

*American Association  
of  
Physicists in Medicine*



*Awards Ceremony*

*July 30, 2012  
Ballroom CD  
Charlotte Convention Center  
Charlotte, North Carolina  
6:30 p.m.*

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The American Association of Physicists in Medicine is the premier organization in medical physics, a broadly-based scientific and professional discipline encompassing physics principles and applications in biology and medicine.

The mission of the American Association of Physicists in Medicine is to advance the science, education and professional practice of medical physics.

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# 2012 Program

Welcome and Presentation of Awards

Gary A. Ezzell, Ph.D.  
AAPM President

Honoring Deceased AAPM Members

AAPM Fellowships and Grants

Research Seed Funding Initiative

Journal of Applied Clinical Medical Physics Paper Awards

AAPM-IPEM Medical Physics Travel Grant

Jack Fowler Junior Investigator Award

John R. Cameron Young Investigator Awards

AAPM Award for Innovation in Medical Physics Teaching

Farrington Daniels Award

Sylvia Sorkin Greenfield Award

Fellows

Recognition of 50+ Years of AAPM Membership

Marvin M. D. Williams Professional Achievement Award

Edith H. Quimby Lifetime Achievement Award

William D. Coolidge Award

Closing Remarks

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Reception immediately following

## ~ AAPM Fellowships and Grants ~

**AAPM Fellowship for Graduate Study in Medical Physics** ~ The fellowship is awarded for the first two years of graduate study leading to a doctoral degree in Medical Physics. A stipend of \$13,000 per year, plus tuition support not exceeding \$5,000 per year is assigned to the recipient. The amount of tuition support granted will be at the discretion of the AAPM. The award will be paid to the recipient's institution and distributed in accordance with the institution's disbursement procedures. It is AAPM's policy that none of the funds may be diverted to the institution's "facilities", "administrative", or other overhead categories and the full \$13,000 stipend must be provided to the recipient. The 2012 AAPM Fellowship for Graduate Study in Medical Physics is: **David Fried, UT Health Science Center**

**AAPM Support for Clinical Residency in Imaging Medical Physics** ~ One award is granted to an institution for support of a clinical residency in medical physics (Imaging). The recipient is: **Mayo Clinic, Rochester, MN - (Supervisor) Beth Schueler, Ph.D.**

**Minority Undergraduate Summer Experience** ~ The MUSE 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. 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. The MUSE Fellows for 2012 are **Desmond Fernandez and Omar Orbe-Toledo.**

**Summer Undergraduate Fellowships** ~ Provides 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 during the summer. The Summer Undergraduate Fellows for 2012 are: **Paul Leo, Hannah Ponek, Lauren Rigsby, Sean Rose, Stephanie Sodergren and Jaebum Chung.** One fellowship was sponsored by the AAPM Southern California Chapter.

**Summer School Scholarships** ~ These scholarships are offered to applicants who are early in their careers in medical physics. The 2012 scholarship recipients are **Zhihua Qi, Ching-Yi Hsieh, Samuel Brady, Justin Ducote and Loretta Johnson.** In addition, Capintec Inc. sponsors two grants to assist with other expenses related to the Summer School. Capintec established these grants to honor the memory of Arata Suzuki, Ph.D., who was part of Capintec Inc. for more than 20 years. **Zhihua Qi and Ching-Yi Hsieh** are the recipients of the 2012 Capintec Suzuki grants.

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## ~ Research Seed Funding Initiative ~

This award provides start-up funds for research-oriented medical physicists. The recipients for 2012 are:

**Huanjun Ding from the University of California Irvine and  
Magdalena Bazalova from Stanford University**

~ **Journal of Applied Clinical Medical Physics Best Paper Awards** ~

~ **RIT Award of Excellence for the Best Medical Imaging Article** ~

The RIT Award of Excellence for the Best Medical Imaging Article published in the *JACMP* in 2011 is presented to:

**Thomas Fearon, Huchen Xie, Jason Y. Cheng, Holly Ning,  
Ying Zhuge and Robert W. Miller**

for their paper entitled "*Patient-specific CT dosimetry calculation: a feasibility study,*" *Journal of Applied Clinical Medical Physics* 12, No. 4, p. 196 (2011).

~ **Unfors Raysafe Award of Excellence For The Best Radiation Measurements Article** ~

The Unfors Raysafe Award of Excellence For The Best Radiation Measurements Article published in the *JACMP* in 2011 is presented to:

**S.R. Manohara, S.M. Hanagodimath and L. Gerward**

for their paper entitled "*Energy absorption buildup factors of human organs and tissues at energies and penetration depths relevant for radiotherapy and diagnostics,*" *Journal of Applied Clinical Medical Physics* 12, No. 4, p. 296 (2011).

~ **Sun Nuclear Award of Excellence For An Outstanding Radiation Oncology Article** ~

The Sun Nuclear Award of Excellence For An Outstanding Radiation Oncology article published in the *JACMP* in 2011 is presented to:

**Omar A. Zeidan, Bhavin D. Chauhan, William W. Estabrook,  
Twyla R. Willoughby, Rafael R. Manon and Sanford L. Meeks**

for their paper entitled "*Image-guided bolus electron conformal therapy - a case study,*" *Journal of Applied Clinical Medical Physics* 12, No. 1, p. 68 (2011).

~ **Varian – Editor In Chief Award Of Excellence For An Outstanding General Medical Physics Article** ~

The Varian – Editor In Chief Award Of Excellence For An Outstanding General Medical Physics Article published in the *JACMP* in 2011 is presented to:

**Hitoshi Takagi, Yasunori Obata, Hidetoshi Kobayashi, Kazuyuki Takenaka  
Yasujirou Hirose, Hajime Goto and Tomohiko Hattori**

for their paper entitled "*Clinical usefulness of a newly developed body surface navigation and monitoring system in radiotherapy,*" *Journal of Applied Clinical Medical Physics* 12, No. 2, p. 254 (2011).

~ **Elekta Award Of Excellence For An Outstanding Radiation Oncology Physics Article** ~

The Elekta Award Of Excellence For An Outstanding Radiation Oncology Physics Article published in the *JACMP* in 2011 is presented to:

**Laurence Court, Matthew Wagar, Madeleine Bogdanov, Dan Ionascu,  
Deborah Schofield, Aaron Allen, Ross Berbeco and Tania Lingos**

for their paper entitled "*Use of reduced dose rate when treating moving tumors using dynamic IMRT,*" *Journal of Applied Clinical Medical Physics* 12, No. 1, p. 28 (2011).

~ **PTW Award Of Excellence For An Outstanding Radiation Oncology Physics Article** ~

The PTW Award Of Excellence For An Outstanding Radiation Oncology Physics Article published in the *JACMP* in 2011 is presented to:

**Aliaksandr Karotki, Katherine Mah, Gert Meijer and Michael Meltsnerg**

for their paper entitled "*Comparison of bulk electron density and voxel-based electron density treatment planning,*" *Journal of Applied Clinical Medical Physics* 12, No. 4, p. 97 (2011).

~ **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 will include £400 from the Institute of Physics and Engineering in Medicine and \$2,750 from AAPM. The AAPM-IPEM Medical Physics Travel Grant is presented to:

**Laurence Court, Ph.D.**

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~ **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 and the award is presented to:

**Rex A. Cardan, Ph.D.**

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~ **John R. Cameron Young Investigator Awards** ~

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**

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~ **AAPM Award for Innovation in Medical Physics Teaching** ~

The Award for Innovation in Medical Physics Teaching is generously supported by a bequest from the estate of Dr Harold Marcus. It is given for innovative programs in medical physics education of physicists, physicians, ancillary personnel and the public and is presented to:

**Eric C. Schreiber, Ph.D.**

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~ **Farrington Daniels Award** ~

The Farrington Daniels Award for the best paper on Radiation Dosimetry published in *Medical Physics* in 2011 is presented to:

**Brian E. Rasmussen, Stephen D. Davis, Cal R. Schmidt,  
John A. Micka and Larry A. DeWerd**

for their paper entitled "*Comparison of air-kerma strength determinations for HDR <sup>192</sup>Ir sources,*" *Medical Physics* 38, No. 12, p. 6721 (2011).

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~ **Sylvia Sorkin Greenfield Award** ~

The Sylvia Sorkin Greenfield Award for the best paper (other than Radiation Dosimetry) published in *Medical Physics* for 2011 is presented to:

**Olivier Couture, Magalie Faivre, Nicolas Pannacci,  
Avin Babataheri, Vincent Servois, Patrick Tabeling and Mickael Tanter**

for their paper entitled "*Ultrasound internal tattooing,*" *Medical Physics* 38, No. 2, p. 1116 (2011).

## ~ Fellows ~

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

**Salahuddin Ahmad, Ph.D.**

**J. Ed Barnes, Ph.D.**

**Wesley Bolch, Ph.D.**

**Jerrold Bushberg, Ph.D.**

**Sha Chang, Ph.D.**

**Zhe (Jay) Chen, Ph.D.**

**Indrin Chetty, Ph.D.**

**Sou-Tung Chiu-Tsao, Ph.D.**

**F. Chris Deibel, Ph.D.**

**Robert Drzymala, Ph.D.**

**Michael Gossman, M.S.**

**Steve Jiang, Ph.D.**

**James Kofler, Ph.D.**

**Zuofeng Li, D.Sc.**

**Charles Mayo, Ph.D.**

**Tariq Mian, Ph.D.**

**Jean Moran, Ph.D.**

**Todd Pawlicki, Ph.D.**

**Phillip Rauch, M.S.**

**David Shepard, Ph.D.**

**Jeffrey Siewerdsen, Ph.D.**

**Ge Wang, Ph.D.**

**Ping Xia, Ph.D.**

**Ying Xiao, Ph.D.**

**Lei Xing, Ph.D.**

**Mark Yudelev, Ph.D.**

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## ~ Recognition of 50+ years of AAPM Membership ~

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### ~ Marvin M. D. Williams Professional Achievement Award ~

This award recognizes an AAPM member for an eminent career in medical physics with an emphasis on clinical medical physics. The recipient of the 2012 AAPM Marvin M. D. Williams Professional Achievement Award is:

**William Hanson, Ph.D.**

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### ~ Edith H. Quimby Lifetime Achievement Award ~

This award recognizes AAPM members whose careers have been notable based on their outstanding achievements. The recipients for the 2012 Award for Achievement in Medical Physics are:

**Charles A. Mistretta, Ph.D.**

**Edward S. Sternick, Ph.D.**

**Kenneth N. Vanek, Ph.D.**

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### ~ 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 2012 AAPM William D. Coolidge Award is:

**Stephen R. Thomas, Ph.D.**

## ~ Fellows ~

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### **Salahuddin Ahmad, Ph.D.**

Dr. Salahuddin Ahmad received a Ph. D. degree in Physics from the University of Victoria, Canada in 1981. He received postdoctoral training in Radiation Oncology Physics from the UT MD Anderson Cancer Center in 1998. He was a Research Assistant Professor at Rice University (1990-96), Assistant Professor of Radiology at the Baylor College of Medicine (2002-2004), and the Chief Physicist at the Houston Veterans Affairs Medical Center (2002-2004). Currently, he is a tenured Professor of Radiation Oncology and the Director of Medical Physics at the University of Oklahoma HSC. He has coauthored 117 peer reviewed journal papers, 59 conference papers, 174 conference abstracts in Nuclear and Medical Physics, and supervised 3 Ph.D. and 9 M.S. students. He has been in the editorial board of JACMP and Medical Dosimetry and actively involved in committees of AAPM and ACMP. He is an ABR certified physicist and a fellow of ACMP.



### **J. Ed Barnes, Ph.D.**

Ed Barnes received his Ph.D. in Radiation Biophysics from the University of Kansas. During his career he has held positions as Senior Research Scientist at the Lovelace Foundation Inhalation Toxicology Research Institute; Assistant Professor at the University of New Mexico School of Medicine; President of Rocky Mountain Medical Physics; Manager of CT Applications Development at GE Healthcare and his current position as President of the Medical Technology Management Institute, a division of Herzing University. Dr. Barnes is board certified by the American Board of Radiology and is a Fellow of the American College of Radiology and the American College of Medical Physics. He has served the AAPM as Board Member at Large, member of the Education Council, Chair of the Continuing Professional Development and Rules Committees. He served as Scientific Program Chairman of the 1982 AAPM Annual Meeting and initiated the Young Investigators Symposium. The organization that Dr. Barnes leads provides over 200 educational programs for medical physicists, physicians and technologists each year.



### **Wesley Bolch, Ph.D.**

Dr. Bolch is currently a Professor of Biomedical Engineering at the University of Florida and Director of its Advanced Laboratory for Radiation Dosimetry Studies. Dr. Bolch manages a broad research program including (1) NCI and DOE funded projects to construct high-resolution models of the skeleton to support dose-response studies in radionuclide therapy and radiation epidemiology, (2) NIBIB funded projects to develop scalable NURBS-based computational phantoms of pediatric patients for organ dose assessment in CT, fluoroscopic imaging, and radiotherapy, and (3) CDC funded projects in external methods for rapid radiological triage following radiological terrorist events. He is member SNM's Medical Internal Radiation Dose (MIRD) Committee since 1993, member of Committee 2 of the International Commission on Radiological Protection (ICRP) since 2005, and member of the National Council on Radiation Protection and Measurements (NCRP) since 2005.





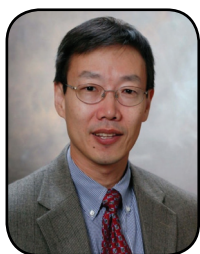
### **Jerrold Bushberg, Ph.D.**

Dr. Bushberg is a Clinical Professor of Radiology and Radiation Oncology at UC Davis. With over 30 years of experience in health and medical physics. He is board certified by ABMP & ABSNM in Nuc Med & medical health physics. Prior to coming to the UC Davis, Dr. Bushberg was on the Radiology faculty of Yale Univ. He has served as an advisor to government agencies and institutions throughout the nation and around the world on the biological effects of ionizing and nonionizing radiation exposure and radiological emergency medical management. He is the Sr. VP of the NCRP and led their radiation protection in medicine science advisory committee for 6 yrs. The textbook "The Essential Physics of Medical Imaging," 3rd ed, authored by Bushberg, Seibert, Leidholdt, and Boone, is used extensively by Radiology Residency programs throughout the US. Dr. Bushberg holds several technology patents in the areas of radiation detection and radiological emergency response.



### **Sha Chang, Ph.D.**

Sha Chang received her Ph.D. degree from Clark University in 1989. She graduated from the medical physics postdoctoral training program at The Joint Center for Radiotherapy at Harvard Medical School in 1991 and joined the Department of Radiation Oncology at the University of North Carolina at Chapel Hill, where she has been the Head of Physics since 2003. Dr. Chang has been active in professional services including SEAAPM Chapter (President), members of AAPM committees and ASTRO IHE-RO planning Committee, and reviewer of journals. Dr. Chang pioneered compensator-IMRT technology in 1990s and nanotechnology-enabled novel irradiation devices in 2000s. Dr. Chang has 4 patents and has published 35 papers in peer-reviewed journals. She is the Principal Investigator (PI) or co-PI (or co-project leader) of 9 research grants.



### **Zhe (Jay) Chen, Ph.D.**

Zhe (Jay) Chen received his Ph.D. in Physics from the City University of New York in 1989. After postdoctoral research at Brown University, he joined SUNY at Stony Brook in 1992 and began his career in medical physics. In 1995, he joined Yale-New Haven Hospital and Yale University School of Medicine, where he is now Professor of Therapeutic Radiology and a board-certified medical physicist. Dr. Chen has served AAPM as Board of Directors and as members in various committees, task groups, and working groups. He was also President of the Connecticut chapter of AAPM in 2001. He has been a Guest Associate Editor for *Medical Physics* and an Associate Senior Editor for the International Journal of Radiation Oncology, Biology, and Physics. Dr. Chen has published over 70 papers in peer-reviewed journals with over 110 abstracts in national and international meetings. His research interests include basic radiation dosimetry, radiobiological modeling, and imaging analysis in radiation therapy.



### **Indrin Chetty, Ph.D.**

Indrin J. Chetty received his Ph.D. degree from the Department of Biomedical Physics at UCLA in 1999. Following graduation, he joined the Department of Radiation Oncology at the University of Michigan, where he worked for over 6 years. In 2007, he joined the Henry Ford Hospital-Department of Radiation Oncology as Director of the Medical Physics Division, his current position. Dr. Chetty has served on many AAPM committees and task groups. He was director of the therapy scientific program for the 2011 annual meeting in Vancouver. He was an Associate Editor of *Medical Physics* for 6 years, and has also been actively involved in the American Society of Therapeutic Radiation Oncology (ASTRO), most notably as current chair of the Radiation Physics Committee and Associate Editor of the Red Journal. Dr. Chetty has published over 50 articles in peer-reviewed journals, and has been principle investigator on a R01 grant from the NIH.



### **Sou-Tung Chiu-Tsao, Ph.D.**

Sou-Tung started her medical physics career as a postdoc trainee at NYU in 1976. She is certified by ABR and ABMP. Besides clinical physics services, she has been faculty at NYU, Downstate MC, Cornell and Oakland University. She has taught many courses in academic institutions, trained 20 MedPhys graduate students and postdoc fellows, mentored many medical physicists, RadOnc residents and fellows. She is active in research, serving as PI, co-PI, co-investigator of research grants and contracts from NIH, FHFH and industry, and publishing 44 papers in peer-reviewed journals. Her service to AAPM includes Committees, WG, TGs, Refresher Course and Summer Schools, Scientific Abstract Reviewer, Chair of TG-129 (eye plaque dosimetry) and Lead author of TG-149 report. She has served as Reviewer and Associate Editor of *Medical Physics* and other journals. She demonstrates leadership in related societies, giving continuing education and refresher courses at national and international meetings.



### **F. Chris Deibel, Ph.D.**

Dr. Deibel joined Faiz Khan's group at the University of Minnesota. Here he learned clinical medical physics, taught residents, RTTs, and graduate students, and did some electron beam research. In 1995 he moved to the Cleveland Clinic, where he oversaw external beam quality assurance, set up total skin electron and total body photon programs, became a Gamma Knife physicist, started intra-operative radiotherapy with the Zeiss Intrabeam, taught physician residents, and in our new (in 2002) program at Cleveland State University taught medical physics to M.S. students, many of whom are now board certified. In 1999 he served as president of Cleveland Area Medical Physicists, and for the last 10 years as treasurer of the Penn-Ohio chapter of AAPM. Dr. Deibel has served on many AAPM committees including Radiation Therapy, Education and Training of Medical Physicists, and TG70: Clinical Electron Beams. He is currently retired from the Cleveland Clinic.



### **Robert Drzymala, Ph.D.**

Robert E. Drzymala received his Ph.D. degree from the University of Oklahoma Health Sciences Center, Oklahoma City in 1977. He started his career in Medical Physics in 1981 at the Department of Radiation Oncology, University of Maryland Medical School at Baltimore. In 1986 he accepted a position at the Department of Radiation Oncology, Washington University School of Medicine in St. Louis, where he is now Professor of Medical Physics. Dr. Drzymala is certified in Therapeutic Radiological Physics by the American Board of Radiology. Dr. Drzymala has served on committees, task groups and has held offices in both the American Association of Physicists in Medicine and the American College of Medical Physics. He has published over 50 papers in peer-reviewed journals. Dr. Drzymala has helped train over 30 medical physics residents and over 50 physician residents in radiation oncology.



### **Michael Gossman, M.S.**

Professor Gossman was educated through Indiana University, the University of Louisville, and Vanderbilt University. He is a Diplomate of the ABR, a 2-term President of the Ohio River Valley Chapter, was on 12 AAPM Committees, 4 Task Groups, Accreditation Site Reviewer for ACRO & ACR-ASTRO, Editor for JACMP, Editor-in-Chief for the Medical Dosimetry Journal, published 1 book, 1 chapter, in 3 compendia, invited to 3 “Point-Counterpoint Debates”, first-authored 28 of his 31 papers, was Adjunct Professor of Medical Physics at Wright State University, grant funded for over \$120,000, served 5 terms as a Medical Consultant to the U.S. NRC for Medical Event investigations. He serves as Radiation Triage Liaison for Eastern Kentucky, and Founder of the Kentucky Radiation in Medicine Advisory Committee. All of this work was extraprofessional to his primary employment. Professor Gossman is the Chief Medical Physicist & RSO at Tri-State Regional Cancer Center in Ashland, KY.



### **Steve Jiang, Ph.D.**

Steve Jiang received his Ph.D. in Medical Physics from Medical College of Ohio in 1998. After completing postdoctoral training at Stanford, he joined Massachusetts General Hospital in 2000 as an Assistant Professor of Radiation Oncology. In 2007, Dr. Jiang was recruited to University of California San Diego as a tenured Associate Professor, where now he is a Full Professor and Director for Physics and Technical Research. Dr. Jiang has served on AAPM TG 75, 76, 104, 157, and the Therapy Imaging Subcommittee. He is ABR certified and a Fellow of Institute of Physics. He currently serves as Associate Editor for *Medical Physics* and is on the Editorial Board for Physics in Medicine and Biology. Dr. Jiang's research in various areas of radiotherapy has been funded by federal, charitable, and industrial grants for over 6 million dollars, resulting in over 110 peer-reviewed papers. He has supervised 18 postdoctoral fellows and 7 Ph.D. students.



### **James Kofler, Ph.D.**

Dr. Kofler completed undergraduate degrees in Nuclear Engineering and Engineering Physics and Physics at The University of Wisconsin in Madison. He also received a Masters and a Ph.D. in Medical Physics at UW in Madison under the direction of Earnest Madsen. He began working at Mayo Clinic in 1989 with a focus on radiographic, fluoroscopic, and mammography equipment. From 1994-2000 he was responsible for physics support of ultrasound imaging at Mayo. Dr. Kofler began working in computed tomography at Mayo in 2000 and CT remains his primary interest. He believes he has one of the best jobs, with some of the best people, at one the best institutions in the world.



### **Zuofeng Li, D.Sc.**

Zuofeng Li received his D.Sc. degree from Washington University in St. Louis, Missouri in 1989. His career in medical physics started with post-doctoral research work in brachytherapy physics at Mallinckrodt Institute of Radiology at Washington University, followed by clinical therapeutic medical physics training at Department of Radiation Oncology, Washington University School of Medicine. Dr. Li is currently an associate professor of radiation oncology of the University of Florida College of Medicine, and serves as director of medical physics at the University of Florida Proton Therapy Institute. Dr. Li has served the AAPM continuously over the years, as members of task groups on brachytherapy and proton therapy dosimetry and techniques; and as members of several AAPM committees and subcommittees. Dr. Li is certified by the ABMP in therapeutic medical physics.



### **Charles Mayo, Ph.D.**

Charles Mayo received his Ph.D. degree from the University of Massachusetts in 1991 where he developed a widely used, surface plasmon resonance technique for measuring adsorption kinetics. He completed a post-doctoral fellowship at Harvard University in 1993 in proton radiation therapy. He then transitioned into conventional radiation therapy serving at St. Anne's Hospital in 1993 and at Tufts University in 1995. He joined the faculty at the University of Massachusetts in 2000, developing novel planning methods for IMRT and VMAT. As a QUANTEC member he focused on optic nerve and brainstem. He joined the faculty at Mayo clinic in 2010 leading in development of outcomes databases. Dr. Mayo has served in many capacities in the AAPM serving on several committees and chairing TG206. He is an assistant editor for the *Journal of Applied Clinical Medical Physics*. Dr. Mayo has published over 16 papers in peer reviewed journals and spoken widely national and international meetings.



### **Tariq Mian, Ph.D.**

Tariq A. Mian received his M.S. and Ph.D. degrees from the University of Texas Houston in Biophysics/Biomedical Sciences. He joined the Department of Physics at M.D. Anderson Cancer Center in 1982 as a staff physicist where he worked with Robert Shalek and Marilyn Stovall in the outreach physics program for four years. Later he was on Radiation Oncology faculty at University of New Mexico as Assistant Professor (1986-1989) and at University of Arizona as Associate Clinical Professor and Chief Clinical Physicist (1999-2000). Dr. Mian has served on a number of AAPM, ACR, and ASTRO committees. He is currently the secretary-elect of the Arizona Chapter of AAPM. He has been actively involved with the ACR/ASTRO Radiation Oncology Practice Accreditation Program for over fifteen years and currently serves as chair of its physics subcommittee. Dr. Mian has been a Fellow of ACR since 2002. He is chair of ACR Guidelines and Standards Committee of Medical Physics and recently appointed to the ACR Council Steering Committee. NIH SBMI-T grant panel.



### **Jean Moran, Ph.D.**

Jean M. Moran received her Ph.D. degree in 1999 from the University of Michigan. She continued on at the University of Michigan in the Department of Radiation Oncology where she is currently an Associate Professor and the Associate Division Director of Clinical Physics. Dr. Moran has served the AAPM in many capacities including as an instructor in AAPM Summer Schools and as a member of the Board of Directors, Therapy Physics Committee, Finance Committee and task groups related to IMRT. She is chair of TG113 on Physics Practice Standards for Clinical Trials and the Women's Professional Subcommittee. She serves as Vice-Chair of the Therapy Physics Committee and is Associate Editor for *Medical Physics*. She is board certified in Radiation Therapy by the American Board of Medical Physics. She is a mentor in the department's CAMPEP-approved residency program and has mentored several post-doctoral associates. Dr. Moran has 31 publications in peer-reviewed journals.



### **Todd Pawlicki, Ph.D.**

Todd Pawlicki received his Ph.D. degree from the Medical College of Ohio in 1998. He then went on to a two year postdoctoral fellowship at Stanford University. He subsequently joined the medical physics faculty at Stanford University in 2000. In 2006, Dr. Pawlicki moved to the Department of Radiation Oncology at the University of California, San Diego (UCSD) where he is now a Professor and Director of the Medical Physics Division. Dr. Pawlicki started the medical physics residency programs at both Stanford University and the UCSD. Both programs are CAMPEP accredited. Dr. Pawlicki serves as Chair of the Multidisciplinary QA Subcommittee, Clinical Affairs and Quality Committee for ASTRO. He is the first editor of the 100 chapter textbook, *Quality and Safety in Radiotherapy*. Dr. Pawlicki has over 50 peer-reviewed publications and over 70 invited nation and international presentation on topics ranging from IMRT and IGRT to quality and safety.



### **Phillip Rauch, M.S.**

Phil Rauch received a Baccalaureate Degree in Engineering Physics from the University of Oklahoma in 1969, and a Master's Degree in Medical Physics from the University of Colorado in 1974. He is a diplomat of the American Board of Radiology in Diagnostic Radiologic Physics. Mr. Rauch joined the medical physics staff at Henry Ford Hospital in 1974 and since that time has continuously taught the physics of diagnostic radiology in the radiology resident training program. Mr. Rauch is the only physicist to have received the "Excellence in Teaching Award" given by the graduating resident class to the most outstanding teacher during their resident training. He teaches in the Wayne State University graduate medical physics program, and has presented refresher courses for the American College of Radiology, the AAPM, the Radiological Society of North America, Society for Pediatric Radiology, College of Imaging Administrators, Conference of Radiation Control Program Directors.



### **David Shepard, Ph.D.**

David Shepard completed his Ph.D. at the University of Wisconsin where he worked under the guidance of Rock Mackie. David joined the faculty at the University of Maryland where he was promoted to Associate Professor. He currently is the Director of Medical Physics at the Swedish Cancer Institute in Seattle. He has been the principal investigator on grants through the National Science Foundation, Philips Medical, and Elekta. He has authored 40 publications as well as 7 book chapters, and he has been issued 2 patents. He has served as a member of the AAPM's Regional Organization Committee and the Recruitment of Young Physicists into Medical Physics Subcommittee and has been active in the Mid Atlantic and Northwest Chapters of the AAPM including organizing the NWAAPM fall meeting on an annual basis. He served as advisor for six postdoctoral fellows and was director of an accredited medical dosimetry training program.



### **Jeffrey Siewerdsen, Ph.D.**

Dr. Siewerdsen's work includes research and education with a focus on new digital x-ray and CT technologies. He has served on the AAPM Science Council, Imaging Physics Committee, and Scientific Program Subcommittee for our annual meeting. He earned his Ph.D. from the University of Michigan, where he worked on the early development of flat-panel x-ray detectors. As a Scientist at William Beaumont Hospital, he was on the team that developed the first systems for cone-beam CT in image-guided radiotherapy, and as faculty at the University of Toronto, he expanded his interests to include image-guided surgery. At Johns Hopkins University, he is the principal investigator of the I-STAR Lab and leads a collaborative, interdisciplinary team of researchers on topics of x-ray and CT imaging performance, new CT systems, 3D image reconstruction methods, and applications in diagnostic and image-guided procedures.



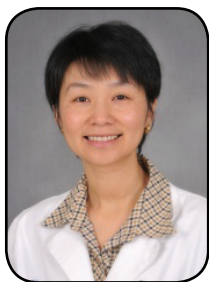
### **Ge Wang, Ph.D.**

Ge Wang received M.S. and Ph.D. in ECE from State University of New York, Buffalo, in 1991 and 1992. He was on faculty with Mallinckrodt Institute of Radiology, Washington University at St. Louis, 1992-1996; with University of Iowa, 1997-2002; and since then has been Pritchard professor, the Director of the SBES Division / ICTAS Center for Biomedical Imaging, Virginia Tech. His interests include x-ray tomography, optical tomography, and other inverse problems. He authored/co-authored over 300 articles in peer-reviewed journals such as IEEE Trans, PRL, PNAS, and Nature, including the first paper on spiral cone-beam CT, the first paper on bioluminescence tomography, and the first paper on interior tomography. He with his co-inventors has over 30 patents and disclosures. He is the founding Editor-in-Chief for International Journal of Biomedical Imaging, Associate Editor for IEEE Trans. Medical Imaging, IEEE Trans. Biomedical Engineering, IEEE Fellow, SPIE Fellow, OSA Fellow, AIMBE Fellow, and AAPM Fellow.



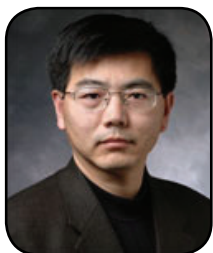
### **Ping Xia, Ph.D.**

Ping Xia received her Ph.D. in physics from the University of Virginia, Charlottesville in 1993. After completing medical physics residency training at the University of California San Francisco, she was a faculty member in their Department of Radiation Oncology from 1997 to 2009. Dr. Xia served in AAPM as a chapter representative member of the Board of Directors of AAPM, a member of the Science Council, and is current a member of the Therapy Physics Committee. Dr. Xia taught numerous refresher courses at annual meetings of AAPM and ASTRO. She has published 76 peer-reviewed articles and 9 book chapters. Dr. Xia has also been awarded a research grant from the Department of Defense for Prostate Cancer. Currently, Dr. Xia is an Endowed Chair in Medical Physics, and a Professor in the Cleveland Clinic Lerner College of Medicine and at Case Western Reserve University.



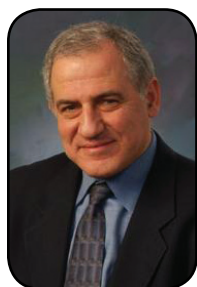
### **Ying Xiao, Ph.D.**

Ying Xiao received her Ph.D. degree from Temple University in 1996. She completed her Medical Physics Post-Doc Fellowship program in the University of Pennsylvania in 1998. She joined the medical physics faculty of the Department of Radiation Oncology, Thomas Jefferson University in 1998 where she has taken various administrative positions and her current academic rank is at Associate Professor. She is Board certified in Therapy Radiation Physics by the American Board of Radiology. She has published over fifty peer-reviewed papers, more than one hundred abstracts, and is the author of five book chapters. Dr. Xiao has over ten research grants, with two ongoing grants wherein she is the Principal Investigator. She serves the radiation oncology community through her involvement in various committees of the American Association of Physicists in Medicine, the Radiation Therapy Oncology Group, and ASTRO, taking leadership roles within these international professional organizations.



### **Lei Xing, Ph.D.**

Dr. Lei Xing is currently the Jacob Haimson Professor of Radiation Physics and Director of Radiation Physics Division of Radiation Oncology Department at Stanford University. He also holds affiliate faculty positions in Medical Informatics, Bio-X and Molecular Imaging Program at Stanford. Dr. Xing obtained his Ph.D. in Physics from the Johns Hopkins University in 1992 and received his Medical Physics training at the University of Chicago. He has been on Stanford faculty since 1997. His research has been focused on inverse treatment planning, tomographic image reconstruction, CT, optical and PET imaging instrumentations, image guided interventions, nanomedicine, and applications of molecular imaging in radiation oncology. Dr. Xing is an author on more than 190 peer reviewed publications, a co-inventor on many patents, and a co-investigator or principal investigator on numerous NIH, DOD, NSF, ACS grants and projects from other funding agencies and corporates. He and his lab members have received numerous awards from ACS, AAPM, ASTRO, and RSNA in the past decade. Dr. Xing is also on the editorial boards of a number of journals in radiation physics and medical imaging.



### **Mark Yudelev, Ph.D.**

Mark Yudelev holds a Ph.D. in Medical Physics from Wayne State University. He joined the faculty of Radiation Oncology at Wayne State University in 1990 and is currently adjunct Associated Professor. Mark taught Physics of Radiation Therapy at WSU Medical Physics Accredited Graduate Program and Radiation Oncology Residency Program. He mentored Medical Physics Graduate Students in Directed Studies, M.S. projects and Ph.D. research. Mark participated in installation, commissioning and clinical implementation of two neutron therapy facilities. He authored and co-authored 67 publications in peer-review journals and one book chapter. Mark has served on AAPM Task Group 136. He is associated editor and reviewer of *Medical Physics*, *Medical Dosimetry* and *Radiation Research* as well as AAPM Annual Meeting abstracts. Currently Mark is Senior Medical Physicist at McLaren Health Care in Michigan and is developing a clinical Medical Physics Residency program affiliated with Wayne State University.

## ~ Marvin M. D. Williams Professional Achievement Award ~

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### **William F. Hanson, Ph.D.**

Will Hanson received his Ph.D. in physics from the University of Tennessee in 1971. Following a postdoctoral year in Medical Physics under Dr. Robert Shalek at MD Anderson Cancer Center, he joined the Radiological Physics Center there. He became Associate Director of the RPC in 1976, Director in 1985, and retired in 2001. He was Chief of the Section of Outreach Physics, Department of Radiation Physics from 1985 until his retirement.

The RPC provides quality audit of dosimetry practices at institutions participating in NCI cooperative clinical trials. Dr. Hanson took the RPC from a program monitoring about 200 facilities in 1975 to more than 1,300 in 2001. This program was the model for a number of other radiotherapy quality audit programs in the US and worldwide. Dr. Hanson also used his expertise on many committees of AAPM and IAEA.

Will was Director of the Anderson ADCL from 1985 till 2006, and spent 5 enjoyable years after formal retirement working part time actually making measurements in the lab. During this time he also enjoyed calibrating non-human irradiators and developing irradiation techniques for biophysics experiments.

Will helped Dr. Ken Hogstrom revise the Medical Physics M.S./Ph.D. program in 1985 and taught basic radiation physics to hundreds of physicians, physicists, and dosimetrists through this graduate program and short courses offered to staff and paying customers through the department. He still lectures to dosimetry students at Anderson and to medical physicists from around the world through an IAEA program taught at Argonne National Lab.

## ~ Edith H. Quimby Lifetime Achievement Award ~

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### **Charles A. Mistretta, Ph.D.**

Dr. Mistretta received his Ph.D. from Harvard in 1968 and in 1971, encouraged by John Cameron, began his career in Medical Physics at the University of Wisconsin. His development of a real time digital image processor became the prototype for X-ray DSA which was commercialized in 1980. In 1983 Dr. Mistretta received the Laufman-Greatbatch Award for developing DSA. In 1988 he began research in time-resolved MRA leading to commercialized techniques such as TRICKS. Subsequently, Mistretta's group began exploring undersampled non-Cartesian MR acquisition trajectories such as VIPR and their combination with constrained reconstruction techniques such as HYPR. This led to MRA acceleration factors approaching 1000 removing the traditional tradeoff between spatial and temporal resolution. Related principles subsequently led to the development of 4D X-ray DSA and 4D fluoroscopy completing the development of DSA into a full 4D modality thirty years after its introduction. 4D DSA generates a time series of 3D vascular volumes 200 times faster than conventional rotational DSA.

Dr. Mistretta has trained some of the most prominent investigators in medical imaging and has greatly benefitted from his association with these individuals. He presently holds 36 issued and 13 pending US patents and their foreign counterparts.

In addition to the Edith Quimby Award, he has been awarded the J. Allyn Taylor International Prize in Medicine, and an MIT Technology Achievement Award. He was the RSNA Outstanding Researcher for 2010 and was recently selected by the International Organization of Medical Physics as the recipient of the 2012 Marie Curie Skłodowska Award.





### **Edward S. Sternick, Ph.D.**

After earning the Ph.D. in Medical Physics from UCLA in 1968, Dr. Edward (Ned) Sternick joined the faculty at Dartmouth-Hitchcock Medical Center where he founded the Medical Physics Section and led its growth over the next decade.

In 1978, Dr. Sternick accepted an invitation from Tufts Medical Center to become the founder, Professor and Director of a new Medical Physics Division providing research, education and clinical physics services for the Departments of Radiation Oncology and Radiology.

From 1995 to 1999, he served as Vice-President of Clinical Affairs for Nomos Corporation, the company that developed the first FDA-approved IMRT system.

Dr. Sternick returned to Tufts Medical Center in 2002 as the Administrative Director of the Cancer Center with management responsibility for the Departments of Radiation Oncology and Hematology-Oncology, the Breast Health Center, Clinical Trials, Nutritional and Social Services and the Tumor Registry.

In 2007, Dr. Sternick was named Medical Physicist-in-Chief, Professor and Vice Chair of Radiation Oncology at Rhode Island Hospital/ Warren Alpert Medical School of Brown University, the position he currently holds.

For many years, Ned has actively participated in professional activities of AAPM, ACMP, ACR, ABMP, CAMPEP and IOMP. He has been appointed to and/or chaired numerous committees and task groups in these organizations and served as President of AAPM, founding President of ABMP and was a founding Director of CAMPEP.

Ned is a recipient of the Marvin M.D. Williams Professional Achievement Award from the ACMP and is a Fellow of the AAPM, ACMP and ACR.



### **Kenneth N. Vanek, Ph.D.**

Dr. Vanek received his M.S. in Biophysics from Texas A&M in 1969 and his Ph.D. in Medical Physics from the University of Florida in 1976. From 1968 to 1988, he served on active duty in the U.S. Air Force completing his military career at Wilford Hall Medical Center in San Antonio, TX as the Chief of Medical Physics and Consultant in Medical Physics to the USAF Surgeon General.

After 10 years in community practice at Memorial Hospital in Chattanooga, TN. Dr. Vanek began his academic career in 1998 as the Director of Radiation Oncology Physics and New Technology at the Medical University of South Carolina. He is currently a Professor in the Department of Radiation Oncology with a dual appointment as Professor in Neurosciences. Besides leading new innovations in the radiation oncology department, Dr. Vanek teaches medical residents and has established a radiation oncology medical physics residency program which received CAMPEP accreditation in 2011.

Dr. Vanek has been extensively involved with the AAPM, ACMP, and other related professional societies for over 35 years. He is a Fellow of the AAPM, ACR, and ACMP. His various professional activities within the AAPM include Annual Meeting Coordination Committee Chairman for 9 years, Board member-at-large, Southwest Chapter President, SE Chapter Board Representative, and membership on numerous committees. Within the ACMP, his service included, among others, Chancellor, Chairman of the Board, and ACMP representative to the Alliance which advocates for passage of the CARE bill.

## William D. Coolidge Award Recipients

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1972	William D. Coolidge	1992	Nagalingam Suntharalingam
1973	Robert J. Shalek	1993	Colin G. Orton
1974	John S. Laughlin	1994	F. H. Attix
1975	Marvin M.D. Williams	1995	Robert Loevinger
1976	Harold E. Johns	1996	Leonard Stanton
1977	Edith E. Quimby	1997	James A. Purdy
1978	Lawrence H. Lanzl	1998	Bengt E. Bjarngard
1979	Herbert M. Parker	1999	Faiz M. Khan
1980	John R. Cameron	2000	Lowell L. Anderson
1981	James G. Kereiakes	2001	Ravinder Nath
1982	Gail D. Adams	2002	Bhudatt R. Paliwal
1983	Edward W. Webster	2003	Kenneth R. Hogstrom
1984	Robley D. Evans	2004	C. Clifton Ling
1985	Jack S. Krohmer	2005	Gary T. Barnes
1986	Warren K. Sinclair	2006	Ervin B. Podgorsak
1987	Gordon L. Brownell	2007	Arthur Boyer
1988	John R. Cunningham	2008	Paul L. Carson
1989	William R. Hendee	2009	Willi A. Kalender
1990	Peter R. Almond	2010	David W.O. Rogers
1991	Moses A. Greenfield	2011	Richard L. Morin

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## ~ AAPM William D. Coolidge Recipient for 2012 ~

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### Stephen R. Thomas, Ph.D.

Stephen R. Thomas, Ph.D. received a B.A. in physics from Williams College, Williamstown, MA in 1963 and earned a Ph.D. in solid state physics from Purdue University, West Lafayette, IN in 1973. In between those graduation years from 1964 to 1966, he served as a Peace Corps volunteer teaching secondary school math and science in Accra, Ghana, West Africa. From 1973 to 1974 he was an Assistant Professor within the Department of Mathematics and Physics at Kentucky Wesleyan College, Owensboro, KY. Dr. Thomas made the transition into medical physics via a postdoctoral fellow position in 1974 within the Radioisotope Laboratory at the Cincinnati General Hospital, Cincinnati, OH. He joined the faculty of the University of Cincinnati College of Medicine, Department of Radiology in 1975, becoming full professor in 1989 and Director of the Division of Medical Physics from 1991 through 1998. Two individuals who played key roles as mentors and professional friends particularly through the early years at the College of Medicine were James G. Kereiakes, Ph.D. and Eugene L. Saenger, M.D. to both of whom he is truly indebted.

Dr. Thomas is a Fellow of the AAPM, the ACR, and the ISMRM. Within the AAPM, he was active on a number of committees including the NMR Committee for which he served as the first chair when created under the Science Council in 1983. He was Chairman of the Program Committee from 1988 to 1992 being responsible for the scientific and educational programs at the AAPM Annual Meeting with a direct link to the RSNA Program Committee. Dr. Thomas was a member of EXCOM for 3 years serving as AAPM President in 1997 and Chairman-of the Board in 1998.

Dr. Thomas has been highly involved with the RSNA serving as Co-chairman of the Scientific Program Committee (AAPM Liaison, 1988-1992) and Third Vice-President (1993-1994). He was a member of the RSNA R&E Foundation Board of Trustees from 2000 to 2006. Currently, he serves as Chair of the R&E Foundation Fund Development Committee and is a member of the RSNA Centennial Committee.

Within the SNM, Dr. Thomas was a long standing member of the Medical Internal Radiation Dose (MIRD) Committee and served as Vice-chair (1995-2005) and Chair (2006-2008). He received the Loevinger-Berman Award from the SNM in 2009 for excellence in internal dosimetry. Regarding MR societies, Dr. Thomas was an Interim Board of Trustee member during the March 1993 transition and merger of SMRI and SMRM into a unified organization now called the International Society of Magnetic Resonance in Medicine (ISMRM). He was one of the original 14 signatories of the merger consent agreement document.

Dr. Thomas was a Physics Trustee of the American Board of Radiology from 2001 to 2006 and served as the Associate Executive Director, Medical Physics, from 2006 through 2011.

Dr. Thomas has been active in medical research with particular interest in the areas of radiopharmaceutical dosimetry and F-19 MRI using perfluorocarbon compounds for pO<sub>2</sub> monitoring in vivo (animal models). He directed the development of a 0.15 T whole body MRI system within the Division of Medical Physics. Although the system was intended for non-human research, the first patient receiving a clinical MRI procedure within the city of Cincinnati was scanned on this unit in 1985. He has been the PI on a number of NIH grants and an author on over 100 publications. During his years at the University of Cincinnati, he has served as the advisor, dissertation committee member and/or mentor for 5 doctoral and 22 masters degree students.

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

