

**RUTGERS UNIVERSITY**  
**DEPARTMENT OF STATISTICS AND BIostatISTICS**  
[www.stat.rutgers.edu](http://www.stat.rutgers.edu)

**Seminar**

Speaker: **Professor Deanne Taylor**  
**Director of Bioinformatics**  
**Reproductive Medicine Associates of New Jersey**

Title: **Statistical Challenges in Translational Bioinformatics Research**

Time: **3:20 – 4:20pm, Wednesday, February 5, 2014**

Place: **552 Hill Center**

**Abstract**

Bioinformatics is a field concerned with applying techniques from computer science, information technology and statistics to the analysis and management of biological data. Translational bioinformatics is especially focused on data analysis at the research interface of the clinical and basic sciences. The rapid increase in genetic and genomic data, coupled with increased resolution of patient medical information, suggests that many areas of medicine will soon be poised to make great leaps in our understanding of the relationships between genetics, genomics and disease. However, any advances in our understanding of these relationships will require extensive work in developing statistical models and tools for analysis and inference on sparse but high-dimensional data sets. I will discuss projects and activities in translational bioinformatics from our own laboratory research in a large reproductive health clinic and discuss what I believe to be important challenges in genetics and genomics that may provide interesting avenues for statistical research.

**\*\* Refreshments will be served @2:50pm in Room 502 Hill Center \*\***