# PH296, Section 33 Statistics and Genomics Seminar Fall 2002

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#### Course structure

The course has two components.

- Seminar. A one-hour weekly seminar given by researchers working at the interface between the statistical and biological sciences.
- **Discussion.** A weekly discussion section during which the seminar topics are introduced and related papers are presented and discussed.

Berkely Program in Genomics:

http://computationalbiology.berkeley.edu

#### **Course details**

Discussion	Monday, 4–5pm, 340B Haviland
Seminar	Thursday, 4–5pm, 334 Evans Hall
Class website	http://stat-www.berkeley.edu/users
	/sandrine/PH296.F02/ph296.F02.html
Course control $\#$	76257
Units	2
Grade option	$\mathbf{SF}$

## Topics (non-exhaustive list)

- Genetic mapping;
- DNA microarray experiments;
- Computational gene finding;
- Sequence alignment;
- Protein structure prediction;
- etc.

# Responsibilities

Class presentation of an article(s)/software package(s) which involve the application of statistical methodology to address a biological question.

- One-hour presentation during Monday section.
- Topic of your choice.
- Individual or group presentations.
- Must meet with instructor prior to the presentation to get the topic approved and discuss the presentation content and format.

### Class presentations

- Background on the biological question.
- Background on the statistical and computational methods used to address the question.
- How are these methods used to address the biological question?
- Are the methods appropriate?
- Can you suggest possible improvements and extensions?
- Optional: reproduce analysis and perform other analyses of the data.