

MPU SEMINAR SERIES : 2022-2023

Fall 2022

September 02 : Academic, clinical, radiation safety faculty (MPU, McGill U / MUHC)

Academic, clinical & radiation safety overview

September 09 : Academic Principal Investigators (Medical Physics, MUHC / Radiation Oncology, SMBD-JGH)

Medical Physics & Radiation Oncology research projects overview

September 23 : TheranostiCentre Srl Group (ENEA Research Centre, Brasimone, Italy)

The Compact Neutron Generator (CNG) and the LINC-ER project for the treatment of stage I & II solid cancers

October 21 : Brandon Xia (Bioengineering, McGill University, Montreal, Quebec)

Multiscale modeling of biomolecular networks

November 04: André Diamant (CEO, Gray Solutions, Montreal, Quebec)

From academia to entrepreneurship with some ramblings along the way

November 11 : Dimitre Hristov (Dept Radiation Oncology, Stanford University, Stanford, California)

Multiscale modeling of biomolecular networks

November 18 : Claire Cohalan (Physics & Biomedical Engineering, CHUM, Montreal, Quebec)

Theranostics in nuclear medicine

December 02 : Sangkyu Lee (Medical Physics, Memorial Sloan Kettering Cancer Center, New York, New York)

Radiogenomics: Predicting & understanding normal tissue complication with genomics & machine learning

December 09 : Ravi Menon (Medical Biophysics & Medical Imaging, Robarts Research Institute, University of Western Ontario, London, Ontario)

Random walks: A journey from physics to functional brain imaging

December 16 : Mikaël Simard (Engineering Sciences, University College London, London, UK)

A year of experiences in University College London – From proton imaging for lung cancer to applying artificial intelligence in digital pathology for sarcomas

Winter / Spring 2023

January 13 : Martin Vallières (Computer Science, University Sherbrooke, Sherbrooke, Quebec)

An academic journey from Medical Physics to AI₄Health: From diving to surfing research, and back again

January 20 : Robert Weersink (Techna Institute, UHN / Radiation Oncology - Medical

Biophysics - Institute of Biomedical Engineering, University of Toronto, Toronto, Ont)
Volumetric optical imaging for imaged guided therapies

February 10 : Tim Szczykutowicz (Radiology – Medical Physics – Biomedical Engineering,

University of Wisconsin, Madison, Wisconsin)

Deep learning image reconstruction: Compared and contrasted with FBP and IR

February 17 : Susannah Hickling (Radiotherapy Physics, CancerCare Manitoba, Winnipeg, Manitoba)

Treatment of ocular sites with a gantry-based spot scanning proton system

March 17 : Michael Evans (Medical Physics, MUHC, Montreal, Quebec)

Clinical medical physics: Random opportunities and lucky chances

March 31 : Monique Mayer (Small Animal Clinical Sciences, University of Saskatchewan, Saskatoon, Saskatchewan)

Comparative oncology: How veterinary radiation oncology can benefit both animal and human cancer patients

April 14 : Avery Berman (Physics, Carleton University / University of Ottawa Institute of Mental Health Research, Ottawa, Ontario)

Imaging brain function with improved physiological and spatial specificity using MRI

April 21 : Ruth Wilkins (Ionizing Radiation Health Science Division, Consumer & Clinical

Radiation Protection Bureau, Health Canada, Ottawa, Ontario)

Biodosimetry at Health Canada

May 26 : Marc Chamberland (Medical Physics, University of Vermont Medical Center, Burlington, Vermont)

egs_brachy and the CLRP Monte Carlo TG-43 parameter database

June 09 : Haley Patrick (Medical Physics Unit, McGill University, Montreal, Quebec)

Everything you wanted to know about Residency applications

June 16 : Nathaniel Lasry (Founder & CTO, IMD Research, Montreal, Quebec)

vCuff and the Internet of Medical Things