Il giorno **31 maggio 2004**, alle ore 15.00, presso l'aula 32 del Dipartimento, il prof. **Thomas R. Belin**, della UCLA, Dept. of Biostatistics, terrà un seminario dal titolo:

Bayesian Methods to Handle Missing Data in High-Dimensional Data Sets using Factor Analysis Strategies

Tutti gli interessati sono invitati a partecipare.

Un breve abstract del seminario è riportato nel seguito.

Bayesian Methods to Handle Missing Data in High-Dimensional Data Sets using Factor Analysis Strategies

It is common in applied research to have large numbers of variables measured on a modest number of cases. Even with low rates of missing on individual variables, such data sets can have a large number of incomplete cases. Here we present new methods for handling missing continuously scaled items in multivariate data, based on extracting common factors to reduce the number of covariance parameters to be estimated in a multivariate normal model. One technique is developed to handle cross-sectional data sets with general covariance patterns, while the other is specifically tailored to accommodate longitudinal data with many-dimensional outcomes. Simulation studies compare the statistical properties of the methods with potential alternative approaches. The methods are also illustrated in applied settings with over 100 variables, one being an investigation of psychological outcomes in a study of an emergency room intervention for adolescents who attempted suicide and the other being a study of quality of life integrated into a clinical trial on oral-surgery patients.

(joint work with Juwon Song, Univ. of Texas M.D. Anderson Cancer Center, and Jianming Wang, Medtronic Vascular, Inc.)