

**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:

**Ilaria Simonelli, Silvia Donno, SeSMI-AFaR, Centro San Benedetto Menni – Fatebenefratelli, Lungotevere de' Cenci 5-7, 00186 Rome (Italy) Tel: +39 06 6837300/Fax: +39 06 6837360**

[Ilaria.simonelli@afar.it](mailto:Ilaria.simonelli@afar.it)  
[Silvia.donno@afar.it](mailto:Silvia.donno@afar.it)

**Scientific Coordinators:**

**Rino Bellocco** (University of Milano-Bicocca  
Karolinska Institutet)

**Patrizio Pasqualetti** (Centro San Benedetto Menni – Fatebenefratelli)

**Lorenzo Richiardi** (University of Turin)

You can also visit the website:

<http://www.causal.altervista.org/rome.html>

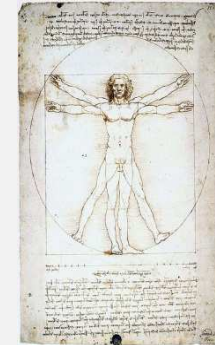
**Lectures and Computer Labsat:**

**Centro San Benedetto Menni – Fatebenefratelli, Lungotevere de' Cenci 5-7, 00186 Rome (Italy)**

**Promotion**

The course is promoted by the Italian Society of Medical Statistics and Clinical Epidemiology (SISMEC) in collaboration with BiostatEpi.

**SISMEC Working Group on Causal Inference**



**A short course on concepts and methods in Causal Inference III Edition**

Rome (Italy), 17-19 September 2012

**Faculty:**

- |                                     |   |
|-------------------------------------|---|
| Rino Bellocco                       | University of Milano-Bicocca<br>Karolinska Institutet |
| Rhian Daniel<br>Bianca De Stavola   | London School of Hygiene<br>and Tropical Medicine     |
| Fabrizia Mealli                     | University of Florence                                |
| Costanta Pizzi<br>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

### 17 September 2012– 9:00/18:00

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

### 18 September 2012 – 9:00/18:00

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

### 19 September 2012– 9:00/17:30

Time-varying confounders; mediation analysis.  
Principal Stratification

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)

Fabrizia Mealli (University of Florence)

Costanza Pizzi (University of Turin)

Lorenzo Richiardi (University of Turin)

Arvid Sjölander (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 350 € for general applicants and 280 € accredited students. The fee covers **only** participation in the course, materials, coffee breaks and lunches. Fees are payable **in full by 31 August 2012**. Upon acceptance, payment details will be provided. The number of participants is limited to 30.

**Accommodation** is available at *Casa per Ferie* Santa Francesca Romana ([www.sfromana.it](http://www.sfromana.it)).

Applicants should complete the application form attached or download it from the Causal Inference Working Group's website: <http://www.causal.altervista.org/rome.html/> and return it as soon as possible to:

**Ilaria Simonelli, Silvia Donno, SeSMI-AFaR, Centro San Benedetto Menni – Fatebenefratelli, Lungotevere de' Cenci 5-7, 00186 Rome (Italy)**

**Tel: +39 06 6837300 / Fax: +39 06 6837360**

## APPLICATION FORM

**A short course on concepts and methods in Causal Inference.**

**Rome (Italy) 17-19 September 2012.**

Please send to: **Ilaria Simonelli, Silvia Donno** - fax **+39 06 6837360**, [Ilaria.simonelli@afar.it](mailto:Ilaria.simonelli@afar.it)  
[Silvia.donno@afar.it](mailto:Silvia.donno@afar.it)

**Please use block capitals**

Surname: \_\_\_\_\_

Forename(s): \_\_\_\_\_

Title: \_\_\_\_\_ Male  Female

Date of Birth: \_\_\_\_\_

Nationality: \_\_\_\_\_

Country of Residence: \_\_\_\_\_

Address for correspondence: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Postcode: \_\_\_\_\_

Daytime Telephone No: \_\_\_\_\_

Mobile No: \_\_\_\_\_

Fax No: \_\_\_\_\_

E-mail address: \_\_\_\_\_