NEA
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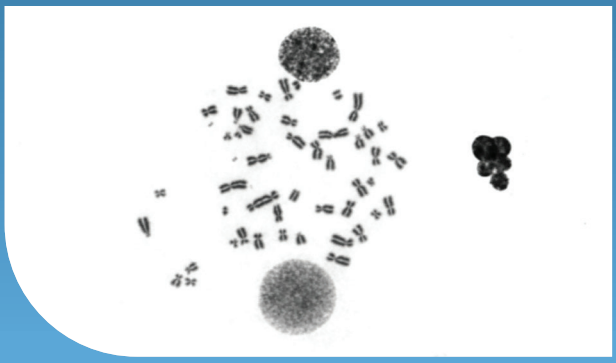
EPRI

Second Joint Workshop on Initiatives of Low-Dose Research Co-ordination

Co-organised by the Electric Power Research Institute and the Nuclear Energy Agency

Washington, DC, United States
23-24 June 2026



Practical information and venue

The meeting will be held at the EPRI Offices in Washington D.C. The main entrance is situated at 1325 G Street NW, Washington DC 20005, United States. Delegates will be required to present a valid ID at the entrance.

Participants are advised to arrive at least 30 minutes before the beginning of the session to have sufficient time for obtaining the required badge to access the meeting room. Breakfast will be available 1 hour before the morning sessions begin.

Coffee breaks and lunch will be provided by EPRI in the office for meeting participants.

Taxi, Uber and Lyft are available from the airport and local hotels. The building is within walking distance of Metro Center and McPherson Square stations, which are accessible via the Red, Blue, Orange and Silver lines. There are also bus routes nearby. Please see the Washington Metropolitan Area Transit Authority for further details.

Free Wi-Fi is available in the EPRI office meeting rooms and throughout its facilities.

Workshop scope and objective

The specific objectives are:

- to share knowledge on the latest research findings on low-dose radiation health outcomes and biological mechanisms associated with low-dose radiation exposure of humans and non-human species, as well as on new research methods and approaches;
- to identify and develop mechanisms to expedite outreach to the radiological protection community on the importance of co-ordination in the field of low-dose research;
- to strengthen the development of education and training resources for the next generation of researchers and radiological protection professionals; and
- to develop initiatives to bring together researchers and regulators, amplifying the impact of key research findings and thereby facilitating the transition of scientific research results to real-world applications.

A joint effort by the research community to improve the effectiveness and efficiency of research through global networking is crucial in this endeavour.

A summary of the workshop's findings will be issued after its conclusion.

Topics

The workshop will address the following topics:

- Setting the scene on the topic of low-dose research
- Research on occupational radiation exposure
- Developing tools for organising radiation research: Using expertise from the chemical field
- Developing tools for organising radiation research: Registers, archives and resources
- Nuclear legacy: Advances in our understanding of health and environmental impacts
- Emerging topics, techniques and the application of artificial intelligence
- Risk perception and communicating to stakeholders and the public
- Challenges and successes identified by the existing co-ordination network

Foreword

This Second Joint Workshop on Initiatives of Low-Dose Research Co-ordination is co-organised by the Electric Power Research Institute (EPRI) and its International Dose Effect Alliance (IDEA) network and by the Nuclear Energy Agency (NEA) and its High-Level Group on Low-Dose Research (HLG-LDR) as part of their collaboration on a series of workshops and webinars on the topic. The IDEA initiative was started in 2016 and provides the opportunity for low-dose radiation research organisations and individuals around the world to meet and exchange information on programmes, priorities and strategic research. The HLG-LDR supports radiological protection policy, regulation and implementation by improving the effectiveness and efficiency of low-dose research through global networking. Other initiatives worldwide, such as in Canada, Europe, Japan and the United States, also contribute to this effort and are identified as major players in the development of the programme of this event.

Therefore, a scientific committee was first convened in order to prepare the workshop programme, with participants from EPRI and its IDEA network, the NEA Committee on Radiological Protection and Public Health (CRPPH) and its HLG-LDR, European research platforms MELODI, EURADOS and ALLIANCE, the Japanese network PLANET, Canada's COHERE, and United States' EPA and DOE.

Day 1 | Tuesday, 23 June 2026

EPRI offices: 1325 G St NW 530, Washington, DC 20005, United States

Workshop sessions facilitated by EPRI and NEA

8:00	**Registration and breakfast**
Introductory session: **Setting the scene on the topic of low-dose research** 9:00-9:50	
Moderated by: Borja Bravo, Principal Technical Leader, Radiation Safety, Electric Power Research Institute (EPRI); George Vardulakis, Deputy Head of Radiological Protection, Nuclear Energy Agency (NEA)	
9:00	**Welcome addresses** Steven Swilley, Vice President and Chief Nuclear Officer, EPRI (online) William D. Magwood, IV, Director-General, NEA (online)
9:20	**The co-ordination strategy and related activities of the NEA Committee on Radiological Protection and Public Health (CRPPH) High-Level Group on Low-Dose Research (HLG-LDR)** Dominique Laurier, HLG-LDR Chair, Nuclear Safety and Radiation Protection Authority (ASNR), France
9:30	**The EPRI view and actions in global co-ordination of low-dose research: The International Dose Effects Alliance** Borja Bravo, Principal Technical Leader, Radiation Safety, EPRI
9:40	**2024 Joint workshop: Key outcomes and insights** George Vardulakis, Deputy Head of Radiological Protection, NEA

Session 1: **Research on occupational radiation exposure – Part 1**

9:50-10:30

Moderated by: David Borrego, Physical Scientist, Science and Emerging Technologies Branch, US Environmental Protection Agency, United States; S. Robin Elgart, Director, Office of Health Studies and Former Worker Programs, US Department of Energy, United States

9:50 **The Million Person Study**

Lawrence T. Dauer, Attending Physicist, Memorial Sloan Kettering Cancer Center, United States

10:10 **The International Workers Study (INWORKS)**

David Richardson, Associate Dean for Research, University of California, Irvine, United States

10:30 Coffee break and group photo

Session 1: **Research on occupational radiation exposure – Part 2**

11:00-12:30

11:00 **US Radiologic Technologists Cohort (USRT) – The Rad Tech Study**

Cari Kitahara, Senior Investigator, National Cancer Institute (NCI), United States

11:15 **The Korean Radiation Workers Study (KRWS): Current developments and future perspectives**

Eunshil Cha, Chief/Senior Researcher, Korea Institute of Radiological and Medical Sciences (KIRAMS), Korea

11:30 **The US Shipyard Worker Study**

Grant Tao, Research Director, Johns Hopkins University, United States

11:45 **Worker dosimetry**

Filip Vanhavere, Head of Expert Group, SCK CEN, Belgium

12:00 **Overview of worker studies**

Richard Wakeford, Professor in Epidemiology, University of Manchester, United Kingdom

12:10 **Panel discussion with session speakers and open discussion**

Moderated by: Richard Wakeford, Professor in Epidemiology, University of Manchester, United Kingdom

12:30 Lunch break

Session 2A: **Developing tools for organising radiation research: Using expertise from the chemical field**

13:30-14:50

Moderated by: Olivier Armant, Principal Investigator, Nuclear Safety and Radiation Protection Authority (ASNR), France; Devin Sullivan, Program Manager Research and Development, Conexus Nuclear Inc, Canada

13:30 **Risk assessment: Comparison between the radiation and the chemical field**

Ludovic Vaillant, Project Manager, CEPN, France

13:50 **Overview: How AOPs are built**

Vinita Chauhan, Research Scientist, Health Canada, Canada (online)

14:10 **AOP-Wiki live demonstration**

Olivier Armant, Principal Investigator, ASNR, France

14:20 **Interactive discussion: Shared experiences from chemical sector**

Moderated by: Olivier Armant (ASNR) and Danielle Beaton (Independent Researcher) (online)

Panelists:

- Knut Erik Tollefsen, Chief Scientist, The Norwegian Institute for Water Research, Norway (online)
- Carole Yauk, Professor, University of Ottawa, Canada (online)
- Clemens Wittwehr, Senior Expert, European Commission (online)

Session 2B: **Developing tools for organising radiation research: Registers, archives and resources**

14:50-16:00

Moderated by: Dmitry Klokov, Head of Laboratory, Nuclear Safety and Radiation Protection Authority (ASNR), France; Edouard Azzam, Advisor to the Program Manager, Conexus Nuclear Inc., Canada

14:50 **Learning from plutonium and uranium workers: The story of human based actinide research**

Sergey Y. Tolmachev, Research Professor & Director, Washington State University, United States

15:10 **The NEA Global Register on Low-Dose Research projects: Its place among other radiobiology databases and archives**

Dmitry Klokov, Head of Laboratory, ASNR, France

15:25 **The Comprehensive Epidemiologic Data Resource (CEDR)**

Ashley Golden, Director of Health Studies, Oak Ridge Associated Universities, United States

15:40	**A moderated discussion with the session speakers** *Moderated by: Edouard Azzam, Advisor to the Program Manager, Conexus Nuclear Inc., Canada*
16:00	Coffee break
Session 3: **Nuclear legacy: Advances in our understanding of health and environmental impacts** 16:15-18:00	
Moderated by: Tatsuhiko Imaoka, Director, Department of Radiation Effects Research, National Institutes for Quantum Science and Technology (QST), Japan; Preetha Rajaraman, Vice Chair, Board of Directors, Radiation Effects Research Foundation (RERF), Japan	
16:15	**Radiation exposure and health effects in post-accident and emergency situations** Sara Della Monaca, Senior Researcher, Italian National Institute of Health (ISS), Italy (online)
16:30	**Lessons learnt from 80 years of follow-up of A-bomb survivors** Preetha Rajaraman, Vice Chair, Board of Directors, Radiation Effects Research Foundation (RERF), Japan
16:45	**15 years post-Fukushima: Advances in low dose/low dose-rate radiation research and environmental protection** Masatoshi Suzuki, Senior Researcher, Fukushima Institute for Research, Education and Innovation (F-REI), Japan
17:00	**Health survey of evacuees following the Fukushima accident** Tetsuya Ohira, Professor, Fukushima Medical University, Japan (online)
17:15	**Breakout discussions in small groups: Closing the gap between long-term epidemiology and emergency decision-making** *Facilitators: Preetha Rajaraman, Vice Chair, Board of Directors, Radiation Effects Research Foundation (RERF), Japan; Tatsuhiko Imaoka, Director, Department of Radiation Effects Research, National Institutes for Quantum Science and Technology (QST), Japan*
17:55	**Closure of day 1** Borja Bravo (EPRI) and Dominique Laurier (HLG-LDR), workshop chairs
18:00	End of day 1
19:00	Workshop reception – Johns Hopkins University Hopkins Bloomberg Campus, 555 Pennsylvania Avenue NW

Day 2 | Wednesday, 24 June 2026

8:00	**Breakfast** Breakfast served from 8:00 am
9:00	**Opening of day 2** Borja Bravo (EPRI) and Dominique Laurier (HLG-LDR), workshop chairs
Session 4: **Emerging topics, techniques and the application of artificial intelligence** 9:05-12:30	
Moderated by: David Richardson, Associate Dean for Research, University of California, Irvine, United States; Gayle E. Woloschak, Professor of Radiation Oncology, Northwestern University, United States	
9:05	**Single-cell genomics reveals radiation-induced mutational signatures in haematopoietic stem cells** Yukiko Matsuda, Research Scientist, Radiation Effects Research Foundation, Japan
9:25	**Multi-omics and benchmark dose modelling integration into AOPs/ transcriptomics/proteomics** Vinita Chauhan, Senior Research Scientist, Health Canada, Canada (Online)
9:45	**Multiple exposures in organisms: Experimental and assessment challenges (view from EU-MULTIPLEX)** Nele Horemans, Senior Researcher, SCK CEN, Belgium
10:05	Coffee break
10:30	**Effects of parental radiation exposure on the next generation: Evidence, uncertainties, and the work of ICRP Task Group 121** Prakash Hande, Professor, National University of Singapore, Singapore
10:50	**Organoids from various tissues exhibit differences in inflammatory and regenerative responses to irradiation** Rob Coppes, Head of Effects of radiation on normal tissues, Professor of Radiotherapy and Radiation Biology of Normal Tissue Effects, University of Groningen), The Netherlands (online)

11:10	**Raman spectroscopy technologies for detecting biomarkers of low-dose radiation response** Sangeeta Murugkar, Associate Professor, Carleton University, Canada (online)
11:30	**Interactive discussion with the audience: Emerging topics, techniques and the application of artificial intelligence** *Moderated by: Nele Horemans, Senior Researcher, SCK CEN, Belgium* Gayle E. Woloschak, Professor of Radiation Oncology, Northwestern University, United States
12:30	Lunch

Session 5: **Risk perception and communicating to stakeholders and the public**

13:30-15:00

Moderated by: Paul Locke, Professor, Department of Environmental Health and Engineering, Johns Hopkins Bloomberg School of Public Health, United States; David Borrego, Physical Scientist, Science and Emerging Technologies Branch, US Environmental Protection Agency, United States

13:30	**Introduction** Paul Locke, Professor, Johns Hopkins Bloomberg School of Public Health, United States
13:35	**Exploring the risk perception associated with ionising radiation** Julie Burtt, Senior Radiation Biologist, The Canadian Nuclear Safety Commission (CNSC), Canada.
13:50	**Panel discussion and audience Q&A** *Moderated by Paul Locke* • Jessica Wieder, President/Founder, Teal Skies Consulting, United States • Shelley Laver, Supervisor, Radiation Information and Outreach Branch, US EPA, United States • Marie-Claude Grégoire, Head of Directorate, Canadian Nuclear Laboratories (CNL) (online), Canada
14:55	**Presentation on the NEA International Radiological Protection School** Richard Wakeford, Professor in Epidemiology, University of Manchester, United Kingdom
15:00	Coffee break

Session 6: **Challenges and successes identified by the existing co-ordination networks**

15:30-17:45 | Co-chairs: Borja Bravo, George Vardulakis

Moderated by: Borja Bravo, Principal Technical Leader, Radiation Safety, EPRI; George Vardulakis, Deputy Head of Radiological Protection, NEA

15:30 **A conversation: Global successes and challenges in low-dose research**

- European Partnership for Radiological Protection Research (PIANOFORTE), Europe

  Jan-Hendrik Kruse, Co-coordinator, ASNR, France

- Multidisciplinary European Low Dose Initiative (MELODI), Europe

  Addie Ivanova, Radiation and Health Scientist, CNSC, Canada

- European Radioecology Alliance (ALLIANCE), Europe

  Olivier Armant, Principal Investigator, ASNR, France

- European Radiation Dosimetry Group (EURADOS), Europe

  Filip Vanhavere, Radiation Protection Research Coordinator, SCK CEN, Belgium

- Planning and Action Network for Low Dose Radiation Research (PLANET), Japan

  Tatsuhiko Imaoka, Director, Department of Radiation Effects Research, National Institutes for Quantum Science and Technology (QST), Japan

- Canadian Organisation on Health Effects from Radiation Exposure (COHERE), Canada

  Julie Burtt, Senior Radiation Biologist, CNSC, Canada

- National Cancer Institute, (NCI), United States

  Lindsay Morton, Director, Radiation Epidemiology Branch

20 minutes – Facilitated discussion with the audience

Part 2: Presentations (5 mins each)

- World Health Organization (WHO)
  Zhanat Kenbayeva, Scientific Officer, WHO, Switzerland (pre-recorded video)
- United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR)
  Ferid Shannoun, Deputy Secretary, UNSCEAR, Austria (online)
- International Commission on Radiological Protection (ICRP)
  Gayle E. Woloschak, Professor of Radiation Oncology, Northwestern University, United States
- National Council on Radiation Protection and Measurements (NCRP), United States
  Kathryn Higley, NCRP President
- Department of Energy (US DOE), United States
  S. Robin Elgart, Director, Office of Health Studies and Former Worker Programs, US DOE*, United States*
- Environmental Protection Agency (US EPA), United States
  David Borrego, Physical Scientist, Science and Emerging Technologies Branch, US EPA*, United States*

20 minutes – Facilitated discussion with the audience	
17:45	**Closing remarks and conclusion** Borja Bravo and Dominique Laurier, workshop chairs
18:00	End of workshop

Speaker biographies

William D. Magwood, IV, Director-General, Nuclear Energy Agency

Mr Magwood took up his duties as Director-General of the NEA on 1 September 2014. He has extensive experience in both the regulatory and developmental aspects of nuclear energy, including at the international level. From 2010 to 2014, he served as one of the five Commissioners appointed by the US President and confirmed by the US Senate to the US Nuclear Regulatory Commission (NRC). While a commissioner, he advocated the importance of nuclear regulatory independence and the necessity of maintaining strong, credible and technically sound nuclear regulation in the United States and all countries that use nuclear power.

Prior to his appointment at the NRC, from 2005 to 2010 he provided independent strategic and policy advice to US and international clients on energy, environmental and technology policy issues. During this time, he also sat on various advisory groups and provided technical and policy advice to members of the US Congress on nuclear research, education and climate change policy.

From 1998 to 2005, Mr Magwood was Director of Nuclear Energy at the US Department of Energy (DOE). During his tenure, he launched several important initiatives, including the US Nuclear Power 2010 programme and the Generation IV International Forum (GIF). He was also actively involved in the work of the NEA, serving as a Steering Committee bureau member from 1999 to 2003, and as Chair in 2004 and early 2005.

Prior to his experience at the DOE, Mr Magwood managed electric utility research and nuclear policy programmes at the Edison Electric Institute in Washington, DC, and was a scientist at Westinghouse Electric Corporation in Pittsburgh, Pennsylvania.

Mr Magwood, a US national, holds Bachelor's degrees in physics and English from Carnegie Mellon University and a Master of Fine Arts from the University of Pittsburgh.

Steve Swilley, Vice President and Chief Nuclear Officer, EPRI.

Steve Swilley has overall management and technical responsibility for EPRI's R&D activities related to the global operating nuclear fleet. Previously, Mr Swilley was Senior Director and Deputy Chief Nuclear Officer responsible for administrative and technical direction for EPRI's nuclear materials, plant support, and innovation functions, with research focused on materials issues, welding, long-term operations, flexible operations, non-destructive evaluation (NDE), artificial intelligence, data analytics, and advanced nuclear technology.

Mr Swilley previously served as Director of the Nuclear NDE Department, the world's leading independent resource for NDE in the nuclear power industry, and as Senior Program Manager of Advanced Nuclear Technology (ANT). In this role, he guided research activities to enable and build confidence in new nuclear plant deployment. His first role at EPRI was Program Manager of NDE Technologies, in which he guided research activities focused on areas including steam generator and Balance of Plant heat exchanger tubing, buried pipe, and component health monitoring. Prior to joining EPRI in 2003, Mr Swilley worked at TXU Energy in engineering roles supporting construction and operation of the Comanche Peak units and held various positions of responsibility related to ASME Code, mechanical design, system testing, system engineering, welding engineering, outage co-ordination, and project management.

Mr Swilley received a bachelor's degree in mechanical engineering from the University of Arkansas and is a registered professional mechanical engineer in the state of Texas.

Dominique Laurier is a radiation epidemiologist who has been involved for over 25 years in the quantification of the health risks associated with low-dose exposure to ionising radiation.

He is currently deputy head of the health division at the French Institute of Radiological Protection and Nuclear Safety (IRSN).

He is the Chair of the High-Level Group on Low-Dose Research (HLG-LDR) of the NEA since its creation in 2020.

He is also Chair of Committee 1 of the International Commission on Radiological Protection (ICRP), alternate representative of the French delegation to the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR).

Borja Bravo is a Principal Technical Leader at the Electric Power Research Institute (EPRI). Mr Bravo joined the EPRI Radiation Safety Program in 2022 and leads research projects related to nuclear power plant radiation protection, radiological assessment, and dosimetry.

Mr Bravo has more than 20 years of radiation protection experience in the nuclear industry. Prior to joining EPRI, he worked at Tecnatom, an engineering company providing services to the nuclear plants. At Tecnatom, he was the manager of the department responsible for radiation protection services to operating facilities and decommissioning sites. In this capacity, he was responsible for radiological protection training support, engineering technical support and personal internal dosimetry service.

Mr Bravo has been the President of the Spanish Society for Radiation Protection (SEPR), member of the board of the Spanish Platform for R&D in Radiation Protection (PEPRI) and member of the European Radiation Dosimetry Group (EURADOS). He has a Master of Science in Physics from Universidad Complutense of Madrid.

Edouard Azzam serves as Advisor to the Program Manager for the Strategic Research and Development Program on low-dose radiation research at Conexus Nuclear Inc., Canada. He is Professor Emeritus in the Department of Radiology at Rutgers New Jersey Medical School (United States), and a member of the US National Council on Radiation Protection and Measurements. He contributes to several national and international committees and is a Fellow of the Radiation Research Society.

Mr Azzam earned his doctoral degree in radiation biology from the University of Ottawa and completed post-doctoral studies at the Harvard School of public health under the mentorship of Professor John B. Little. For more than 30 years his research group investigated the roles and mechanisms of intercellular communications and oxidative metabolism in low-dose and low-fluence radiation responses, including bystander and adaptive effects.

Olivier Armant PhD, HDR, has been Director of Research at the Laboratory of Ecology and Ecotoxicology of Radionuclides (LECO) of the Autorité de Sûreté Nucléaire et de Radioprotection (ASNR) in France since 2022. His research in integrative ecotoxicology focuses on the responses of model and non-model organisms exposed to radiation and radiocontamination, with particular attention to developmental toxicity, post-accidental contexts in Chernobyl and Fukushima, and adaptive processes under genotoxic stress. His work aims to elucidate how environmental exposure to radionuclides influences biological systems across scales, from molecular mechanisms to ecological outcomes. Since 2024, Mr Armant co-chairs the RAD/Chem Topical Group within the High-Level Group on Low-Dose Research (HLG-LDR) of the NEA, where he contributes to the development of AOPs in radioprotection, including work on the biological effects of in utero exposure to ionising radiation leading to microcephaly. He also serves as an Observer for the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) under the NEA, contributing to the assessment of radiation effects, including neurological outcomes, since 2024. He has co-ordinated several national and international research projects in Environmental Radioprotection, including the AOP action within the RADNORM project (EURATOM Horizon Europe, Grant Agreement No. 900009, 2020-2025).

Danielle Beaton completed her MSc in Pharmacology & Toxicology and her PhD in Toxicology. Since 2018 she has focused on the Adverse Outcome Pathway applied to the effects of low-dose ionising radiation on biological systems. She serves on the NEA HLG-LDR and assists the co-chairs of the HLG-LDR Rad/Chem AOP Joint Topical Group

David Borrego is a physical scientist in the Science and Emerging Technologies Branch (SETB) within the Radiation Protection Division (RPD), Office of Radiation and Indoor Air (ORIA) at the US Environmental Protection Agency (EPA). The SETB serves as the scientific backbone of EPA's radiation protection policy, developing the technical foundation that informs EPA regulations, guidance and emergency response actions.

He is a member of the EPA Federal Guidance team, which produces federal guidance reports used by federal and state agencies to develop radiation protection regulations and standards to protect the American public. EPA's federal guidance authority enables the Agency to provide advice to federal agencies on radiation matters directly or indirectly affecting public health. He also serves on the Advisory Team for the Environment, Food and Health (A-Team), a radiological emergency response group that provides protective action recommendations to state, local, tribal, territorial and federal governments.

Beyond his work at EPA, Dr Borrego is actively engaged in the broader radiation protection community. He serves as a member of the International Commission on Radiological Protection (ICRP) and participates in ICRP Task Group 113, which is developing reference organ and effective dose coefficients for common pediatric diagnostic x-ray imaging examinations. He is also a council member of the National Council on Radiation Protection and Measurements (NCRP) and a member of NCRP Program Area Committee 4 on Radiation Protection in Medicine.

Julie Burtt is a senior radiation biologist with nearly 20 years' experience with the Canadian Nuclear Safety Commission (CNSC). She is primarily responsible for assessing the risks of exposure to low doses of ionising radiation in the context of nuclear regulation. Ms Burtt has extensive experience communicating scientific and technical information before the CNSC Commission, to the public and Indigenous peoples and other stakeholders, as well as to colleagues at home and abroad. Her technical expertise has led to her nomination to the Canadian delegation of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) since 2019, except for 2021-2022 where she served as Technical Expert to the UNSCEAR Secretariat. She is also a member of International Commission on Radiological Protection's Committee 4, Task Group 124 (Application of the Principle of Justification) and Task Group 128 (Individualisation and Stratification in Radiological Protection: Implications and Areas of Application). Ms Burtt is also involved with the NEA, previously as Vice-Chair of the Expert Group on Non-radiological Public Health Aspects of Radiation Emergency Planning and Response (EGNR), and currently as a member of the NEA High-Level Group on Low-Dose Research (HLG-LDR). She is currently pursuing a PhD in Human Studies and Interdisciplinarity at Laurentian University, exploring the perceived risk associated with exposure to ionising radiation.

Eunshil Cha is an epidemiologist working in radiation epidemiology and the health effects of low-dose radiation exposure. She received her bachelor's degree in molecular biology and her master's and doctoral degrees in public health. She is Head of the Radiation Health Effects Assessment Team at the Korea Institute of Radiological and Medical Sciences (KIRAMS), where she leads national-level epidemiological studies on radiation-exposed populations, including radiation workers, aircrew and residents living near nuclear facilities. Her research focuses on non-cancer outcomes, including circulatory diseases, using large-scale cohort data linked to national health insurance databases.

Vinita Chauhan is a Senior Research Scientist with the Consumer and Clinical Radiation Protection Bureau (CCRPB) at Health Canada, bringing over 20 years of experience in radiobiology. She earned her PhD in biochemistry from the University of Ottawa Heart Institute in 2000, where her research focused on developing reconstituted low-density lipoprotein (LDL) particles to investigate how variations in lipid composition affect binding to the LDL receptor.

Following the completion of her PhD, Dr Chauhan secured a postdoctoral fellowship at Health Canada, where she worked in the area of environmental pollutants, focusing on the development of in vitro toxicity assays. In 2005, she transitioned to the CCRPB, applying her expertise to the field of non-ionising radiation. There, she led research initiatives examining the effects of radiofrequency fields on brain cells using cutting-edge genomics technologies.

Dr Chauhan currently works in the Ionizing Radiation Health Sciences Division, where her research focuses on low-dose radiation effects through biomarker identification using multi-omics approaches and adverse outcome pathways (AOPs). She has authored over 90 scientific publications and received the Health Canada Assistant Deputy Minister Award in 2023 in recognition of her contributions.

In addition to her research, Dr Chauhan holds several leadership roles in international scientific organisations. She serves as a nominated delegate to the OECD Emerging Science in Risk Assessment Working Party and, since 2021, has co-chaired the Rad/Chem AOP Joint Topical Group within the NEA High-Level Group on Low-Dose Research. This group works to advance the development and application of the AOP framework in radiation research and regulation.

Dr Chauhan also serves as co-coordinator of the Canadian Organization of Health Effects from Radiation Exposure (COHERE) initiative, in collaboration with the Canadian Nuclear Safety Commission. This initiative aims to strengthen national co-ordination and advance low-dose radiation research across Canada.

Rob Coppes obtained a PhD in Molecular Pharmacology and did a post-doc in Radiobiology. In 2000, he joined the Department of Radiation Oncology at the University Medical Center Groningen and became a Professor in 2012. He developed experimental models to study the radiation response of stem and progenitor cells and pioneered the use of salivary gland organoids. In 2015, he received the Bacq-and-Alexander Award from the European Radiation Research Society, and in 2022, the Societal Impact Award from the W.J. Kolff Institute.

Lawrence T. Dauer is an Attending Physicist in the Departments of Medical Physics and Radiology at Memorial Sloan Kettering Cancer Center and serves as their Corporate Radiation Safety Officer. He is a council member and former board member of the National Council on Radiation Protection and Measurements and is currently the Scientific Director for the Million Person Study, the NCRP U.S. occupational radiation epidemiology project. He has served on several national and international radiation science professional committees, including presently as a member of the National Academies of Science Nuclear and Radiation Studies Board.

Shona Robin Elgart serves as the Director of the Office of Health Studies and Former Worker Programs at the US Department of Energy. She received a Bachelor's degree in microbiology from the University of California at Santa Barbara and both her Master's degree and PhD in biomedical physics from the University of California at Los Angeles. Dr Elgart has over 25 years of research experience across multiple life science disciplines, including environmental sciences, medical physics and radiation biology. Prior to joining the Department of Energy in 2023, she served as the Element Scientist for the Space Radiation Element for NASA's Human Research Program. As the Director of Health Studies and Former Worker Programs at the Department of Energy, Dr Elgart is committed to enabling mission-driven radiation protection frameworks that reflect high-quality science to ensure appropriate protection for DOE workers and the public impacted by DOE operations

Ashley Golden, an Epidemiologist and Senior Director, leads the Oak Ridge Institute for Science and Education (ORISE) Health Studies Program at the Oak Ridge Associated Universities (ORAU) and serves as a subject matter expert for epidemiologic studies and multi-disciplinary projects in the areas of occupational exposure/worker health, radiation health effects, beryllium exposure testing, health surveillance, biostatistical analyses and data management. Among other projects, she serves as key study personnel on the Epidemiologic Study of One Million US Radiation Workers and Veterans for health effects of low-dose radiation, oversees numerous worker health registries and work performed at the ORISE Beryllium Lymphocyte Proliferation Testing laboratory, provides analytical oversight for Department of Energy (DOE) current and former worker occupational surveillance programmes, and is Principal Investigator (PI) for several research initiatives related to occupational exposure health surveillance, particularly for radiation and beryllium. Dr Golden was principally involved in the development of 5-day training course in statistics for radiation/health physics professionals for ORAU's Professional Training Programs. Dr Golden provides statistical peer review for the journals *PLOS ONE*, *Health Physics*, and the *American Journal of Occupational Medicine*, while also serving as an associate editor of the International Journal on Radiation Biology. She was elected as the Epidemiology councilor for the US Radiation Research Society and the International Association of Radiation Research in 2023. She has numerous publications and scientific presentations, is an active member of several scientific and professional associations, and regularly serves on working groups related to health effects of radiation and occupational health. Additionally, Dr Golden is currently an adjunct Associate Professor in the Department of Biomedical Sciences at the University of Tennessee and previously an adjust instructor of Biostatistics for the Master of Public Health. Dr Golden received her PhD in Comparative and Experimental Medicine with an Epidemiology concentration and a minor in Biostatistics from the University of Tennessee in 2011. The winner of several young professional awards related to both scientific contribution and community service, Dr Golden's community service activities centre around her passion for healthcare and education, serving on the executive board of the Free Medical Clinic of Oak Ridge, and participating in numerous mentoring and STEM education activities annually.

Marie-Claude Grégoire has 30 years of experience in nuclear research and development applied to health. She has worked as a researcher and a manager in the Australia, Belgium, France and the United States. She is very passionate about collaborating with academia, national and international institutions, including the IAEA and the NEA, to advance knowledge and translate it into innovation.

At Canadian Nuclear Laboratories (CNL) she leads a Directorate of about 110 staff and students and is responsible for building and delivering long-term strategy for the Health and Environment R&D programmes, in synergy with CNL business and DWM missions. The programmes deliver research and innovation that informs Canadian Federal agencies on the impact of radiation on health and environmental systems, develops innovative technologies for CNL programmes on medical isotopes and environmental remediation, and supports industry through a range of R&D services.

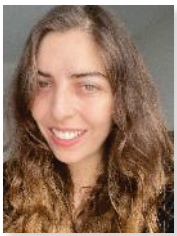
Prakash Hande is a researcher and educator specialising in radiation biology, telomere biology and genomic instability. He is currently an Associate Professor and Assistant Dean at the Yong Loo Lin School of Medicine, National University of Singapore (NUS). He has authored over 180 peer-reviewed articles in leading journals such as *Nature Genetics*, *Cell*, *Science*, *Genes and Development*, and *PNAS*, with a Scopus H-index of 58 (~15 000 citations). His research focuses on biomarkers of radiation exposure, telomeres and telomerase in ageing and cancer, and experimental cancer therapeutics. At NUS, he teaches Cancer Biology and Ageing and has conducted interdisciplinary seminar courses (e.g. *Biomedicine and Singapore Society, Radiation and Society*). In addition, Mr Hande co-ordinated workshops and gave lectures on Responsible Conduct of Research for graduate students for more than 15 years and delivering educational lectures on research integrity. He currently serves on Committee 1 of the International Commission on Radiological Protection (ICRP), co-chairs Task Group 121 (Ionising radiation effects in offspring and future generations), contributes to Task Group 118 (RBE and radiation weighting factors), and is the recipient of the AARR Senior Level Scientist Award 2025 from the Asian Association for Radiation Research. He currently serves as Regional Editor of *Mutation Research – Genetic Toxicology and Environmental Mutagenesis* (since July 2022) and Associate Editor of the *International Journal of Radiation Biology* (since November 2021).

Kathryn Higley is an OSU Distinguished Professor of Nuclear Science and Engineering (NSE) in the College of Engineering at Oregon State University and the 7th President of the National Council on Radiation Protection and Measurements (NCRP). She also holds a joint appointment with the Pacific Northwest National Laboratory (PNNL) as a Chief Scientist in its Earth Systems Sciences Division. Previously she served for a decade as School Head of NSE and managed OSU's Radiation Health Physics Program, including developing its online graduate degree, into the largest in the country. Dr Higley has been at Oregon State University since 1994 and conducts research on the environmental fate and transport of radionuclides. Her research has enabled her to help communities impacted by radiological contamination by working as a technical resource and liaison. As NCRP President she is also a Council Member of the nearly 100-year-old organisation which advises the US Government on radiation safety issues. Dr Higley has previously been a member of the International Commission on Radiological Protection and was formerly Chair of Committee 5: Protection of the Environment, where she helped develop international tools and guidance for protection of the environment from ionising radiation. She is a Fellow of the Health Physics Society, and a Certified Health Physicist. Dr Higley received both her PhD. and M.S. in Radiological Health Sciences from Colorado State University, and her B.A. in Chemistry from Reed College. She has held both Reactor Operator and Senior Reactor Operator's licences and is a former Reactor Supervisor for the Reed College TRIGA reactor.

Nele Horemans is Head of the Biosphere Impact Studies research unit at the Belgian Nuclear Research Centre, SCK CEN. She holds a Master's degree in Biological Sciences and a PhD in Sciences, awarded magna cum laude, from the University of Antwerp, where her early work focused on plant physiology and antioxidant systems.

Her research career has evolved from fundamental plant physiology to the study of plant responses to environmental stressors, including heavy metals, ozone, ionising radiation and radionuclides. Since joining SCK CEN in 2008, her work has focused on understanding the effects of chronic radiological exposure on plants, integrating laboratory experiments with field studies, including research in the Chornobyl and Fukushima exclusion zones.

Ms Horemans has published over 110 peer-reviewed papers, supervised more than 12 PhD students, and is a guest lecturer at Hasselt University, teaching eco and radiotoxicology and radioecology.



Addie Ivanova is a radiation and health scientist with the Canadian Nuclear Safety Commission (CNSC). She provides technical support to the Commission on matters of radiobiology and conducts research with a focus on radiation-related health effects and implications for radiation protection. She represents the CNSC on Theme 1 (Health) of Canada's Federal Nuclear Science and Technology (FNST) Committee, and is a member of the Multidisciplinary European Low Dose Initiative (MELODI), the NEA High-Level Group on Low-Dose Research (HLG-LDR), the Canadian Organization on Health Effects from Radiation Exposure (COHERE), and the Canadian Radiation Protection Association (CRPA) Liaison Committee. She holds an MSc in Radiation Biology from the University of Oxford.

Tatsuhiko Imaoka completed his PhD at the Graduate School of Science, University of Tokyo, in biological sciences in 2002. In 2000 and 2001, he conducted research on mammary gland biology as a Visiting Scientist in Prof. Nelson Horseman's laboratory at the University of Cincinnati College of Medicine, United States, where he elucidated the autocrine role of serotonin in regulating lactational activity, work that formed part of his doctoral thesis. In 2002, he joined the National Institute of Radiological Sciences (NIRS), Japan, where he began work in animal radiobiology under the leadership of Dr Yoshiya Shimada. Following the reorganisation of NIRS into the National Institutes for Quantum Science and Technology (QST) in 2016, Dr Imaoka became a Group Leader in the Department of Radiation Effects Research, and in 2024 he was appointed Director of the same department at the Institute for Radiological Science, QST. As of April 2026, he is a member of the PLANET Steering Committee, a Visiting Professor at Tokyo Metropolitan University, a Vice President of the Japanese Radiation Research Society, and a member of the International Commission on Radiological Protection (ICRP) Task Group 111. He specialises in radiobiology, with research interests spanning radiation carcinogenesis, stem cell biology, the integration of radiation epidemiology and biology, and biomedical applications of quantum technology.

Zhanat Kenbayeva has more than 20 years of experience in radiation protection, radiation and health, and preparedness, response, and recovery for radiological and nuclear emergencies, with a strong focus on public-health and medical aspects. She serves as WHO's focal point for preparedness and response to radiation emergencies. In this role, she is the technical lead for radio-nuclear hazards within the Organization's response to the ongoing military conflicts in Ukraine and in the Middle East. Dr Kenbayeva coordinates two WHO global expert networks — the Radiation Emergency Medical Preparedness and Assistance Network (REMPAN) and BioDoseNet — which serve as key mechanisms for providing assistance to WHO Member States. Her work includes: (i) developing and coordinating evidence-based policy initiatives, including norms, guidance, recommendations, and capacity-building tools; (ii) strengthening national preparedness for radiation emergencies through training and exercises; (iii) providing technical advice on public-health and medical countermeasures against radio-nuclear threats; (iv) supporting risk communication; and (v) leading advocacy and outreach efforts. She represents WHO in high-level inter-agency committees and advisory groups, and works closely with national public-health authorities, other governmental sectors, non-state actors (including ICRP and IPPNW), professional societies (such as IRPA, IARBED, and IAR), and global and regional partners to advance radiation protection and radiation safety, fostering international cooperation in the field of radiation and health.

Cari Kitahara is an epidemiologist and Senior Investigator (with tenure) in the Radiation Epidemiology Branch of the Division of Cancer Epidemiology and Genetics at the National Cancer Institute/National Institutes of Health. She received her masters- and doctoral-level training in epidemiologic methods from the Johns Hopkins School of Public Health and conducted her postdoctoral training in radiation epidemiology at the National Cancer Institute. She currently leads a multidisciplinary research programme that focuses on radiation-associated health risks to medical staff and patients and on the aetiology of thyroid cancer. She is the Principal Investigator of the US Radiologic Technologists Study (a cohort of 146 000 certified radiologic technologists followed since the mid-1980s), the Cooperative Thyrotoxicosis Therapy Follow-up Study (a cohort of patients treated for hyperthyroidism with radioactive iodine, surgery, or drugs since the 1940s-1960s), and the Pediatric Proton and Photon Therapy Comparison Cohort (a cohort of children treated with either proton or photon radiotherapy and followed over time to assess risks of second cancers – currently recruiting). Ms Kitahara's work, including more than 220 peer-reviewed publications and five book chapters, provides high-quality evidence to inform radiation protection practices, cancer prevention efforts, and clinical care. She is an active member of the American Thyroid Association (ATA) and the International Society for Radiation Epidemiology and Dosimetry (ISoRED), having served on several committees of both organisations. She is an Editorial Board member of the journal Thyroid and is the recipient of the prestigious Van Meter Award from the American Thyroid Association and Rosalind Franklin Society Award for Science.

Dmitry Klokov, PhD. in Radiobiology, is Head of the Laboratory of Experimental Radiotoxicology and Radiobiology (LRTOX) at the French Authority for Nuclear Safety and Radiation Protection (ASNR, formed from the merger of ASN and IRSN) in Fontenay-aux-Roses, France. He is also an Adjunct Professor in the Department of Biochemistry, Microbiology and Immunology at the University of Ottawa. His research focuses on the biological effects of low-dose and low-dose-rate ionising radiation, with the broader objective of understanding how genotoxic and molecular responses may contribute to long-term health outcomes, including cancer, cardiovascular disease, neurological disorders, and transgenerational effects. Before joining ASNR/IRSN, Dr Klokov spent 12 years at Canadian Nuclear Laboratories, where he established and led a low-dose radiobiology research programme. In parallel with his laboratory-based work, he is actively involved in science-policy interfaces aimed at advancing radiological protection. He contributes to international initiatives involving stakeholders, regulators, and policy makers, including activities co-ordinated by UNSCEAR, MELODI and the NEA. Within the NEA High-Level Group on Low-Dose Research (HLG-LDR), he leads topical work related to the Global Register of Low-Dose Research Projects, an international reference platform designed to catalogue ongoing and planned studies worldwide, identify collaboration opportunities, reduce unnecessary duplication, and strengthen global co-ordination in low-dose research.

Jan-Hendrik Kruse is an experienced professional in radiological protection and international programme management, combining experience in scientific co-ordination, emergency preparedness, and the science-policy interface. He currently manages the PIANOFORTE European Partnership on Radiation Protection Research at the French Nuclear Safety and Radiation Protection Authority (ASNR), overseeing the implementation of a EUR 46 million programme uniting more than 120 partners across over 30 research projects.

Before joining ASNR, Jan-Hendrik worked at the NEA, where he contributed to international initiatives on radiological protection, including emergency management and post-accident recovery. Earlier in his career, he directly supported EU-level policymaking as an Accredited Parliamentary Assistant in the European Parliament, working on legislative and budgetary files and engaging with institutional and community stakeholders.

Holding a bachelor's in geosciences and a Master's in International Security, Jan-Hendrik brings an interdisciplinary perspective to radiation protection. He has co-authored several international publications and frequently contributes to scientific, regulatory and stakeholder discussions at European and international levels.

Shelley Laver is the Supervisor of the Radiation Information and Outreach Branch, Radiation Protection Division for the US Environmental Protection Agency. In this role, Shelley serves as a communications leader on matters related to radiation protection including both standards, regulations, and emergency response.

Prior to her role at EPA, she was the communications director and senior advisor for the Special Inspector General for Troubled Asset Relief Program (SIGTARP).

Prior to her work at SIGTARP, Ms Laver served in multiple communications leadership roles within the Department of Energy and the DOE's National Nuclear Security Administration. She served as a vital institutional resource and independent advisor for the Office of Public Affairs and the Department and as a strategic communications advisor to the National Labs, Secretary of Energy, Deputy Secretary and senior leadership. As the Nuclear Emergency Communications advisor and Deputy Director of External Affairs for the National Nuclear Security Administration, she ensured communication priorities and goals are met furthering public understanding of the National Nuclear Security mission.

Ms Laver, a retired Air Force officer, served in a variety of military and national security positions.

Paul Locke, an environmental health scientist and attorney, is a Professor at the Johns Hopkins Bloomberg School of Public Health. He holds an MPH from Yale University School of Medicine, a DrPH from the Johns Hopkins University Bloomberg School of Public Health and a JD degree from Vanderbilt University School of Law. He is admitted to practice law in the state of New York and the District of Columbia, and before the bar of the United States Supreme Court.

Dr Locke's research, practice and teaching focus on the intersection of law and science. He leads an interdisciplinary team that advocates for the use of human-centric methods in toxicity testing and improvements in the drug development process, capitalising on scientific advances that create opportunities to replace animals in biomedical research with new, non-animal (in vitro) methods. In addition, he is an international expert in radiation protection policy and radiation risk communication. He is a member of the NEA High-Level Group on Low-Dose Research (HLG-LDR) and co-chairs its communications subgroup. He has facilitated stakeholder town halls and citizen meetings to share and collect information about uranium mining and low-dose ionising radiation.

Dr Locke has published widely in both scientific journals and law reviews, including the Columbia Journal of Environmental Law, Animal Law Review, Frontiers in Oncology, Journal of Health Care Law and Policy, AMA Journal of Ethics, ALTEX, ILAR Journal, International Journal of Radiation Biology and the Environmental Law Reporter.

Yukiko Matsuda is an Associate Senior Scientist in the Department of Molecular Biosciences at the Radiation Effects Research Foundation (RERF). She received her PhD in Medicine from Osaka University in 1999 and has a multidisciplinary research background spanning cellular physiology, molecular genetics, genomics, radiation biology, and stem cell biology. She joined RERF in late 2019, where her research focuses on radiation-induced mutagenesis and oncogenesis. Her research uses single-cell genomic approaches to investigate radiation-induced mutagenesis, particularly in haematopoietic stem cells. Her overarching goal is to understand the mechanisms and quantitative features of somatic mutation processes induced by ionising radiation, and how these contribute to carcinogenesis. Through this work, she aims to improve radiation risk assessment and to develop mutation-based biodosimetry approaches relevant to human populations, including atomic bomb survivors.

Sara Della Monaca studied theoretical nuclear physics at the University of Trento (Italy), where she obtained her PhD. She subsequently completed a second-level Master's degree in Nuclear and Ionizing Radiation Technologies at the IUSS School for Advanced Studies in Pavia (Italy), with a specialisation in applied radiation physics.

She gained experience in medical physics during a research appointment at the University Hospital of Grenoble, working on radiotherapy-related applications.

Since 2011, she has been employed at the Istituto Superiore di Sanità (ISS, Italy), where she currently serves as Senior Researcher within the Core Facilities. Her research focuses on retrospective dosimetry using physical techniques – particularly Electron Paramagnetic Resonance (EPR) and luminescence methods – as well as on clinical beam dosimetry. Her work addresses both methodological development and operational applications in emergency and post-accident scenarios involving ionising radiation exposure.

She has been actively involved in the European Radiation Dosimetry Group (EURADOS) since 2008 and currently serves as Chair of Working Group 10 (WG10) on Retrospective Dosimetry.

Lindsay Morton is a molecular epidemiologist and serves as a Senior Investigator and Director of the Radiation Epidemiology Branch, Division of Cancer Epidemiology and Genetics, which is part of the US National Cancer Institute Intramural Program. She earned her B.A. from Dartmouth College and PhD. in cancer epidemiology from Yale University. She joined DCEG in 2004 as a postdoctoral fellow to train in molecular epidemiology and became a tenure-track investigator in 2008, earning NIH tenure in 2015. She has served as Director of the Radiation Epidemiology Branch since 2022 and Head of the Cancer Survivorship Research Unit since 2021. She is an active leader in the scientific community, including serving as JNCI Associate Editor, Lymphoma Research Foundation Scientific Advisory Board Member, and Member of the National Academies of Sciences, Engineering and Medicine Committee on Developing a Long-Term Strategy for Low-Dose Radiation Research in the United States. Her achievements include election to the American Epidemiological Society and receipt of the NIH Merit Award, NCI Director's Award, and DCEG Mentoring Award.

Dr Morton's interdisciplinary research programme addresses two main areas: 1) uncovering the genetic basis of radiation-induced cancers, and 2) measuring the risks and identifying risk factors for new malignancies, or "second cancers," in cancer survivors, particularly blood cancers (leukemias and lymphomas). Her large-scale team science approach bridges population and laboratory studies to advance scientific understanding and provide useful information for clinical, public health and radiation protection guidelines.

Sangeeta Murugkar is an Associate Professor in the Department of Physics at Carleton University in Ottawa, Canada, and the Director of LAMPELab, a biomedical optics laboratory she established there in 2013. Her work centres on developing optical spectroscopy and imaging technologies, with a particular emphasis on identifying and applying optical imaging biomarkers for use in radiation medicine and cancer diagnosis. She earned her B.Sc. and M.Sc. degrees in Physics in India, followed by a PhD. in Physics from the University of Michigan, Ann Arbor, where she studied the fundamental properties of semiconductor superlattices using Raman spectroscopy. She later expanded her focus towards practical applications of photonics during a two-year postdoctoral fellowship at McMaster University and through five years as a Research Scientist at JDS Uniphase in Ottawa. Returning to academia, she spent seven years at the University of Ottawa as a Research Associate and Senior Scientist, where she cultivated a strong interest in biophotonics and nonlinear optical imaging.

Dr Murugkar's research aims to develop advanced optical techniques such as Raman spectroscopy and nonlinear optical microscopy, to study how cells, tissues, and biofluids respond to oxidative stress caused by cancer and ionising radiation. By integrating these optical methods with machine learning and other AI tools, her lab designs approaches to distinguish between normal and diseased biological states. Her work has applications in rapid cancer diagnostics, biodosimetry, and the study of low-dose radiation effects.

Tetsuya Ohira graduated from the Fukushima Medical University School of Medicine in 1990. After working as a general and psychosomatic physician at Aizu Chuo General Hospital, Hamamatsu University Hospital Department of Internal Medicine Second Division, and Kikugawa General Hospital Department of Internal Medicine, he enrolled in the Doctoral Programme in Social and Environmental Medicine at the University of Tsukuba Graduate School of Medicine in 1995, earning a PhD (Medicine) in 1999. He became Chief Physician of the Department of Epidemiology and Mass Examination for Cardiovascular Diseases at the Osaka Medical Center for Cancer and Cardiovascular Diseases in 2000. He worked as a researcher in the Division of Epidemiology and Community Health at the University of Minnesota from 2004 until 2006, when he joined the Department of Public Health at the Graduate School of Medicine at Osaka University (as an Assistant Professor in the Faculty of Medicine). In 2008, he became an Associate Professor of the same department. In 2013, he became a Professor in the Department of Epidemiology at the Radiation Medical Science Center for the Fukushima Health Management Survey, and Chair of the Department of Epidemiology at Fukushima Medical University School of Medicine.

Preetha Rajaraman serves as Vice Chair, Executive Director and Chief of Research at the Radiation Effects Research Foundation (RERF), where she provides strategic vision and scientific leadership regarding the long-term studies of health effects of ionising radiation following the atomic bombings of Hiroshima and Nagasaki. After obtaining her PhD in epidemiology from the Johns Hopkins Bloomberg School of Public Health (Baltimore, US), Dr Rajaraman joined the Radiation Epidemiology Branch at the US National Cancer Institute, where her research focused on the interaction of environmental and genetic factors in cancer risk. She co-led the US Radiologic Technologists Study, an occupational cohort of more than 100 000 technologists exposed to low-to-moderate doses of fractionated radiation and examined cancer risk following early life exposure to radiation in diagnostic and therapeutic settings. In addition to her work on radiation, Dr Rajaraman designed and led one of the first genome-wide association studies of brain tumours, and worked closely with international collaborators to design, analyse and publish the first large genome-wide association study of gallbladder cancer. Dr Rajaraman's subsequent work as South Asia Director at the National Cancer Institute's Center for Global Health leading the development, oversight and evaluation of regional programmes for cancer research and training was recognised by the NCI Director's Award for exceptional leadership in fostering co-operation in cancer research. Prior to joining RERF, Dr Rajaraman served as the US Health Attaché and Regional Representative for South Asia, co-ordinating research, policy, and programmatic efforts for the US Department of Health and Human Services. In this role she facilitated major international health initiatives, including engagements at the G20, Quadrilateral Security Dialogue, and the World Health Assembly, and co-ordinated key aspects of the regional COVID-19 response, earning a commendation from the US Office of the President. Dr Rajaraman is currently an expert member of Committee 1 (biological effects) of the International Commission on Radiological Protection and has served on advisory committees for the International Brain Tumor Epidemiology Consortium, the US Childhood Cancer Survivor Study, the World Health Organization and the Lancet Oncology.

David Richardson is Associate Dean for Research in Public Health and Professor of Environmental and Occupational Health at the University of California, Irvine. He has conducted studies of cancer among nuclear workers, underground miners, as well as among the Japanese survivors of the atomic bombings of Hiroshima and Nagasaki. He has served as a member of the US President's Advisory Board on Radiation and Worker Health, on the Science Advisory Board for the US Environmental Protection Agency, and numerous committees of the US National Academies of Science, Engineering, and Medicine. He recently served as Lead Coordinating Writer for the United Nations Committee on Epidemiological Studies of Radiation and Cancer (UNSCEAR) and currently serves on Committee 1 (Radiation Effects) of the International Commission on Radiological Protection and on the Scientific and Ethical Committee for the Health Effects Study on A-bomb Survivors' Children in Hiroshima, Japan. He is a lead investigator on the Pooled Uranium Miners Analysis (PUMA) study and the International Nuclear Workers Study (INWORKS) and is Associate Editor of the journal Occupational and Environmental Medicine. Dr Richardson received a PhD. and M.S.P.H., both in epidemiology, from the University of North Carolina at Chapel Hill.

Ferid Shannoun is the Deputy Secretary of the secretariat of the United Nations Scientific Committee on the Effects of Atomic Radiation (UNSCEAR), which is based in Vienna, Austria. He has 30 years of technical expertise in radiation science and protection, including working for the World Health Organization in Geneva, Switzerland and at the Radiation Protection Department of the Ministry of Health in Luxembourg.

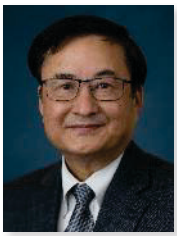
Devin Sullivan is currently the Health Safety & Environment, Research and Development Program Manager at Conexus Nuclear Inc., where he leads a portfolio of projects designed to optimise CANDU station practices in radiation protection, dosimetry, environmental monitoring, emissions, and waste management.

Mr Sullivan's expertise is grounded in a strong background in radiation safety and environmental remediation. He previously held roles at Canadian Nuclear Laboratories, and Golder & Associates, where he led projects in decommissioning, remediation and mining. His diverse experience enables him to effectively bridge the gap between complex technical research and practical station-level implementation, ensuring both safety and economic viability in nuclear operations.

Masatoshi Suzuki holds a cross-appointment as a Senior Researcher at the Regional Environmental Co-Creation Unit, Fukushima Institute for Research, Education and Innovation (F-REI), and as a Senior Assistant Professor at the International Research Institute of Disaster Science (IRIDeS), Tohoku University, Japan. By bridging these two organisations, Dr Suzuki leads interdisciplinary research in radiation life science, specifically focusing on the impact of nuclear disasters. This joint appointment enables him to combine research on animals affected by nuclear disasters at F-REI with the verification of cellular responses at Tohoku University, thereby advancing low dose/low dose-rate radiation research.

He received his PhD. from Nagasaki University, Japan, in 2006. Prior to his current position, he served as a postdoctoral fellow at UT Southwestern Medical Center at Dallas (UTSW), United States, and at the Atomic Bomb Disease Institute, Nagasaki University, where he investigated cellular radiation responses.

Dr Suzuki's current project involves the collection and dissemination of scientific data regarding the Fukushima Daiichi nuclear power plant accident. He focuses on wildlife inhabiting the ex-evacuation zone to monitor biological responses and develop methods for external evaluation, which contributes to advancements in environmental protection frameworks.



Grant Tao PhD. is a Professor and Research Director in the Division of Occupational & Environmental Medicine at the Johns Hopkins School of Medicine. A 1993 IARC Fellow, he spent two decades teaching Occupational and Environmental Epidemiology at the Johns Hopkins Bloomberg School of Public Health. His research focuses on the health impacts of long- and short-term environmental and occupational exposures. Since 2011, when he joined the US shipyard nuclear worker project under Dr Gene Matanoski, he has been a key figure in the project and served as the lead author of the three most recent papers of the study. He is currently the Principal Investigator for the Long-Term Maintenance of the Shipyard Worker's Database, a project sponsored by Fluor Marine Propulsion, LLC through 2028.

Knut Erik Tollefsen is Chief Scientist at Section for ecotoxicology and risk assessment at the Norwegian Institute for Water Research (NIVA) and former Adjunct Professor in Ecotoxicology at Norwegian University of Life Sciences (NMBU). He is an Eurotox registered ecotoxicologist with almost 30 years of experience in ecotoxicology, with special emphasis on ecotoxicological testing, endocrine disruption, radioecology, biomarker research, AOP development, computational toxicology and risk assessment of chemicals and radiation. Dr Tollefsen is a bureau member of the OECD Advisory Group on Emerging Science in Chemicals Assessment (ESCA) and have previously co-chaired the NEA High-Level Group on Low-Dose Research (HLG-LDR) co-ordinated RAD/CHEM AOP Joint Topical Group. He has extensive project management experience in national and international projects and is currently managing NIVA's Computational Toxicology programme (NCTP, www.niva.no/nctp).

Sergey Y. Tolmachev is a Research Professor in the College of Pharmacy and Pharmaceutical Sciences at Washington State University and serves as Director of the United States Transuranium and Uranium Registries (USTUR). Prior to the directorship, he managed the USTUR's radiochemistry laboratory operations and research.

He received an Engineer's Diploma (equivalent to an M.S.) in nuclear-chemical technology, with specialisation in radiochemistry, from the Mendeleev University of Chemical Technology of Russia (Moscow, Russia) in 1993. Dr Tolmachev earned a PhD. (Doctor of Science) in chemistry and physics of condensed matter, with specialisation in radioecology, from Kyushu University (Fukuoka, Japan) in 2001, and completed postdoctoral training at the Japan Atomic Energy Research Institute (Tokai-mura, Japan) and the National Institute of Radiological Sciences (Chiba, Japan).

Dr Tolmachev's research interests include radiation protection, radiation epidemiology, radioecology, radiochemistry, nuclear analytical techniques, internal dosimetry, biokinetic modelling, and radiation measurement and mass spectrometric techniques. He has authored more than 80 peer-reviewed publications.

Dr Tolmachev is a Council Member of the National Council on Radiation Protection and Measurements (NCRP) and serves on NCRP's Program Area Committee 6: *Radiation Measurements and Dosimetry*. He chaired the radiochemistry team of NCRP Council Committee 2: *Meeting the Needs of the Nation for Radiation Protection* and was Vice-Chair of Scientific Committee 6-12: *Development of Models for Brain Dosimetry for Internally Deposited Radionuclides*.

Dr Tolmachev has served on the US Scientific Review Group for the DOE's Russian Health Studies Program. He is a Trustee of the Herbert M. Parker Foundation and a member of the Washington State Academy of Sciences. Internationally, he is a member of the European Radiation Dosimetry Group and serves on the Editorial Board of the Japanese Journal of Health Physics.

Dr Tolmachev is a Fellow of the Health Physics Society.

Ludovic Vaillant is a chemical engineer by trade, graduating from Chimie PariTech in 2001. He joined CEPN after graduation, starting his career as a Junior Researcher. He was involved in various projects dealing with the assessment of nuclear fuel cycle external costs, occupational exposures management in nuclear facilities, radioactive waste management, and recycling of radioactive materials. Now a project manager at CEPN, Mr Vaillant has led numerous projects dealing with the practical implementation of the principle of optimisation of radiological protection in the nuclear industry. He supports a graded, holistic, all-hazard and pragmatic approach of radiological protection. Ludovic is also involved in the management of radioactive waste and materials, and reflections associated with waste management hierarchy and sustainable development.

Mr Vaillant sits on the board of the French Radiation Protection Society (Société Française de Radioprotection, SFRP) and he is a French Delegate at the NEA CRPPH.

He has been progressively involved in ICRP reflections and reports which include LNT hypothesis, calculation of radiological detriment, construction of the effective dose, reasonableness, and protection of the environment. His work and engagement have been strongly supported and influenced by Jacques Lochard and Thierry Schneider. He has been a member of ICRP Committee 1 since 1 July 2021, and involved in several Task Groups including 98, 115, 119, 122 and 123. He is one of the co-authors of ICRP Publication 152 on Radiation Detriment Calculation Methodology.

Filip Vanhavere graduated as civil and nuclear engineer from Ghent University and also obtained a PhD in applied sciences at Ghent University. From the start of his career, he has worked in radiation protection at the Belgian Nuclear Research Centre. He is specialised in dosimetry, quantifying radiation, in all aspects of applications of ionising radiation, from space, over nuclear power plants, to medical applications. Since 2021 he has also connected to the experimental radiotherapy department of KULeuven. He is an author or co-author of more than 240 international publications, and has been guiding nearly 30 PhD students. He is a member of ICRP (International Commission on Radiological Protection) Committee 2, Member of the Board of Advice from the ANVS (Authoriteit Nucleaire Veiligheid en Stralingsbescherming van Nederland), and a member of the executive board of the PIANOFORTE European Partnership for Radiological Protection Research.

George Vardulakis is Deputy Head of the Division of Radiological Protection and Human Aspects of Nuclear Safety at the OECD Nuclear Energy Agency, where he provides strategic scientific and technical leadership on international radiological protection policy.

He is the Scientific Secretary of the Committee on Radiological Protection and Public Health (CRPPH), focusing on advancing international collaboration, including on scientific research in the low-dose range, and on policy development across governments, regulators, research organisations, and international institutions. He has extensive expertise in radiation protection, nuclear and radiological security, emergency preparedness, regulatory implementation, and the development of international standards and best practice guidance.

Over more than two decades, George has held senior scientific, policy, and operational roles across academia, government, international organisations, and the private sector, including with the European Commission Joint Research Centre, the EU Space Programme Agency, the United Nations Office of Counter-Terrorism, and the UK Home Office. His career has combined technical research, policy development, and operational activities in radiological protection, nuclear security, radiation detection, and resilience and emergency planning, spanning both civil nuclear and broader security applications. He holds a BSc in physics from Imperial College London, as well as an MPhil in microelectronic engineering and a PhD in astrophysics, from the University of Cambridge.

Richard Wakeford received a BSc in physics and a PhD in sub-nuclear physics from the University of Liverpool, UK. He worked for British Nuclear Fuels Ltd (BNFL) for almost 30 years before taking early retirement in 2006; for much of this time he specialised in the risks posed by radiation, particularly low-level exposure, and he has written and lectured extensively on the subject. In 1994 he received the Founder's Prize of the UK Society for Radiological Protection for "contributions of distinction to radiological protection". In 2006, Mr Wakeford was appointed Visiting Professor in Epidemiology at the Dalton Nuclear Institute of The University of Manchester, UK, and from 2012 was Professor in Epidemiology at the Centre for Occupational and Environmental Health of The University of Manchester. He retired in 2019 and is now Honorary Professor at the University. During 1997-2022, Richard was Editor-in-Chief of the Journal of Radiological Protection and is now Emeritus Editor, and he is also a member of the Editorial Board of the British Journal of Cancer.

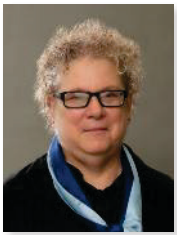
Mr Wakeford was a member of the UK Government's independent expert advisory Committee on Medical Aspects of Radiation in the Environment (COMARE) during 2008-2017, of the European Commission's Expert Advisory Group established under Article 31 of the Euratom Treaty during 2005-2015, of the UK Government's Scientific Advice Group for Emergencies (SAGE) for the Japan Nuclear Incident in 2011, and of the World Health Organisation's Health Risk Assessment Working Group examining the risks to health from the Fukushima accident. He was also a member of the scientific committee of the US National Council for Radiation Protection and Measurements (NCRP) that produced Commentary No. 27 on LNT and radiological protection in 2018. He has been member of Committee 1 of the International Commission on Radiological Protection (ICRP) since 2009, and has been a member of the UK delegation to the UN Scientific Committee on the Effects of Atomic Radiation (UNSCEAR) since 2013.

In the 2024 King's Birthday Honours, Richard was appointed an Officer of the Order of the British Empire (OBE) for "'services to the advancement of the science of radiation protection".

Jessica Wieder is a risk communications and emergency management expert with more than 20 years of federal service. She specialises in translating complex scientific and regulatory information into clear, actionable guidance for senior officials and the public. Ms Wieder held senior leadership roles at FEMA External Affairs and EPA's Radiation Protection Division, where she directed incident communications planning, countered misinformation during major disasters, and developed national consensus messaging for radiological and nuclear incidents.

After leaving federal service in 2025, Ms Wieder founded Teal Skies Consulting, where she helps organisations strengthen crisis, risk, and science communication strategies. She also serves on the National Council on Radiation Protection & Measurements.

Clemens Wittwehr is a Group Leader in the Systems Toxicology Unit of the European Commission's Joint Research Centre (JRC) in Ispra, Italy, where he advances animal-free, human-relevant safety science through knowledge-based and mechanistic approaches. His activities centre on the development and long-term sustainability of the global Adverse Outcome Pathway framework and the AOP-Wiki. Mr Wittwehr facilitates the international SKIG (Society for the Advancement of AOPs Knowledge Base Interest Group), a forum for discussing conceptual and practical developments around AOPs, and also the AOP-KB Coordination Group, which oversees the strategic evolution and governance of the AOP Knowledge Base ecosystem. He furthermore co-facilitates the AI4AOP initiative, exploring how artificial intelligence can support AOP development, knowledge extraction, and mechanistic reasoning in toxicology. In parallel, he contributes to the Methods2AOP effort, which aims to better connect New Approach Methodologies (NAMs) with mechanistic AOP knowledge for regulatory and scientific applications. Earlier in his JRC career, Mr Wittwehr managed the development of IUCLID, the software platform used worldwide for chemical safety data management under frameworks such as REACH, before its transfer to the European Chemicals Agency. He joined the European Commission in 1997 and holds a degree in Computer Science and Business Administration from the University of Linz, Austria.



Gayle Woloschak is Professor of Radiation Oncology and Associate Dean of The Graduate School at Northwestern University where her research focuses on the effects of internal and external radiation exposure on biological systems. She worked previously at Argonne National Laboratory where she still holds a joint appointment. She did her PhD at the Medical College of Ohio/University of Toledo and postdoctoral research at Mayo Clinic-Rochester. She is Chair of Program Area Committee-1 for the NCRP, Co-chair of Committee 1 for International Commission of Radiation Research, past President of the Radiation Research Society, and is a member of the US delegation to the UN Scientific Committee on the Effects of Atomic Radiation.

Carole Yauk was the lead scientist of the Genomics Laboratory in the Environmental Health Science and Research Bureau at Health Canada for 18 years. She joined the University of Ottawa's Department of Biology as a professor in September 2020, where she holds a Canada Research Chair in Genomics and the Environment. Her research broadly focuses on the development and implementation of genomic tools for human health risk assessment of environmental chemicals. Carole currently chairs the Board of Trustees for the Health and Environmental Sciences Institute (HESI) and is involved in its Emerging Systems Toxicology in the Assessment of Risk (eSTAR) and Genetic Toxicology Technical (GTTC) Committees. She is a Canadian delegate and plays leadership roles within the OECD Advisory Group on Emerging Science in Chemicals Assessment. She is Past-President of the Environmental Mutagenesis and Genomics Society (EMGS) and a recent inductee into the Canadian Academy of Health Sciences. She is the 2025 recipient of the EMGS's Alexander Hollaender Award for her outstanding contributions advancing the use of genomic technologies in regulatory toxicology and risk assessment.

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Cover page photos: Scientific researcher (Adobe Stock); Chromosomes from human peripheral blood lymphocytes exposed to 5 Gy of gamma radiation (Andrzej Wojcik, Prof. D.Sc.).