

Vice-President-Elect

Sally Amundson

Current Position:

Associate Professor of Radiation Oncology

Department/Institution:

Center for Radiological Research, Columbia University,
New York, NY

Educational Background:

- ScD Radiation Biology: Harvard University, School of Public Health, Boston, MA
- BA Biology: Hamline University, St. Paul, MN

Professional Experience:

- Associate Professor of Radiation Oncology, Center for Radiological Research, Columbia University (2003-Present, tenured 2011)
- Adjunct Investigator, NCI Radiation Epidemiology Branch, National Institutes of Health, Bethesda, MD (2002-2005)
- Research Fellow, National Cancer Institute, Bethesda, MD (1998-2003)

Fellowships & Honors:

- Michael Fry Research Award, Radiation Research Society (2004)
- IRTA Postdoctoral Fellow, Cancer Biology, NCI, Laboratory of Molecular Pharmacology, Bethesda, MD (1995 - 1998)
- Intramural Research Training Award, NCI intramural program (1995-1998)
- Postdoctoral Fellow, Radiation Biology, Life Sciences Division, Los Alamos National Laboratory, Los Alamos, NM (1992 - 1995)
- Director's Fellowship, Los Alamos National Laboratory, Los Alamos, NM (1992-1994)
- National Research Service Award, HSPH, Harvard University (1986-1992)
- Phi Beta Kappa (1986)

Professional Activity & Appointments:

Committee Memberships:

- Radiation Research Society



- Committee for Women in Radiation Research (2000-2003)
- Program Committee (2004, 2005, 2007, 2008, 2009, 2019)
- Conference on Radiation Health Liason
- Finance Committee (2005-2011)
- Councilor-at-Large (2012-2015)
- Nominating Committee, Chair (2018)
- National Council on Radiation Protection and Measurements (NCRP) (2004-Present)
- Member of NCRP Program Area Committee 1 (2008-Present)
- Chair of NCRP Scientific Committee 1-21 "Integrating Radiobiology with Epidemiology" (2012-2015)
- Radiation Effects Research Foundation (RERF) Scientific Council (2009-2014)
- CHAIR FOR 2012 RERF REVIEW
- EPA Science Advisory Board, Radiation Advisory Committee (2015-Present)
- MELODI Scientific Committee (2016-Present)
- Nuclear and Radiation Studies Board, National Academies of Science (2019- Present)

Editorial

- Associate Editor, *Radiation Research* (2007-Present)
- Ad hoc reviewer for journals including *Nature*

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Sally Amundson, Continued

Medicine, PLoS Medicine, PLoS Genetics, JAMA Cardiology, FASEB J, Genome Research, Cancer Research, Oncogene, Bioinformatics, Molecular Biology of the Cell, Nucleic Acids Research, Carcinogenesis, Mutation Research, Molecular Carcinogenesis, Int. J. Radiation Oncology, Biology and Physics, BMC Genomics, BMC Bioinformatics, Molecular Cancer Therapeutics, Cancer Gene Therapy, Advances in Space Research, Radiation Research, Radiation and Environmental Biophysics, Health Physics, Database, DNA Repair

Consultative

- Ad Hoc Grant Reviewer
 - NIH, Radiation Study Section
 - NIH, Modeling and Analysis of Biological Systems Study Section
 - NIH (NIAID), Project Bioshield
 - Wellcome Trust (UK)
 - Health Canada
 - NASA, Postdoctoral Program
- Study Section Member
 - NIH (NIAID), Medical Countermeasures to Restore GI Function after Radiation Exposure: Project Bioshield (RFA-AI-07-013) (2007)
 - NIH (NIAID), ARRA Grand Opportunities (RFA-OD-09-004) (2009)
 - NIH (NIBIB), Special Emphasis Panel: Biomedical Research on the International Space Station (PAR-09-120) (2010 – 2012)
 - NIH (NCI), Special Emphasis Panel (PAR12-144 and PAR12-145) (2013)
- National Academy of Science study: “Evaluation of Radiation Shielding for Space Exploration” (2006-2008)
- Contributor to ASTRO Radiation/Cancer Biology Practice Exam and Study Guide (2007, 2008, 2009, 2011, 2017)
- Workshop on Biological Imaging and Spectroscopy at the NSLS II (produced draft report for DOE (2008)
- Radiation Effects Team Working Group (NASA) (2003)
- Organizing Committee for EU-US (NCI) Workshop

on Molecular Signatures of DNA Damage Induced Stress Responses (2003)

- Program Committee, International Radiation Systems Biology Workshop (2008)
- Organizing Committee for the American Statistical Association (ASA) Conferences on Radiation and Health (2008-2012, 2014-2017)
- Organizing Committee for EPR-BIODOSE 2010 and 2013 meetings (2008-2013)
- National Academy of Science study: “Airport X-ray Backscatter Machines” (2013-2015)
- ICRU Report Committee 29: Retrospective Assessment of Individual Doses for Acute Exposures to Ionizing Radiation (2015-Present)

Current Interests:

- Gene expression-based radiation biodosimetry
- Predicting individual sensitivity to radiation
- Reconstruction of radiation-related cellular signaling networks from whole transcriptome data
- Molecular signaling and abscopal effects for optimization of particle therapy

Vision Statement:

Support for young radiation scientists

I was fortunate to be introduced to the radiation sciences as a graduate student in Jack Little’s department at Harvard. I joined the Radiation Research Society as a student member early in my graduate career, and was almost immediately given opportunities to broaden my professional activities, from being invited to present my work at the Annual Meeting, to serving on committees. My first RRS committee was “Women in Radiation Research”, which was just starting its transformation into the Scholars-in-Training (SIT) program. I am convinced that the atmosphere of support and networking opportunities that I found at my early RRS meetings played a major part in both my early success and my decision to remain in the radiation research field. It has been incredibly rewarding to be able to carry on this RRS tradition, providing support and mentorship to the young scientists who are the future of our profession.

Vice-President-Elect

Sally Amundson, Continued

As Vice-President Elect, I will continue to support, and further develop, the RRS programs like SIT and ECI – these programs represent our future!

Interdisciplinary support

Interdisciplinary research has been heralded in recent years as a great revolution in how we do our science. This is old news in the radiological sciences, however, where we have long recognized the need for a multidisciplinary approach. The complementary disciplines of Physics, Chemistry, Biology and Medicine have long been the pillars of RRS, and the Society has provided a forum for communication and cooperation across these disciplines. Several years ago, I was elected to Council running in part on a platform of improving the involvement of radiation epidemiology, which seemed to be a significantly missing pillar. I subsequently acted as the liaison with the epidemiology community, as the RRS extended a welcome to radiation epidemiology by offering a home to their Conference on Radiation and Health. As Vice-President Elect, I will strongly support all our disciplines, including epidemiology, and specifically will work to enhance the synergy between them, and our links with other societies with shared interests.

More international links

Our RRS is an international society, but it is perceived too often as “the American radiation society”. As Vice-President Elect, I will work to strengthen the involvement of international participants, and grow our membership outside the US.

Nurturing our Journal

Reflecting our interdisciplinary nature, the Society Journal, *Radiation Research*, is our jewel in the crown. In these days of aggressive corporate publishers seeking to monopolize the scientific literature, it is more important than ever to maintain the independence of our Journal. As Vice-President Elect, I will continue to support and nurture this precious asset of our Society.

Secretary-Treasurer-Elect

Marjan Boerma

Current Position:

Associate Professor

Department/Institution:

University of Arkansas for Medical Sciences, Division of Radiation Health

Educational Background:

- Postdoctoral Training- Radiation Biology: University of Arkansas for Medical Sciences (2006)
- PhD Radiation Biology: Leiden University, The Netherlands (2004)
- MS Cell Biology: Wageningen University, The Netherlands (1998)
- BS Biology: Wageningen University, The Netherlands (1994)

Professional Experience:

- Assistant Professor, University of Arkansas for Medical Sciences (2006 – 2012)
- Associate Professor, University of Arkansas for Medical Sciences (2012 – present)

Fellowships & Honors:

- J.W. Osborne Award, Radiation Research Society (2016)
- Dr. and Mrs. Wolfe Annual Endowed Award for Faculty Excellence, University of Arkansas for Medical Sciences College of Pharmacy (2013)
- Michael Fry Research Award, Radiation Research Society (2011)
- American Heart Association Postdoctoral Fellowship (2004)
- Student and postdoc travel awards: Radiation Research Society, German Association for Radiation-Oncology, Netherlands Radiobiological Society (2000 – 2005)

Society Memberships:

- American Association for the Advancement of Science (since 2010)
- American Association for Colleges of Pharmacy (since 2006)



- American Heart Association (since 2006)
- American Society for Pharmacology and Experimental Therapeutics (since 2006)
- American Society for Therapeutic Radiology and Oncology (since 2018)
- European Society for Therapeutic Radiology and Oncology (since 2009)
- Radiation Research Society (since 1999)
- Royal Netherlands Society for Agricultural Sciences (since 1998)
- Society for Redox Biology and Medicine (since 2018)
- Society of Toxicology (since 2018)

Current Interests:

The overall objective of my research is to elucidate biological mechanisms by which ionizing radiation causes normal tissue injury and to identify countermeasures for intervention, with an emphasis in radiation injury in the cardiovascular system. Most of my work is performed in animal models that address whole body radiation exposure due to radiological accidents, cardiac side effects of radiation therapy, and cardiovascular effects of low- and high-linear energy transfer radiation to mimic exposures in deep space travel.

Secretary-Treasurer-Elect

Marjan Boerma, Continued

Vision Statement:

The RRS is a vibrant professional society, and the annual scientific meeting is clearly one of its highlights.

I gladly give something back in return for the fun, friendships and support received as a member during the past 20 years. To remain a strong society with active membership, we need to stay up to date with all disciplines in the radiation sciences and continue to support programs that benefit members, such as the Scholars-in-Training and Early Career Investigators. Financial health and stability are at the center of the Society's success. The Secretary-Treasurer should assist the Executive Committee and Council in determining the financial impacts of policy decisions and communicate such decisions and the Society's financial status to its membership. Having attended the meetings of the Finance Committee since 2014, I am willing to take on these tasks.

Councilor-at-Large

Mary-Keara Boss

Current Position:

Assistant Professor

Department/Institution:

Department of Environmental and Radiological Health Sciences, Colorado State University

Educational Background:

- PhD Comparative Biomedical Sciences: North Carolina State University
- DVM: North Carolina State University

Professional Experience:

- Assistant Professor, Radiation Oncology, Colorado State University *(2016-Present)*
- PhD in Comparative Biomedical Sciences, NC State University/Duke University (Advisor – Mark Dewhirst, DVM, PhD) *(2011-2016)*
- Residency in Veterinary Radiation Oncology, NC State University *(2009-2011)*
- Small Animal Rotating Internship in Medicine and Surgery, University of Pennsylvania *(2008-2009)*
- Doctor of Veterinary Medicine Program, NC State University *(2004-2008)*

Fellowships & Honors:

- Top Abstract Award, Category: Experimental Therapeutics, Consortium for Canine Comparative Oncology *(2016)*
- Early Career Investigator Travel Awards, Radiation Research Society *(2016, 2017)*
- Scholar-in-Training Travel Awards, Radiation Research Society *(2013, 2014, 2015)*
- Travel Award, 10th International Workshop of Microbeam Probes of Cellular Radiation Response *(2012)*

Professional Activity & Appointments:

- Member, Radiation Research Society *(2016-Present)*
- Scholar-in-Training, Radiation Research Society *(2013-2016)*
- Diplomate, Radiation Oncology Board Certification, American College of Veterinary Radiology *(2011)*



- Comparative Medicine and Translational Research Training Program Trainee: Ruth L. Kirschstein National Research Service Award (T32 Grant), NIH/ North Carolina State University *(2011-2014)*
- Member, University of Colorado Cancer Center *(2016-Present)*
- Working Group Co-Lead: Medicine, Basic Research Needs Workshop on Compact Accelerators for Security and Medicine, U.S. Department of Energy *(May 2019)*
- RRS Committees
 - Program Committee *(2015-2017, 2018-Present)*
 - Education and Website Committee *(2016-Present)*
 - Constitutions and Bylaws Committee *(2016-Present)*
 - SIT Committee *(2013-2017)*; Chair *(2016-2017)*; Vice-Chair *(2015-2016)*
- Colorado State University Committees
 - Veterinary Student Scholars Program Committee *(2018-Present)*
 - Vet Curriculum Committee *(2017-Present)*
- Research Judge
 - College of Veterinary Medicine and Biomedical Sciences Research Day *(2019)*
 - Resident Abstract Award, Radiation Oncology, American College of Veterinary Radiology *(2018)*
 - Graduate Student Showcase, Colorado State University *(2016)*
- Lecturer

Councilor-at-Large

Mary-Keara Boss, Continued

- Radiation Biology, Colorado State University (2019)
- Cancer Biology, Colorado State University (2019)
- Radiation Oncology, Colorado State University (2017)
- Reviewer
 - PLOS One, Cancer Research, Veterinary and Comparative Oncology, Radiation Research
- Mentorship
 - Primary Advisor: 2 Masters Students, 1 Veterinary student, 1 Undergraduate student
 - Committee Member: 6 Masters students, 3 PhD students
 - Rotating PhD Student (1)
 - Veterinary Summer Students (2)

Current Interests:

My research interests are focused in the fields of cancer biology and clinical oncology. Throughout my professional experiences, I have acquired a unique skill set which allows me to study cancer and the role of radiation therapy in both the laboratory and the veterinary clinical setting. Just like humans, companion animals develop cancer naturally throughout their lifetime. Many tumor types share important similarities to the human form of disease, molecularly and biologically, with a comparable clinical course. The field of Comparative Oncology offers an important preclinical model for translational radiation research through veterinary clinical trials. As a veterinary radiation oncologist, I am devoted to treating companion animals with spontaneous, naturally-occurring cancer with advanced radiation therapy techniques and therapeutics. As a clinician-scientist, I strive to provide high quality cancer care to veterinary patients while translating clinical findings from animals to humans in order to advance cancer research.

I am an assistant professor in the Department of Environmental and Radiologic Health Sciences and a veterinary oncologist in the Flint Animal Cancer Center at Colorado State University. The broad aim of my research program is to explore normal

tissue and tumor microenvironmental effects of radiation therapy. We routinely treat veterinary cancer patients with high intensity stereotactic body radiotherapy (SBRT) protocols; this is an area of comparative oncology with translational potential for elucidating underlying biological effects in preclinical radiation oncology studies. Currently, I have projects investigating the impact of lymph node irradiation on the anti-tumor response of head and neck cancer patients treated with SBRT using orthotopic murine and spontaneous canine cancer models; the impact of changes in tissue oxygenation and shifts in immune cell populations on treatment outcome for veterinary patients undergoing SBRT; and I'm branching out to explore SBRT and local immunotherapy combinations to enhance local and systemic tumor control in canine cancer patients.

Vision Statement:

We are so fortunate to be a part of such a bright, exciting, (and fun!) scientific community. The Radiation Research Society is home to established, influential scientists, up-and-coming early career radiation researchers, and a mass of eager, enthusiastic trainees. It is both comforting and energizing to come together at RRS meetings to share our hard-earned results that have emerged throughout the year, discuss the "hot new" research presented at the meeting, and catch up with colleagues that have become supportive friends and collaborators. Since my first RRS meeting as a Scholar-In-Training (SIT), I have been hooked, and I've been hanging on to my Perfect Attendance status ever since.

I am proud to be actively involved with the Radiation Research Society. Over the years, I have participated in several RRS committees, including serving as the Chair of the Scholars-In-Training Committee. At this point, I hope to take the next step and join the RRS Council as a Councilor-at-Large. My research disciplines within RRS include radiobiology and radiation oncology, and I have expertise in translational animal models for preclinical radiation research. As a radiobiologist and veterinary radiation oncologist,

Councilor-at-Large

Mary-Keara Boss, Continued

I believe I will bring a unique perspective to the RRS Council with respect to promoting efforts within the Society for more predictive, more translational preclinical radiation research.

Finally, if elected to the RRS Council, I feel I can speak to the experiences of SIT and Early Career Investigator (ECI) members. I recognize that I have benefited greatly from strong, supportive mentorship, and I believe one of the strengths of RRS is the openness and eagerness of senior members to mentor SITs and ECIs. Now, I serve as a mentor to my own students, and it is a beautiful thing to be able to share RRS with them. As Councilor-at-Large, one of my goals will be to expand opportunities linking SITs, ECIs, and senior RRS members at the annual meeting and throughout the year.

Councilor-at-Large

Marianne Koritzinsky

Current Positions:

- Scientist, Princess Margaret Cancer Centre, University Health Network: Toronto, Canada
- Associate Professor and Director of Research, Department of Radiation Oncology: University of Toronto
- Member, Institute of Medical Science: University of Toronto

Departments/Institutions:

Princess Margaret Cancer Centre University Health Network; Department of Radiation Oncology University of Toronto; Institute of Medical Science University of Toronto

Educational Background:

- PhD, Faculty of Mathematics and Natural Sciences: University of Oslo (2003)
- MSc Faculty of Physics, Informatics and Mathematics: Norwegian University of Science and Technology (1996)

Professional Experience:

- Assistant Professor, Department of Radiation Oncology, University of Toronto (2008-2018)
- Associate Member, Institute of Medical Science, University of Toronto (2010-2015)
- Scientific Associate IV, Ontario Cancer Institute, University Health Network (2008-2014)
- Postdoctoral Fellow, Radiation Oncology, University Hospital Maastricht (2003-2007)
- PhD student, Faculty of Mathematics and Natural Sciences, University of Oslo (1999-2003)
- Department Engineer, The Norwegian Radium Hospital (1996-1999)

Major Awards:

- Research Leadership Award. Department of Radiation Oncology, Faculty of Medicine, University of Toronto (2017)
- Michael Fry Award, Radiation Research Society (2016)
- New Investigator Award, Terry Fox Foundation / Research Institute (2011)



- VARIAN-Juliana-Denekamp Research Award, European Society for Radiotherapy and Oncology (2007)
- VENI Research award, Netherlands Organization for Scientific Research (2005)

Current Interests:

Research in my laboratory is focused on vulnerabilities in cancer that emerge as a consequence of the tumor microenvironment. Tumor hypoxia confers poor patient prognosis due to resistance to radiation and chemotherapy, and stimulation of a more aggressive phenotype. The aim of my research program is to increase our understanding of molecular and cellular responses to hypoxia, with the ultimate goal of targeting these responses to improve cancer treatment efficacy, mitigate cancer aggressiveness and improve patient outcomes. Our research is focused on determining how cancer cells adapt metabolism and secretion capacity in hypoxia, and therapeutic strategies to reprogram tumor metabolism to potentiate radiotherapy.

I am also dedicated to providing excellent education to the next generation of researchers. I am the Director of “Clinical and Experimental Radiobiology” and co-Director of “Strategic Training in Transdisciplinary Radiation Science” (STARS21), two pan-Canadian educational programs hosted by the Department of Radiation Oncology. In these roles and others, I have

Councilor-at-Large

Marianne Koritzinsky, Continued

taught over 1,500 (post-)graduate students and served as primary supervisor for more than 26 researchers-in-training.

Vision Statement:

My undergraduate training in biomedical physics engineering, graduate training in radiation biology and my integration in clinical radiotherapy departments have fostered my fascination and appreciation for the interdisciplinary nature of our research community.

Since I was a PhD student, the Radiation Research Society has been a unique and valuable resource to meet fellow scientists, gain deeper knowledge about my own field, learn about other fields and how they intersect, find inspiration and stimulate growth as a scientist. Our society has been thriving in recent years with vibrant annual meetings featuring outstanding inspirational invited speakers and serving as a unique platform for young scientists to showcase their work and engage with the community. We must continue to build on these successes to solidify the RRS and the annual meeting as a home for scientific excellence, collaboration and opportunity.

Knowing first-hand the benefits of being integrated with RRS, I will stimulate more scholars-in-training to join the society. Since my research career so far has been divided between Europe and Canada, this has also positioned me well to advocate for increased RRS memberships from these and other communities around the world.

As a recipient of the RRS 2016 Michael Fry award, it would be a privilege for me to give back to the Society and serve on the Radiation Research Society Council.