FNRS Graduate School in Statistics and Actuarial Sciences,

FNRS Graduate School in Public Health, Health and Society,

and

The Biostatistics Section of the Belgian Statistical Society (SBS-BVS)

Organize a training on

1, 2, and 3 September 2008

Competing risks: A practical perspective

Melania PINTILIE

Motto: Probability is a divine subject, whereas statistics is human (S Senn).

Ontario Cancer Institute / University Health Network - University of Toronto

COURSE VENUE: **UCL-Bruxelles** http://www.uclouvain.be/en-acces-bxl.html
Avenue Mounier 50, 1200 Brussels – Belgium
Centre Faculté -1 http://www.uclouvain.be/68220.html
Computer Room ***Avicenne***

PRELIMINARY SESSION: **29 August 2008, 9:30 – 17:00** SAS and R at a glance

COURSE OUTLINE:

1 September 2008, 9:30 – 17:00: Introduction to survival for beginners

This introductory course will cover the basic topics of the time to event analysis. The first part will be dedicated to the survival analysis when only one type of event is possible to be observed. It will include the methodology for estimation of the probability of survival, the modeling of the hazard and the sample size calculation. The use of software (SAS and R) will be exemplified by means of real life examples. The second part of the course will introduce the concept of competing risk and the related changes to the methodology. Thus, the basis for estimating the probability of event of interest and the modeling techniques will be presented. Examples of analysis of competing risks will be given using R and SAS whenever possible. An example of a sample size calculation will also be given using the PASS software.
In the afternoon, participants will apply the concepts presented in the morning to real-life examples.
Participants are expected to have working knowledge of SAS or R and a general understanding of the statistical modeling.

2 September 2008, 9:30 – 17:00: Cox PH Model and Sample Sizes in survival

This course will cover the concepts related to the time to event analysis when only one type of event is possible to observe. The two main assumptions of the Cox proportional hazards model (linearity and proportionality of hazards) will be discussed and methods for checking these assumptions will be presented. The calculation of the predicted survival probabilities will also be given. The concepts will be illustrated on real-life examples using SAS and R. The formulae for the sample size calculation will be given and performed using PASS software.
In the afternoon the participants will apply the material presented in the morning on real-life examples.
The participants are expected to have working knowledge of SAS or R and an understanding of the statistical modeling.

3 September 2008, 9:30 – 17:00: Prognostic assessment facing with competing risks

This course will cover the concepts related to time to event analysis in the presence of competing risks. The competing risks situation appears when more than one type of event can be observed, but only one of them is of interest. The course will present the need for different techniques in this case. The cumulative incidence function will be introduced as a means to estimate the probability of the event of interest. The Cox proportional hazards model as well as a modified Cox model will be presented and their interpretations will be discussed. I will give methods of checking the assumption of proportionality of hazards. Techniques for calculating the sample size when competing risks are present will be discussed and illustrated. R and SAS will be used whenever possible. Interpretations for a real-life example will be discussed.
In the afternoon the participants will apply the methodologies discussed in the morning to real-life examples.
It is expected that the participants have workable knowledge of SAS or R. They would also need a general understanding of statistical modeling and of survival analysis.

WHO SHOULD ATTEND?

The course is aimed at PhD students, Researchers in Health sciences, Statisticians from pharmaceutical industry or clinical settings, Scientists concerned with survival designs or analysis in epidemiology or in clinical trials, and academia.

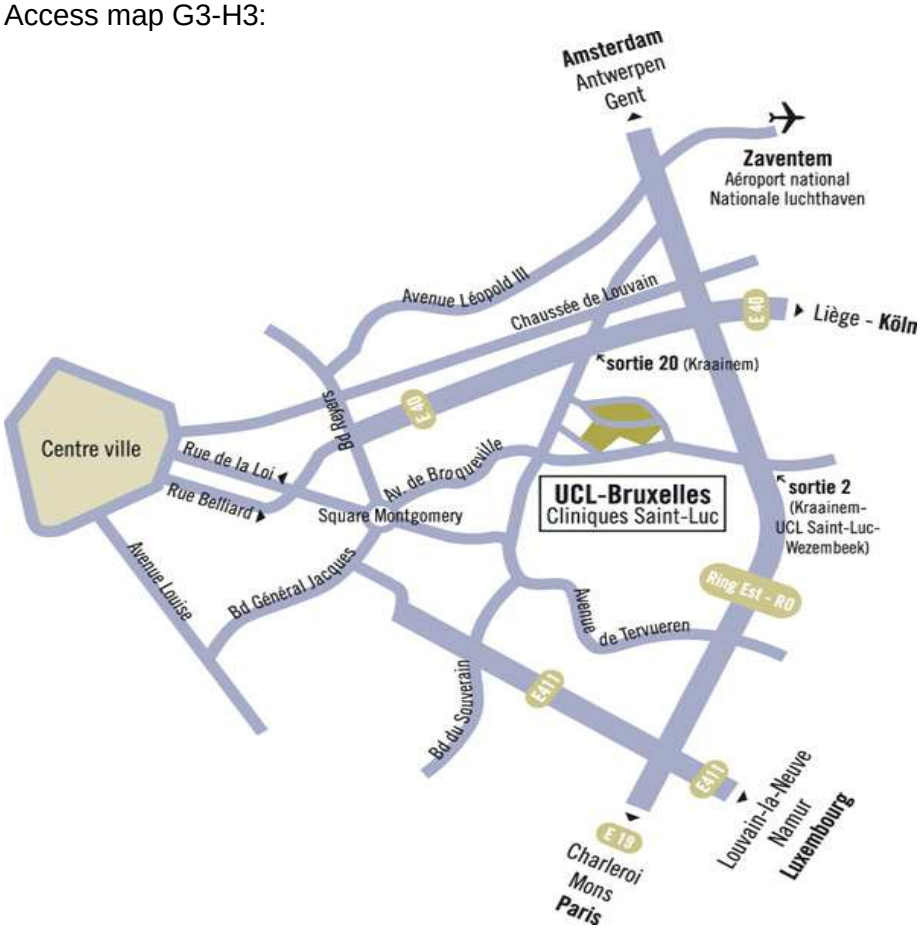
For PhD students from the Communauté française de Belgique, the Graduate School in Statistics and Actuarial Sciences, and the Graduate School in Public Health, Health and Society can validate the 3-days course as 3 credits in the European Credits Transfer System.

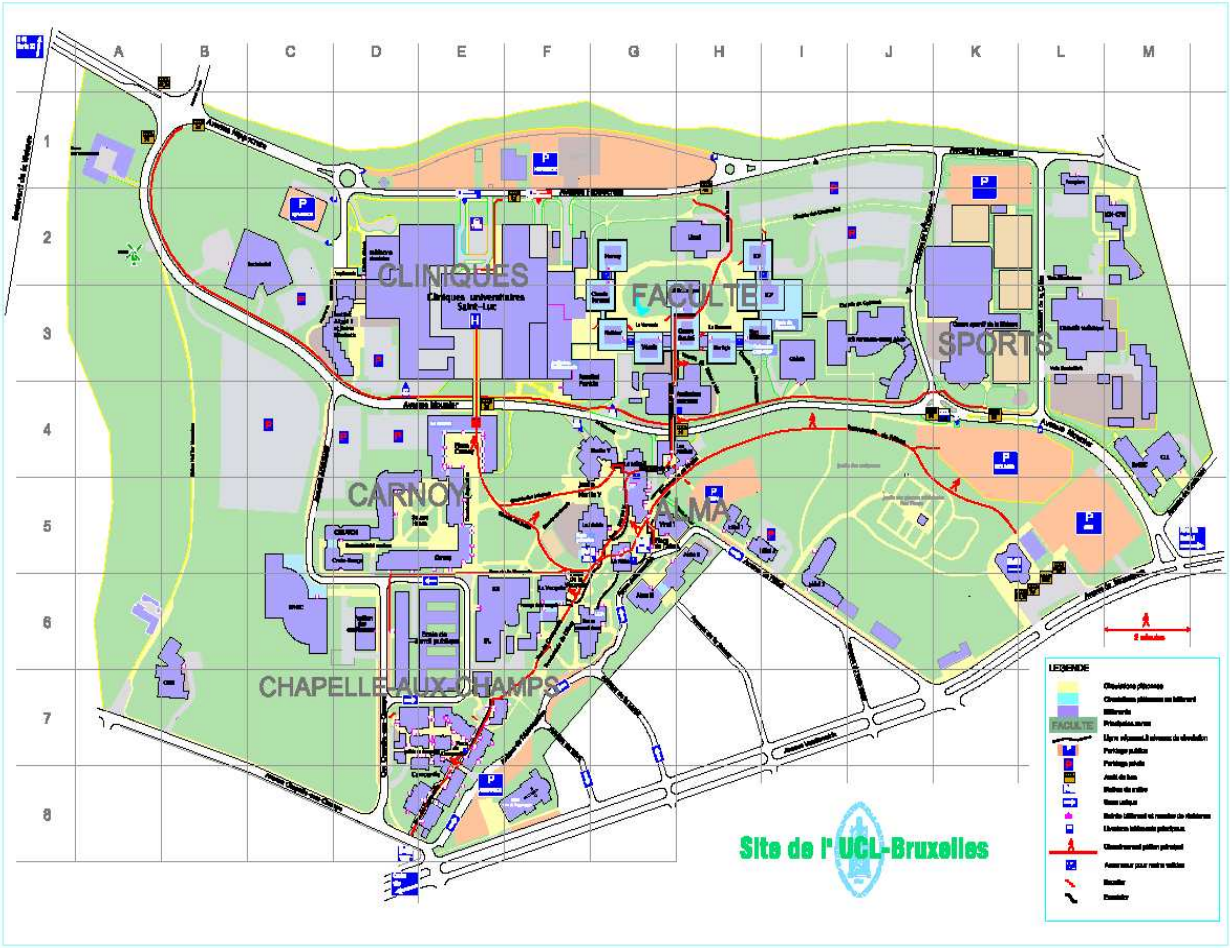
PRACTICAL ASPECTS - Please, register using the attached **Registration form**.

ORGANIZERS: Jan Bogaerts[1] (EORTC), Cécile Dubois[1] (UCB), Catherine Legrand[1, 2] (UCL), and Annie Robert[1, 2, 3] (UCL)

[1] for the Biostatistics Section of BSS
[2] for the Graduate School in Statistics and Actuarial Sciences
[3] for the Graduate School in Public Health, Health and Society

Access map G3-H3:





REGISTRATION FORM

Competing risks; A practical perspective – Melania PINTILIE

on September 1, 2, 3, 2008

UCL-Bruxelles, Centre Faculté -1, Computer Room ***Avicenne*** - 1200 Bruxelles

Mr/Ms/Mrs ……
……
Title ……

Company/Institution ……
Address ……
Address ……
Address ……

Phone …….. fax……..

e-mail …….

Fees for Days 2 and 3:

- Not a SBS-BVS or Quetelet member: 400 euros

- SBS-BVS or Quetelet members:
  Academia 100 euros
  Others 200 euros

- Student (regardless of membership): 10 euros (for lunches)
  Please, send also a copy of your student card

I am (Yes – No) a member of the SBS-BVS or Quetelet, I will attend the two-days course (Yes – No) and I will pay …….. euros to the bank account **350-1025142-68** of the Biostatistics Section of the SBS-BVS with the mention "Name – UCL Pintilie's course". For foreign participants, it is possible to pay cash at the course place. The lunch is included in the price and can be taken on site.

I will (Yes – No) participate to the introduction to SAS and R on **Friday 29 August**
(No additional fees, also at UCL-Brussels, Computer room Avicenne)

I will (Yes – No) participate on **Monday 1 September** because I'm not familiar with survival.
(No additional fees)

I will (Yes – No) participate only on **Tuesday 2 and Wednesday 3 September**.

Please send this form **before August 24th** to

Annie ROBERT
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Fax +32 (0)2 764 3322 Email: secretariat-epid@uclouvain.be

NOTE: GA of the BSS Biostatistics section on September 2nd, 2008 at 17:00 at UCL-Brussels