# Course Week Clinical Biostatistics I 2013

Marie Curie Initial Training Network **MEDIASRES:** Novel Statistical **ME**thodology for **DIA**gnostic/Prognostic and Therapeutic **S**tudies and Systematic **RE**view**S**

**April 8-13 in Copenhagen**

| Venue: | |
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| **Monday/Tuesday** | **Lundbeck**, Ottiliavej 9, 2500 Valby. The nearest S-train station is Valby (10 minutes walk). Homepage: www.lundbeck.dk |
| **Wednesday-Saturday** | **University of Copenhagen**, Department of Biostatistics. Øster Farimagsgade 5, Entrance B, 2nd floor, 1014 Copenhagen K. The nearest station (S-train and Metro) is Nørreport (5 minutes walk). Homepage: www.biostat.ku.dk |

## Scientific Program:

**Monday, April 8th      Lundbeck,**

**please be at the reception at 8:50 the latest!**

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| 8:30 | **Coffee** |
| 9:00 – 10:20 | **Introduction** Philip Hougaard (Lundbeck) |
| 10:20 – 11:00 | **Exploratory Data Analysis** Mouna Akacha (Novartis) |
| 11:00 – 12:00 | **Linear Mixed Models** Ekkehard Glimm (Novartis) |
| 12:00 – 13:00 | **Lunch** |
| 13:00 – 13:45 | **Marie Curie ITNs** Hanna Hasselblatt (UKLFR) |
| 13:45 – 15:00 | **Linear Mixed Models continued** Ekkehard Glimm (Novartis) |
| 15:00 – 17:00 | **Missing Data** Mouna Akacha (Novartis) |
| 18:30 | **Dinner at Nørrebro Bryghus (www.noerrebrobryghus.dk)** |

## Tuesday, April 9th        Lundbeck

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| 9:00 – 9:30 | **Missing data continued** Mouna Akacha (Novartis) |
| 9:30 – 9:45 | **Software for computer session** Philip Hougaard (Lundbeck) |
| 9:45 – 10:30 | **Computer session (SAS and R)** |
| 10:30 – 12:00 | **Nonlinear models** Philip Hougaard (Lundbeck) |
| 12:00 – 13:00 | **Lunch** |
| 13:00 – 13:45 | **An introduction to stroke** Thomas Truelsen (clinical advisor) |
| 13:45 – 15:45 | **Nonlinear models continued** Philip Hougaard (Lundbeck) |
| 15:45 – 16:00 | **Software for computer session** Philip Hougaard (Lundbeck) |
| 16:00 – 16:45 | **Computer session (SAS and R)** |
| 16:45 – 17:00 | **Summary** |

## Wednesday, April 10th        University of Copenhagen

**Presentation day: please note: Presentation of each individual research project by the corresponding ESR**
**Feedback on presentation skills and scientific aspects of work**
**(in total 25 min per project; presentation should take about around half of that)**

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| 8:30 – 9.15<br>9:15 – 11:00 | **Presentation skills (by Sanne Larsen)**<br>**Meta-Analysis: Projects 2,6,7,14**<br>Federico Bonofiglio: Meta-analysis of studies with competing risks outcomes<br>Matteo Quartagno: Missing data and measurement in individual patient data meta-analysis<br>Soheila Aghlmandi: Bayesian approaches to analyzing adverse events in randomized trials with a high proportion of trial arms observing no event<br>Anna Wiksten: Meta-analysis of controlled clinical trials: Models and assumptions, inferential principles, and computational algorithms |
| 11:00 – 11:15 | **Coffee** |
| 11:15 – 12:30 | **Diagnosis/Prognosis 1: Projects 3,4,8**<br>Sung Won Kim: Prediction from longitudinal high dimensional molecular data<br>Alexia Kakourou: Methods for proteomic diagnosis and prognosis in inflammatory diseases<br>Anna Barz: Model selection and validation |
| 12:30 – 13:15 | **Lunch** |
| 13:15 – 14:30 | **Diagnosis/Prognosis 2: Projects 5,9,10**<br>Mia Klinten Grand: Dynamic prediction in event-history analysis<br>Susanne Strohmaier: Understanding treatment mechanisms in clinical survival trials – a causal approach<br>Leyla Azarang: New methods for biased survival data |

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| 14:30 - 14:45 | **Coffee** |
| 14:45 – 16:30 | **Therapy: Projects 12,11,1,13**<br>Corine Baayen: State of the art adaptive dose finding designs<br>Ketil Biering Tvermosegaard: Clinical trials with a pharmacodynamics endpoint<br>Hong Sun: Clinical trials for personalized, marker based treatment strategies<br>Markus Lange: Design of clinical trials with biologics |
| 16:30 – 17:00 | **Rounding up – overall feedback (by Sanne Larsen)** |

## Thursday, April 11<sup>th</sup>     University of Copenhagen

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| 8:30 – 11:45 | **Survival data – Introduction** Ørnulf Borgan (UiO) |
| Material for preparation: | **Chapter 1 of Book "Survival and Event History Analysis: A Process Point of View" (ABG)**<br><br>**sections 2.2.1-6 and 2.3.1-2 (only main results without technical details) of ABG**<br><br>**sections 3.1 to 3.3 of ABG** |
| 12:00 – 12:30 | **Lunch** |
| 12:30 – 13:15 | **Session by clinical advisor** Professor Christian Torp-Pedersen (Gentofte University Hospital) |
| 13:30 – 16:30 | **Cox Regression** Thomas Scheicke (UCPH) |
| Material for preparation: | **Chapter 4.1 of AGB plus slides**<br><br>**additional reading Sections 6.1 and 6.2 of Martinussen and Scheike (2006). (Get via springerlink (free download for many Universities))** |
| 17:30 | **Boat Tour and official Course Week Dinner (Dinner starting at 19:00)** |

## Friday, April 12<sup>th</sup>     University of Copenhagen

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| 8:30 – 10:45 | **Competing risks** Jan Beyersmann (UKLFR) |
| Material for preparation: | **Chapter from CH-handbook**<br><br>**Beyersmann–Scheike.pdf** |
| 10:45 – 11:00 | **Coffee** |
| 11:00 – 12:00 | **Multistate models** Hein Putter (LUMC) |
| 12:00 – 12:30 | **Lunch** |

| 12:30 – 13:45 | **Multistate models continued** Hein Putter (LUMC) |
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| 13:45 - 16:00 | **Sampling of time to event data** Jacobo de Uña Álvarez (UVIGO) |
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## Saturday, April 13th    University of Copenhagen

| 9:00 – 12:00 | **Scientific reading and writing**<br>(Teacher from UCPH) |
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## General information:

**Transport information:** www.rejseplanen.dk

**Tickets:** from Airport to Hotel a 3-zone ticket is needed (to be payed in Danish Crowns), for the meeting 2-zone klip cards are recommended (tickets for going 10 times by train or bus)

**Money:** You can draw cash from Nordea or Danske Bank at Nørreport station. There will be a considerable fee except for clients of some banks such as Commerzbank (or Comdirect). Almost everywhere you can pay with your Visa card and the corresponding pin.

**Phone Calls:** An easy way to make cheap phonecalls is to buy a Lycamobile card for the mobile phone.

Please also check the document with Travelling Directions for further information.