Student Research Day

The Department of Oncology Presents:
13th Annual
Oncology Research Day

PROGRAM

Thursday, June 23, 2016
9:00 am - 3:00 pm
4th Floor, JCC Lecture Theatre
## ITINERARY

### Oncology Research Day

**Juravinski Cancer Centre**

**4th Floor Lecture Theatre**

**Thursday, June 23, 2016**

*9:00 a.m. to 3:00 p.m.*

<table>
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<th>Time</th>
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<td>9:00 – 9:15 a.m.</td>
<td>Welcome, Dr. Sachi Voruganti, Associate Professor Chair and Host, Student Research Day</td>
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<td>9:15 – 10:45 a.m.</td>
<td>Oral Presentations</td>
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<td>10:45 – 12:00 noon</td>
<td>Poster Viewing</td>
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<td>11:30 – 12:00 noon</td>
<td>Lunch</td>
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| 12:00 – 1:00 p.m.   | Keynote Speaker, Dr. Brian Lichty, Associate Professor, Department of Pathology & Molecular Medicine, McMaster University  
                        *Title: A novel cancer therapy isolated in the jungles of Brazil*. |
| 1:00 – 2:30 p.m.    | Oral Presentations Continue                                         |
| 2:45 – 3:00 p.m.    | Awards Presentation                                                 |

- The Stuart Jay Cohen Memorial Awards Presentation
  - Poster Research Awards
  - Oral Research Awards

Dr. Mark Levine, Chair, Department of Oncology

- Acknowledgements and Closing Remarks
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<th>Student</th>
<th>Supervisors &amp; Presentations</th>
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| 1 | Paul Barnfield  
PGY5 Resident, Medical Oncology  
McMaster University  
9:15 – 9:30 a.m. | **Title:** Multiplex Assessments of Tumour Cells in Hamilton (MATCH)  
**Supervisor:** Rosalyn Juergens, Associate Professor, Oncology, McMaster University, Juravinski Hospital and Cancer Centre |
| 2 | Elysia Donovan  
PGY5 Resident, Radiation Oncology  
McMaster University  
9:30 – 9:45 a.m. | **Title:** Brachytherapy for endobronchial metastasis: An effective method of achieving palliative relief of cough, hemoptysis, chest pain and dyspnea  
**Supervisor:** Ranjan Sur, Professor, Oncology, McMaster University, Juravinski Hospital and Cancer Centre |
| 3 | V.D. Du Le  
Graduate Student  
Radiation Sciences  
McMaster University  
Juravinski Cancer Centre  
9:45 – 10:00 a.m. | **Title:** Dual modality optical biopsy of glioblastoma with diffuse reflectance and fluorescence  
**Supervisor:** Joe Hayward, Associate Professor, Medical Physics and Applied Radiation Sciences, McMaster University, Juravinski Hospital and Cancer Centre |
| 4 | Roochi Arora  
Resident, Internal Medicine  
McMaster University  
10:00 – 10:15 a.m. | **Title:** Neoadjuvant chemoradiation for the treatment of locally advanced esophageal cancer.  
**Supervisor:** Rosalyn Juergens, Associate Professor, Oncology, McMaster University, Juravinski Hospital and Cancer Centre |
| 5 | Samantha-Jo Caetano  
Graduate Student  
Mathematics & Statistics  
McMaster University  
10:15 – 10:30 a.m. | **Title:** Proposing and analysing methods which improve the Kaplan-Meier estimates of de-identified time-to-event data  
**Supervisor:** Gregory Pond, Associate Professor, Oncology, McMaster University, Juravinski Hospital and Cancer Centre |
| 6 | Vanessa Houde  
Postdoctoral Fellow  
Medicine/Oncology  
McMaster University  
10:30 – 10:45 a.m. | **Title:** Genetic loss of AMPK β1 accelerates tumorigenesis  
**Supervisor:** Gregory Steinberg, Professor, Medicine, McMaster University |
### ORAL PRESENTATIONS RESUME AT 1:00 P.M.

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<th>Session</th>
<th>Title</th>
<th>Supervisor</th>
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<td>Pauline Kosalka</td>
<td>Developing a new model through quality improvement to reduce wait times for oncology patients presenting to the ED of the Niagara Health System. Supervisor: Kathleen Willis, Regional Sepsis Coordinator, Niagara Health System, St. Catharines</td>
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<td>François Caron</td>
<td>Risks of atrial fibrillation and bleeding associated with ibrutinib: A systematic review and meta-analysis Supervisor: Chris Hillis, Clinical Research Fellow, Oncology, Juravinski Hospital and Cancer Centre</td>
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<td>9</td>
<td>Amy Gillgrass</td>
<td>What is the role of the immune response in TNBC? Supervisor: Anita Bane, Associate Professor, Oncology, McMaster University, Juravinski Hospital and Cancer Centre</td>
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<td>10</td>
<td>Julie Blain</td>
<td>Long bone metastases and pathologic fracture risk: A retrospective matched case control study Supervisor: Benjamin Deheshi, Radiation Therapy, Juravinski Hospital and Cancer Centre</td>
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<td>11</td>
<td>Jessica Bogach</td>
<td>Quality concerns with pre-operative pelvic computed tomography (CT) or magnetic resonance imaging (MRI) scans for patients undergoing major rectal cancer surgery in Local Health Integration Network 4 (LHIN4) hospitals: A retrospective population-based chart audit. Supervisor: Marko Simunovic, Professor, Surgery, McMaster University, Juravinski Hospital and Cancer Centre</td>
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A. Courtney Coschi, Undergraduate Medical Student
Understanding the attitudes and beliefs of oncologists regarding the transition/sharing of survivorship care with PCPs: A systematic review
Supervisor, Jonathan Sussman, Associate Professor, Oncology

B. Derek Chu, Resident, Internal Medicine
Systematic review and meta-analysis of antithrombotics (antiplatelets and anticoagulants) for cardiovascular events in patients with essential thrombocytosis
Supervisor, Sonia Anand, Professor, Medicine

C. Oren Levine, Clinical Fellow
Systemic therapy for previous untreated advanced BRAF-mutated melanoma: A network meta-analysis
Supervisor, Xie Feng, Assistant Professor, Clinical Epidemiology & Biostatistics

D. Nidhi Kumar-Tyagi
Rates of cardiotoxicity in Stage I-III HER2+ breast cancer at JCC from 2006-2013
Supervisor, Bindi Dhesy, Associate Professor, Oncology

E. Elysia Donovan, Resident, Radiation Oncology
Volumetric modulated arc therapy versus intensity modulated radiotherapy versus 3D conformal planning technique for esophageal cancer: A new standard or case-based decision?
Supervisor, Ranjan Sur, Professor, Oncology

F. Nhu Tram Nguyen, Resident, Radiation Oncology
Brachytherapy as a sole treatment modality for early esophageal cancer
Supervisor, Ranjan Sur, Professor, Oncology

G. Jeevin Shahi, Resident, Radiation Oncology
The management of small cell lung cancer with radiotherapy: A Pan-Canadian survey of radiation oncologists.
Supervisor, Anand Swaminath, Associate Professor, Oncology

H. Catherine Young, Undergraduate, Radiation Therapy
12-hour shifts for radiation therapists
Supervisor, Marcia Smoke, Manager, Radiation Therapy

I. Julianna Sienna, Resident, Radiation Oncology
Sinonasal undifferentiated carcinoma with brain metastasis: A case report and review of literature
Supervisor, Brandon Meyers, Assistant Professor, Oncology

J. Amber Murphy, Undergraduate, Medical
Interest in GynOnc E-Learning modules for OB/GYN residents
Supervisor, Laurie Elit, Professor, Obstetrics and Gynecology
K. Kayla Driver, Graduate Student, Biochemistry and Biomedical Sciences
The effect of approved drugs targeting dopamine transporters and receptors in breast cancer stem cells
Supervisor, John Hassell, Professor, Pathology & Molecular Medicine

L. James Lally – Fellow, Medicine
Elevated lipogenesis due to fructose overfeeding and a single-point mutation in acetyl-CoA carboxylase (ACC accelerates the development of hepatocellular carcinoma
Supervisor, Gregory Steinberg, Professor, Medicine

M. Lyndsay Rayner, Graduate Student, Biology
High Kaiso expression correlates with TGF-β signaling and tumor stage in triple negative breast tumours from women of African ancestry (WAA)
Supervisor, Juliet Daniel, Biology

N. Blessing Bassey-Archibong, Graduate Student, Biology
Kaiso depletion inhibits triple negative breast cancer cell proliferation
Supervisor, Juliet Daniel, Biology

O. Linda Villani, Graduate Student, Medicine
Canagliflozin potently activates AMPK and inhibits the growth and survival cancer cells
Supervisor, Gregory Steinberg, Medicine
Keynote Speaker

Dr. Brian Lichty, PhD
Associate Professor
Pathology and Molecular Medicine
Division: Molecular Medicine
McMaster Immunology Research Centre

Dr. Brian Lichty is a distinguished scientist with extensive expertise in oncolytic viruses and related immunotherapies, including seminal work with Dr. John Bell at the Ottawa Regional Cancer Centre. He has been a professor in the Department of Pathology & Molecular Medicine and the McMaster Immunology Research Centre (MIRC) at McMaster University since 2004. Dr. Lichty’s expertise includes influence research in the identification of strategies to leverage oncolytic viruses to harness the patient’s immune system in a sustainable manner, including vaccine design and engineering to directly engage the adaptive immune system tumour-specific and/or to enhance combinations with other immunotherapies. He is also director of the Robert E. Fitzhenry vector lab at McMaster where clinical grade viral vaccines are manufactured for human clinical trials. Dr. Brian Lichty received his PhD from the University of Toronto and holds a BSc from the University of Guelph.
EVENT JUDGES
Oral Presentations

Dr. Anand Swaminath, B.Sc., MD., FRCPC
Associate Professor, Division of Radiation Oncology
Department of Oncology, Faculty of Health Sciences

Dr. Swaminath is a radiation oncologist at the Juravinski Cancer Centre and an Associate Scientist at the Escarpment Cancer Research Institute in Hamilton, Ontario. His main clinical interests are in the treatment of lung and hepatobiliary cancers with a focus on use of ablative radiotherapy directed at primary lung cancer and oligometastatic disease. His research interests are mainly in the evaluation of new technologies in radiotherapy delivery, clinical trials and patient outcomes.

Dr. Rosalyn Juergens, BS., MD., Ph.D.
Associate Professor, Division of Medical Oncology
Department of Oncology, Faculty of Health Sciences

Dr. Juergens is a medical oncologist at the Juravinski Cancer Centre and Scientist at the Escarpment Cancer Research Institute in Hamilton, Ontario. Her clinical expertise is in the area of lung cancer and esophageal cancer. Her area of research expertise is in functional imaging with FLT PET. Dr. Juergens’ other area of research has been in developmental therapeutics with a focus on epigenetics. Her work focuses on the inhibition of DNA methyl transferase and histone deacetylators as therapeutic options in oncology.

Dr. Bradley Doble, PhD.
Scientist, McMaster Stem Cell and Cancer Research Institute (SCC-RI)
Assistant Professor, Department of Biochemistry and Biomedical Sciences, Faculty of Health Sciences

Dr. Doble’s research program is focused on understanding the signaling mechanisms that maintain embryonic stem cells in a pluripotent self-renewing state versus those that promote their differentiation into specialized cell types. He is particularly interested in understanding how signals are relayed through cells via changes in the phosphorylation status of signaling molecules. Enzymes called kinases are responsible for phosphorylating proteins, often dramatically changing the function of the protein targets.
EVENT JUDGES
Poster Presentations

Dr. Jeffrey Greenspoon, M.Sc., MD., FRCPC
Assistant Professor, Division of Radiation Oncology
Department of Oncology, McMaster University

Dr. Jeffrey Greenspoon is a radiation oncologist at the Juravinski Cancer Centre. His clinical expertise is in the treatment of both adult and children brain tumours – including stereotactic radiosurgery (SRS), spinal and paraspinal tumours including stereotactic body radiotherapy (SBRT) and complex retreatment cases.

Dr. Janos Juhasz, B.Sc., M.Sc., Ph.D., MCCPM
Medical Physicist and Adjunct Professor
Department of Medical Physics
Juravinski Cancer Centre and Ryerson University

Dr. Janos Juhasz primary research and clinical focus is in the field of radiation biophysics and image guided radiation therapy. He is currently a member of the breast disease site team and responsible with the total body irradiation treatment. Dr. Juhasz also teaches radiation biology and radiation therapy at Ryerson University in Toronto.

Dr. Kevin Zbuk, M.Sc., MD., FRCPC
Associate Professor, Division of Medical Oncology
Department of Oncology, McMaster University

Dr. Zbuk’s clinical areas of expertise is in the treatment of gastrointestinal (GI) malignancies and cancer genetics. He is the Head of the Cancer Genetics Program at the Juravinski Cancer Centre.
The Department of Oncology and Faculty of Health Sciences at McMaster University are grateful to the following organizations for their support of Student Research Day:

Eli Lilly Canada Inc.

Pfizer Canada Inc.

The Juravinski Hospital and Cancer Centre

The Stuart Jay Cohen Memorial Fund