Instructor: Yang Feng

- Office: Room 1012, SSW Building (1255 Amsterdam Avenue, between 121st and 122nd street)
- Phone: (212) 851-2139.
- Email: yangfeng@stat.columbia.edu
- Office Hours: MW 11:30am-12:30pm.

**TA information:** Richard Neuberg (rn2325@columbia.edu). Office hours: Tuesdays: 4:00-5:00pm, Wednesdays: 4:10-5:10pm Location: Lounge of the tenth floor SSW

**Textbook:**


**Syllabus:**

- Univariate statistics
- Linear models
- Experimental design
- Generalized linear models
- Non-linear and smooth regression
- Tree based methods
- Random and mixed effects models
- Multivariate analysis
- Classification
- Survival analysis
- Spatial statistics
- Missing data
Software: R will be used throughout the course and the assignments.

Homework: Weekly. Contains a mix of paper and computer problems. The assignments will be posted on the coursework page every Monday and due 8PM the next Monday unless stated otherwise. Late homework will receive a grade of zero. To compensate, the lowest homework score will be dropped. To receive credit on homework, you must show all work neatly, clearly label each problem, and staple the entire assignment together in correct order with your name printed. The homework will be graded, and each homework problem carries equal weight. You are allowed to work with other students on the homework problems, however, verbatim copying of homework is absolutely forbidden. Therefore each student must ultimately produce his or her own homework to be handed in and graded.

Exams: There will be no midterm exam and the final exam will be on the last day of class and is composed of an in-class closed book part and take home data analysis part.

Honor Code: All exams and assignments in the course are to be completed in accordance with the Barnard Honor Code, regardless of whether or not you are a Barnard student.

Schedules and Grading Policy:
Homework (20%) ................................................................. Due every Monday.
Final Exam (in class) (40%) ................................. 10:10am – 12:30pm, Monday, Dec 14, 2015.
Final Exam (take home) (40%) .................................