

Sixth Annual Summer School on Medical Imaging End of Year Student Presentations

Date / Time

Aug. 16-17, 2016
9:30 a.m. – 3:30 p.m.

Location

Lakehead University
ATAC 1006

Judges

- Dr. Roxanne Deslauriers – Scientific Director, TBRI
- Dr. Todd Randall – Acting Dean, Faculty of Science and Environmental Studies, Lakehead University
- Dr. Craig MacKinnon – Professor and Chair, Department of Chemistry, Lakehead University
- Dr. Christine Gottardo – Professor, Department of Chemistry, Lakehead University
- Dr. Peter McGhee – Director of Medical Physics, TBRHSC; Adjunct Professor, Department of Physics, Lakehead University
- Dr. Ian MacKay – Lecturer, Department of Physics, Lakehead University

Judge Schedule

Session	Aug. 16	Aug 17
Morning	Dr. Roxanne Deslauriers Dr. Christine Gottardo	Dr. Craig MacKinnon Dr. Ian MacKay
Afternoon	Dr. Todd Randall Dr. Christine Gottardo	Dr. Peter McGhee Dr. Ian MacKay

Schedule for Aug. 16, 2016

Time	Student	Title	Supervisor
9:30-9:45	Welcome		
10:00-10:15	Maria Kisslegoff	Neural Activations Underlying Visuomotor Adaptation Following Stroke, fMRI Study	Dr. Jane Lawrence-Dewar
10:15-10:30	Boris Potoyants	PEM a Solution to the Shortcomings of MRI and Mammogram for Breast Cancer Detection	Dr. Vivianne Freitas
10:30-10:45	Emily Puumala	Electrochemical Detection of Mercury (Hg(II)) Using Modified Nonporous Gold Micro Electrodes	Dr. Aicheng Chen
10:45-11:00	Break		
11:00-11:15	Ben Gidalevich	Coordinate Reconstruction and Energy Resolution in Solid State PET Detectors: Our Ways to Improve Both	Dr. Alla Reznik
11:15-11:30	Keren Mayorov	Image Reconstruction for Organ Specific Positron Emission Tomography	Dr. Alla Reznik
11:30-11:45	Paul Chen	High Resolution Positron Emission Mammography (PEM): First Steps Towards A Clinical Prototype	Dr. Alla Reznik
11:45-12:00	Deliberations		
12:00-1:00	Lunch		
1:00-1:15	Dipal Patel	Contrast Optimization for Variable-Field MRI: A Guide to Smarter Imaging	Dr. Laura Curiel
1:15-1:30	Jeffrey Andrew-Cotter	MRigHIFU: Design of Software for the MRI-Table	Dr. Laura Curiel
1:30-1:45	Owen Bai	Alzheimer's Disease Prediction Using Bayesian Probability	Dr. Mitchell Albert
1:45-2:00	Break		
2:00-2:15	Peter Smylie	<i>In vivo</i> use of Cucurbit[6]uril as an MRI Contrast Agent Through HyperCEST	Dr. Mitchell Albert
2:15-2:30	Braedan Prete	Functionalized ¹²⁹ Xe Biosensors as Molecular Imaging Agents for Hyperpolarized ¹²⁹ Xe MRI	Dr. Mitchell Albert
2:30-2:45	Deliberations		
2:45-3:00	Awards		

Schedule for Aug. 17, 2016

Time	Student	Title	Supervisor(s)
9:30-9:45	Welcome		
10:00-10:15	Iggy Osmulski	Brain Function During Grasping Tasks in Stroke	Dr. Jane Lawrence-Dewar
10:15-10:30	Simrun Chahal	Investigating the Pain Blocking Response of Buprenorphine in Rats Using Hyperpolarized ¹²⁹ Xe fMRI	Dr. Mitchell Albert
10:30-10:45	Ashlyn Kopanski	Investigating the use of Propane Gas as an Inhalation Imaging Agent for MRI	Dr. Mitchell Albert
10:45-11:00	Break		
11:00-11:15	Alexander Medrek	Mouse Stereotactic System for Blood Brain Barrier FUS Exposure	Dr. Laura Curiel
11:15-11:30	Jason Sri Kantha	Revolutionizing Research in Alzheimer's with the Application of Bioinformatics	Dr. Apichart Linhananta
11:30-11:45	Carl Fletcher	A Physical Model to Better Understand HIV	Dr. Apichart Linhananta
11:45-12:00	Deliberations		
12:00-1:00	Lunch		
1:00-1:15	Victor Xiao	Lead Oxide as a Photoconductor for Direct Conversion X-ray Medical Imaging Detectors	Dr. Alla Reznik
1:15-1:30	Brandon Baldassi	Characterization of Cadmium Zinc Telluride as a Material for Solid State Detectors in Advanced Computed Tomography	Dr. Alla Reznik
1:30-1:45	Sajed McHeik	Photonic Crystal Fiber (PCF) to Develop a Biological Sensor	Dr. Gautam Das
1:45-2:00	Break		
2:00-2:15	Kathleen Roulston	Testing of Novel Antibody Fragments for Their Ability to Bind the Human Papillomavirus 16 E6 Protein	Dr. Ingeborg Zehbe
2:15-2:30	Miranda Mellerup	Molecular Therapies for HPV-Related Cancer: Using Western Blot Imaging to Optimize the Efficacy of siRNA/DsiRNA	Dr. Ingeborg Zehbe
2:30-2:45	Chris Gibb	Creating a Platform to Analyze Pathogen-Host Relationships in Next Gen Sequencing Data	Dr. Ingeborg Zehbe
2:45-3:00	Deliberations		
3:00-3:15	Awards		