



Spring Course

Advanced Topics in Genome-Wide Association (GWA) Studies

This five-day course will cover many current topics that arise in current GWA efforts through lecture-based seminars and practical exercises. At the end of the course, students will have familiarity with principles of GWA analysis, rare variant analysis, 1,000 genomes imputation, penalized regression methods, parent-of-origin effects and epigenetic measures.

Course Directors: Dr. Lyle Palmer and Dr. Jo Knight

Course Dates: June 3 to June 7, 2013

Lecturers: Dr. Jo Knight, Dr. Lei Sun, Dr. Cornelia van Duijun, Dr. Heather Cordell, Dr. Bryan Howie, Dr. Andrew Morris, Dr. Rafal Kustra, Dr. Gary Bader, Dr. Katrina Goddard

Location: Toronto, Ontario, Canada

Course Fees: Students: \$700 + HST; Non-students: \$850 + HST

Registration: Open March 1 to May 1, 2013
 **Note: Course enrolment is limited to 20 participants.
<http://gwas.events.oicr.on.ca/gwas-home>

Prerequisites: Students should have basic knowledge of genetics and statistics. Familiarity with R and LINUX is also required. Students should have basic knowledge of GWAS analysis.

Course Details:

	Morning session	Afternoon session
Monday	Basic Principles of GWA Analysis	Rare Variant Analysis I; Lab Practical I
Tuesday	From Hypothesis Free GWAS to Hypothesis Driven GWAS; Lab Practical II	From GWAS to Prediction
Wednesday	Penalized Regression and Maternal Effects; Lab Practical III	1,000 Genomes Imputation; Lab Practical IV
Thursday	Rare Variant Analysis II; Lab Practical V	Epigenetic Measures
Friday	Pathway Analysis; Lab Practical VI	Closing Lecture

For more information please contact Jennifer Skinner at jennifer.skinner@oicr.on.ca