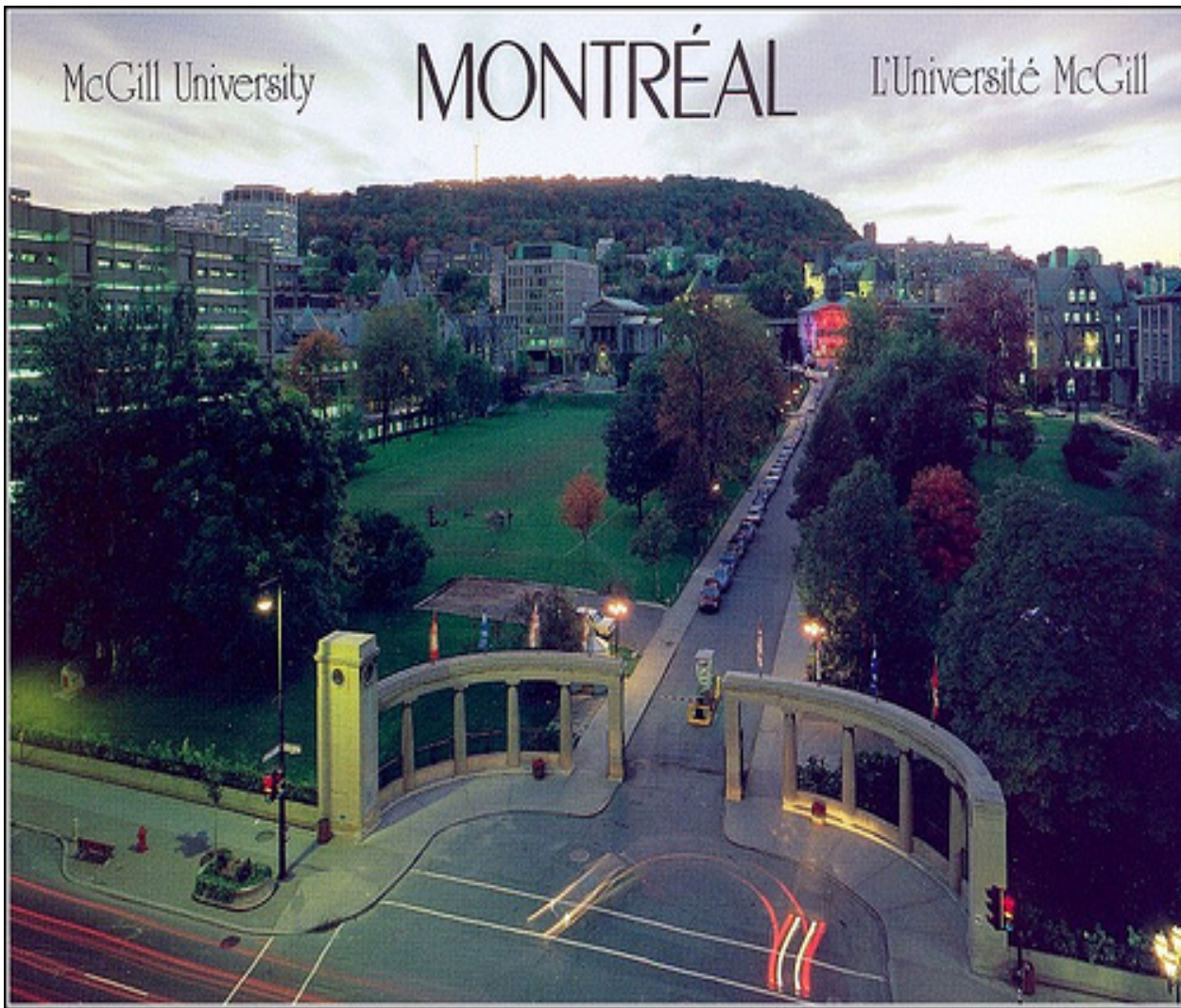




Funded by:

Workshop: March 30-31, 2015
'From Track Structure to Clinical Outcomes and Reverse'
Ballroom Thomson House
3650 rue McTavish
Montreal, QC H3A 1Y2, Canada



Funded by:

Monday 30th of March

09:00-09:20 Coffee

09:20-09:30 Shirin Abbasi Nejad Enger, McGill University, Presentation and overview of the workshop

Moderator: Shirley Lehnert

09:30-10:10 Neil Kopek, McGill University Health Center, Higher doses per fraction and smaller fields: the clinical impetus for more accurate dosimetry

10:10-10:50 X. Allen Li, Medical College of Wisconsin, Outcome modeling for radiation treatment planning

10:50-11:10 Coffee

11:10-11:50 Issam El Naqa, McGill University, Systems Radiobiology for radiotherapy response

11:50-12:30 Darel Hunting, University of Sherbrooke, Understanding the radiobiology of DNA modified by chemotherapeutic agents: cisplatin adducts greatly modify DNA sensitivity to gamma radiation

12:30-13:30 Lunch

Moderator: Issam El Naqa

13:30-14:10 Sunuchakan Sanguanmith, Jean-Paul Jay-Gerin, University of Sherbrooke, Physicochemical basis for the biological action of ionizing radiation

14:10-15:00 Shirley Lehnert, McGill University, Radiation Dose in the Context of Radiochemotherapy

15:00-16:00 Discussion Panel: X. Allen Li, Issam El Naqa, Shirley Lehnert



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Tuesday 31st of March

Moderator: Jan Seuntjens

- 09:00-09:40** Jan Schuemann, Harvard University, “From clinical MC simulations to track structure calculations”
- 09:40-10:20** José María Fernández-Varea, University of Barcelona, “Radiation-matter interaction models for track-structure applications”
- 10:20-10:40** **Coffee**
- 10:40-11:20** Léon Sanche, University of Sherbrooke, “Low energy electron interactions and cross sections of relevance to radiation dose calculations in biological media”
- 11:20-12:00** Michael Dingfelder, East Carolina University, “Cross sections for track structure simulations of charged particles in biological media”
- 12:00-13:00** **Lunch**

Moderator: Shirin Abbasi Nejad Enger

- 13:00-13:40** Sebastien Incerti, Bordeaux 1 University, “Geant4-DNA: past, present and future”
- 13:40-14:10** Mario Bernal, Departamento de Física Aplicada, Instituto de Física Gleb Wataghin, UNICAMP, Campinas, Brasil, “Using quantum molecular dynamics to study radiation-DNA interaction”
- 14:10-14:20** **Coffee**
- 14:20-14:40** Piotr Pater, McGill University, “Simulation of clusters of DNA lesions using a probabilistic approach”
- 14:40-15:00** Gloria Backstrom, McGill University, “An approach to predict RBE based on clusters of energy deposit sites”
- 15:00-15:20** Judy Wang, McGill University, “Validation of MC track structure codes against experiments in amorphous ice”
- 15:20-16:00** **Discussion** Panel: José María Fernández-Varea, Michael Dingfelder, Léon Sanche



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