# University of California, Irvine
# Statistics Seminar

## *Computational Statistics within Orange County Biotech: The Experiences of a UCI Statistics Alumni*

**Adam Roy**
**Senior Biostatistician**
**Research and Development**
**ReVision Optics, Inc.**

**Monday, November 14**
**4-5 p.m.**
**Donald Bren Hall - Room 2011**
(Bldg #314 on campus map)

Orange County is home to many leaders of the current revolution in biotechnology. With connections to many major ophthalmic companies, ReVision Optics (RVO) is a biotech startup in Lake Forest that produces a corneal microlens. This microlens is designed to correct presbyopia by reshaping the anterior surface of the cornea. Many preoperative measurements are made during the patient selection process, and for those chosen for implantation, postoperative outcomes are recorded during monthly follow-up visits.

Scientists are very interested in understanding the longitudinal progression of outcomes, and also the underlying relationships between preoperative and postoperative measures. Clinical Managers are seeking to generate statistical tables for external FDA submission, and also the ability to quickly diagnose patient cohorts that may need extra attention. Strategic Personnel are interested in maximizing the information generated from clinical studies, and also an automated system for summarizing patient data to inform decisions.

This seminar will discuss the statistical tools employed to directly address these needs. How can we build a flexible structure to coherently organize patient data? How might we validate our data collection process? What sort of multivariate models are typically utilized? How do we ensure that these models are robust and stable through time?

For current students, have you learned everything you need to succeed in the private sector? How will your coursework help you succeed after you graduate? I am excited to explore these topics with you, and to discuss any other questions that you may have.

For directions please refer to http://www.ics.uci.edu/about/visit/
For more information please contact Lisa Stieler at lstieler@uci.edu