



RADIATION RESEARCH SOCIETY

Radiation Research Society 2014 Elections Candidate Biographies and Vision Statements

Vice-President-Elect

Prabhat Goswami
Charles Limoli

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Mohan Natarajan
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David Gius
David Kirsch

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David Close
Jan Schuemann

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Al Fornace
Daohong Zhou

Candidates listed alphabetically within each office

Candidates for Vice-President-Elect

Prabhat Goswami

Charles Limoli

Candidate for Vice-President-Elect

Prabhat C. Goswami, PhD

Date/Place of Birth:

November 1, 1955 / Assam, India

Current Position:

Professor

Department/Institution:

Free Radical and Radiation Biology Division
Department of Radiation Oncology
The University of Iowa, Iowa City, Iowa

Educational Background:

MSc. 1976, Chemistry, Gauhati University, Assam, India

PhD 1983, Chemistry, Gauhati University, Assam, India

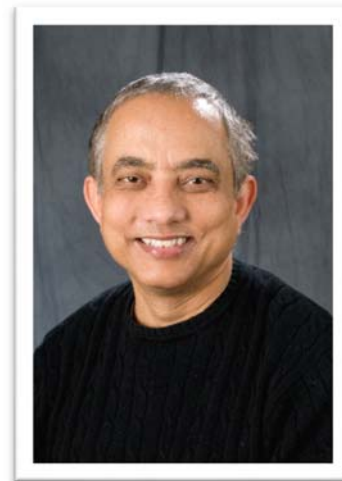
Postdoctoral Training 1990, Mallinckrodt Institute of Radiology, Radiation Oncology Center, Washington University School of Medicine, St. Louis, MO

Professional Experience:

Dr. Goswami is a professor with tenure in the Free Radical and Radiation Biology Graduate Program that is a division in the Department of Radiation Oncology at the University of Iowa. He has more than 20 years of experience in the field of Radiation Research studying the role of redox biology of the mammalian cell cycle as it pertains to radiation biology, aging, and cancer. His group has recently shown that MnSOD regulates a metabolic switch during the mammalian cell cycle linking cellular metabolism to cell cycle progression as well as regulating the delayed metabolic production of ROS and radiation sensitivity (International Journal of Radiation, Oncology, Biology, Physics, 2013 87(3): 619-625; PMID: 24074935; PMC 3787541); Cancer Research 2012, PMC3429130; Cancer Biology and Therapy 2009, PMID:19738419). Dr. Goswami has mentored many graduate students, postdoctoral fellows and other research personnel who present their work regularly at the Radiation Research Society annual meeting. Several of his trainees have also successfully competed for the Travel Awards from RRS. In addition he has been an active member of the RRS serving on the program committee as well as speaking and chairing symposia, presenting eye opener lectures, and sitting on the membership committee.

Current Interests:

Radiation induced late ROS accumulation, cellular metabolism and radiation-sensitivity
Cancer cell growth-state and radiation response
Normal cell metabolism influencing radiation response of cancer cells



Vision Statement:

I view the strength of the Radiation Research Society lies in the members' cutting edge science and its broad impact to basic science research and translational applications. It is my goal to seek ways to enhance current activities and to develop new opportunities for Society members to exchange information. Some specific goals would be:

1. Facilitate the mentoring aspects of the Society by establishing a Committee on Mentoring that seeks out activities that will help new investigators find a satisfying career path.
2. Establish mini-fellowships (2-3 months) to support students and post-doctoral fellows to learn state-of-the-art techniques relevant to their research that may not be available in their current laboratories.
3. Significantly increase the number of new investigators including students and post-doctoral fellows as speakers in the Society's annual meeting.
4. Foster the educational activities of the Society by allowing more time for the poster presentation at the annual meeting.
5. Ensure that a balance in basic chemistry/biochemistry, molecular biology, signaling, nutrition, and clinical topics related to radiation research is achieved at the annual meeting.
6. Continue to establish methods to recognize members' contributions and achievements. Examples to consider are: named lectureships at the annual meeting; awards for contributions of mid-career and senior scientists; have the Society's journal, Radiation Research, participate in disseminating information on awards and achievements of RRS members.

Candidate for Vice-President Elect

Charles L. Limoli, PhD

Date/Place of Birth:

March 31, 1961 / San Diego, California

Current Position:

Professor of Radiation Oncology

Department/Institution:

University of California, Irvine

Educational Background:

B.Sc. Chemistry – Massachusetts Institute of Technology,
Cambridge, MA 1984

Ph.D., Biomedical Sciences, University of California San Diego, La Jolla, CA 1994

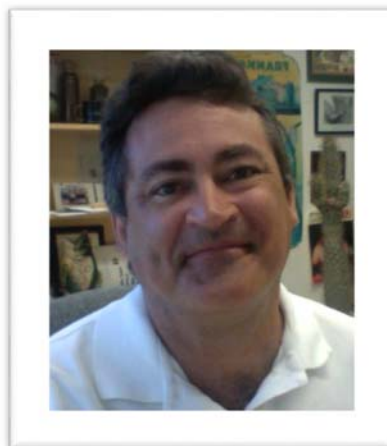
Professional Experience:

I obtained my graduate degree working in the lab of John Ward, where I focused on radiation chemistry and photobiology to generate a new type of DNA DSB. Following my graduate work at UCSD, I took a postdoctoral position in Bill Morgan's lab at UCSF where I studied the mechanisms and consequences of radiation-induced genomic instability. I remained at UCSF for 12 years receiving my first grant support from the American Cancer Society. Subsequent awards from the NIG, DOE and NIH allowed me to establish a program where I studied the consequences of replication arrest and oxidative stress in a variety of mammalian cells systems. While at UCSF I began to study the consequences of high and low LET radiation damage to neural stem cells. Soon thereafter I was recruited to UCI in 2005 where I started an in vivo program analyzing radiation injury in the CNS. I have since been promoted to full professor (2010) and maintain an active lab investigating radiation effects in the CNS with related interests in glioma and cancer stem cell biology.

I have served as a standing member of the Radiation Therapeutics and Biology (RTB) study section at the NIH (2009-2012) and currently chair the Carcinogenesis, Nutrition and the Environment (CNE) study section at the ACS (since 2008). I'm on the Editorial board of Radiation Research, Translational Cancer Research Radiation and Environmental Biophysics and act as the Executive North American Editor for Mutagenesis.

Fellowships and Honors:

Translational Scientist of the Year, University of California, Irvine (2014); NIH Postdoctoral Fellowship (1995-1997); NIH Postdoctoral Scholarship (1994); Graduate Fellowship, University of California (1988-1994)



Society Memberships and Offices:

Radiation Research Society (since 1990); Society for NeuroOncology (since 2008); NCI Designated Comprehensive Cancer Centers (UCSF, UCI).

Current Interests:

I have a multidisciplinary research program focused on elucidating the molecular and biochemical mechanisms regulating the radiation response of the CNS. My lab has focused on developing state-of-the-art techniques for analyzing structural and synaptic plasticity in the irradiated brain and developed pharmacologic and stem cell based interventions for ameliorating radiation- and chemotherapy-induced cognitive decrements. We also have long-standing interests in space radiation biology and in the redox biology of cancer stem cells, especially in regards to how that contributes to treatment resistance.

Vision Statement:

As we move forward in the current funding climate I'm inclined to be conservative, as times are tough and maintaining status quo in the society may prove difficult at best. Past presidents have embraced the retention/promotion of younger members and education outreach at the lower grade levels. Perhaps it's time to consider embracing new/different technologies to foster collaborations with more non-traditional radiation disciplines – and to pinpoint areas likely to remain topical for funding. I would propose a platform “surviving difficult times through targeted innovation and collaboration”.

Candidates for Councilor-of-Biology

Mohan Natarajan

Claudia Wiese

Candidate for Councilor-of-Biology

Mohan Natarajan, PhD

Date/Place of Birth:

January 3, 1958 / Madras, India

Current Position:

Professor, Departments of Pathology, Molecular Medicine & Radiology, and Hematology/Oncology, University of Texas Health Science Center, San Antonio, Texas

Department/Institution:

University of Texas Health Science Center

**Educational Background:**

MSc. 1980, Zoology, University of Madras, India; MPhil. 1981, Human Genetics, Post Graduate Institute of Basic Medical Sciences, India

Pre-doctoral Position: PhD. 1986, Biomedical Genetics with Dr. Rita Sarkar: "Genetic Basis of Metabolic Disorders"

Post-doctoral Position:

Clinical Immunology, Indian Institutes of Sciences, India 1988-89; Radiology, University of Texas Health Science Center (UTHSCSA), San Antonio, Texas 1989-93.

Special Fellowships & Honors:

Venkatraman Scholarship for outstanding academic record, University of Madras, 1978-80; Fellow of University Grants Commission, India, 1982-86; Fellow of National Board of Biotechnology, Indian Institute of Sciences, India, 1987-88; Most Productive Faculty, Radiation Oncology, 1998.

Professional Experience:

Chair & Course director for Radiation Biology PhD track, Graduate Program, UTHSCSA; Instructor, Department of Radiology; Assistant Professor, Dept. of Radiation Oncology; Associate Professor, Dept. of Radiation Oncology; Graduate Faculty, Departments of Molecular Medicine & Radiology; Professor, Dept. of Otolaryngology Head and Neck Surgery; Professor, Hematology/Oncology; UTHSCSA, San Antonio, TX

Society Memberships and Offices:

Radiation Research Society (Since 1996), American Association for Cancer Research (Since 1996), American Society for Therapeutic Radiology and Oncology (since 2001), San Antonio Cancer Institute (Since 1994), The Bio Electromagnetics Society (Since 1996), Center for Environmental Radiation Toxicology (Since 1994), San Antonio Chapter of the American Association for Dental research (since 2006), Radiation Research Society Membership

Committee (2004-07), Indian Society for Radiation Biology (ISRB), VA Biosafety committee (2010-13); Committee on Graduate Studies (2003-10); Chair, Radiation Biology curriculum committee (2003-10); Chair, Radiation Security sub-committee; Chair, Radiation Spill Task Force sub-committee; Chair, Head & Neck Resident Research committee (2001-10); member, UT System Institutional Biosafety committee; member, Radiation Safety committee (2007-10); Director, Gamma Cell 40 Irradiator Exposure facility (2005-present).

Current Interests:

My current research is focused on (i) cellular/molecular responses and cell signaling upon radiation- and or chemo-induced carcinogenesis. These responses are being studied using several cancer models and normal cell types both in vitro and in vivo; (ii) radiation bystander effect and how that influences tumor recurrence at the treatment site and (iii) the mechanisms involved in hemodynamic shear stress and mechano-transduction signaling in macro-vascular complications upon radiation exposures.

Vision Statement:

In the past years we have seen a profound advancement in fine tuning radiation as a tool to treat cancer. Integration of physics, chemistry, biology and medicine has been well articulated in achieving precision in imaging, targeting and treating cancer. Similar (or more advanced) integrated approaches should be the goal in coming years for normal tissue response, contribution of micro-environmental niche and mechanism of bystander effect. Focusing on these issues will help not only in developing safer ways to use radiation in clinics but also help in developing countermeasures to protect normal tissue injury in other situations such as occupational, intentional and accidental exposures. As an elected RRS Councilor of Biology, I will raise the awareness among the young and mid-career members in our society and encourage them to strongly consider these issues in their study. Second, I will work with the membership committee to bring in more members from other biological science fields to radiation research. This is very important since it will add valuable expertise to radiation research and enhance the visibility of our society, which, I believe, will rapidly advance the field. My third goal will be to encourage members to collaborate with small businesses who are interested in biological responses to radiation in order to translate basic science to an application tool and marketing. This bridging may also foster research funding from different untapped sources, and also increase the contribution of corporate members to our society. I am truly honored to be nominated, and, if I am elected, I will make every effort to accomplish these goals.

Candidate for Councilor-of-Biology

Claudia Wiese PhD

Date/Place of Birth:

October 16, 1964 / Frankfurt, Germany

Current Position:

Assistant Professor

Department/Institution:

Department of Environmental and Radiological Health Sciences,
CVMBS

Colorado State University, Fort Collins, CO

**Educational Background:**

Technical University Darmstadt; Darmstadt, Germany, B.Sc., 1986, Biology

Technical University Darmstadt; Darmstadt, Germany, M.Sc., 1990, Biochemistry/Radiation Biology

Christian-Albrechts-University Kiel; Kiel, Germany, Ph.D., 1995, Cell Biology/Genetics

Lawrence Berkeley National Laboratory; Berkeley, CA, Postdoctoral, 2001, Radiation Biology

Professional Experience:

1995 – 1996 Postdoctoral Fellow, Abteilung Biophysik, Gesellschaft für
Schwerionenforschung, Darmstadt, Germany

1996 – 2001 Postdoctoral Fellow, Department of Cell and Molecular Biology, Lawrence
Berkeley National Laboratory, Berkeley, CA, USA

2001 – 2003 Scientist, Abteilung Biophysik, Gesellschaft für Schwerionenforschung,
Darmstadt, Germany

2003 – 2005 Project Scientist, Life Sciences Division, Lawrence Berkeley National Laboratory,
Berkeley, CA, USA

2005 – 2013 Biologist Research Scientist, Life Sciences Division, Lawrence Berkeley National
Laboratory, Berkeley, CA, USA

2013 – 2014 Staff Scientist, Life Sciences Division, Lawrence Berkeley National Laboratory,
Berkeley, CA, USA

2014 – Assistant Professor, Department of Environmental and Radiological Health
Sciences, CVMBS, Colorado State University, Fort Collins, CO

Fellowships and Honors:

Travel Grant; 45th Annual Meeting - Radiation Research Society, Providence, RI (1997)
Travel Award; 11th International Congress - Radiation Research Society, Dublin, Ireland (1999)
Emerging Leaders Leadership Development Program – Lawrence Berkeley National Laboratory (2011)

Society Memberships and Offices:

Radiation Research Society (1996 to present)
American Association for the Advancement of Science (1997 to 2002)

Current Interests:

Delineate the molecular mechanisms of DNA double-strand break (DSB) repair: What determines DNA DSB repair pathway choice? How does radiation quality (low LET vs. high LET ionizing radiation) affect DNA DSB repair pathway choice?

Identify and characterize novel proteins in DNA damage repair that are critical for the maintenance of genome stability and for tumor suppression. In particular, aim to better understand the proteins and mechanisms of homologous recombination repair, a DNA repair pathway with well-described tumor suppressor role.

Identify potential therapeutic opportunities that can be exploited based on defects in DNA damage repair (*e.g.*, radiotherapy, chemotherapy, targeted therapy).

Vision Statement:

The strength of our Society stems from its diversity, and from the four pillars on which it stands: physics, chemistry, biology and medicine. Collectively, we all have experienced incredible research opportunities and witnessed outstanding discoveries resulting from the unique interactions of our distinct and multidisciplinary community. As Councilor of Biology, I will do anything I can to maintain the excellence and foster the future growth of our Society. Given the uncertainties in funding situations, it will be especially important to encourage young scientists to join our Society, and I will make every effort to be part of this. Moreover, I will engage in further making other scientific communities aware of our exceptional research programs, and I will be open to any suggestions that you may have promoting the excellence of RRS.

Candidates for Councilor-of-Chemistry

Marc Greenberg

Jay Laverne

Candidate for Councilor-of-Chemistry

Marc M. Greenberg, PhD

Date/Place of Birth:

May 21, 1961 / New York, New York

Current Position:

Professor of Chemistry, Johns Hopkins University

Department/Institution:

Chemistry, Johns Hopkins University

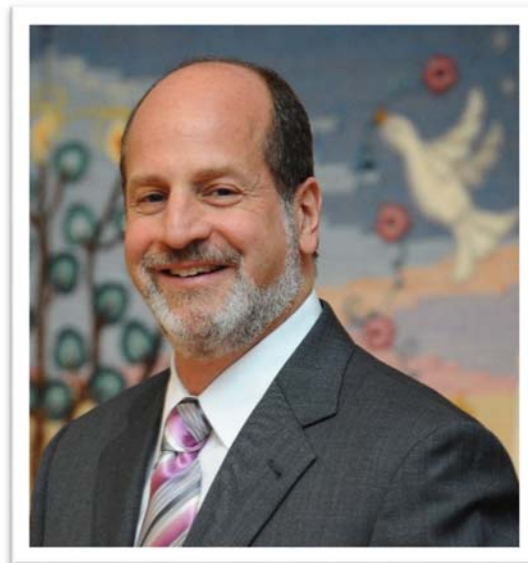
Educational Background:

New York University, B. S. Chemistry, June 1982

The Cooper Union School of Engineering, B. E.

Chemical Engineering, June 1982

Yale University, Ph.D. in Chemistry, May 1988

**Professional Experience:**

Postdoctoral Fellow

California Institute of Technology

1988-1990

Assistant Professor, Department of Chemistry

1990-1996

Colorado State University

Associate Professor, Department of Chemistry

1996-1999

Colorado State University

Professor, Department of Chemistry

1999-2002

Colorado State University

Professor, Department of Chemistry

2002-present

The Johns Hopkins University

NSF/EPA Partnership in Science Review Panel; Panel member; June 1995, May 1997, May 1998

NSF Organic Chemistry CAREER Program Review Panel; Panel member; November 1997

Editorial Advisory Board, *Journal of Organic Chemistry*; January 2003-2010

NIH Bioorganic and Natural Products Study Section; member; October 2003–October 2004

NIH Synthetic and Biological Chemistry A Study Section, member; October 2004–June 2007

(This study section replaced Bioorganic and Natural Products.)

Governing Board, Reaction Mechanisms Conference; July 2004– June 2008

Founding Director, Chemistry-Biology Interface Graduate Program, Johns Hopkins University; September 2005– July 2013
Editorial Advisory Board, *Chemical Research in Toxicology*; January 2008 – 2010
Editorial Advisory Board, *Biochemistry*; January 2010-present
External Advisory Committee; Chemistry Ph.D. Program, City University of New York; March 2011
American Cancer Society; Cancer Drug Discovery Review Panel; January 2012
NSF Chemistry of Life Sciences Review Panel (CLP-3); April 2012
External Review Committee for Laboratory of Chemistry, Division of Therapeutic Programs, Office of Biotechnology Products, FDA; January 24, 2013
Vice Chairperson, Free Radical Reactions Gordon Research Conference, Plymouth NH, July 1999.
Chairperson, Free Radical Reactions Gordon Research Conference, Plymouth NH, July 2001.
Governing Board, Reaction Mechanisms Conference (2004-2008).
International Scientific Committee, IXth International Workshop on Radiation Damage to DNA; Tekirova, Turkey; May 14-18, 2006.
Co-organizer, 1st Frontiers at the Chemistry and Biology Interface Symposium; University of Maryland College Park, MD; April 12, 2008.
Co-Founder and Co-Organizer, 2008 Telluride Workshop on Nucleic Acid Chemistry; Telluride, CO; August 3-9, 2008.
Program Committee, 56th Annual Meeting of the Radiation Research Society; Maui, HI; September 25-29, 2010.
Session Chair, 58th Annual Meeting of the Radiation Research Society: Rio Del Mar, Puerto Rico; September 29- October 3, 2012.
International Scientific and Program Committee, XIIIth International Workshop on Radiation Damage to DNA; Boston, MA; June 14-18, 2014.

Fellowships and Honors:

Brenner Research Award in Chemistry, New York University, 1982
American Institute of Chemists Award, New York University, 1982
Dox Fellowship, Yale University, 1986-1987
American Cancer Society Postdoctoral Fellowship, 1988-1990
Alfred P. Sloan Foundation Fellowship, 1996-2000
American Association for the Advancement of Science Fellow, 2010

Society Memberships:

American Chemical Society, 1982-present
American Association for the Advancement of Science, 1989-present
Radiation Research Society, 2007-present

Current Interests:

I became involved in the Radiation Research Society through my interests as a chemist in DNA damage and repair, which began when I was a postdoctoral fellow in Professor Peter Dervan's group at the California Institute of Technology. Our research group utilizes organic chemistry, biochemistry, and molecular biology to understand how nucleic acids are damaged, what the effects of damage are, and when the opportunity arises apply this knowledge. Applications include the design of repair enzyme inhibitors, radiosensitizing agents, and sensors for specific DNA lesions. While with the exception of our efforts to discover radiosensitizing agents, we do not work directly with radiation, we are using the above tools to understand the chemical and biochemical effects of radiation on nucleic acids.

Vision Statement:

I attended my first Radiation Research Society (RRS) meeting in New Mexico in May 2000. Although the RRS is small compared to other scientific organizations, such as AAAS and the American Chemical Society, the breadth of science represented was striking. Chemistry though is often described as the "central science," and as such it overlaps with physics and biology. Chemistry helps bring the disparate disciplines within the RRS together. This is often evident by the symposia organized under the chemistry umbrella at the annual RRS meetings. Through these joint efforts, one can understand the important and evolving role that chemistry plays in radiation research. For chemistry to remain vital within the RRS, it is important that we continue to evolve and recognize its role as the central science.

Candidate for Councilor-of-Chemistry

Jay Allen LaVerne, PhD

Date/Place of Birth:

January 12, 1951 / Port Arthur, Texas

Current Position:

Senior Scientist (Professional Specialist) Radiation Laboratory,
University of Notre Dame

Concurrent Professor Department of Physics, University of Notre
Dame

Department/Institution:

University of Notre Dame

Educational Background:

Lamar University, Beaumont, Texas, Chemistry B.S., 1972

University of Nebraska, Lincoln, Nebraska, Physical Chemistry Ph.D., 1981

University of Notre Dame, Notre Dame, Indiana, Postdoctoral training, 1981-1983

Special Fellowships & Honors:

Venkatraman Scholarship for outstanding academic record, University of Madras, 1978-80;
Fellow of University Grants Commission, India, 1982-86; Fellow of National Board of
Biotechnology, Indian Institute of Sciences, India, 1987-88; Most Productive Faculty, Radiation
Oncology, 1998.

Professional Experience:

Concurrent Professor of Physics, University of Notre Dame, 2004

Professional Specialist, Radiation Laboratory, University of Notre Dame, 1992

Associate Professional Specialist, Notre Dame Radiation Laboratory, 1986-1992

Assistant Professional Specialist, Notre Dame Radiation Laboratory, 1983-1986

Research Associate, Notre Dame Radiation Laboratory, 1979-1983

Principal Investigator in the "Radiation and Photochemistry in the Condensed Phase and at
Interfaces" program at the Notre Dame Radiation Laboratory, a cooperative project of the U.S.
Department of Energy and the University of Notre Dame

Subtask Leader, "Interfacial Radiation Sciences" subtask, Radiation Laboratory, University of
Notre Dame

Radiation Chemistry Consultant, Los Alamos National Laboratory

Associate Editor: *Radiation Physics and Chemistry*

Associate Editor: *Radiation Research*

Chair: 2014 Gordon Conference on Radiation Chemistry



Society Memberships and Offices:

Radiation Research Society (Since 1996), American Association for Cancer Research (Since 1996), American Society for Therapeutic Radiology and Oncology (since 2001), San Antonio Cancer Institute (Since 1994), The Bio Electromagnetics Society (Since 1996), Center for Environmental Radiation Toxicology (Since 1994), San Antonio Chapter of the American Association for Dental research (since 2006), Radiation Research Society Membership Committee (2004-07), Indian Society for Radiation Biology (ISRB), VA Biosafety committee (2010-13); Committee on Graduate Studies (2003-10); Chair, Radiation Biology curriculum committee (2003-10); Chair, Radiation Security sub-committee; Chair, Radiation Spill Task Force sub-committee; Chair, Head & Neck Resident Research committee (2001-10); member, UT System Institutional Biosafety committee; member, Radiation Safety committee (2007-10); Director, Gamma Cell 40 Irradiator Exposure facility (2005-present).

Current Interests:

Radiation chemistry – examination of the basic processes and mechanisms driving the physics and chemistry of radiation effects.

Chemical effects of particle track structure – understanding the relationships between local energy deposition and final product formation, including all aspects of LET effects.

Radiation effects in condensed systems – probe of the fundamental decomposition of water, liquid organics polymers, and resins. This work covers fundamental medium decomposition processes and the reactivity of subsequent transient species.

Interfacial radiation effects – examination of the transport of energy, charge, and mass through solid-water interfaces, especially those systems associated with the nuclear power industry.

Astrochemistry - study of the radiolytic aging of primordial ices associated with the surfaces of planets and their moons in the solar system.

Environmental chemistry – determination of the long-time effects of radiation on materials presently found in nature or to be placed in indefinite storage.

Analytical chemistry – development of novel approaches to examine medium decomposition using gas chromatography, gas chromatography - mass spectrometry, liquid chromatography, ion selective electrodes, ion chromatography, Fourier transform infrared spectroscopy, Raman spectroscopy, UV-Vis spectroscopy, secondary electron microscopy, X-ray photoelectron spectroscopy, X-ray diffraction, and others.

Development and use of experimental radiolysis techniques – includes beta radiolysis, γ radiolysis (protons to uranium) using several accelerators in the United States, Canada, Europe, and Asia.

Theoretical physical track structure calculations – extensive computations involving basic physical concepts on energy loss processes of ions passing through matter.

Diffusion-kinetic chemical model calculations – the modelling of nonhomogeneous, homogeneous, and heterogeneous chemical reactions in aqueous solutions and in hydrocarbons.

Vision Statement:

Each discipline of the Radiation Research Society brings a special expertise and approach to the study of radiation effects. No one branch can adequately address all aspects of radiation and it is the combination of disciplines within this Society that make it great. I intend to work with everyone from all disciplines so that the Radiation Research Society continues to be a world renowned organization.

I am a long-time chemistry member of the Radiation Research Society with a broad range of expertise in radiation sciences and I would be proud to bring my enthusiasm and expertise to Council once again. Specifically, I intend to:

- work toward increasing membership, especially young investigators in chemistry;
- make sure adequate resources are devoted to each discipline at the national meetings;
- present a strong representation of chemistry at Council; and
- strive to bring a broader range of chemical interests into the society.

We must increase overall membership in the Society so that it remains strong and vital. We especially have to increase efforts at getting and keeping young investigators in chemistry so that they can contribute their perspective to the betterment of the Society. I will listen to all members and work with anyone on Council to continue the efforts of the Radiation Research Society to be the premiere instrument for advancements in the radiation sciences.

Candidates for Councilor-of-Medicine

David Gius

David Kirsch

Candidate for Councilor-of-Medicine

David Gius, MD, PhD

Date/Place of Birth:

August 23, 1960 / Chicago, Illinois

Current Position:

Associate Professor

Department/Institution:

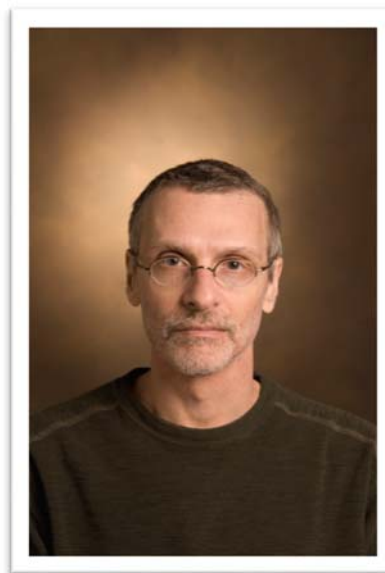
Zell Family Scholar Professor

Director, Women's Cancer Research Program

Robert H. Lurie Comprehensive Cancer Center

Department of Radiation Oncology - Feinberg School of
Medicine

Northwestern University

**Educational Background:**

B.S. Chemistry - University of Illinois, at Chicago, Chicago, Illinois. 1983

Ph.D. Virology - The University of Chicago, Chicago, Illinois, 1989

M.D. Medicine - Loyola University of Chicago, Maywood, Illinois, 1992

Professional Experience:

Post Doctoral-Fellowship. The University of Chicago, Department of Molecular Genetics and Cell Biology, Howard Hughes Medical Institute, Chicago, IL. Supervisors: Vikas P. Sukhatme, M.D., Ph.D. and Tom Curran, Ph.D. 1993.

Radiation Oncology Resident, Radiation Oncology Center, Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis, MO. 1993-1997.

Assistant Professor and Residency Director, Radiation Oncology Center, and Section of Cancer Biology, Mallinckrodt Institute of Radiology, Washington University School of Medicine, St. Louis, MO. 1997-2001.

Chief, Molecular Radiation Oncology Section, Residency Director, NCC Radiation Oncology Residency, and Clinical Director, GYN Services, Center for Cancer Research, National Cancer Institute, National Institute of Health, Bethesda, MD. 2001-2010.

Deputy Director and Executive Committee member, the National Institutes of Health Oxford/Cambridge Scholars Graduate Student Program, National Institute of Health, Bethesda, MD. 2005-2010.

Associate Professor, Departments of Cancer Biology, Pediatrics, and Radiation Oncology Vanderbilt University School of Medicine, Nashville, TN. 2010 – present.

Fellowships and Honors:

Member, Alpha Omega Alpha (AOA) Honor Medical Society, 2014
External Adviser Committee, University of Virginia Cancer Center, (2008 -)
Councilor-Medicine, Radiation Research Society Governing Board, (2007 - 2010)
Member, ASTRO Education and Research Committee (2007 - 2010)
Member, ASTRO Radiation & Cancer Biology Committee (2004 - 2008)
Chair, Planning Committee, NCI Bi-Annual Radiation Oncology Young Investigator Workshop, (2003, 2005), Bethesda, MD

Society Memberships and Offices:

Radiation Research Society
American Society of Radiation Therapeutic Oncology
American Society of Cancer Research

Current Interests:

A fundamental observation in oncology is that the rate of malignancies increases significantly as a function of age, suggesting a potential mechanistic link between the cellular process governing longevity and the development of cancers. In this regard, the genes that play a critical role in longevity (or aging) have recently been characterized in *S. cerevisiae* and *C. elegans*, and the human and murine homologs have been isolated and are referred to as the sirtuin gene family. One of these sirtuin genes, *Sirt3*, appears to be the primary mitochondrial deacetylase, and it has been proposed that sirtuins, and in particular *Sirt3*, may function as fidelity or repair genes. Thus, four years ago we constructed mice lacking the mitochondrial *Sirt3* gene to determine if *Sirt3* is a fidelity gene and if loss of function would create a tumor permissive phenotype. We have recently shown that *Sirt3* knockout mice develop receptor-positive mammary tumors, which are most commonly observed in older women and have a high statistical correlation with increasing age. SIRT3 levels are lower in human breast tumors, as compared to normal breast ductal cells, as well as several other human malignancies. Thus, these experiments show that *Sirt3* is the first identified genomically expressed, mitochondrial localized tumor suppressor (TS), and it is proposed that the *Sirt3* knockout mice are a novel spontaneous tumor model and an *in vivo* proxy to experimentally link aging, mitochondrial metabolism, and cancer. Finally, we are investigating the connection between these aging genes and how normal and tumor cells respond to ionizing radiation that may play a role in the accelerated aging that is observed in patients treated with radiation with or without chemotherapy.

Vision Statement:

I finished my residency and post-doctoral fellowship 15 years ago, and one of the first things I realized when starting my career and laboratory was the importance of the RRS. The society provides a great deal to young faculty, and my interaction with RRS and the help and mentorship I received was critical to starting my academic career. As I have aged I have continued my association with RRS through my participation on several RRS boards, as well as the Membership Committee. In addition, as a practicing breast and lung cancer radiation oncologist I know firsthand just how important and critical RRS is to the clinical field of Radiation Oncology, even if this is sometime lost among my clinical faculty. In considering my candidacy I would say that I am totally committed to the RRS and very strongly believe that the society's best days are in fact ahead of us. In my opinion, the society has the rare opportunity over the next decade to not only promote science, including translational science, but also to set up programs to mentor and promote the next generation of scientists and physician scientists that will assure the role of radiation research in the future of cancer research. The NCI has made a strong commitment to translational research, and I strongly believe that no society is as well-positioned as RRS to address this scientific mission. If elected, I will put considerable effort on achieving this goal, along with promoting education and training. In closing, I am very pleased to be considered and nominated for this position, and if elected, I will put forth my best effort to continue the significant progress made by the current RRS leadership.

Candidate for Councilor-of-Medicine

David Kirsch, MD, PhD

Date/Place of Birth:

August 23, 1960 / Chicago, Illinois

Current Position:

Associate Professor with tenure

Vice-Chair for Basic and Translational Research

Department/Institution:

Department of Radiation Oncology

Department of Pharmacology & Cancer Biology

Duke University Medical Center

**Educational Background:**

B.S., Duke University, Durham, NC, 1993

M.D., Ph.D., Johns Hopkins School of Medicine, Baltimore, MD, 2000

Professional Experience:

As an undergraduate student at Duke, I completed an honors project studying the transcriptional regulation of the sodium proton antiporter gene *nhaA* in *E. coli*. After graduating *summa cum laude* with a B.S. in Biology, I entered the Medical Scientist Training Program at the Johns Hopkins School of Medicine. I pursued my PhD thesis research in the laboratory of Michael Kastan, MD, PhD. The Kastan laboratory studies the mechanism by which the tumor suppressor p53 is activated by ionizing radiation and the cellular consequences of p53 activation, such as apoptosis. My thesis research focused on the regulation of Bcl-2 family proteins during apoptosis. This research set the stage for my research on p53 and apoptosis as a post-doctoral fellow and currently as a principal investigator in my own lab. After graduating from Johns Hopkins, I pursued residency training in radiation oncology at Massachusetts General Hospital at Harvard Medical School. In addition, I was the first resident from the Harvard training program accepted into the Holman Research Pathway by the American Board of Radiology. This allowed me to utilize the final 21 months of my residency to begin a post-doctoral fellowship at M.I.T. in the laboratory of Tyler Jacks, PhD. The Jacks lab has pioneered the development of genetically engineered mouse models of human cancer. During my four years in the Jacks lab, I developed a genetically engineered mouse model of soft tissue sarcoma, which my lab currently uses to study sarcoma development, metastasis, and mechanisms of response to radiation therapy. I also used genetically engineered mouse models to demonstrate that loss of p53 function is required for tumor maintenance in lymphomas and sarcomas. Finally, I utilized the Cre-loxP system to study the mechanism by which radiation causes normal tissue injury to the gastrointestinal (GI) tract. In 2007, I returned to Duke to care

for patients with sarcomas and to start my independent laboratory. Since that time, we have published a number of manuscripts ranging from investigating mechanisms of radiation-induced heart disease to the acute radiation syndrome to the role of endothelial cells in mediating the response of primary sarcomas to radiation therapy. I currently have several leadership positions at Duke including serving as the Vice Chair for Basic and Translational Research in the Department of Radiation Oncology and as the co-leader of the Radiation Oncology & Imaging Program in the Duke Cancer Institute, which is one of 9 Programs in our NCI-designated Comprehensive Cancer Center. I am active in the Radiation Therapy and Oncology Group (RTOG- now called NRG) serving as the national radiation oncology co-chair for RTOG 0630, which is a phase II clinical trial of image-guided radiation therapy for soft tissue sarcomas. In addition, I am an active member of the Radiation Research Society (RRS) where I have served on the finance committee since 2007 and as chair of this committee since 2010. Last year, I was appointed as Councilor in Medicine to serve out the remaining year in a vacated position. Therefore, I also have leadership experience in RRS.

Fellowships and Honors:

2014	Duke University Dean's Award for Excellence in Mentoring given to faculty members from the University, who teach in the humanities, sciences, or engineering
2013	Elected Member, The American Society for Clinical Investigation (ASCI)
2010-2014	Advanced Clinical Research Award in Sarcoma, Amer. Soc. of Clinical Oncology
2010	Michael Fry Research Award, Radiation Research Society
2008-2010	Damon Runyon-Rachleff Innovation Award
2007	Simon Kramer New Investigator Award, Radiation Therapy Oncology Group
1989-1993	North Carolina Math Contest Scholarship, Duke University

Society Memberships and Offices:

Radiation Research Society
 American Association for Cancer Research
 American Association for the Advancement of Science
 American Society for Clinical Investigation
 Connective Tissue Oncology Society
 American Society of Clinical Oncology
 American Society for Therapeutic Radiology and Oncology

Current Interests:

My clinical focus is using radiation therapy to care for patients with bone and soft tissue sarcomas. My laboratory uses next-generation genetically engineered mouse models to study mechanisms of sarcoma initiation, progression and metastasis. A major focus of my laboratory is to utilize sophisticated mouse models to study mechanisms of radiation-induced cancer, acute and late normal tissue injury from radiation, and mechanisms of tumor response to radiation therapy.

Vision Statement:

Over the past two decades, discoveries in cancer biology have led to important advances in cancer therapy, but most of these gains have been concentrated in medical oncology. In contrast, advances in radiation oncology have largely resulted from discoveries in physics and technology. I believe that the future holds great promise for equally impactful discoveries in radiation biology that will advance the care of cancer patients treated with radiation. This vision has the best chance of coming to fruition if scientists with expertise in radiation chemistry, physics and biology come together and interact with physician scientists and clinicians in radiation oncology to share perspectives, debate ideas, and collaborate to advance radiation research together. The natural forum for these interactions is our society. However, at this time of unprecedented scientific opportunity in radiation research, there is growing concern for the vitality of the Radiation Research Society because of aging demographics and a limited number of trainees in the radiation sciences, who are successfully transitioning to independence. More broadly, there is concern for the future of the radiation sciences. Indeed, I am a Program Committee member for an NCI/ASTRO workshop that will take place in the summer of 2014 to discuss the current status and future of radiobiology with a goal to chart a course that can help reinvigorate the radiation sciences. However, I believe that these fears are misplaced. Within radiation oncology there is a vibrant group of residents and junior independent physician scientists that are poised to make discoveries that will advance radiobiology and radiation medicine. However, many of these physicians are not members of our society or do not regularly participate in our annual meeting. If elected as Councilor of Medicine, my major goal will be to increase the participation of these junior physician scientists at our annual meeting and to promote interdisciplinary interactions across all branches of our society. This will not only increase the strength of our society, but will also increase the cross-fertilization of ideas that will have the potential to advance radiation research to have the best chance to positively impact patients in the clinic.

Candidates for Councilor-of-Physics

David Close

Jan Schuemann

Candidate for Councilor-of Physics

David M. Close, Ph.D.

Date/Place of Birth:

March 9, 1942 / Plainfield, New Jersey

Current Position:

Professor of Physics

Department/Institution:

Department of Physics, East Tennessee State University in Johnson City, TN

Educational Background:

AB Physics, Franklin and Marshall College, 1964, MS in Physics, West Virginia University, 1967. PhD in Physics, Clark University, 1972

**Professional Experience:**

Investigated radiation damage to DNA constituents for more than thirty five years. Performed collaborative research with investigators in Oslo, Norway, Atlanta, GA, and in Rochester, NY. Recent work in computational chemistry with collaborators in Jackson, MS, and in Columbus, OH. Written more than 100 papers in international journals, five book chapters, and a number of review articles on radiation chemistry, and in computational chemistry. Taught introductory physics, mechanics, optics, electronics and biophysics courses for more than 35 years while at ETSU. Team teaching an introductory Physics and Society course that involves students working on technical subjects like the health effects of radiation, the risks of accidental nuclear war, nuclear reactor failures, global warming, and the problems of nuclear waste and plutonium.

Fellowships and Honors:

Post-Doctoral Positions: Post-Doctoral Research Fellow in Physics, Univ. of Connecticut. Identified radiation induced defects in hydroxyapatite (tooth-enamel). NIH Career Development Award as Post-Doctoral Research Fellow at the University of Rochester with Bill Bernhard. Employed EPR/ENDOR spectroscopy to elucidate radiation induced defects in nucleosides/tides.

Society Memberships and Offices:

American Physical Society (1966), Sigma Xi (1967), Sigma Pi Sigma (1967). Radiation Research (1977), Formerly: Associate Editor for Chemistry of Radiation Research, Councilor for Physics (2 terms), Journal Committee, Nominating Committee, Awards Committee, and Finance Committee (2 terms)

Current Interests:

My current research involves working to identify the primary radiation induced in DNA constituents. Doing high level calculations on free radicals in the environment found in DNA, including base-pairs, various base stacking arrangements, and protein-DNA cross-linking.

Vision Statement:

During the times I served on the Finance Committee (most recently as Chairman) substantial and positive changes took place in the financial condition of the RRS. The Committee found ways to make the annual meeting revenue neutral; found investments that would produce better yields than traditional government bonds, and acquired funding for the SIT program. Since this time I have seen these changes make a significant difference to the Society. If elected, I will work diligently to see that this trend continues.

During the past few meetings I have dedicated as much time as possible to working with the SIT participants (judging posters, talking with students, and working with the organizers). The SIT program is clearly a key initiative of the RRS as it aids in nourishing RR scientists of the future. If elected I will do whatever is necessary to see that this program receives the funding and attention it deserves.

Currently, I am at a point in my career where I have time to dedicate to new tasks. If elected, I can promise that I will make the time necessary to diligently carry out the duties of Councilor for Physics of the RRS.

Candidate for Councilor-of-Physics

Jan Schuemann, PhD

Date/Place of Birth:

June 28, 1974 / Hamburg, Germany

Current Position:

Assistant Radiation Biophysicist

Department/Institution:

Department of Radiation Oncology, Massachusetts General Hospital

Instructor, Harvard Medical School

Educational Background:

Physics student at the University of Hamburg, Germany,

Diplom(master's) degree at the University of Hamburg, Title: Inelastic J/ψ -Photoproduction at HERA and the Color Evaporation Model (at H1, DESY, Germany) (1994 – 2000)

PhD student at National Taiwan University, Taipei Thesis title: Rare B meson decays with an η' in the final state (2000 – 2005)

Professional Experience:

Postdoctorate position at the National United University, Taiwan (2005 – 2006)

Research-Fellow of the Japanese Society for the Promotion of Science (JSPS) and Feodor Lynen Research Fellow (Alexander v. Humboldt Foundation) at Belle, KEK, Japan, related work: DAQ expert, $B \rightarrow$ hadron hadron analysis (2006 – 2008)

Project Researcher at the Institute for the Physics and Mathematics of the Universe, Tokyo University, Japan, Topic: Upgrading the Super-Kamiokande neutrino detector (2008 – 2010)

Research Fellow, Massachusetts General Hospital and Harvard Medical School, Topic: Creating an easy to use Tool for Particle Simulations for medical physics and particle therapy (2010 – 2012)



Fellowships and Honors:

Winner of the “Jugend forscht” (Youth research) competition, Hamburg, Germany, Topic: Strange planetoid orbits in double star systems (1995)

Scholarship of the Friedrich-Ebert Foundation (FES, Germany) for outstanding and socially active individuals (1996-00)

Scholarship of the Deutscher Akademischer Austausch-Dienst (DAAD, German academic exchange office, Germany) (2000-03)

Ministry of Education Scholarship to outstanding foreign students (Taiwan) (2004-05)

Fellowship from the Japanese Society for the Promotion of Science (JSPS) and Feodor Lynen research fellowship from the Alexander v. Humboldt Foundation (2006-08)

Best in Physics Prize and ASTRO Travel Grant for the ASTRO annual meeting (2014)

Society Memberships and Offices:

Member, Deutsche Physikalische Gesellschaft (since 2003)

Member, American Society of Medical Physics (since 2010)

Co-Chair Massachusetts General Hospital Postdoc Association (MGPA) (2012/13)

Member of Radiation Research Society (since 2012)

Member of the Geant4-DNA collaboration (since 2014)

Current Interests:

My current research goals are to extend current Monte Carlo simulation codes to nanometer scale and include predictions of macroscopic and microscopic biological effects as well as to make Monte Carlo simulations for proton therapy available utilizing GPUs and thereby reducing the calculation time to obtain patient dose distributions from several hours to a few seconds. I have been programming and working with Geant4 (and its predecessor, Geant3) in particle physics since the beginning of my PhD. Based on this work I have extended knowledge in particle interactions as well as programming. My transition to medical physics in 2010 has been as one of the original developers of the TOPAS project. The TOPAS project is developing a tool for Monte Carlo based dose distributions on traditional CPUs, funded by an R01. This project has been released in summer 2013 as a beta version. Beta tests are currently ongoing at over 60 institutes around the world. In my role as core developer for TOPAS, I have been investigating all aspects of Monte Carlo simulation related parameters that are necessary for correct handling and description of patients, Hounsfield Unit conversions and particle interactions.

I received a great introduction course to radiobiology when I joined MGH, which sparked my interest in the biological side of medical physics research. Since then I have been studying Radiobiology. Through the research environment at MGH/HMS, I have had the opportunity to participate in several radiobiological experiments. This has strengthened my desire to combine my expertise in Monte Carlo simulations, in particular the TOPAS approach to make Monte Carlo easy-to-use and widely available, with my strong interest in understanding the basic processes in radiation biology. Understanding the underlying processes at a nanometer scale have become my main focus. Currently I am working on projects trying to explain the bystander effect with simulations, correlating track structure information to cell damage and studying the effects of gold nanoparticles on the sub-cellular level.

Vision Statement:

As a physics councilor in the Society I see a great opportunity to bring physics, chemistry and biology research closer together. I believe we can achieve the greatest advances by combining research from across our disciplines. The Society offers a unique environment for this endeavor, the annual meeting inherently provides a platform for scientists from all three fields to meet and mingle. On my first annual meeting I was impressed with the quality of presented work and how easy it was to find colleagues from the other fields that work on topics related to my work. Simultaneously, I was overwhelmed with information and topics that I did not understand. One of my goals as a physics councilor would be to encourage and coordinate the continuation and expansion of interdisciplinary sessions and workshops, both at our annual meeting as well as in combination with other organizations. Additionally, I see one of the missions of the RRS to be the education of its members to get an overview and (at least) basic understanding of the entirety of research under its umbrella, from basic sciences to translational research and physics to biology. This mission is successfully addressed through our annual meeting and our journal and should be further emphasized and extended.

As a physics councilor, I aim to be a contact point for any scientist looking to include physics in their research, be an advocate for cross-disciplinary research and continue the educational functions of our society.

Candidates for Councilor-at-Large

Al Fornace

Daohong Zhou

Candidate for Councilor-at-Large

Al Fornace, MD

Date/Place of Birth:

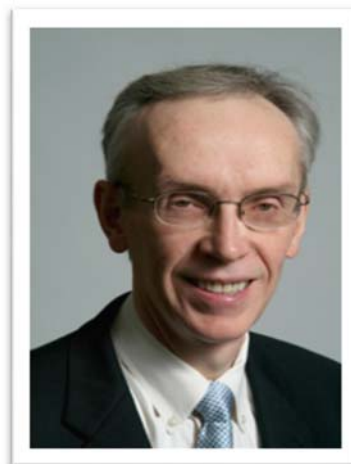
April 5, 1949 / Philadelphia, PA

Current Position:

Professor of Biochemistry and Molecular & Cellular Biology
Molecular Cancer Research Chair
Director, Waters Center of Innovation for Metabolomics

Department/Institution:

Dept. of Biochemistry and Molecular & Cellular Biology
Dept. of Radiation Medicine
Dept. of Oncology, Lombardi Comprehensive Cancer Center
Georgetown University

**Educational Background:**

B.S., Pennsylvania State Univ., University Park, PA, 1970
M.D., Jefferson Medical College, Thomas Jefferson Univ., Phila., PA, 1972

Professional Experience:

While a student at Jefferson, I developed my interest in a research career during research student-intern positions in cancer pharmacology and protein biochemistry, as well as radiation oncology. Following a medical internship, I was a fellow in the laboratory of Kurt Kohn at NCI, and participated in the development of the alkaline elution assay, applying it to the study of radiation-induced strand breaks and DNA-protein crosslinks. I was a postdoc in Jack Little's laboratory at Harvard and a resident in anatomic pathology at the Brigham & Women's Hospital. After completion of pathology training, I returned to NCI for much of my career, focusing on stress-signaling mechanisms including discovery of the gadd gene group of growth-arrest and DNA-damage inducible genes. *GADD45A* was the first identified p53-regulated stress gene, and a continuing focus has been the characterization of stress pathways involved in radiation signaling, tumor suppression, and cell cycle control. My laboratory group also pioneered the use of transcriptomics and metabolomics approaches for stress signaling applications with relevance to radiobiology, oncology, and molecular toxicology. Following another stint at Harvard and since 2006, my laboratory at Georgetown Univ. has expanded and further developed a comprehensive systems approach to elucidate the cellular responses to radiation exposures and other stress responses.

Fellowships and Honors: (representative)

Individual NIH Research Fellowship Award (at Harvard Sch. of Public Health), 1977-8 and 1979
Public Health Service Outstanding Service Medal, 1998.

HighlyCited.com author, ISI Thompson Scientific, 2005-present.

Radiation Discipline Working Group, Space Radiation Research Board, Office of Biological and Physical Sciences, NASA, 2003-2009.

Molecular Cancer Research Chair, Lombardi Comprehensive Cancer Center, 2007.

World Class University (WCU) Professor, National Research Foundation of Korea, Dankook Univ., 2009.

Director (and founder), Waters Center of Innovation for metabolomics and systems biology at Georgetown Univ., 2011.

Radiation Research Society Excellence in Mentoring Award, 2011

Society Memberships and Offices:

Radiation Research Society, 1984 - Annual Meeting Program Committee, multiple years including 2014

American Association for Cancer Research, 1981

American Society for Microbiology, 1990

Environmental Mutagen Society, 1993

Metabolomics Society, 2010

Society of Toxicology, 2014

Current Interests:

My laboratory program focuses on a multidisciplinary approach investigating stress signaling with particular emphasis on radiation responses. We employ mouse model, molecular, and omics approaches to study basic regulatory pathways as well as to develop biomarkers for radiation exposures with support for the latter from NIAID's radiation countermeasures program. I also lead a NASA Specialized Center of Research to study gastrointestinal cancer risk by space radiation. We continue studies in radiation stress signaling pathways with focus on roles for p38 MAPK, p53, Gadd45a, and Wip1/*PPM1D*.

Vision Statement:

As Councilor-at-Large, I will work to enhance the unique character of the Radiation Research Society, which is dependent on interactions between the disciplines of biology, chemistry, physics, and medicine. Recent advances in the omics fields, which span the genome through proteins to small molecules (metabolomics) in both basic and translational research, offer important opportunities for our Society. With the growing impact of radiation metabolomics in our field, this offers an opportunity to build stronger interactions between chemistry and the other RRS disciplines. An ongoing RRS priority will be for me to contribute to strategic planning to attract and retain young scientists and increase their participation at the annual meeting.

Candidate for Councilor-at-Large

Daohong Zhou, MD

Date/Place of Birth:

August 14, 1961 / Hubei, China

Current Position:

Professor and Deputy Director

Department/Institution:

Division of Radiation Health, Department of Pharmaceutical Sciences, College of Pharmacy, University of Arkansas for Medical Sciences

Educational Background:

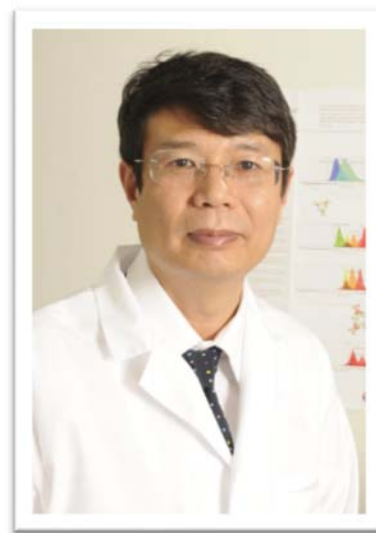
M.D., Yunyany Medical College of Tongji Medical University, China, 1983

M.S., Henan Medical University, Zhengzhou, China, 1986

Postdoctoral fellow, Johns Hopkins University School of Medicine, Baltimore, MD, 1990-1992

Professional Experience:

1986-1990	Lecturer, Department of Microbiology, Henan Medical University, Zhengzhou, China.
1992-1995	Research Associate, Department of Pathology, School of Medicine, University of Pittsburgh, Pittsburgh, PA
1995-1996	Sr. Research Associate, Department of Medicine, University of Kentucky, Lexington, KY
1996-2000	Assistant Professor, Department of Medicine, University of Kentucky, Lexington, KY
2000-2007	Associate Professor, Department of Pathology & Laboratory Medicine, Medical University of South Carolina (MUSC), Charleston, SC
2001-2007	Director of the Shared Irradiator Facility, Hollings Cancer Center, MUSC, Charleston, SC
2007-2010	Director of the Flow Cytometry Facility, Hollings Cancer Center, MUSC, Charleston, SC
2007-2010	Professor, Department of Pathology & Laboratory Medicine, MUSC, Charleston, SC
2008-2010	Adjunct Professor, Department of Radiation Oncology, MUSC, Charleston, SC
2008-	Honorary Professor, Peking Union Medical College, Beijing/Tianjin, China
2010-	Professor, Department of Pharmaceutical Sciences, College of Pharmacy, University of Arkansas for Medical Sciences (UAMS), Little Rock, AR
2010-	Deputy Director, Division of Radiation Health, College of Pharmacy, UAMS, Little Rock, AR



- 2011- W. Rockefeller Endowed Chair for leukemia and lymphoma research, Winthrop P. Rockefeller Cancer Institute (WPRCI), UAMS
- 2011- Co-Director, Host Response and Radiation Sciences Program, WPRCI, UAMS
- 2012- Associate Director for Basic Research, WPRCI, UAMS

Fellowships and Honors:

Recipient of the International Research Fellowship of the Baltimore Regional Burn Center Foundation, Baltimore, MD (1990-1992)

American Academy of Allergy, Asthma & Immunology Travel Award (1996 & 1997)

The FIRST (R29) Award, National Institutes of Health (NIH) (1997-2002)

Grant reviewer of the United States Civilian Research and Development Foundation (2000)

Member of NIH Site Visit Committee, Georgetown University, Washington DC (2002)

Grant reviewer: the Health Research Board of Ireland (2005)

Member of the NIH Special Emphasis Panel: ZRG1 (2005-2011)

Ad hoc grant reviewer: the U.S. Army Medical Research and Materiel Command (2006)

Grant reviewer: the National Natural Science Foundation of China (NSFC) (2006-present)

Ad hoc grant reviewer: the Radiation Therapeutics and Biology (RTB) Study Section of NIH (2007-2009)

Member of the RTB Study Section of NIH (2009-2013)

Co-Chair of the Panel Meeting for General Program of the Dept. of Health Sciences (Hematology), NSFC (2010)

The Winthrop Rockefeller Endowed Chair for Leukemia Research, Winthrop P. Rockefeller Cancer Institute, UAMS, Little Rock, AR (2010)

Arkansas Research Alliance Scholar, Arkansas Research Alliance, AR (2010)

Society Memberships and Offices:

Radiation Research Society

International Society of Experimental Hematology

American Society of Hematology

International Society of Stem Cell Research

Current Interests:

1. Elucidation of the cellular and molecular mechanisms by which ionizing radiation and chemotherapy induce hematopoietic stem cell injury and genomic instability
2. Development of mechanism-based strategies to protect the hematopoietic system from cancer therapy-induced damage and leukemia
3. Development of novel medical countermeasures against radiological/nuclear accidents or terrorism.

Vision Statement:

The Radiation Research Society has been my professional home since I became an independent investigator in 1999. I still vividly remember how the members of the society embraced me when I first attended the society annual meeting in 2000 in Albuquerque, New Mexico. Their enthusiastic encouragement at the meeting helped me to launch a successful career in radiation research. Since then I have been actively involved in various activities in the society, including frequently reviewing manuscripts for Radiation Research and serving as a member in the RRS membership committee and in the NIH Radiation Therapeutics and Biology Study Section. I would like to use these experiences to welcome new comers into our society and to help them grow their careers in radiation research. In addition, as a MD scientist I have done many studies cross multi-disciplines. If I am fortunately elected as the Councilor-At-Large, I would like to advocate more multi-discipline collaborations in our society.