Main Degree or Qualification, Diploma and Certificated held

Degree or Diploma:\_\_\_\_\_

#### Most recent employment

Employer:\_\_\_\_\_

Position held:

How and where did you hear about this course?

\_\_\_\_\_

**Intended source** Self Financing

Sponsor

Signed:\_\_\_\_\_

Date:\_\_\_\_\_

#### **Contact Addresses**

If you need further details on the course please contact:

**Emanuela Ciliberto**, Cancer Epidemiology Unit, Via Santena, 7 - 10126 Torino (Italy) Tel: +39 011 6334661/Fax: +39 011 6334664 emanuela.ciliberto@hotmail.com

You can also visit the website: http://causal.altervista.org/pdf/brochure\_torino.pdf

and: http://causal.altervista.org/courses.php

# Lectures, computer labs and hotel accommodation at:

Villa Gualino Viale Settimio Severo, 63 10133 Torino - Italy Tel +39 011 6603555 Fax +39 011 6603535

www.villagualino.net

#### Patrocinium

The course is patrocined by the Italian Society of Medical Statistics (SISMEC) in collaboration with BiostatEpi.



### SISMEC Working Group on

### **Causal Inference**



# A short course on concepts and methods in Causal Inference II Edition

## Torino (Italy), 19-21 September 2011

### Faculty:

Rino Bellocco	University of Milano-Bicocca
Rhian Daniel	London School of Hygiene and Tropical Medicine
Bianca De Stavola	London School of Hygiene and Tropical Medicine
Costanza Pizzi	University of Turin
Lorenzo Richiardi	University of Turin
Arvid Sjolander	Karolinska Institutet



#### **GOALS AND RATIONALE**

Causal inferences play a predominant role in science. In epidemiology, the goal and the ambition of the most part of the researchers is to determine an unbiased estimate of the effect of being exposed to a given risk factor on a well defined outcome (disease, death).

In recent years, there have been important statistical developments that go beyond the traditional multivariable regression techniques in order to obtain unbiased estimates.

Aims of this course are to discuss the current state of the art with respect to these issues, while retaining a practical focus and to assess our current and future abilities to address effectively cause-and-effect questions.

#### **COURSE DESCRIPTION**

#### 19 September 2011 - 9:00/18:00

Basic concepts in epidemiology seen through causal inference and causal diagrams: measures of association, bias, confounding, missing values.

### 20 September 2011 - 9:00/18:00

Causal Estimation methods: propensity score, inverse probability weighting. Introduction to Marginal structural models.

**21 September 2011 – 9:00/15:00** Time-varying confounders; mediation analysis.

Teaching will be based on combination of formal lectures and computer practicals. Each day there will be a 2-hour section with invited speakers on specific case-studies.

#### **Teachers:**

Rino Bellocco (University of Milano-Bicocca) Rhian Daniel (London School of Hygiene and Tropical Medicine) Bianca De Stavola (London School of Hygiene and Tropical Medicine) Costanza Pizzi (University of Turin) Lorenzo Richiardi (University of Turin) Arvid Sjolander (Karolinska Institutet)

#### WHO SHOULD APPLY?

Epidemiologists and statisticians with interest in epidemiology, or researchers with similar background. The course is thought at an introduction/intermediate level.

#### **COURSE FEE AND APPLICATION**

The total course fee is 300 €, which covers **only** participation in the course, materials, coffee breaks and lunches. Fees are payable **in full by 21 August 2011**. Upon acceptance, payment details will be provided.

The number of participants is limited to 30 students.

Accommodation is available at Villa Gualino (single room with breakfast 70 € per night). Please contact directly Villa Gualino (+390116603555 – www.villagualino.net) if you wish to book an accommodation, specifying that you will participate in the Causal Inference Course. (Please contact Emanuela Ciliberto if you experience any problem).

Applicants should complete the application form attached or download it from the Causal Inference Working Group's website: http://causal.altervista.org/courses.php

and return it as soon as possible to:

**Emanuela Ciliberto,** Cancer Epidemiology Unit, Via Santena, 7 - 10126 Torino (Italy) Tel: +39 011 6334661/Fax: +39 011 6334664 emanuela.ciliberto@hotmail.com

#### **APPLICATION FORM**

A short course on concepts and methods in Causal Inference.

#### Turin (Italy) 19-21 September 2011.

Please send to: Emanuela Ciliberto - fax +390116334664, <u>emanuela.ciliberto@hotmail.com</u>

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