

*American Association
of
Physicists in Medicine*



Awards Ceremony

*July 28, 2008
George Bush Grand Ballroom
Convention Center
Houston, Texas
6:00 p.m.*

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.

2008 Program

Welcome and Presentation of Awards

Gerald A. White Jr., M.S.

AAPM President

Honoring Deceased AAPM Members

AAPM Fellowships and Grants

Research Seed Funding Initiative

AAPM Medical Physics Travel Grant

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

Reception immediately following in the
foyer outside of the George Bush Grand Ballroom

A Two Year Pre-Doctoral Fellowship

This fellowship consists of \$18,000 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 Two Year Pre-Doctoral Fellowship is:

Dustin Jacqmin - University of Wisconsin

Summer Undergraduate Fellowships

These fellowships consist of a stipend of \$4,000 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 Summer Undergraduate Fellowship Program Subcommittee (member of the Education and Training of Medical Physics Committee) and funded by the AAPM. The 2008 winners are:

**Rachelle Berger
Douglas Dean
Kimberly Garrett
Bryce Gustafson
Melany Klauser**

**Courtney Knaup
Christine Luerman
Travis McCaw
John Noll
Nicholas Roosevelt**

**Caroline Stratton
Kevin Tierney
Lindsey Weber
Caitlyn Yeager**

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 \$4,000 stipend, funded by the AAPM. The winners are:

**Jonathan Baca
Lauren Foley
Sheena Gause
Lynda Ikejimba**

**Judith Rivera
Korressa Williams
Horace Lee Lambert, III**

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 2008 winners are:

**Amar Basavatia
Mohamed M. Galal Ibrahim
Liang Liang**

**Ping-Fang Tsai
Jana Musgrove
Luz Stella Veloza**

2008 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:

**Timothy Solberg - University of Texas Southwestern Medical Center
Brian Wichman - Kansas City Cancer Center
Indrin J. Chetty - Henry Ford Health System
James C.H. Chu - Rush University Medical Center
Chester Ramsey - Thompson Cancer Survival Center**

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 2008 are:

Zejian Liu, Ph.D. - Johns Hopkins School of Medicine

Amit Sawant, Ph.D. - Stanford University

AAPM Medical Physics Travel Grant

This grant is made annually to a U.S. AAPM member to travel to a foreign country of the recipient's choice. The purpose of this grant is to assist in the career development of the recipient and to promote communications in medical physics between nations. This grant is supported by a donation from Gammex, Inc. of up to \$1,500. The 2008 AAPM Medical Physics Travel Grant recipient is:

Jun Deng, Ph.D.

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 2008 AAPM-IPEM Travel Grant recipient is:

Jean Moran, 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.

Murat Surucu, 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 2007 is presented to:

Ioannis Sechopoulos, Ph.D., Sankararaman Suryanarayanan, Ph.D., Srinivasan Vedantham, Ph.D.

Carl D'Orsi, M.D. and Andrew Karellas, Ph.D.

for their paper entitled "*Computation of the glandular radiation dose in digital tomosynthesis of the breast,*" **Medical Physics** 34, 221 (2007).

Sylvia Sorkin Greenfield Award

The Sylvia Sorkin Greenfield Award for the best paper (other than Radiation Dosimetry) published in **Medical Physics** for 2007 is presented to:

**Sihua Yang, Ph.D., Da Xing, Ph.D., Quan Zhou, Ph.D., Liangzhong Xiang, Ph.D.
and Yeqi Lao, Ph.D.**

for their paper entitled "*Functional imaging of cerebrovascular activities in small animals using high-resolution photoacoustic tomography*," **Medical Physics** 34, 3294 (2007).

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:

Allen S. Lichter, 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.

Muthana S.A. L. Al-Ghazi, Ph.D.

John A. Antolak, Ph.D.

Sam Beddar, Ph.D.

Stanley H. Benedict, Ph.D.

Dianna D. Cody, Ph.D.

Henry T. Heaton II, M.S.

David J. Keys, Ph.D.

X. Allen Li, Ph.D.

Robin A. Miller, M.S.

Norbert J. Pelc, Sc.D.

Robert A. Phillips, Ph.D.

David R. Pickens, Ph.D.

Jeffrey V. Siebers, Ph.D.

Chris C. Shaw, Ph.D.

Raymond K. Wu, Ph.D.

Yan Yu, Ph.D.

Yunping Zhu, 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:

Maryellen L. Giger, Ph.D.

Mary K. Martel, 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 M. Galvin, D.Sc.

Kenneth R. Kase, 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:

Paul L. Carson, Ph.D.

Honorary Membership



Allen S. Lichter, M.D.

Allen S. Lichter, MD, is among the nation's most respected specialists in the field of radiation oncology. His groundbreaking research while at the National Cancer Institute (NCI) and throughout his career on radiation after lumpectomy has earned him international recognition in the field of breast cancer treatment. For the last two decades, Dr. Lichter served at the University of Michigan, first as Chair and Professor of Radiation Oncology from 1984-1998 and then as Dean of the Medical School from 1998 to 2006. During his tenure as Chair, Dr. Lichter built a department that brought three-dimensional treatment planning and conformal therapy to the forefront of current practice of radiation treatment.

Dr. Lichter was named the first Isadore Lampe Professor of Radiation Oncology, an endowed chair at the University. Dr. Lichter was also honored as a Newman Family Professor of Radiation Oncology in 2000. Among his accomplishments as Dean, Dr. Lichter introduced an innovative curriculum to meet the needs of future medical students and oversaw the creation of a new Biomedical Science Research facility for the University's researchers and educators.

Prior to his tenure at the University, Dr. Lichter was the Director of the Radiation Therapy Section of the NCI's Radiation Oncology Branch. There, he conducted one of the pivotal trials that found the use of lumpectomy and radiation therapy for breast cancer to be as effective as the traditional treatment of mastectomy. His research in three-dimensional treatment planning and conformal dose delivery of radiation therapy is another widely recognized hallmark of Dr. Lichter's NCI career, and led to a Gold Medal from the American Society for Therapeutic Radiology and Oncology (ASTRO) and elected to the Institute of Medicine of the National Academies of Science recognizing his outstanding contribution to the field.

As a member of ASCO since 1980, Dr. Lichter has assumed many prominent roles in the Society, including President (1998-1999) and Founding Chair of The ASCO Foundation Board. He has served on ASCO's Board of Directors and as Chair of the Public Issues Committee, Special Awards Selection Committee, and Co-chair of the Fellows Task Force. Dr. Lichter has served multiple terms on the Scientific Program Committee as well as the Nominating Committee, the Audit and Finance Committee, and the Editorial Board of ASCO's *Journal of Clinical Oncology*.

Dr. Lichter has held active positions in numerous other professional societies, including the Board of Directors for the Liaison Committee on Medical Education, the Accreditation Council for Graduate Medical Education, ASTRO, and the NCI.

Dr. Lichter was a co-editor of the textbook *Clinical Oncology* and several books on breast cancer, and the author of over 100 scientific papers. In addition, he has served on the editorial boards of *Oncology*, the *Journal of the National Cancer Institute*, and the *International Journal of Radiation Oncology, Biology, and Physics*.

Dr. Lichter received his bachelor's (1968) and medical (1972) degrees from the University of Michigan. He trained in radiation oncology at University of California, San Francisco, before joining the faculty at Johns Hopkins University, and later the National Cancer Institute.

New AAPM Fellows



Muthana S.A. L. Al-Ghazi, Ph.D.

Muthana Al-Ghazi received his PhD degree from the University of Manitoba in 1983. He completed a postdoctoral fellowship at the Manitoba Cancer Foundation and a Clinical Medical Physics Residency at the London Regional Cancer Centre in 1984 and 1985 respectively. After appointments in Ontario and British Columbia, he has moved to the Department of Radiation Oncology, University of California, Irvine in 1998 where he is currently a Clinical Professor and Director of the Division of Medical Physics and Director of the Medical Physics Residency Training Program. He is certified by the ABR in Therapeutic Radiological Physics, the ABMP in Radiation Oncology Physics and a Fellow of the CCPM. He serves on several committees of the AAPM. He has co-authored 22 peer reviewed papers, one book chapter, 20 research reports and conference papers and 52 abstracts. He has presented 51 oral presentations at local, national and international conferences as a contributing and invited speaker.



John Antolak, Ph.D.

John Antolak received his PhD from the University of Alberta in 1992. He joined the staff at the UT MD Anderson Cancer Center, where he remained until 2004. He personally supervised 3 graduate students, and was involved in committees for another 12 students. He was also involved in teaching physics to RTT students and Radiation Oncology residents. In 2004, he moved to Minnesota, the "State of Hockey", where he joined the physics staff at the Mayo Clinic. He is currently the Director of the Medical Physics Residency Program, and is the primary physics instructor for the Radiation Oncology residents. His service to AAPM includes membership in three task groups, one work group, and two committees. He is board-certified by the ABR and serves as an AE for the JACMP. He has published more than 40 refereed manuscripts and made numerous presentations at national and international meetings.



Sam Beddar, Ph.D.

Sam Beddar received his doctorate from the University of Wisconsin in 1990. He then joined Princess Margaret Hospital as a staff physicist, and then became an assistant professor at the University of Rochester Medical Center. Following posts at Albany Medical College and University Hospitals of Cleveland, he is now an associate professor at MD Anderson Cancer Center. Dr. Beddar has served in many capacities in the AAPM, and is currently an Associate Editor of Medical Physics. He is board certified by the American Board of Radiology and has been a fellow of the Canadian College of Physicists in Medicine since 1992. Over the course of his career he has mentored a number of postdoctoral fellows, students, and residents. Dr. Beddar has 50 papers in peer-reviewed journals and over 65 peer-reviewed abstracts in national and international meetings. He is a world-class expert in the field of scintillation dosimetry for radiation therapy, and was recently awarded an NIH R01 grant.



Stanley Benedict, Ph.D.

Stanley H. Benedict received his MS in Radiological Health Physics from San Diego State University in 1984, and PhD in Biomedical Physics from UCLA in 1992. He joined the faculty of Virginia Commonwealth University, Medical College of Virginia, in 1993, and in 2000 was promoted to Associate Professor, Chief of Clinical Physics. In 2006 he joined the faculty of University of Virginia as Associate Professor and Director of Radiological Physics in the Department of Radiation Oncology. His professional achievements include over 25 scientific peer-reviewed publications, several book chapters and proceedings, and over 65 scientific abstracts for presentations at international symposia. He has been actively involved in teaching, including lecturer to medical physics graduate students, physician and physics residents, and therapy students. He is board certified by the American Board of Radiology in Radiological Therapeutic Physics and is a Fellow of the American College of Medical Physics.



Dianna Cody, Ph.D.

Dr. Cody trained as a bioengineer at the University of Michigan (MS and PhD) and attained American Board of Radiology certification in Diagnostic Medical Physics while on staff at Henry Ford Hospital in Detroit, Michigan. She spent 13 years at Henry Ford, and in 2000 she joined The University of Texas M.D. Anderson Cancer Center in Houston, Texas, where she currently holds the rank of Professor in the Department of Imaging Physics. She is also the Section Chief of Radiologic Physics, and provides CT physics support for 16 clinical scanners, 4 research scanners, and 9 hybrid scanners. She is also involved in small animal CT imaging research, CT medical physics graduate education, and CT related workshops for technologists and practicing medical physicists. Dr. Cody also holds medical physics leadership positions in several national organizations.



Henry Heaton, M.S.

Mr. Heaton began his career at NBS(now NIST) where measured neutron total cross sections by time-of-flight using the NBS linear accelerator, absolute and relative ^{252}Cf averaged fission cross sections, and set up accreditation programs for laboratories in the private, State and Federal sectors. He was hired by FDA to be the Chief of the Radiation Metrology Branch which is responsible for calibrating all of the x-ray instruments used by FDA inspectors. The lab was the first to be accredited by NVLAP and first for calibrating mammography instruments in both molybdenum and rhodium beams. Through his efforts, the link between the AAPM ADCL's and Federal calibration laboratories has increased. He has reviewed radiation dosimetry/physics of medical devices submitted for premarket review including radiological medical devices ranging in size from microspheres to proton accelerators and for cardiology the dosimetry of all the IVBT devices submitted for clinical trial in IDE submissions.



David Keys, Ph.D.

Dave Keys received his MA degree in 1975 from Washington University. He then entered the field of clinical medical physics and continued studies earning his doctorate in 1984. Since that time he has been primarily engaged in clinical physics including diagnostic, therapy and mammography activities. Since 1979 he has been president of his own medical physics service companies, serving the greater Missouri River Valley area. He has contributed to AAPM and ACMP activities with emphasis on licensure and reimbursement issues. He has been an active participant in joint programs with the CRCPD and the Alliance (working on the CARE bill).



X. Allen Li, Ph.D.

Allen Li received a Ph.D. from Concordia University, Montreal in 1992. After completing the Clinical Physics Residency at Ottawa Cancer Center, he worked as a physicist at the same institute, then as an assistant professor at Rush University and an associate professor at the University of Maryland. He is now a professor and the Chief of Medical Physics in the Department of Radiation Oncology, Medical College of Wisconsin. He has been a board-certified medical physicist since 1994, and is currently a member of AAPM TG-74, TG-106 and Bio-effect WG. He is an Associate Editor for Medical Physics and a reviewer for seven scientific journals and five public and private research funding agencies. He has authored 104 peer-reviewed papers and 170 abstracts, and has been the recipient of 18 research grants from NIH and other funding agencies. His research interests include biologically-based treatment planning, management of respiratory motion, and Monte-Carlo applications.



Robin Miller, M.S.

Robin Miller received her Master of Science in Radiological Medical Physics from the University of Kentucky in 1991. She spent an additional year at the University as a medical physics resident before joining the radiation oncology department at the University of Virginia. She is currently Chief Physicist at Radiation Oncology Services, Riverdale; a free-standing facility outside Atlanta, GA. Ms. Miller has been a dynamic participant in numerous AAPM activities, including the organization of several summer schools, the Meeting Coordination Committee, the Finance Committee, and as a Member-at-large of the Board of Directors. She is presently active in the AAPM Placement Service, as an AAPM liaison to the ASTRO Committee on Workforce Diversity and Disparity and as an officer for the Southeastern Chapter of the AAPM.



Robert Phillips, Ph.D.

Robert A. Phillips received his Ph.D. from Northwestern University in 1972. He then joined the Nuclear Medicine department of St. Luke's Hospital, New York. In the next ten years he worked in the Radiation Therapy and Diagnostic Radiology departments. He was also an adjunct instructor in Radiology at Columbia University and was an active member of RAMPS. Since 1978, he has worked for the U.S. Food and Drug Administration, Center for Devices and Radiological Health, primarily with radiological devices. He recently stepped down as branch chief of the Radiological Devices Branch. Dr. Phillips has been very active in AAPM as a member of several committees. He is certified by the American Board of Radiology (Diagnostic Radiological Physics) and American Board of Health Physics. He has also been an active member of the local chapters of the Health Physics Society and the AAPM. He has published three book chapters, 5 papers and given numerous presentations.



Norbert Pelc, Sc.D.

Norbert Pelc received his ScD degree in Medical Radiological Physics from Harvard University in 1979. He worked at GE Medical Systems from 1978 to 1990 in the Radiological Sciences Laboratory as a Senior Physicist and manager of the group. He joined Stanford University in 1990 where he is now Professor of Radiology and Bioengineering, Professor of Electrical Engineering (by courtesy) and Associate Chair for Research in the Radiology Department. Within the AAPM, he served on the Task Group on Bone Mineral Measurement, the Imaging Physics Committee, and is currently a member of the Science Council. He has served on the editorial boards of Medical Physics and several other medical imaging journals. Dr. Pelc has published over 160 papers in peer-reviewed journals. He has served on NIH study sections and was a member of the National Advisory Council of the National Institute of Biomedical Imaging and Bioengineering.



David Pickens, Ph.D.

David Pickens received his Ph.D. degree from Vanderbilt University in 1981. He now holds the joint appointments of Associate Professor of Radiology and Radiological Sciences and Associate Professor of Biomedical Engineering at Vanderbilt University. Dr. Pickens has served AAPM in many capacities. Of those, he has served as Chairman of the Scientific Program Committee followed by Chairman of the Program Subcommittee of the Meeting Coordination Committee from 1999-2004. He also served as AAPM Board Member-at-Large from 2004-2006. He is board certified by the American Board of Radiology in Diagnostic Radiological Physics and Assistant Editor of the Journal of Magnetic Resonance Imaging. He has been Principal Investigator and Co-Principal Investigator on numerous NIH-funded research grants and has 184 scientific publications and presentations.



Jeffrey Siebers, Ph.D.

Upon receiving his PhD from the University of Wisconsin in 1990, Jeffrey V. Siebers joined Loma Linda Medical Center as a Senior Physicist, then Assistant Professor to develop hospital-based proton radiation therapy. In 1997, he joined the Department of Radiation Oncology at Virginia Commonwealth University, where he is now Professor and Director of the VCU Medical Physics Graduate Program which he began. He is currently leading over \$2.5 M of research as PI or Co-investigator. Dr. Siebers has published over 70 papers in peer-reviewed journals. He was certified by the American Board of Medical Physicists in 1999. Dr. Siebers has served the AAPM as a Reviewer and Associate Editor for Medical Physics Journal, as an instructor at AAPM Summer Schools and for annual meeting CE courses, and has participated on Task Group and CLA committees. He has also been active professionally as a consultant to the ICRU, IAEA, and NCI.



Chris Shaw, Ph.D.

Chris C. Shaw received his PhD degree from the University of Wisconsin- Madison in 1981. Since his graduation, he has worked as an academic research physicist at major medical centers. In 1998, he joined the University of Texas M. D. Anderson Cancer Center where he has worked as Professor of Imaging Physics and Director of Digital Imaging. Dr. Shaw has served in various Task Groups of the AAPM. He is serving as the Imaging Track Co-Director for the Scientific Programs of the 2007 and 2008 Annual AAPM meetings. He is also serving as an Associate Editor for Medical Physics and will begin his service in the Physics Subcommittee of the Scientific Assembly of the RSNA in 2008. Dr. Shaw is board certified by the ABR in Diagnostic Physics. He has published over 40 papers in peer-reviewed journals and served as the principal investigator or co-investigator in many peer reviewed research grants. He has also been active in grant reviews for NIH and other granting agencies.



Raymond Wu, Ph.D.

Raymond K. Wu finished his PhD work in 1973 and joined Thomas Jefferson University Hospital as a postdoctoral fellow. He joined the faculty of Temple University Medical School in 1977 when he served as the Secretary and then the President of the Delaware Valley Chapter. In 1985, Raymond was appointed Professor at the Eastern Virginia Medical School of Virginia where he stayed for 17 years. He has involved heavily with international affairs activities and helped establish the infrastructures of the International Affairs Committee (IAC). He has made over 30 invited presentations in international meetings and published over 20 articles. He served in several committees of AAPM, ACMP, ASTRO and ACR. Currently he is Chairman of IAC, and Vice-Chairman of ACMP. He was a co-chair of the NCRP subcommittee that re-wrote the radiotherapy facilities shielding design report. He has been active promoting international scientific exchange activities within and beyond AAPM.



Yan Yu, Ph.D.

Yan Yu received his PhD degree from the University of London in 1986. After postdoctoral research at the University of Illinois, he completed a clinical fellowship Program at Thomas Jefferson University. He joined the University of Rochester in 1994, where he was promoted to Professor of Radiation Oncology, Oncology and BME. He is now Professor at Thomas Jefferson University and directs the Medical Physics Division. Dr. Yu served in various committees in the AAPM, chaired Task Group #64, and was President of the Upstate New York Chapter in 2001. Dr. Yu has published over 70 papers in peer-reviewed journals, and has been PI on 7 grants from the Whitaker Foundation and NIH totaling over \$5M. His research interests include multi-objective optimization, image-guided adaptive and robotic delivery, optical spectroscopy, acoustic manipulation of blood flow, and vascular disrupting techniques.



Yunping Zhu, Ph.D.

Yunping Zhu received his PhD degree from the Rice University in 1987. After completing his Postdoctoral Medical Physics Fellowship Program at the MD Anderson Cancer Center, he joined the Radiological Physics Center, in 1989. He worked in Ontario Cancer Institute/Princess Margaret Hospital as Assistant Professor from 1990-1995. He joined St. Jude Children's Research Hospital and become Associate Professor until 2004. He has been with Cooper University Hospital since 2004 and is now Professor of Radiation Oncology and Director of Medical Physics. Dr. Zhu was board certified by the American Board of Radiology in Therapeutic Radiology Physics since 1991. Dr. Zhu has published over 50 papers in peer-reviewed journals and trained 10 postdoctoral fellows and number of students, most of whom are practicing medical physics.

Achievement in Medical Physics Award



James M. Galvin, D.Sc.

James M. Galvin started his medical physics training at the University of Cincinnati working under Dr. James Kereiakes. After receiving MS degrees in Nuclear Engineering and Medical Physics from UC in 1966 and 1968, he moved to Boston to work at the Joint Center for Radiation Therapy under Dr. Bengt Bjarngard. He received his D.Sc. degree in Medical Physics from the Harvard School of Public Health in 1975. Jim was the Director of Medical Physics at Thomas Jefferson University Hospital from 1997 to the beginning of 2008, and currently holds the academic appointment of Professor at Jefferson Medical College. Jim continues his activities at Jefferson on a part-time bases, and he now spends half of his time with the Radiation Therapy Oncology Group (RTOG). Jim served on the Board of Directors of the AAPM for two terms, and he was Secretary from 1997 to 1999. He has served on many AAPM committees and is currently the Treatment Delivery Subcommittee Chair under the Therapy Physics Committee of Science Council. Jim has also been active with ASTRO and served as a Board Member from 2000 to 2003. He is a Fellow of both the AAPM and ASTRO. His publications include 56 peer reviewed articles and 11 book chapters and AAPM Task Group reports.



Kenneth R. Kase, Ph.D.

Kenneth Kase began his career in Health Physics at Lawrence Livermore National Laboratory and Stanford Linear Accelerator Center (SLAC). In 1975 he received a PhD from Stanford University and was appointed to the faculty of Radiation Oncology at the Harvard Medical School. He moved to the University of Massachusetts Medical School in 1985. In 1992 he returned to Stanford and was appointed Associate Director of SLAC and Director of the Environment, Safety and Health Division in 1995. He retired from that post in 2001 and from SLAC in 2004. Currently he works part-time at Lyncean Technologies, Inc., an R & D firm in Palo Alto, CA.

Throughout his career Ken has been involved in research activities, many of which were projects of students that he advised at the University of Massachusetts, Lowell, Harvard University and San Jose State University. These included investigations in radiation characteristics, interactions and transport, such as radioactive gas production at a 100-MeV electron linac; muon shielding at high energy electron accelerators; spectral characterization of 4 MV bremsstrahlung; reconstruction of diagnostic x-ray spectra by numerical analysis of transmission data; and giant dipole resonance neutron yields produced by electrons. He also contributed studies into various aspects of radiation dosimetry including, dose to patients from bremsstrahlung in rotational electron therapy; calibration of brachytherapy iridium-192 sources; dose from secondary radiation outside a treatment field; replacement correction factors for photon and electron dose measurements; effects of ionization chamber construction on dose measurements in a heterogeneity; dosimetry using electron spin resonance in bone; and x-ray dosimetry in 7-keV to 17.5-keV synchrotron radiation beams.

Ken was Business Manager of Medical Physics from 1984-1986 and AAPM Treasurer from 1986-1991. He served on the Finance Committee and the Board of Directors. He has been active in the Health Physics Society and American Academy of Health Physics serving as President of both organizations. Ken also has been an associate editor of Health Physics, Medical Physics and Radiation Research.

Currently Dr. Kase is Senior Vice President of the National Council on Radiation Protection and Measurements and chair of Scientific Committee 6-2 on Radiation Exposure to the U.S Population. He has been a member of the Council since 1987 and served for 10 years as Scientific Vice-President and Chair.

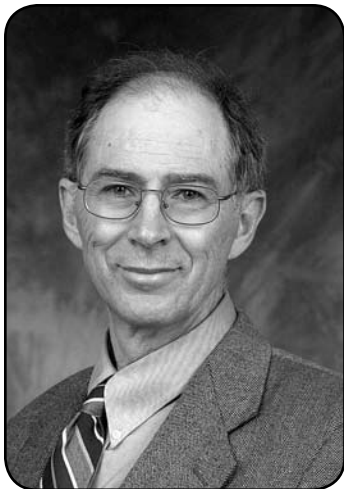
Ken is Vice President of the International Radiation Protection Association and chaired the scientific program committee for the 2000 International Congress on Radiation Protection. He has also served on Committee 4 of the International Commission on Radiation Protection, the Board of Chancellors for the ACMP and several committees for the ACR and AIP.

He is certified by the American Board of Health Physics and the American Board of Radiology in Radiotherapy Physics, and is a Fellow of AAPM, HPS, the American College of Medical Physics and the American College of Radiology. Ken received the Elda E. Anderson Award for outstanding achievement in health physics by an individual under the age of 40 from the Health Physics Society. He is also a recipient of the R. S. Landauer Memorial Lecture from the Midwest Chapters of HPS and AAPM and the Failla Memorial Lecture from the Greater NY Chapter HPS and RAMPS. He has published over 75 papers in peer reviewed journals, co-authored one book and edited 3 others on radiation dosimetry.

William D. Coolidge Award Recipients

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

AAPM William D. Coolidge Recipient for 2008



Paul L. Carson, Ph.D.

Paul Carson received his B.S. in physics from Colorado College and Ph.D. in physics (low energy nuclear) from the University of Arizona in 1972. He started as Instructor, Department of Radiology at the University of Colorado Health Sciences Center. His responsibilities included coordination of the medical physics training program under Dr. William Hendee. This work enabled his certification in Radiological Physics by the American Board of Radiology in 1976. The nuclear imaging project Dr. Carson initiated was not immediately funded, whereas several ultrasound research, safety, QC and training projects were, so he became an acoustical physicist. The first large grants were in ultrasonic CT and characterization of fetal lung and liver maturity. At the University of Michigan since 1981, Dr. Carson is now the Basic Radiological

Sciences Collegiate Professor, Department of Radiology, and Professor of Biomedical Engineering and member of Applied Physics. There he directed Radiology's Basic Radiological Sciences Division for almost 27 years until this spring. He is continuing as an active faculty member in the division.

He has served as the Chair and then member or resource of AAPM's General Medical Physics Committee and its succeeding Ultrasound Subcommittee almost continuously since 1974, coauthoring AAPM's Report #8 on ultrasound system performance tests. He served three terms on the Science Council, most recently as vice chair and chair of the Imaging Physics Committee. He was a founding member of the NMR Committee, chairman of its Site Planning Task Group, and an author of the latter's AAPM report. He cofounded and served on the Council on Special Interest Groups and represented AAPM on the AIP Council and Executive Committee, the Radiology Centennial as chair of Basic Sciences, the AIUM/FDA/NEMA Standards Committee on Real Time Labeling of Ultrasound Systems and the Academy of Radiology Research. He was program chair of two AAPM summer schools and faculty on four others. He served on several education subcommittees and review panels. Dr. Carson has chaired or participated in numerous assessments and plans for imaging in the AAPM and strategies regarding NIH. He initiated the Biomedical Imaging Research Opportunities Workshops through the AAPM. He served on the Scientific Program Committee, Board of Directors, Nominating Committee, Development Committee, Graduate Fellowship Selection Committee, and Research Committee. He has published or presented approximately 70 abstracts, presentations and posters at AAPM meetings, 120 including the AAPM/RSNA meeting.

Paul Carson is a fellow and past-president of the American Association of Physicists in Medicine, a fellow and past vice-president of the American Institute of Ultrasound in Medicine (AIUM), and a fellow of the Acoustical Society of America, the American Institute of Medical and Biological Engineers, and the American College of Radiology. He is a recipient of the AIUM's Joseph H. Holmes Basic Science Pioneer Award and Colorado College's Lois T. Benezet Career Achievement Award.

Dr. Carson has been principal investigator on 17 federally supported and 30 total grants and contracts and published over 150 papers in peer reviewed journals, plus over 175 other publications and 465 abstracts. He is best known for his work on ultrasound performance and safety standards as well as his research on ultrasound and multimodality imaging systems, quantitative imaging and applications development.

The last 15 years have been dedicated more toward the imaging research that might have a long term impact. Work on quantification of perfusion and flow from 2D to 4D color flow Doppler signals helped lead to the implementation of power Doppler imaging [1] and will grow in importance [2]. The AIUM Standard 100 mm Test Object developed primarily by Paul [3] served many years as the dominant QC device for diagnostic ultrasound, and an acoustic output survey [4] led to key levels still used by the FDA as guidelines for 510(k) approvals. A long series of studies on generation of microbubbles in vivo [5] in conjunction with Brian Fowlkes may well achieve clinical success and probably helped stimulate many developments by colleagues and their students in ultrasonic therapy and aberration correction. Photoacoustic tomography is a multimodality technique that will find a substantial roll in medicine with its contrast from spectroscopic optical absorption and its high resolution from ultrasound [6]. The earliest ultrasonic CT attenuation images of the breast in vivo in combination with speed of sound and highly compounded pulse echo images [7] were promising but only now reapproaching implementation, as is ultrasound imaging in combination with x-ray tomosynthesis [8].

Dr Carson and his wife of 40 years, Patricia Carson, have two children, Cari Carson-Dietz, M.A.T., Colorado College and James Carson, Ph.D., Baylor Medical School. Cari and husband Matt and children, Sydney and Carson, live in Edwards, CO and James and wife Lena and children, Isabela, Sophia and Nicolas live in Richland, WA.

1. Rubin, J.M., Bude, R.O., Carson, P.L., Adler, R.S., and Bree, R.L., Power Doppler: A potentially useful alternative to mean frequency-based color doppler US. *Radiology*, 1994. 190: p. 853-56.
2. Carson, P.L., Fowlkes, J.B., Roubidoux, M.A., et al., 3-D color Doppler image quantification of breast masses. *Ultrasound in Medicine & Biology*, 1998. 24: p. 945-52.
3. Carson, P.L., Leung, S.-S., Hendee, W.R., Holmes, J.H., and Linsey, L.F., A sealed test tank for echoscope performance evaluation. *J. Clin. Ultras.*, 1973. 1: p. 208-18.
4. Carson, P.L., Fischella, P., and Oughton, T.V., Ultrasonic power and intensities produced by diagnostic ultrasound equipment. *Ultras. Med. Biol.*, 1978. 3: p. 341-50.
5. Kripfgans, O.D., Fowlkes, J.B., Woydt, M., Eldevik, O.P., and Carson, P.L., In vivo droplet vaporization for occlusion therapy and phase aberration correction. *IEEE Trans. Ultras. Ferroel. Freq. Control*, 2002. 49: p. 726-38.
6. Wang, X., Chamberland, D.L., Carson, P.L., Fowlkes, et al., Imaging of joints with laser-based photoacoustic tomography: An animal study. *Med. Physics*, 2006. 33: p. 2691-97.
7. Carson, P.L., Meyer, C.R., Scherzinger, A.L., Oughton, T.V., Breast imaging in coronal planes with simultaneous pulse echo and transmission ultrasound. *Science*, 1981. 214: p. 1141-43.
8. Sinha, S.P., Goodsitt, M.M., Roubidoux, M.A., et al., Automated ultrasound scanning on a dual modality breast imaging system: Coverage and motion issues and solutions. *J. Ultras. Med.*, 2007. 26(5): p. 645-55.

Congratulations to all of the Award Winners!

Honoring the past
Celebrating the present
Preparing for the future
Houston, Texas • July 27 - 31, 2008

The logo features a large, stylized number '50' in a light gray font. To the right of the '0' is a circular emblem containing the letters 'AA' stacked above 'PM'. The words 'CELEBRATE' and '50 YEARS' are written in a curved path around the top and bottom of the emblem, respectively.