

3rd Annual Biostatistics Training Initiative Distinguished Lecture

The Ontario Institute for Cancer Research's (OICR) Biostatistics Training Initiative (BTI), led by Drs. Richard Cook (University of Waterloo) and Greg Pond (McMaster University), is pleased to announce the 3rd Annual BTI Distinguished Lecture, to be held on November 15, 2017.

**Title: Enrichment strategies for biomarker stratified clinical trials.
Speaker: Dr. Stephen George, Biostatistics Professor Emeritus,
Biostatistics and Bioinformatics Department, Duke University School
of Medicine**

**Location: OICR, 661 University Avenue, Suite 510, Toronto
(Boardrooms 5-20/5-21)**

Date: November 15, 2017

Time: 12:30 p.m.

Abstract: In large clinical trials using a biomarker stratified design, the cost of treating and following all patients for clinical outcomes may be prohibitive. With a fixed number of randomized patients, the efficiency of testing certain parameters can be improved by increasing the proportion of biomarker positives on study, especially when the prevalence rate of biomarker positives is low in the underlying patient population. When the cost of assessing the true biomarker is high, one can further improve the study efficiency by oversampling biomarker positives with a cheaper auxiliary variable or biomarker that correlates with the true biomarker. An enriched biomarker stratified design enriches the cohort of randomized patients by directly oversampling the relevant patients with the true biomarker, while an auxiliary-variable-enriched biomarker stratified design enriches the randomized cohort based on an inexpensive auxiliary variable. The latter design avoids testing the true biomarker on all screened patients and reduces treatment waiting time. For both designs, the optimal enrichment proportion is derived for testing a single hypothesis or two hypotheses simultaneously. Numerical studies and examples are presented.

Dr. George's lecture will be preceded by two invited speakers, Drs. Lillian Siu (University Health Network) and Jerry Lawless (University of Waterloo).

**Register now at <https://events.oicr.on.ca/biostatistics>.
The registration deadline is November 3, 2017.**

Additional information, including the full agenda, speaker presentation title/abstract, and registration/satellite viewing details can be found on the registration website.