

From: [Hudes, Estie](#)
Cc: [Hudes, Estie](#)
Subject: RESCHEDULED -- Reminder: 5/21/19; Dr. Maya Petersen "Targeted Maximum Likelihood Estimation, integrating machine-learning, to evaluate the effects of longitudinal interventions including dynamic regimes"
Date: Friday, April 12, 2019 12:38:22 PM

Dear Methods Core seminar participants,

This is a reminder for our rescheduled seminar with Dr. Maya Petersen.

The seminar will take place on Tuesday, May 21, 2019. Below are the details.

Title: Targeted Maximum Likelihood Estimation, integrating machine-learning, to evaluate the effects of longitudinal interventions including dynamic regimes.

Presenter: Maya Petersen, MD, PhD
co-Chair, Graduate Group in Biostatistics
Division of Epidemiology and Biostatistics
School of Public Health
University of California, Berkeley



Date: Tuesday, , May 21, 2019

Time: 10 am - 12:00 noon

Location: AmfAR Conference room MH-3700
550 16th Street (at 4th Street), 3rd Floor
Mission Bay, SF 94158

Abstract: Targeted Maximum Likelihood Estimation (TMLE) provides an approach for estimating the causal effects of longitudinal interventions with several attractive properties. TMLE uses estimates of

both the propensity score (as used in inverse probability weighting) and of a series of outcome regressions (as can be used in parametric G-computation). Machine-learning methods, such as Super Learning (an ensemble approach) can be used to estimate both the propensity score and outcome regressions. TMLE, which is a double robust semiparametric efficient estimator, has the potential to reduce bias and variance and to improve the validity of statistical inferences compared to alternative approaches. However, as with other methods, challenges remain, particularly when some treatment regimes of interest have poor data support given confounder values. This workshop will provide an introduction to implementation of TMLE with Super Learning. Methods will be illustrated using applied case studies drawn from HIV implementation science. A brief introduction to the R-package `ltmle`, which can be used to implement all methods described in the workshop, will also be provided.

Short Bio: Maya Petersen, MD, PhD is Associate Professor of Biostatistics and Epidemiology at the School of Public Health of the University of California, Berkeley. Dr. Petersen's methodological research focuses on the development and application of novel causal inference methods to problems in health, with an emphasis on longitudinal data and adaptive treatment strategies (dynamic regimes), machine learning methods, and study design and analytic strategies for cluster randomized trials. Her applied work focuses on developing and evaluating improved HIV prevention and care strategies in resource-limited settings.

Please let [Estie Hudes](#) know if you are planning to attend the seminar and, if you are coming from outside of Mission Hall, whether you need to be put on the building security list.

Hope to see you many of you at the seminar next month,

--Estie

Estie Hudes, PhD MPH

(pronouns: she/her/hers) <https://lgbt.ucsf.edu/pronounsmatter>

Specialist / Statistician

Division of Prevention Science | University of California, San Francisco

Center for AIDS Prevention Studies (CAPS) | UCSF Prevention Research Center

&

Department of Epidemiology and Biostatistics

[UCSF Profile](#) | <http://prevention.ucsf.edu>

UCSF Box 0886 | 550 16th Street, 3rd Floor | San Francisco, California 94143

Fax: 415.476.5348

****CONFIDENTIALITY NOTICE**** This e-mail communication and any attachments are for the sole use of the intended recipient and may contain information that is confidential and privileged under state and federal privacy laws. If you received this e-mail in error, be aware that any unauthorized use, disclosure, copying, or distribution is strictly prohibited. If you received this e-mail in error, please contact the sender immediately and destroy/delete all copies of this message.