Program

Students must choose one course from each block, for a total of two courses per week, and also choose between attending either one week or two weeks. Notice that no lab/group sessions are given on Saturday afternoon. In most courses, Stata® is the statistical software used. The maximum number of students per class is 30. The Sunday Stata® courses are extra courses and they are independent of courses from other blocks.

13 June 2010

Stata Course 1 9:00-17:00		
Introduction to Stata	Epidemiology with Stata	Meta-analysis using Stata

14-19 June 2010

Course Block 1 8:30-10:30 Lecture 14:00-15:30 Lab/group session		
Biostatistics I	Applied Linear Regression	Applied Logistic Regression
Course Block 2 11:00-13:00 Lecture 16:00-17:30 Lab/group session		
Principles of Epidemiology	Survival Analysis	Causal Inference

20 June 2010

Stata Course 2 9:00-17:00		
Introduction to Stata	Analysis of Prospective Studies with Stata	Regression Modelling Strategies with Stata

21-26 June 2010

Course Block 3 8:30-10:30 Lecture 14:00-15:30 Lab/group session		
Statistical Genomics	Applied Longitudinal Analysis	Monitoring and Evaluation of Health Programs
Course Block 4 11:00-13:00 Lecture 16:00-17:30 Lab/group session		
Biostatistics II	Statistical Methods in Environmental Epidemiology	Evidence Based Public Health

Program Location

The school is held at the Brandolini Colomban Castle in Cison di Valmarino, 55 km north of Venice, in Veneto, in the northeast of Italy. The castle is now a hotel with meeting, sporting, recreational and well-being facilities. For more information, visit the homepage www.castelbrando.it

Accommodation

Standard lodging expenses per person are € 125 per day, including accommodation in the castle and all meals (breakfast, coffee-breaks, lunch, dinner). Accommodation is in double rooms; however, a small number of single rooms are available at an extra charge, on a first-come first-served basis. The castle offers accommodation both inside the castle grounds and within walking distance (at a slightly lower daily rate). Choices can be made only on a first-come first-served basis. Check-in is Sunday afternoon or evening (Saturday afternoon or evening for those attending the Stata course) and check-out is Saturday morning of the following week (Sunday morning for those students attending only the first week course and the second Stata course). If different arrangements are required, they should be made with the hotel administrator in advance. More information can be found in the course application form and in the hotel accommodation form in the application section of the website.

Registration Fee

The registration fee includes only the course tuition. The final deadline for registration is **31 May 2010**. Fees depend on whether the applicant is currently a student at an accredited university, or not, number of weeks, and timing of enrollment.

	Registration before 30 March 2010		Registration after 30 March 2010	
	Student	General	Student	General
2 Blocks/1 week	€ 1050	€ 1150	€ 1250	€ 1350
4 Blocks/2 weeks	€ 1900	€ 2100	€ 2200	€ 2400

The fee for attending each Stata course is €400. Students attending summer school courses during the week receive a discounted rate of €250 per course.

Education Administration, Summer School
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Summer School on Modern Methods in Biostatistics and Epidemiology

13 - 26 JUNE 2010

Cison di Valmarino-Treviso, Italy

Castello Brandolini Colomban

Organization

Scientific Directors:

Marcello Pagano — Harvard University
Juni Palmgren — Karolinska Institutet

Course Directors:

Johanna Adami — Karolinska Institutet
Rino Bellocco — University of Milano-Bicocca, Karolinska Institutet
Marco Bonetti — Bocconi University
Roberto Gnesotto — Regione del Veneto

BIOSTATEPI.ORG

Goals and Rationale

The School aims to provide introductory and advanced courses in medical statistics and epidemiology, and their application in etiology research and public health.

Modern medical research is becoming increasingly formalized. Today researchers, physicians and health professionals are encouraged to use scientific data, including controlled experiments and well-structured observational data as the source for decision making. Evidence-based medicine is entering into many subspecialties, including public health science.

This School provides participants insight into available critical tools for planning research, handling data and interpreting results. Better understanding of scientific medical papers is a goal and it requires not only knowledge of the topic being investigated but also an understanding of the research methods being used. Examples include proper understanding of the meaning of a hazard ratio or a confidence interval and an understanding of the difference between a randomized controlled trial and a case-control study.

Course Descriptions

Analysis of Prospective Studies with Stata® R. Bellocco

This course is designed to introduce the analysis of cohort studies, managing person-times, estimating counts and incidence rate ratios of both fixed and time-varying exposures and fitting count regression models.

Applied Linear Regression - R. Bellocco

This introductory course teaches students how to apply and use linear regression models with continuous and categorical predictors.

Applied Logistic Regression - D. Wypij

Introduces students to the practice and application of logistic regression modeling. Topics include assessment of confounding and effect modification, use of indicator variables, model building methods, goodness-of-fit assessment, presentation of logistic regression models for reports and publications.

Applied Longitudinal Analysis - G. Fitzmaurice

This course focuses on methods for analyzing longitudinal and repeated measures data. This type of study design encompasses epidemiological follow-up studies as well as clinical trials.

Biostatistics I - M. Pagano

Introduces the fundamental principles of statistics applied to biomedicine. The topics to be covered include: descriptive statistics, measures of central tendency, probability, diagnostic testing, population and sample, comparison of proportions.

Biostatistics II - M. Bonetti

A course designed to provide the student with an understanding of the foundations of biostatistics and how useful the discipline is in tackling problems in the health sciences.

Causal Inference - A. Rotnitzky

Students will learn to critically evaluate the pitfalls of observational studies and of imperfect experimental studies, in particular all possible biases that can arise. Students will learn analytic tools, based on causal diagrams and new statistical models, that can help squeeze as much evidence as these imperfect studies carry about the causal effects of interventions, treatments and/or exposures of interest.

Epidemiology with Stata® - N. Orsini

This course introduces basic Stata commands useful in epidemiological research to describe, plot, and compare the incidence of a binary response.

Evidence Based Public Health - E. Savoia

Introduce the core concepts of evidence based public health and present studies conducted in Europe, the United States and in the developing world assessing the effectiveness of public health interventions and their relationship with the organizational structures, financing systems, workforce characteristics and delivery mechanisms of various practice settings.

Introduction to Stata® - U.L. Bell, G. Capelli

This course is designed to introduce students to the basics in Stata®. By the end of this one-day course, the student should be capable of using Stata® autonomously.

Meta-analysis using Stata® - R. D'Amico

The aim of this course is to provide an overview of methods to perform meta-analysis using Stata. We will cover Stata commands for a variety of tasks: data preparation and input, fixed and random-effect models, forest plots (publication quality graph), heterogeneity across studies, publications bias, sensitivity analysis, and meta-regression models.

Monitoring and Evaluation of Health Programs M. Pagano

This course covers the basic statistical tools necessary for monitoring and evaluation of health programs.

Principles of Epidemiology - J. Adami

Introduction to epidemiology as a basic science for public health and clinical medicine so that students may interpret critically the epidemiological literature.

Regression Modelling Strategies with Stata® N. Orsini

Provides methods for estimating the shape of the relationship between predictors and response using linear and restricted cubic spline construction within the general framework of generalized linear models.

Statistical Genomics - G. Parmigiani

This course will cover the basic concepts of genomic analysis, and is designed for students with a background in biostatistics, and interest in population or clinical research. The goal is to provide a general orientation and pointers to simple and effective methodologies for analyzing genomic data in these contexts.

Statistical Methods in Environmental Epidemiology - F. Dominici

This course provide an overview of statistical methods for the analysis of health effects associated with exposure to one or more environmental contaminants. The course introduce regression models for spatio-temporal data, Bayesian hierarchical models, and statistical methods for confounding adjustment.

Survival Analysis - P. Dickman

The course aim is to introduce statistical methods for describing how epidemiological cohort studies can be analysed in the framework of survival analysis.