

AGENDA
October 5, 2023

8:30 - 9:00	Registration and Poster Session
9:00 - 9:10	Welcome, Farrah Norton, Science and Technology Program Manager, Atomic Energy of Canada Ltd
9:10 - 9:20	Remarks from Canadian Nuclear Laboratories, Vice President, Science and Technology, Jeff Griffin
9:20 - 9:30	Remarks from co-chair of sub-committee, Ruth Wilkins, Health Canada

Guest Speakers		
9:30 - 9:50	Overview of CANDU Owners Group R&D Program in Health and Radiation Protection	Yevgeniya Le, Program Manager – Health, Safety and Environment, CANDU Owners Group
9:50 - 10:10	Understanding repetitive alpha particle irradiation health effects, from radon exposure in large populations to DNA damage in individual cells	Aaron Goodarzi, Associate Professor, University of Calgary
10:10 - 10:30	Canadian Organization on Health Effects from Radiation Exposure (COHERE) - Strengthening Co-operation within the Canadian Government on Radiation Research	Ruth Wilkins, Research Scientist, Health Canada & Kristi Randhawa, Radiation and Health Sciences Officer, Canadian Nuclear Safety Commission
10:30 - 10:50	Health Effects of Chronic Exposure to Natural Uranium in Drinking Water & an Adverse Outcome Pathway to Kidney Toxicity	Baki Sadi, Research Scientist, Health Canada
10:50 - 11:20	Break and Poster Session	

Guest Speakers		
11:20 - 11:40	New Approaches to detect low dose effects	Sangeeta Murugkar, Associate Professor, Carleton University
11:40 – 12:00	“We Are Going” – From the International Space Station to the Moon and Beyond”	Leena Tomi, Project Officer, Canadian Space Agency

Supporting the development of biological applications and understanding the implications of radiation on human health

12:00 - 12:20	ICRP Task Group 111: How does sex modify ionizing radiation-induced health effects?	Julie LeBlanc, Radiation and Health Sciences Officer, Canadian Nuclear Safety Commission
12:20 - 1:20	Lunch and Poster Session	

SESSION 1		
1:20 - 1:40	Overview of understanding radiation exposure health effects and the development of medical applications theme area	Marie-Claude Gregoire, Head of Directorate Health and Environment, Canadian Nuclear Laboratories
1:40 - 2:10	Understanding Low Dose Radiation exposure health effects	Marcelo Vazquez, Research Scientist, Canadian Nuclear Laboratories
2:10 - 2:40	Assessing Low Dose Radiation exposure and associated health risks	Richard Richardson, Senior Research Scientist, Canadian Nuclear Laboratories
2:40 - 3:20	Break and Poster Session	

SESSION 2		
3:20 - 3:50	Internal Dosimetry & Toxicology of Uranium exposure	Laura Bannister, Research Scientist, Canadian Nuclear Laboratories
3:50 - 4:20	Increasing safety and efficacy of Targeted Alpha Therapy	Svetlana Selivanova, Research Scientist, Canadian Nuclear Laboratories
4:20 - 4:40	The use of nuclear technologies for medical applications	Yi Wang, Research Scientist, Canadian Nuclear Laboratories
4:40 - 4:45	Closing Remarks	

POSTER SESSION

Poster Title	Lead Presenter
Tritium dosimetry following different types of organically bound tritium (OBT) chronic exposures over multiple generations of rodents	Marilyne Stuart
Interpreting Health Risks from Radiation Dose	Lindsey Bertrand
Combination immune checkpoint therapy with low dose radiation: the effect on metastatic cancer and the mechanisms of resistance	Yi Wang
Health effects of chronic exposure to natural uranium in drinking water	Laura Bannister, Sarah Frye
Effects of low-dose chronic gamma radiation on carcinogenesis in vivo - advising AOP development	Holly Laakso
Radionuclide Production and Targeted Radiotherapeutic Evaluation	Laura Bannister
The Epigenetic Basis of Radiation Health Effects: Tissue Regenerative Capacity	Holly Laakso
Multi-Physics Modelling of the Efficacy and Toxicity under Human Vasculature for Targeted Alpha Therapy	Tao Xu
Biological effects of targeted alpha therapy on haematopoietic stem cells	Megha Chandrashekhar
Follow on to definition project investigating the necessary requirements to establish a tissue bank in Canada	Holly Laakso
Study of Airborne COVID-19 Transmission and Seasonal Variations	Sammy Chin
Improving Radiation Dosimetry Assessment for Radiation Protection	Jason Sun
Start-up Testing of Radon Inhalation Chamber	Mandy Serran
Dose response analysis of cell death following uranium exposure	Sarah Frye
Exploring the role of sex and genetic susceptibility factors in radiation sensitivity	Holly Laakso, Laura Bannister

Supporting the development of biological applications and understanding the implications of radiation on human health

Biological effects of Low Dose Radiation	Yi Wang
Oxidative Stress and Inflammatory Responses Induced by Energetic Neutrons	Edouard Azzam, Marcelo Vazquez
Physiologic Investigation of Biological Effects and Mechanisms of Low Dose Radiation on Cataracts	Marlene Kontcho
Resolving Neutron Radiation Quality Issues of Human Blood Cells Using ZED-2 Reactor	Laura Paterson
Investigation of Alpha-Radiation Biomarkers in the Blood of Humans Chronically Exposed to Radon	Marilyn Vera Chang
The Radiation-Induced Bystander Effect: Transcriptomic & Translatomic Profiling	Jihang Yu
Novel mutation in a tobacco smoke model of mouse lung cancer and exploration of synergy with radiation exposure.	Laura Bannister
Role of different radiation qualities on the intestinal microbiome	Holly Laakso, Matt Flegal
Lifespan Study: comparing the toxicity of gamma and tritium-beta radiations	Marie-Claude Gregoire, Joel Surette
Eye Lens Dosimetry	Jason Sun