# UC Davis / UC Berkeley
# COLLOQUIUM

Department of Statistics
Graduate Group in Biostatistics
University of California, Davis

## UC Davis / UC Berkeley Colloquium

*When:*   **THURSDAY, March 10th, 2011 at 3:30pm,**

*Where:*   **MSB 1147 (Colloquium Room, Math Sciences Building), UC Davis**

Refreshments at 3:30pm in the Colloquium Room; the seminar will begin at 4:10pm.

*Speaker:*   **Rasmus Neilsen** (UC Berkeley)

*Title:*   **Inferring Evolution from DNA Sequences: statistical problems**

*Abstract:*   Population genetics is a research area rich in applications of probability theory. Probabilistic models are used for making inferences from DNA data regarding the past demographic history of the populations analyzed and for detecting Darwinian natural selection.  In this talk I will first introduce some of the commonly used population genetic models, and then show through some examples how these models have been used for making inferences about demography and selection.  I will then discuss some current research on inference problems relating to New-Generation Sequencing data, a type of large genomic data that recently have become available through the development of new technology, and address some computational and statistical problems related to the analysis of such data.  I will illustrate the methods using applications to different organisms including humans.

Please join us for a **reception** after the talk in the Statistics lounge (MSB 4110, fourth floor).

If you would like to attend this event, please send an email to Pete Scully (pscully@wald.ucdavis.edu ), so we can get an idea of how many might attend.

Those interested are cordially invited to join us for a **no-host dinner** at a nearby Davis restaurant after the event, leaving no later than 7:00pm; please let us know if you wish to join us for the dinner.

## Statistics Seminar, Thursday March 10, 2011
## Location: Math Sciences Building 1147, UC Davis
http://www.stat.ucdavis.edu/seminars