

## **Summer Institute of Advanced Epidemiology and Preventive Medicine**

### **Critical Review of Epidemiological Literature and Translational Epidemiology – Summer Course 2013 Outline**

Sunday – Thursday (July 14<sup>th</sup> - July 19<sup>th</sup>)  
08:30 to 13:00 (Except Thursday 08:30 – 15:00)

**Course Instructor: Moyses Szklo**

Teaching Assistant: Michael Brik – [michael.brik@gmail.com](mailto:michael.brik@gmail.com)

#### Epidemiologic Themes Relevant to Health Policy

During the course, epidemiologic concepts relevant to the development of health policies, programs and interventions will be discussed.

The course will cover study designs to evaluate effectiveness, including a discussion of pre-post and quasi-experimental studies; issues related to screening evaluation such length-biased sample, referral time and over-diagnosis biases. Lead time bias and its estimation will also be presented.

Other concepts to be covered are the primacy of the population-based approach for primary and secondary prevention, Rothman's causality model and its importance to prevention, and a critique of Hill's guideposts with a special focus on the pitfalls of using consistency of findings to infer effectiveness.

Format: Lectures and small group discussions followed by a general discussion.

#### Preparation of manuscripts reporting epidemiologic findings

This mini-course will review some of the main points to bear in mind when preparing manuscripts to be submitted to peer-reviewed journals. The focus of the course will be on avoiding common mistakes in writing such articles. A theoretical presentation will be followed by a discussion of original submissions of papers that were eventually accepted for publication in the *American Journal of Epidemiology* (*AjE*). There will also be an opportunity for a discussion of students' questions related to the review process.

### Course Schedule

Day	Schedule	Lecture	Exercise
1. Sun, 14 <sup>th</sup>	08:30 – 10:30	1. Rules of Evidence; Efficacy and Efficiency; Meta-Analysis	
	11:00 – 13:00	2. Screening	(No exercise on the first day)
2. Mon, 15 <sup>th</sup>	08:30 – 09:30	3. Breast cancer screening	
	10:00 – 13:00		Breast cancer screening *
3. Tue, 16 <sup>th</sup>	08:30 – 10:30	4. Semantic and other issues related to translational epidemiology	
	11:00 – 13:00		Breast cancer screening – discussion
4. Wed, 17 <sup>th</sup>	08:30 – 10:30	5. Population-based vs. high risk approaches; Critique of Hill's guideline.	
	11:00 – 13:00		Decision tree exercise and discussion
<u>Common Pitfalls in Reporting Epidemiologic Findings:</u>			
5. Thur, 18 <sup>th</sup>	08:30 – 10:30	6. The peer review process; Preparation of manuscripts reporting epidemiologic findings	
	11:00 – 15:00		Discussion of papers
Fri, 19 <sup>th</sup>		<b>Final Exam</b>	

\*This exercise is based on a paper (the 2002 report of the USTFPS). Students should review it before the 2<sup>nd</sup> day of the course and come to class prepared to discuss it with colleagues in their small group meeting.