

From: [Hudes, Estie](#)
Cc: [Hudes, Estie](#)
Subject: Methods Core / TAPS seminar, Tue March 7 2017; 2pm-4pm; location MH-3700
Date: Friday, February 03, 2017 4:37:11 PM

Dear Methods Core seminar participants and TAPS fellows,

Our March seminar is a joint event with the TAPS fellows.

Title: **Optimally Combining Outcomes to Improve Prediction**

Presenter: [David Benkeser, PhD](#)

Postdoctoral Fellow
UCB School of Public Health



Date: **Tuesday**, Mar 7, 2017

Time: 2 pm – 4 pm

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

Abstract: In many studies, multiple instruments are used to measure different facets of an unmeasured outcome of interest. For example, in studies of childhood development, children are administered tests in several areas and researchers combine these test scores into a univariate measure of neurocognitive development. Researchers are interested in predicting this development score based on household and environment characteristics early in life in order to identify children at high risk for neurocognitive delays. We propose a method for estimating the combined measure that maximizes predictive performance. Our approach allows modern machine learning techniques to be used to predict the combined outcome using potentially high-dimensional covariate information. In spite of the highly adaptive nature of the procedure, we nevertheless obtain valid estimates of the prediction algorithm's performance for predicting the combined outcome as well as confidence intervals about these estimates. We illustrate the methodology using longitudinal cohort studies of early childhood development.

Bio: David Benkeser is a post-doctoral researcher in the Department of Biostatistics working with Dr. Mark van der Laan. My research interests revolve around causal inference and machine learning. I am currently working with the Bill and Melinda Gates

Foundation's Healthy Birth, Growth, and Development initiative aimed at identifying children at high risk for developmental deficits in the developing world and developing targeted interventions to help these children. I received my PhD. from the University of Washington Department of Biostatistics where my research focused on methods for evaluating vaccines, particularly for prevention of HIV and malaria. I have also worked extensively in cardiovascular epidemiology and health care economics at end-of-life.

If you are coming from outside Mission Hall, please RSVP to [Estie Hudes](#) to be put on the building security list.

Hope to see you in March,
--Estie

++++
For building entrance at Mission Hall., please RSVP to Estie Hudes ahead of time.

The CAPS Methods Core activity and materials from past seminars can be found at:
<http://caps.ucsf.edu/about/caps-structure-and-cores/methods-core/methods-core-seminars/>

Directions to Mission Bay:
http://campuslifeservices.ucsf.edu/transportation/services/alternative_transportation/mission_bay_transit_options
Please note that you can only use the Red shuttle at 16th Street BART if you have a current UCSF ID badge,

Parking at Mission Bay:
http://campuslifeservices.ucsf.edu/transportation/services/parking/public_parking

++++

Estie Sid Hudes, PhD MPH
Specialist / Statistician
UCSF Division of Prevention Sciences &
Department of Epidemiology & Biostatistics
University of California, San Francisco
Email: Estie.Hudes@ucsf.edu
<http://caps.ucsf.edu/personnel/ehudes/>

Fax: 415.476.5348
UCSF Mailcode 0886
550 16th Street, 3rd Floor
San Francisco, CA 94158-2549

CONFIDENTIALITY NOTICE: INFORMATION IN THIS MESSAGE, INCLUDING ALL ATTACHMENTS, IS INTENDED ONLY FOR THE PERSONAL AND CONFIDENTIAL USE OF THE INTENDED RECIPIENT(S) NAMED ABOVE. If the reader of this message is not an intended recipient or an agent responsible for delivering it to an intended recipient, you are hereby notified that you have received this message in error, and that any review, dissemination, distribution, or copying of this message is strictly prohibited. If you received this message in error, please notify the sender immediately, and delete the message and any hard copy print-outs. Thank you.