 to 1995 he lectured at the Technical University of Munich, Germany. In 1995 he was appointed full Professor and Chairman of the newly established Institute of Medical Physics at the Friedrich-Alexander-University Erlangen-Nuremberg, Germany. In 2001, he was nominated as Distinguished Visiting Professor to the Department of Radiology at Stanford University, Stanford, CA, USA.

Willi Kalender has conducted research mainly in the area of diagnostic imaging. The development and introduction of volumetric spiral computed tomography was a particular focus of his work. Other fields of research were radiation protection and the development of quantitative diagnostic procedures, e.g. for the assessment of osteoporosis, lung and cardiac diseases. His work is documented in about 800 scientific papers with more than 200 original publications among these. He organized and hosted numerous international workshops and conferences, among them the World Conference of Medical Physics in 2005 in Nuremberg, Germany.

Willi Kalender is a Fellow of the American Association of Physicists in Medicine; from 2005 to 2007 he was Member of the Board of Directors of this society. He is member of the International Commission on Radiation Units and Measurement (ICRU). In 2009 he was awarded an honorary doctoral degree in medicine by the Medical School of the RWTH Aachen, Germany. Among the many awards received, are the Cross of the Order of Merit of the Federal Republic of Germany (Bundesverdienstkreuz) in 2004, the European Science Foundation's Latsis Prize in 2007, and - most recently - the William D. Coolidge Award of the AAPM (American Association of Physicists in Medicine) in 2009.

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**Congratulations to all of the Award Winners!**

