

Course Outline - CHL 7001H:

STATISTICAL METHODS FOR GENETICS & GENOMICS - RESEARCH SEMINAR AND JOURNAL CLUB

TIME: 10am – 12 noon Friday
Seminar: 10-11am
Small Group Discussion: 11am – 12 noon

LOCATION: Prosserman Centre of the Samuel Lunenfeld Research Institute,
60 Murray Street, 5th floor, Room 5-102

Co-INSTRUCTORS:

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A. COURSE OVERVIEW

Goals and Objectives:

- To obtain basic understanding of current developments in statistical genetic/genomic methods and current analytic issues in genetic epidemiology.
- To become cognizant of sources of methodology literature for the design and analysis of investigations in statistical genetics, statistical genomics, and genetic epidemiology.
- To develop critical evaluation skills for underlying theory and/or applications of current study designs and statistical analysis methods.
- To develop skills in communication and presentation in an inter-disciplinary setting.

Audience: Graduate students in Biostatistics, Epidemiology or Statistics

Special features about course delivery:

One hour Journal Club/Research Seminar session, held 2-3 times per month, September through May, with faculty participation.

<http://research.lunenfeld.ca/MITACS/DEFAULT.ASP?page=Fall%202011>

Each seminar session will be followed by one hour small-group discussion for the registered students in the same location, with faculty discussion leaders

Co-ordinated with the monthly International Speaker Seminar Series organized as part of the STAGE Training Program in Advanced Genetic Epidemiology.

<http://www.stage.utoronto.ca>

Guest speaker talks will be held Friday at 12 noon (CDIU Room, 4th Floor, Elm Wing, Sick Kids), followed by discussion with course participants (Room 6711, 6th Floor, SickKids Atrium).

Prerequisites: Biostatistics/Statistics coursework at the graduate level.

Class size for discussion: One or two groups of 4-6 trainees.

Faculty Discussion leaders:

Shelley Bull, Dalla Lana School of Public Health & Samuel Lunenfeld Research Institute
Andrew Paterson, Dalla Lana School of Public Health & SickKids Research Institute
Lei Sun, Dalla Lana School of Public Health

B. ASSIGNMENTS AND EVALUATION

Students are expected to:

- (1) attend all Friday journal club sessions and seminars,
- (2) present in one journal club session, and
- (3) submit a paper consisting of a literature review in a specific topic area of interest or summarizing two of the guest seminar presentations.

Pass/Fail according to

Presentation (Jan 20, Feb 17, Mar 16, or April 13, 2012)	35%
Participation in Seminars and Discussion Groups	30%
Final paper (due April 23, 2012)	35%

C. STATISTICAL SOFTWARE

No special requirements.

D. STANDARD NOTICES

Plagiarism

The Code of Behaviour on Academic Matters (University of Toronto Governing Council Secretariat, 1991) reads:

“ It shall be an offence for a student knowingly:

- *to represent as one's own any idea or expression of an idea or work of another in any academic examination or term test or in connection with any other form of academic work, i.e. to commit plagiarism;*
- *to submit, without the knowledge and approval of the instructor to whom it is submitted, any academic work for which credit has previously been obtained or is being sought in another course or program of study in the University or elsewhere;*
- *to submit any academic work containing a purported statement of fact or reference to a source which has been concocted;” (B. 1.d-f)*

Academic deadlines and policy on late assignments

Deadline for scheduling student presentations: 9 December 2011.

Due date for the Final paper: ??23?? April 2012 (no extensions)

E. DETAILED LECTURE AND EVALUATION SCHEDULE (subject to revision)

September 9	10am – Organizational Meeting for Journal Club
September 16	10am – Organizational Meeting for CHL Course Participants
September 23	No seminar due to IGES Meeting
September 30	10am – IGES Meeting Highlights
October 7	12 noon ** please note change in time and location ** International Speaker Seminar - Dr. Stephen S. Rich, Director, Center for Public Health Genomics and Harrison Professor of Public Health Sciences, University of Virginia
October 14	No seminar – ASHG Meeting
October 21	10am – ASHG Meeting Highlights
October 28	10am – Journal Club
November 4	12 noon ** please note change in time and location ** International Speaker Seminar – TBA
November 11	10am – Journal Club
November 18	10am – Journal Club
November 25	10am – Journal Club
December 2	12 noon ** please note change in time and location ** International Speaker Seminar – TBA
December 9	10am – Journal Club – last week of classes Final date for scheduling student presentations

January 6	12 noon ** please note change in time and location ** International Speaker Seminar – TBA
January 13	Journal Club
January 20	Student Presentation(s)
January 26	12 noon ** please note that this is a Thursday ** International Speaker Seminar – Dr. Clarice R. Weinberg, Chief, Biostatistics Branch, National Institute for Environmental Health Sciences, National Institutes of Health

February 3 Journal Club
February 10 Journal Club
February 17 Student Presentation(s)
February 24 No seminar – Reading Week

February 27 ** final date to drop Full-Year courses without academic penalty

March 2 12 noon ** please note change in time and location **
International Speaker Seminar
– Dr. John Witte, Epidemiology & Biostatistics and Urology,
University of California San Francisco, Institute for Human Genetics,
Helen Diller Family Comprehensive Cancer Center

March 9 Journal Club
March 16 Student Presentation(s)
March 23 Journal Club/Research
March 30 Journal Club/Research

April 5 12 noon ** please note that this is a Thursday **
International Speaker Seminar
– Dr. Giovanni Parmigiani, Oncology, Biostatistics, and Pathology,
The Sidney Kimmel Comprehensive Cancer Center, Johns Hopkins University

April 6 Good Friday Holiday

April 13 Student Presentation(s)
April 20 Journal Club

April 23(TBC) Due date for final student papers (no extensions)

April 27 No seminar – Week of Canadian Genetic Epidemiology &
Statistical Genetics Meeting

May 4 12 noon ** please note change in time and location **
International Speaker Seminar
– Dr. Alice S. Whittemore, Epidemiology and Biostatistics, Department of Health
Research and Policy, Stanford University School of Medicine

May 11 Journal Club
May 18 No seminar – Victoria Day Weekend
May 25 Journal Club

Seminar web page:

<http://research.lunefeld.ca/MITACS/DEFAULT.ASP?page=Fall%2020101>

25 August 2011