

PUBLIC HEALTH & PREVENTIVE MEDICINE

Grand Rounds

Sponsored by: The Division of Biostatistics

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Thursday, January 16, 2014

12:00PM-1:00PM

Campus Services Building Room 679

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Regularized Regression and Perturbation Methods for High Dimensional Data

ABSTRACT

Analysis of high dimensional data often seeks to identify a subset of important covariates and assess their effects on the outcome. Traditional statistical inference procedures based on standard regression methods often fail in the presence of high-dimensional features. In recent years, regularization methods such as LASSO and SCAD have emerged as promising tools for analyzing high dimensional data. These methods simultaneously select important features and provide stable estimation of their effects. Some regularization methods have especially nice asymptotic properties.

However, in finite samples, constructing confidence intervals for regression parameters is a challenging problem. It also remains difficult to evaluate the predictive performance of such models. In this talk, Dr. Minnier will introduce the challenges of regularization and will present her work in developing perturbation resampling based procedures for obtaining inference on estimates from these types of models.

This is brown bag event. Please feel free to bring your own lunch to eat during the presentation.

For more information or questions about this event, please contact Devora Pinsky: 503-494-2550, pinsky@ohsu.edu