RADIATION RESEARCH SOCIETY
Home of the Radiation Sciences

2020 Election Winners

Vice-President-Elect
Julie Schwarz

Councilor-Biology
Dorthe Schaue

Councilor-Chemistry
Steven Swarts

Councilor-Epidemiology
Lydia Zablotska

Councilor-Medicine
Kerry O'Banion

Councilor-Physics
Stephen McMahon

Vice-President-Elect

Julie Schwarz

Current Position:
Vice Chair for Research
Director of the Cancer Biology Division
Professor *with Tenure*

Department/Institution:
Department of Radiation Oncology
Washington University School of Medicine, St. Louis, MO

Educational Background:
- BS in Biology, *magna cum laude*
  Duke University, Durham, NC

- MD, PhD (Cell and Molecular Biology)
  Washington University School of Medicine, St. Louis, MO

Professional Experience:
- Assistant Professor
  Department of Radiation Oncology
  Washington University School of Medicine, St. Louis, MO
  (2009 - 2015)
- Associate Professor *with Tenure (awarded 2015)*
  Department of Radiation Oncology
  Washington University School of Medicine, St. Louis, MO
  (2015 - 2020)

Fellowships & Honors:
- Dean's List with Distinction, Duke University *(1991-1995)*
- *Magna cum laude*, Duke University *(1995)*
- Letter of Commendation, Medical Physiology, Washington University School of Medicine *(1996)*
- Leonard B. Holman Research Pathway Resident, American Board of Radiology ***(2006-2009)***
- Resident Clinical Basic Science Research Award, American Society for Therapeutic Radiology and Oncology (ASTRO) ***(2007)***
- National Cancer Care Network (NCCN) Fellow ***(2008)***
- Alpha Omega Alpha ***(2008)***
- Roentgen Research Award, Radiological Society of North America (RSNA) ***(2008)***
- Michael Fry Research Award for Outstanding Junior Investigator, Radiation Research Society (RRS) (***2012)***
- AACR Bristol-Myers Squibb Midcareer Female Investigator Award (***2019)***
- American Board of Radiology Volunteer Service Award (***2019)***

Editorial Responsibilities:
- *Journal of Nuclear Medicine (2008 - present)*
- *International Journal of Radiation Oncology, Biology and Physics (2009 - present)*
- *International Journal of Gynecologic Cancer (2011 - present)*
- ASTRO Annual Meeting *(2013 - present)*
- ABS Annual Meeting *(2013 - present)*
- *Clinical Cancer Research (2014 - present)*
- *Cancer Research (2017 - present)*
- RRS Annual Meeting *(2018 - present)*
- *JAMA Oncology (2019 - present)*
- *Journal of Clinical Oncology,* Editorial Board *(2019 - present)*

Vice-President-Elect

Julie Schwarz, Continued

Professional Activity & Appointments:

- The Cancer Genome Atlas (TCGA) – Cervical Cancer Working Group
- ASTRO/NCI Radiobiology Consensus Workshop
- AACR Radiation Oncology Think Tank
- ASTRO Community of Radiation Oncology Physician Scientists (mentor)
- ABS Guidelines for Medically Inoperable Endometrial Cancer (Chair)
- ASTRO Endometrial Best Practice Committee
- NCI Future of Radiobiology Workshop (Section Chair)
- NCI Cervical Cancer Task Force (Co-leader)
- Radiation Research Society (RRS) Governing Council (Councilor of Medicine)
- AACR Radiation Science and Medicine (RSM) Working Group
- AACR RSM Steering Committee
- RRS/AACR Tumor Metabolism Workshop (Chair)
- Teaching Assistant, Medical Histology *(1997)*
- Supervision/training of Radiation Oncology residents *(2009 - present)*
- Director of Resident Research, Radiation Oncology *(2009 - present)*
- Nuclear Medicine Teaching Conference *(2010 & 2012)*
- Resident Radiobiology Course Lecturer *(2014 - present)*
- Cancer Biology Pathway Lecturer *(2014 - present)*
- Cancer Biology PhD Program (Co-Director) (*2018 - present)*
- Grant Review/Study Section Panelist, IDX Award *(2013)*
- DOD/CDMRP Breast Cancer Research Program *(2013)*
- American Cancer Society Institutional Research Grants WUMC *(2014 - present)*
- Multi Investigator Imaging Awards MDACC *(2015)*
- Siteman Investment Program (SIP) *(2016 - present)*
- NCI/NIH Radiation Therapy and Biology (RTB) Ad hoc reviewer *(2016 - present)*
- Emerson Collective Grant Review *(2018 - present)*
- Damon Runyon Cancer Research Foundation *(2019 - present)*
- Director of Resident Research Program *(2014 - present)*
- ASTRO Community of Radiation Oncology Physician Scientists Mentor *(2014 - present)*
- MSTP Faculty Career Mentoring Program *(2016 - present)*
- National leader in the delivery of brachytherapy for gynecologic malignancies
- Continuing Medical Education for radiation oncologists and medical physicists
- Radiation Biology Education for Medical, Graduate and Post-Graduate trainees
- Co-leader of the Washington University Cancer Biology PhD Program
- Development of Physician Scientist Training Program (PSTP) as a supplement to clinical training for physician scientist residents in radiation oncology

Current Interests:

My current research interests include tumor metabolism, functional imaging, immunity and response to radiation therapy. My lab is interested in the biology that drives tumor appearance on functional images (including positron emission tomography (PET) and magnetic resonance (MR) imaging) and how this information can be used to improve response to primary radiation therapy. We use molecular biology, genetic engineering and small animal models to ask fundamental biological questions about tumor metabolism, immunity and radiation sensitivity. We use well annotated clinical databases and prospectively collected tumor banks to perform high quality translational research. As a clinician, I specialize in delivering radiation therapy for gynecologic and endocrine tumors, including external beam radiation, brachytherapy and radiopharmaceuticals.

Vision Statement:

The Radiation Research Society (RRS) has meant so much to me and my career development over the years. I began my research career training as a graduate student in the laboratory of Dr. Helen

Vice-President-Elect

Julie Schwarz, Continued

Piwnica-Worms working on radiation induced cell cycle checkpoint signaling and went on to study the relationship between FDG-PET and radiation response as part of my clinical training in radiation oncology. My experience with RRS began as a junior faculty member when I had the honor of receiving the Michael Fry Award, aptly named after one of our Society's most outstanding mentors, whose career was characterized by a strong commitment to scholarship and service. During the question and ask period of my lecture (or perhaps even during it!), leaders in our field asked important questions and provided meaningful feedback. These ideas went on to become integral to the success of my fledgling laboratory, and many of these scientists have become lifelong mentors, collaborators, colleagues and friends. I have had the opportunity to serve RRS on the Finance Committee and most recently as Councilor of Medicine, a role I truly treasure that has brought me closer to even more lifelong colleagues and friends. At our most recent RRS Annual meeting, I was impressed again by the truly collaborative and supportive nature of RRS as my graduate student, Fiona, delivered her first invited talk and was met with the same characteristic enthusiasm, collegiality and support. As we move forward into the future, I plan to build on our strengths and expand our reach to further secure RRS as the home for outstanding research, collaboration and collegiality in the radiation sciences.

Advocacy for basic research in radiation sciences – Research in chemistry, physics, biology, medicine and epidemiology is the cornerstone of RRS. RRS has recently solidified its commitment to epidemiology by moving to add this discipline as an official pillar of our Society. I propose to capitalize on this momentum by continuing to work to integrate radiation epidemiology into our meetings, networking and scientific discussions. An opportunity exists to expand engagement and presentations in radiation physics and chemistry, and I will work with our Council and membership to achieve this. We will continue to promote high quality new research in all 5 areas into our annual meeting by reserving 50% of the oral presentations to be selected from submitted abstracts. We will continue to support high quality peer reviewed publication from all 5 areas in our journal, Radiation Research.

Interdisciplinary collaboration to promote radiation science – The quality of our annual meeting is a highlight every year, not only for the scientific content, but also for the opportunity to meet and network with our colleagues and friends. This year we faced unprecedented challenges due to COVID 19, which required us to change to a virtual format for our annual meeting. While this situation presented challenges, it is also an opportunity to think creatively about solutions to increase participation in our annual meetings from members who cannot attend in person due to clinical work, financial or health related constraints. An opportunity exists to further our commitment to collaboration between clinicians and basic researchers by using new meeting and webinar formats. We are committed to returning to in person format for our beloved Annual Meeting as soon as it is safe for our members. I will continue to support the development of smaller workshops on targeted areas of interest to our membership and will identify these areas by actively surveying our membership.

Mentorship and support for developing radiation scientists – RRS has an outstanding tradition of mentorship and support for trainees and early career scientists. I pledge to continue to support our existing ECI and SIT programs and think creatively about opportunities to expand these programs further through awards, individual and other group interactions. I will work to ensure that the support of RRS is available to all developing radiation researchers. In an effort to increase support of female trainees and junior faculty members, I propose a one on one mentoring program that pairs our outstanding RAD Women with female ECIs and SITs.

Vice-President-Elect

Julie Schwarz, Continued

Diversity, Equity and Inclusion – I pledge to ensure that issues of diversity, equity and inclusion are priorities in the RRS strategic plan. I will establish a task force to address these issues and include representation from ECIs and SITs in this group. An opportunity exists to extend our outreach to interested undergraduate and high school students especially women and students of color who may be located currently at institutions with limited RRS visibility. I will work with existing outreach programs to plan and develop programming in this area.

Councilor - Biology

Dorthe Schaue

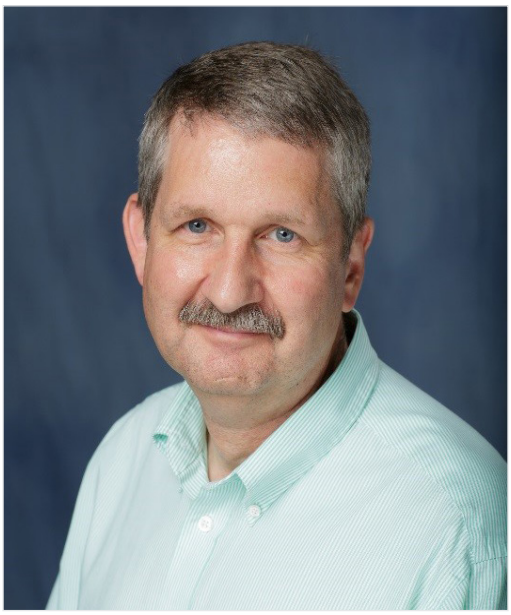
Experience:
For almost two decades Dr. Schaue's work has focused on the effects of ionizing radiation on the immune system, on tumor immunity and on radiation mitigation. Originally trained at radiation research institutions in the UK and Germany, including the Gray Lab in London and the Paterson Institute in Manchester she developed an interest in the immunological aspects of radiation exposures. She was able to build on this knowledge in 2004 when joining in the Department of Radiation Oncology at UCLA where she is currently an Associate Professor. She has mentored numerous students, residents and postgraduate researchers and she is a member of the Physics and Biology in Medicine Graduate program at UCLA where she teaches Radiation Biology and Immunity in addition to basic and translational radiobiology to UCLA Radiation Oncology Residents. She is an associate editor for the International Journal of Radiation Biology and a reviewer for the NCI Clinical and Translational Exploratory/Developmental, and other, Study Sections.

Current Interests:
Her current research efforts focus on understanding the complex interaction at the irradiated immune-tumor-host interface, and the development of immunoPET for monitoring these interactions in vivo. Her interests in radiation-induced immune imbalances and the role of chronic inflammation, fibrosis and tissue remodeling in late effects of radiation damage, and life shortening grew through her involvement in extensive radiation mitigation studies.

Vision Statement:
Arguably the most important association of radiation scientists in the world, RRS provides a platform for all scientists interested in radiation, through a uniquely comprehensive program at the RRS annual meeting and the societal journal. The challenges have never been greater: the resurgence of ever more adventurous space trips, technological advances in radiation physics and oncology, the need for radiation countermeasures, environmental radiobiology, bystander carcinogenesis, survivorship and the effects of radiation exposure on aging. Expansion of the cadre of radiation scientists with multiple backgrounds is urgently needed to meet these challenges. I believe RRS needs to be vigorous in drawing into its ranks early career scientists and scientists from other specialties and to extend its influence in academia, industry and government. An inclusive and collaborative environment presenting cutting-edge science is essential to the training of the next generation of radiation experts. At a time when research funding is scarce and the broad research portfolio is threatened by an increasing emphasis on immediate clinical translatability, the RRS must protect and foster science and scientist for the broader societal benefit.

Councilor - Chemistry

Steve Swarts



Current Position:
Research Associate Professor

Department/Institution:
Department of Radiation Oncology
University of Florida, Gainesville, Florida

Educational Background:
- BS, Chemistry, Oakland University, Rochester, MI
- PhD, Biomedical Sciences, Oakland University, Rochester, MI

Professional Experience:
I obtained my graduate degree working in the laboratory of Michael Sevilla, where I focused on the radiation chemistry of DNA, DNA bases, and thiols. After completing my PhD, I was a post-doctoral fellow in the Experimental Radiation Oncology Unit at the Bowman Gray School of Medicine at Wake Forest University. Here I worked under Kenneth Wheeler conducting studies to test the accessibility hypothesis regarding DNA strand-break repair in the proliferative and quiescent 66 and 67 mouse mammary tumor cell lines. In 1990, I joined the Radiation Oncology research faculty at Wake Forest. My research there focused on using solid-state hydrated DNA models to examine how the local environment (e.g., hydration water, conformation) influences DNA radiation chemistry. I also collaborated with cancer epidemiologists to develop biomarkers of oxidative stress as predictors of breast and prostate cancer susceptibility. In 2001, I joined Syracuse Research Corporation as an environmental chemist developing human exposure and risk profiles of various radioisotopes and high-volume production chemicals. I returned to academia in 2007 and joined the laboratory of Paul Okunieff at the University of Rochester to develop novel, naturally derived, anti-inflammatory agents and radiation mitigators. I also collaborated with William Bernhard to further probe free radical reaction pathways and end-product formation in irradiated oligomers and DNA. Currently, I am a research associate professor in Radiation Oncology at the University of Florida (2010-Pres) developing lead mitigators of acute radiation syndrome candidates and anti-tumor drug candidates as well as rapid biodosimetry based on radiation-induced signals in fingernails and toenails. In addition, I am continuing to investigate how the local environment influences the radiation chemistry of DNA.

Professional Activity & Appointments:
- RRS Member (1988-present)
- Member, Education and Training Committee (1997-2000)
- Councilor-at-Large (2013-2016)
- Member, Constitution and Bylaws Committee (2016-Pres)
- Member, Program Committee (2019-2020)
- RRS Peer Reviewer (1996-present)
- RRS Associate Editor (2000-2004)
- Member, American Chemical Society (1985-present)
- Member, American Association of Pharmaceutical Scientist (2011-present)
- Vice President, International Association of Biological and EPR Radiation Dosimetry (2019-present)
- Peer reviewer, EPR Biodose Special Edition of Radiation Protection and Dosimetry (2016)

Councilor - Chemistry

Steve Swarts, Continued

Peer reviewer, Report Committee 29 on Retrospective Assessment of Individual Doses for Acute Exposures to Ionizing Radiation, International Committee on Radiation Units and Measurements (2017)

- Peer reviewer, International Journal of Radiation Biology (1997-present)
- Peer reviewer, Health Physics Journal (2007 -present)
- Peer reviewer, Journal Radiation Physics and Chemistry (2018-present)

Current Interests:

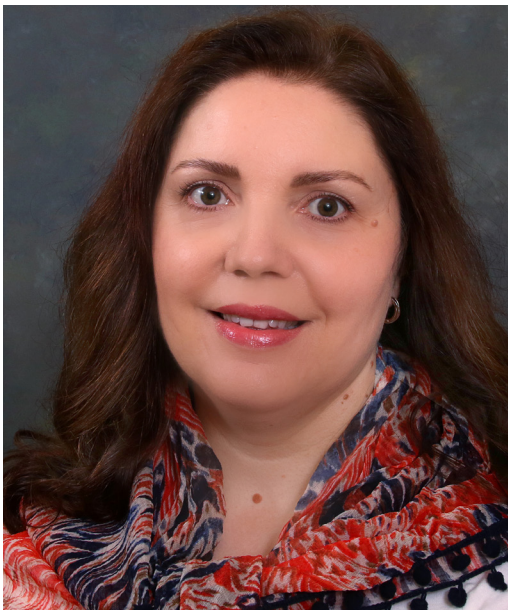
Development of mitigation agents against acute radiation syndrome; development of assays of early tumor response and normal tissue toxicity to radiation; biodosimetry assays based on physical and biologically based biomarker methods; influence of redox metals and differing charge states of thiols on radiation-induced strand and base damage in the hydrated DNA model.

Vision Statement:

Since becoming a member in 1988, I have found the Radiation Research Society (RRS) to be the cornerstone of the radiation research community because of its interdisciplinary nature. Our annual meetings, and now specialty workshops, are the premier forum for the exchange of information and ideas in radiation science with the full involvement of all disciplines, including physics, chemistry, biology, medicine, epidemiology, and translational research. To ensure the strength of RRS and its members, the interdisciplinary nature of the Society and the interaction between the many radiation science disciplines must be maintained, along with the encouragement of membership in the Society. In this regard, for the Society to remain vibrant and innovative the multidisciplinary nature of the society must look beyond the society. The Society and its members most draw from the knowledge and expertise from other scientific disciplines, embracing a wider genre of basic and applied methodologies and approaches, and incorporating cutting-edge technologies and scientific advancements that can bring new perspectives and insights to the radiation sciences. These activities in turn offer the opportunity to bring in new members to our society. As councilor I will strive to facilitate these interactions and promote communication between the membership and the Council, representing the interests and concerns of the membership. However, for this to work effectively I invite you to make known your opinions, your ideas, concerns, and guidance in how the Society can best serve its members. Please allow me the opportunity to serve you as Councilor in Chemistry.

Councilor - Epidemiology

Lydia Zablotska



Current Positions:
- Professor of Epidemiology

Department/Institution:
Department of Epidemiology & Biostatistics at University of California, San Francisco

Educational Background:
- Ph.D. Epidemiology, Mailman School of Public Health, Columbia University, New York, NY (2003)
- M.P.A. Public Policy and Health Administration, Askew School of Public Administration, Florida State University, Tallahassee, FL (1997)
- M.D. Medicine, Minsk State Medical School, Belarus (1993)

Professional Experience:
- Residency in Internal Medicine, Chief Resident, Lviv State Medical School, Ukraine (1993-1995)
- Research Staff Associate, Mailman School of Public Health (MSPH), Columbia University, New York, NY (2000-2003)
- Instructor, Department of Epidemiology, MSPH, Columbia University, New York, NY (2003-2004)
- Assistant Professor, Department of Epidemiology, MSPH, Columbia University, New York, NY (2004-2008)
- Assistant Professor, Department of Epidemiology and Biostatistics (DEB), School of Medicine (SOM), University of California, San Francisco (UCSF), San Francisco, CA (2008-2010)
- Associate Professor, DEB, SOM, UCSF, San Francisco, CA (2010-2012)
- Associate Professor, In Residence series, DEB, SOM, UCSF, San Francisco, CA (2012-2016)
- Head, Occupational and Environmental Area of Concentration, DEB, SOM, UCSF, San Francisco, CA (2013- present)
- Professor, In Residence series, DEB, SOM, UCSF, San Francisco, CA (2016- present)
- Topic Steward for Epidemiology, Biostatistics and Population Science in the Bridges Curriculum, Foundational Sciences 1, SOM, UCSF, San Francisco, CA (2015-2019)
- Director of the "Epidemiology, Biostatistics, and Population Science" (EBPS) Longitudinal Foundational Science Thread, Bridges Curriculum, Foundational Sciences 1, SOM, UCSF, San Francisco, CA (2019- present)

Fellowships & Honors:
- Graduation with Distinction (Summa Cum Laude), Minsk State Medical School, Minsk, Belarus
- 1995 Senator E. Muskie Scholarship for Graduate Studies for Outstanding Students from the Commonwealth of Independent States, U.S. Agency for International Development (1993)
- Sydney Kark Award in Epidemiology for doctoral student committed to work in international health, MSPH, Columbia University, New York, NY (2003)
- Young Investigator Award, 12th International Congress of Radiation Research, Brisbane, Australia (2003)
- Calderone Junior Faculty Research Prize, MSPH, Columbia University, New York, NY (2004)
- New Investigator's Award, American Statistical Association's Conference on Radiation and Health, Monterey Beach, CA (2006)
- Young Investigator Award, 13th International Congress of Radiation Research, San Francisco, CA (2007)

Councilor - Epidemiology

Lydia Zablotska, Continued

- Academic Career Development Award, National Cancer Institute (2010)

- Stephen B. Hulley Award for Excellence In Teaching, UCSF (2016)
- Mentor Award for Exceptional Commitment to the Development of Early Stage Radiation Investigators, Conference on Radiation and Health, Waikoloa Village, HI (2016)
- The Haile T. Debas Academy of Medical Educators at UCSF, Center for Faculty Educators, School of Medicine, UCSF (2019)

Professional Memberships:

- 1997- Member, American Public Health Association
- 2003- Member, Radiation Research Society
- 2004- Member, American Society of Preventive Oncology
- 2004- Member, Society for Epidemiologic Research
- 2004-2006 Member, Advisory Council on Chronic Lymphocytic Leukemia Radiogenicity Research, National Institute for Occupational Safety and Health
- 2005-2007 Adviser, Committee on Reconsideration of Exclusion of Chronic Lymphocytic Leukemia from
- Eligibility for Compensation under EEO/CPA, NIOSH
- 2006- Member, American Statistical Association
- 2006-2011 Consultant, United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), Report on the Health Effects Due to Radiation from the Chernobyl accident, Sections on Leukemia and Cancer Registries
- 2009-2011 Scientific Reviewer, Report on development of a CLL risk model for NIOSH-IREP
- 2009- Member, Helen Diller Family Comprehensive Cancer Center, UCSF
- 2012-2013 Member, NIH Special Emphasis Study Section ZRG1 PSE-Q (02) M "Radiation and cancer"
- 2012-2013 Member, NIH Peer Review Committee ZCA1 SRLB-3 M2 "Core Infrastructure and Methodological Research for Cancer Epidemiology Cohorts"
- 2013- Reviewer, American Cancer Society Institutional Research Award, UCSF Helen Diller Family Comprehensive Cancer Center, UCSF
- 2014- Reviewer, AIDS and Cancer Specimen Resource (ACSR), Young Investigator Pilot Award
- 2016-2017 Member, NIH Peer Review Committee ZRG1 PSE-R 56 R "Secondary dataset analyses in heart, lung, and blood diseases and sleep disorders"
- 2016-2017 Member, NIH Peer Review Committee ZES1 LWJ-J P3 1 "Environmental Health Sciences Core"
- 2017-2018 Member, NIH Peer Review Committee ZCA1 RPRB-O M2 P "US-Russia Bilateral Collaborative Research Partnership on Cancer"
- 2017- Member, NCRP CC 2 Committee, "Meeting the Needs of the Nation for Radiation Protection", leader of the section on Radiation Epidemiology and Biostatistics
- 2018- Expert Advisor from the Canadian Delegation to United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), RDon Expert Group (REG)
- 2020- Council Member, U.S. National Council on Radiation Protection and Measurements (NCRP)
- 2020- Member, U.S. and a Russian Scientific Review Group (SRG), Office of Environment, Health, Safety & Security, U.S. Department of Energy (DOE)

Current Interests:

I am a radiation epidemiologist with extensive training and publications in epidemiology, biostatistics, and molecular genetics. Beginning with my doctoral dissertation and the K07 Academic Career Training Award from the National Cancer Institute, my research has concentrated on the examination of risks of radiation exposures in various occupational and environmental settings. Over the last fifteen years as a PI of several cohort and case-control studies, I

Councilor - Epidemiology

Lydia Zablotska, Continued

by combining traditional epidemiological methods with advanced statistical modeling and new approaches to risk estimation and projection. Throughout my career, in addition to doing my research, I collaborated with communities affected by the effects of radiation fallout and environmental radiation contamination to help them understand risks of radiation exposures and advocate for laws protecting their health.

My current research interests could be summarized as follows:

Risks of occupational radiation exposures – Beginning with the doctoral dissertation work, one of the main themes of my research has been an examination of risks of occupational exposures to ionizing irradiation. My work on the studies of Canadian and U.S. nuclear workers has provided important information with regards to the effects of low-dose radiation exposures. In recent years, I have been working on developing a new area of research on the risks of occupational exposures among workers of the uranium fuel production cycle exposed to a wide range of uranium compounds from the ore dust and to other radioactive and non-radioactive mill products. My studies add to an emerging consensus that radiation risks for workers employed in uranium processing are substantially different from risks of uranium miners or uranium enrichment workers or nuclear workers. In addition to conducting several studies of occupationally exposed workers in the U.S. and Canada, I am currently leading a five-year study pooling together uranium workers from 16 cohorts in 7 countries (~100,000 workers) and actively participating in other international consortia pooling the data from individual worker studies.

Risks of thyroid cancer and other thyroid diseases after exposures to radioactive iodines from the Chornobyl nuclear accident fallout – In collaboration with intramural scientists from the Radiation Epidemiology Branch at the NCI and a multidisciplinary team of scientists from Columbia University, I have been involved in several studies of those exposed to radiation after the Chornobyl nuclear accident in 1986. We recruited two large cohort studies of ~25,000 subjects in Ukraine and Belarus for biennial screenings for thyroid diseases starting in 1997. The studies were first to show that exposures to ingested and inhaled radioactive iodines lead to increased risks of thyroid cancer similar to risks from external radiation. Our findings raised concerns about radioiodines and redefined the emergency protocols for populations working or living around nuclear power plants. Our work was instrumental in setting up studies of the population living around the Fukushima plant in Japan. My research also opened a new area of inquiry by showing that exposures to radioiodines increase not only the risks of thyroid cancer, but also of benign thyroid tumors such as follicular adenomas.

Radiogenicity of chronic lymphocytic leukemia (CLL) – My recent work on the risks of leukemia in Chernobyl cleanup workers addressed a long-standing controversy regarding differences in risks for CLL and non-CLL leukemia. Our group reported significantly increased radiation-related risks of incident CLL in these workers. Our findings were confirmed in the most recent incidence follow-up of atomic bomb survivors and in several recently published incidence-based studies of occupationally exposed workers. For a number of years I served as a scientific adviser on several NIOSH committees on CLL radiogenicity. The emergence of CLL as a radiation-induced disease has prompted NIOSH to reconsider the radiogenicity of CLL and its eligibility for compensation for U.S. nuclear weapons workers occupationally exposed to radiation. We continue work in this area by examining risks of CLL from low-dose radiation exposures in other populations, including uranium workers and the general population from the InterLymph Consortium of population-based lymphoma studies.

Cancer and non-cancer risks after diagnostic and therapeutic medical radiation exposures – In several studies using the SEER data, I used novel statistical analysis methods to show that breast cancer patients who received radiotherapy after mastectomy for breast cancer were at increased risk of second

Councilor - Epidemiology

Lydia Zablotska, Continued

primary cancers such as lung and esophageal cancer. Recently, we reported that therapeutic and repeated diagnostic radiation exposures lead to excess mortality and morbidity from circulatory diseases. I continue this work by examining risks of repeated X-ray fluoroscopies in a unique cohort of 64,000 Canadian tuberculosis patients and 13,000 U.S. patients from Massachusetts with detailed exposure and confounder data. These studies seek to provide evidence on the effects of low-dose protracted radiation exposures similar to exposures from computed tomography.

Vision Statement:

Last year members of the Radiation Research Society formally approved changes to the Society's Bylaws to include Epidemiology as the fifth discipline. As a radiation epidemiologist, my research always relies on interdisciplinary teams of scientists working together to investigate health risks of radiation exposures. I am a strong supporter of interdisciplinary collaboration and believe that the formal inclusion of Epidemiology into the Society will bring about many positive changes, including exchange of new ideas between disciplines and new joint projects. In seeking your support to become a first RRS Councilor for Epidemiology, I want to ensure that RRS will continue to foster interdisciplinary collaboration, support young investigators and become a 'permanent home' for radiation epidemiologists.

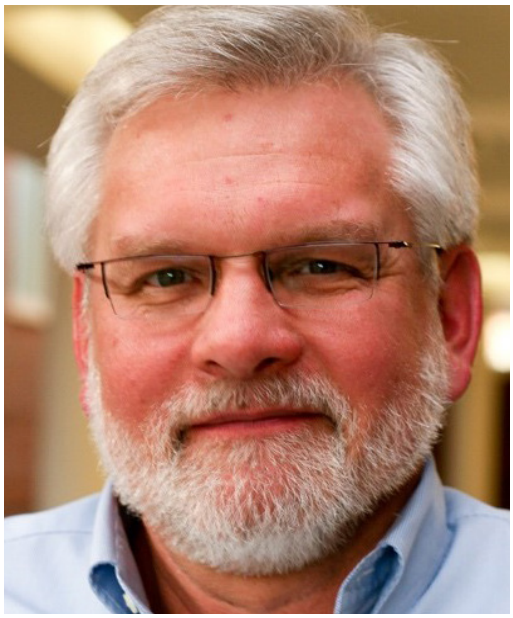
I joined the Radiation Research Society in 2003 as a graduate student. My mentors at Columbia University, Drs. Geoffrey Howe, Eric Hall, Tom Hei and Charles Geard, encouraged me to join the Society and introduced me to RRS members at the annual meetings. As a young scholar in training, I benefited from the Society's commitment to support young investigators and was able to attend the 12th International Congress of Radiation Research in Australia in 2003 as a recipient of the Young investigator Award. This first meeting left me with wonderful memories of interacting with and learning from the leading researchers in various fields of radiation research. To increase training opportunities for young radiation epidemiologists, in 2012 I founded the Early Stage Radiation Investigators (ESRI) Workshop conducted in conjunction with biennial meetings of the Conference on Radiation and Health (CRH).

I have been a member of the CRH Organizing Committee for the past 14 years. Since 1981, CRH has provided a forum for discussion of recent research findings on health risks of exposures to radiation in various settings. The CRH meetings attracted a highly diverse groups of scientists, including epidemiologists, statisticians, risk modelers and physicists working in radiation research. Since 2014, CRH was held in conjunction with the annual RRS meeting. The impetus for merging of the two conferences was due to a mutual interest in radiation health effects and to complementary expertise of participants. These joint meetings fostered increased interdisciplinary communication between CRH and RRS members and improved the quality and breadth of scientific presentations. On September 22, 2018, the RRS Council voted to add Epidemiology as a fifth discipline in the Society, and the process was formally approved by RRS members at the 2019 annual meeting in San Diego.

In the past, the RRS has shown strong commitment to increasing the presence of epidemiologists at its annual meetings. I will work with the Council and the Program Committees to ensure that Epidemiology is fully integrated into the Society and that epidemiologists present their work in lectures and symposia at the annual meetings. In addition, I will plan to continue working on developing a separate free-standing 2.5 day workshop for Epidemiology in early 2022. With your support, I will work with the RRS Council to develop programs to continue to provide training opportunities for the next generation of radiation epidemiologists, biostatisticians, and dosimetrists. The RRS is an international society and by participating in its annual meetings, epidemiologists will expand their international collaborations in radiation research.

Councilor - Medicine

Kerry O'Banion



Current Position:
Professor and Vice Chair
Director, Medical Scientist Training Program (MSTP)

Department/Institution:
Department of Neuroscience and Department of Neurology, Del Monte Neuroscience Institute, Wilmot Cancer Institute, Environmental Health Center, University of Rochester School of Medicine & Dentistry

Educational Background:
- PhD Microbiology: University of Illinois, Urbana (1987)
- MD, Alpha Omega Alpha: University of Illinois, Urbana (1987)
- BS: Biology summa cum laude, University of Illinois, Urbana (1980)

Professional Experience:
- Professor and Vice-Chair, Department of Neuroscience, Professor of Neurology, and Member, Ernest J. Del Monte Neuroscience Institute, University of Rochester School of Medicine & Dentistry (URSMD) (2016 – Present)
- Professor Department of Neurobiology and Anatomy, URSMD (Interim Chair, 2014-2015; Associate Chair, 2009-2014)
- Associate Professor, Department of Neurobiology and Anatomy, URSMD (2000 – 2009, Tenured in 2002)
- Associate Professor, Departments of Neurology and of Neurobiology and Anatomy, URSMD (1997 – 2000)
- Assistant Professor, Departments of Neurology and of Neurobiology and Anatomy, URSMD (1991 - 1997)
- Instructor and Fellow, Departments of Medicine and Biochemistry, URSMD (1990 – 1991)
- Postdoctoral Fellow, Departments of Medicine and Biochemistry, URSMD (1987 – 1990

Fellowships & Honors:
- • NIH Postdoctoral Training Fellow in Endocrinology and Metabolism (1987 – 1989)
- • Wilmot Cancer Research Postdoctoral Fellowship (1989 – 1991)
- • New York State Health Research Council Fellowship for Diabetes Research (1990 – 1991)
- • George W. Corner Dean's Teaching Scholar (1996 – 1998)
- • American Physician Scientists Association Founders Award (2016)

Professional Activity & Appoinments:
Affiliations
- Society for Neuroscience
- American Association for the Advancement of Science
- National Association of MD/PhD Programs
- American Society for Neurochemistry
- Radiation Research Society
- American Physician Scientists Association
- *Editorial Board, Journal of Neuroinflammation (2003 – Present); Associate Editor (2011 – Present)*
- *MD-PhD Section, Graduate Research, Education, and Training (GREAT) Group, American Association of Medical Colleges; Executive Committee (2006 – 2009); Co-chair, Committee on Communication (2007 – 2009); Chair-Elect and Program Planning Committee (2008 – 2009); Chair and Co-Chair, Program Planning Committee (2009 – 2010)*

Councilor - Medicine

Kerry O'Banion

- *Lecturer, NASA Summer Space School, Brookhaven National Laboratories, NY (2009 – 2017)*
- *External Advisory Board Member, multiple national MD-PhD training programs*
- *National Council on Radiation Protection and Measurements (NCRP) Scientific Committee 1-24 on Radiation Exposures in Space and the Potential for Central Nervous System Effects, phase 2 (2016 – 2019)*
- *NASA GCR Consortium Member (2019 – Present)*
- *NASA Space Radiation Element Central Nervous System Working Group (2015 – Present)*
- *NASA Grant Review Panels, Member or Chair (2003 – Present)*
- *Member (2014-2017) and Chair (2017-2019), TWD-A (NIGMS Training and Workforces Development) Study Section, Center for Scientific Review, National Institutes of Health*
- *Member, BDCN-4 Study Section (now CNBT-1), Center for Scientific Review, National Institutes of Health (2001 – 2005)*
- *Standing Member, Medical Advisory Committee Review Panel, Muscular Dystrophy Association (2009 – 2017)*
- *Ad-hoc Grant Reviewer for Alzheimer's Association, multiple NIH study sections, Wellcome Trust, Science Foundation of Ireland, Israeli Science Foundation, and many others*
- *Review Panelist, Howard Hughes Medical Institute (HHMI) Research Training Fellowship Program for Medical Students (2007 – 2009)*
- *Society for Neuroscience Representative to the AAMC Council of Academic Societies (CAS, 2008 – 2013)*

Current Interests:
My research focuses on understanding the role of neuroinflammation in Alzheimer's and other neurodegenerative diseases, as well as its contribution to changes seen following brain irradiation and environmental exposure. I am particularly interested in the influence of glial expressed cytokines and infiltrating peripheral cells on brain pathology, and utilize genetic and pharmacological approaches in a variety of mouse models. I have long-standing experience with neuroinflammation and its role in normal CNS tissue responses, work that has been supported by NIA, NINDS, NCI, NASA, DOE and NIAID. In the field of radiation biology, we have investigated normal CNS effects of radiation on neuroinflammation, hippocampal neurogenesis, and cognitive performance, and have recently worked on sex- and complement-dependent microglial responses involved in synapse loss and cognitive deficits. We also have a long history of working in Alzheimer's disease, with our most recent studies focused on potentially beneficial roles of microglia and neuroinflammation in reducing Alzheimer's plaque and tau pathology, as well as the intersection of radiation exposure and predisposition to neurodegeneration.

Vision Statement:
As a welcoming and vibrant organization, the Radiation Research Society played a major role promoting my interest to better understand radiation's impact on the brain. Indeed, from the time of my very first meeting (2003), it was clear that the society promoted multidisciplinary interactions and provided me, a mid-career cellular neuroscientist, an opportunity to learn about the physics and biochemistry that underlies initiation of radiation injury in complex tissues. As members of the society, our science greatly benefits from this emphasis on multiple disciplines. Another major emphasis of RRS is career development of trainees at all levels. The very active Scholars-in-Training (SIT) and more recently implemented Early-Career-Investigators (ECI) committees and their associated programs provide substantive opportunities for education and mentorship that are rare in most scientific societies, but absolutely critical for the growth and sustainability of our field. Finally, with the recent challenges imposed by Covid-19, RRS has stepped up by hosting several webinars highlighting topics of specific interest to the membership. The success of these webinars provides an important template for future RRS activities. As a Councilor-at-Large, I will support the continued emphasis on bringing together investigators from all disciplines and

Councilor - Physics

Stephen McMahon

Current Position:
Lecturer, Queen's University Belfast
UK Research & Innovation Future Leaders Fellow

Department/Institution:
Patrick G Johnston Centre for Cancer Research, Queen's University Belfast, Northern Ireland

Educational Background:
- PhD Physics, Queen's University Belfast (2006 – 2009)
- MSci Physics, Queen's University Belfast (2002 – 2006)

Professional Experience:
- Queen's University Research Fellow, Patrick G Johnston Centre for Cancer Research, Queen's University Belfast (2017 – 2020)
- Marie Curie Research Fellow, Centre for Cancer Research and Cell Biology, Queen's University Belfast (2016 – 2017)
- Marie Curie Research Fellow, Department of Radiation Oncology, Massachusetts General Hospital (2014 – 2016)
- Postdoctoral Fellow, Centre for Cancer Research and Cell Biology, Queen's University Belfast (2009 – 2014)

Fellowships & Awards:
- UK Research & Innovation Future Leaders Fellowship (2020 – 2024)
- Jack Fowler Award, Radiation Research Society (2018)
- Queen's University Research Fellowship (2017 – 2020)
- Marie Curie International Outgoing Fellowship (2014 – 2017)

Current Interests:
Although my background and original research expertise is in physics, in the decade since the completion of my PhD the majority of my work has involved the application of modelling techniques from physics to biological questions.
My core research interest focuses on the delivery of development of novel computational models to predict radiosensitivity. Decades of research into the mechanisms of radiation response have built a detailed understanding of many of the key drivers of radiosensitivity on the cellular and tissue level, which could potentially significantly inform how we treat patients by personalising radiotherapy based on individual patient features. However, in many cases this information is poorly integrated and difficult to use to make general predictions. I am currently developing modelling tools that seek to integrate this knowledge into a single tool that would enable prediction of radiosensitivity based on mechanistic, phenotypic information about cells without ad-hoc fitting, as a first step towards the development of more personalised radiotherapy.
Alongside this central work I collaborate extensively with a range of biologists and clinicians, providing physics input and modelling expertise for a range of projects, including research in high-LET radiotherapy, radiosensitising nanoparticles, non-targeted effects of radiotherapy, and small animal radiotherapy. All of these research programmes benefit strongly from interdisciplinary involvement, linking in strongly to one of the Radiation Research Society's key strengths.

Councilor - Physics

Stephen McMahon, Continued

Vision Statement:

When I began my PhD project on radiosensitising gold nanoparticles, I had not had any formal training in medical physics or biology as part of my undergraduate degree. I found myself having to learn a large number of new concepts, particularly around the biological and clinical aspects of radiotherapy. Through working with collaborators including medical physicists, biologists and clinicians I gained an appreciation for the broader field of radiation research, where I've focused the majority of my research work over the past ten years.

This story will be familiar to many radiation researchers, as familiarity with topics sometimes quite far outside our original expertise is needed to fully understand the key questions in understanding radiation responses. The Radiation Research Society (RRS) with its broad, interdisciplinary ethos has played an important part in this process for both myself and many other investigators through its SIT and ECI programmes, which I believe it is important to support and develop in the future.

But individual training is only one part of the picture. While many of the early developments in radiation researcher were driven by talented generalists working across discipline boundaries, the depth and breadth of radiation research now demands collaboration between researchers with different specialties to combine our knowledge and deliver the most impactful science in the future. This can be seen in other disciplines with the embrace of open standards and open data, to more effectively leverage knowledge and more rapidly build collaborative projects between modellers and experimentalists. While RRS already plays an important role in enabling the dissemination of science and networking of researchers, I believe it is ideally placed to lead on a broader effort to improve and facilitate collaboration across its interdisciplinary strengths.