Summer School on Modern Methods in Biostatistics and Epidemiology

I did my PhD in preclinical laboratory research. Since I started my residency in obgyn in Gothenburg, Sweden, I even started my postdok with focus on epidemiologic and genetic studies. Most of our studies are based on the material from the Norwegian Mother and Child Cohort Study, a comprehensive birth cohort including more than 106,000 pregnancies. These studies require different statistical methods from what I used and learned during my PhD time. Several colleges recommended the Summer School on Modern Methods in Biostatistics and Epidemiology [http://www.biostatepi.org/](http://www.biostatepi.org/).

The two weeks were definitely worth it and I will have great benefit from what I have learned during my future research. A short description of the courses I attended follows below. Thank you for giving me this opportunity!

**June 8, 2014**

**Basics of Stata®**

Nicola Orsini, Ph.D. Associate Professor of Medical Statistics, Unit of Nutritional Epidemiology and Unit of Biostatistics, Institute of Environmental Medicine, Karolinska Institutet, Stockholm, Sweden

**June 9-14, 2014**

**Course Block 1 "Missing Data"**

Nicholas Horton, Sc.D. Professor of Statistics, Department of Mathematics and Statistics, Amherst College, USA

The aim of this course was to learn about how to minimize missingness, nomenclature of missing data methods, appropriate ways to describe and account for missing data with focus on using multiple imputation and sensitivity analysis.

**Course Block 2 "Applied Logistic Regression"**

David Wypij, Ph.D. Senior Lecturer on Biostatistics, Department of Biostatistics, Harvard School of Public Health, Boston, USA

This course dealt with fitting, evaluation, and interpretation of binary data models arising from epidemiological studies, clinical trials, or other application areas including assessment of confounding and effect modification, use of indicator variables, model building methods and goodness-of-fit assessment.

**June 16-21, 2014**

**Course Block 4 "Epidemiology II"**

Murray Mittleman, Dr.Ph. Associate Professor of Epidemiology, Department of Epidemiology, Harvard School of Public Health, Boston, USA

This course explored fundamental epidemiologic concepts focusing on practical study design. Issues of confounding, selection bias, effect modification, and generalizability were discussed based on the concept of causal inference using directed acyclic graphs.

**Block 5 “Biostatistics II”**

Marco Bonetti, Ph.D. Full Professor of Statistics, Department of Policy Analysis and Public Management, Bocconi University, Milano, Italy
Biostatistics II introduced methods for the comparison of outcome between two groups (t-test and non parametric tests), as well as the extension to the comparison of outcome across several groups (ANOVA); methods for the study of association between two continuous variables (correlation and linear regression); the analysis of contingency tables; the study of survival (time-to-event) data.

Verena Sengpiel
MD, PhD
Department of Obstetrics and Gynecology
Sahlgrenska Academy, Sahlgrenska University Hospital
SE- 416 85 Göteborg, Sweden
verena.sengpiel@obgyn.gu.se