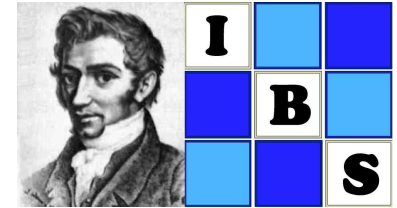




FNRS Graduate School in Statistics and Actuarial Sciences,
 FNRS Graduate School in Public Health, Health and Society,
 and



Société Adolphe Quetelet -
 Adolphe Quetelet Vereniging,
 Belgian region of IBS



Organize 4 days in

Statistics in genetics

on 15 September in Liège, and 16 to 18 September 2008 at UCL-Brussels

PRE COURSE in LIEGE: **15 September 2008, 9:00 – 12:30** Concepts in Statistical genetics
Malu CALLE

Department of Systems Biology, Universidad de Vic, Vic (Spain)

CONFERENCE in LIEGE: **15 September 2008, 13:30 – 17:20** Aspects in Statistical genetics

Time	Mini-Conference Outline	http://www.statgen.be/
13:30-13:40	Introduction by ULg organizing committee Kristel Van Steen and Gentiane Haesbroeck (ULg)	
13:40-14:20	David Balding Professor of statistical genetics at the Department of Epidemiology & Public Health, Imperial College London (UK)	The effects of population structure on research outcomes
14:20-14:30		Discussion
14:30-15:10	Juni Palmgren Department of Medical epidemiology and Biostatistics, Karolinska Institutet, Stockholm (Sweden)	Issues in genetic epidemiology
15:10-15:20		Discussion
15:20-15:40	Coffee Break	
15:40-16:20	Harold Snieder Unit of Genetic Epidemiology and Bioinformatics, Department of Epidemiology, University Medical Center Groningen, Groningen (the Netherlands)	Gene-environment interactions
16:20-16:30		Discussion
16:30-17:10	Anne-Laure Boulesteix Sylvia Lawry Centre for Multiple Sclerosis Research, Munich (Germany)	Detecting high-order interactions
17:10-17:20		Discussion
	Closing	

PRE COURSE and CONFERENCE VENUE: Sart-Tilman, LIEGE (check www.statgen.be for updates on exact locations)

3-DAY COURSE in BRUSSELS: 16-18 September 2008, 9:30 – 17:00

Statistics in gene-mapping studies & SAS JMPgenomics

Amy ANDERSON, Western Washington University (USA)

Thanks to Fisher and Wright, 2 geneticists who devised the Markov chains for statisticians...

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 *Paré*

COURSE OUTLINE:

16-18 September 2008, 9:30 – 17:00

In this three-day course, we will look at the methodology behind gene-mapping studies, considering both population-based and family-based designs.

In our first session, we will begin with an introduction to genetics and genetic data, then explore background topics including Hardy-Weinberg equilibrium and linkage disequilibrium. Once we are comfortable with the structure of genetic data, we will briefly discuss gene-mapping methods applicable to population-based association studies on binary (case-control) and quantitative traits.

Our second set of lectures begins with a more in-depth look at association studies including practical issues such as data quality, population structure, and multiple testing. We then turn our attention to some of the classic methods for gene-mapping using data collected from families of individuals. In particular, we will look at the transmission disequilibrium test (TDT) and its relative, the quantitative transmission disequilibrium test (QTDT). We will also provide analyses of microarray data.

The course will finish with a lab session in which we use the JMP Genetics portion of the JMP Genomics statistical package (SAS) to run some of the analyses we have discussed. If time permits, we may also, depending on participant interest, cover additional topics such as model-free linkage (e.g. affected sib pair designs, Haseman-Elston Regression and Variance Component methods), multiple-stage designs (as a way to reduce genotyping costs), or the statistics behind forensic DNA profiling.

WHO SHOULD ATTEND?

The course is aimed at PhD students, Researchers in Health sciences, Statisticians from pharmaceutical industry or clinical settings, Scientists concerned with molecular biology 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-day course as 3 credits in the European Credits Transfer System.

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

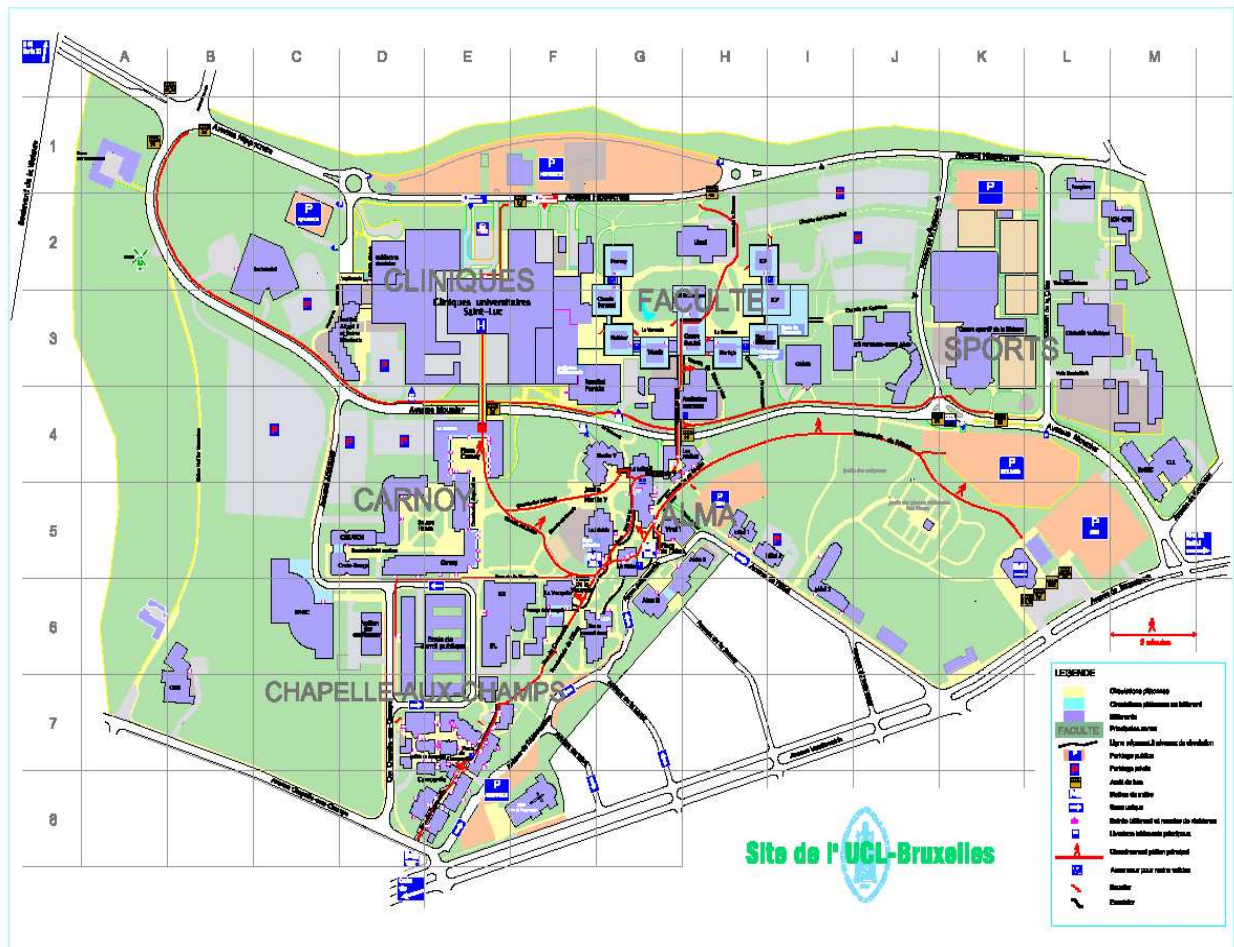
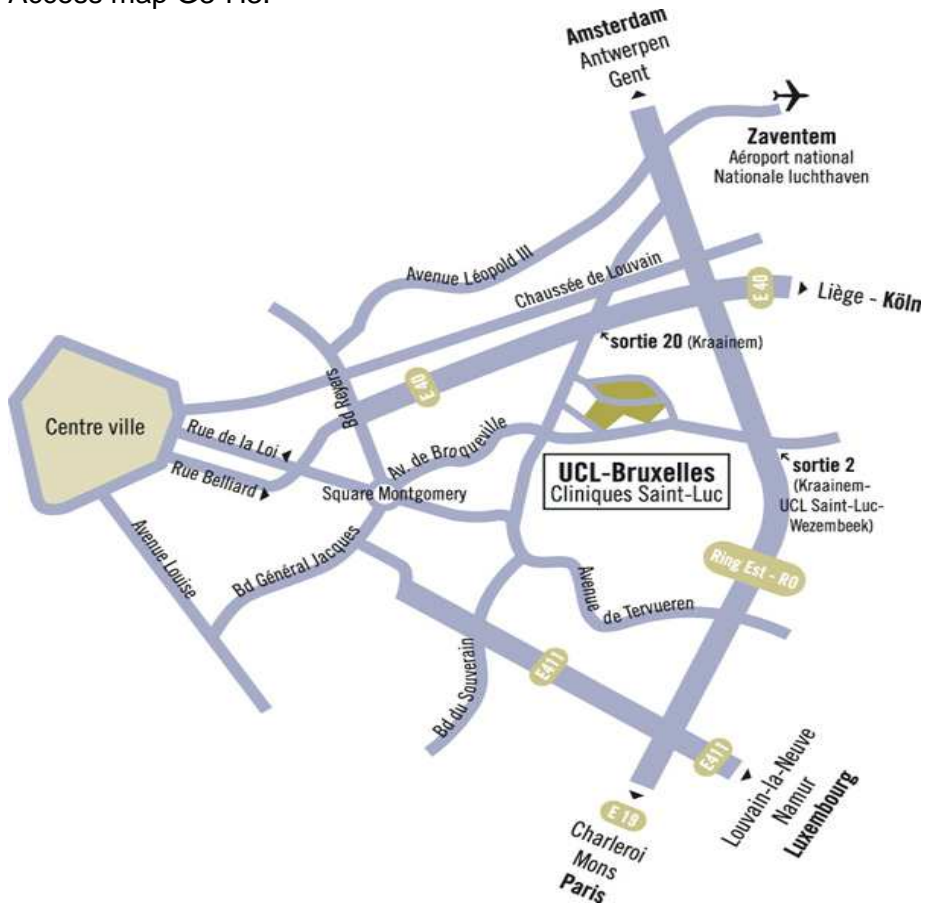
ORGANIZERS: Luc Bijmens¹ (Janssen), Laurence Collette¹ (EORTC), Viviane De Maertelaer¹ (ULB), Gentiane Haesbroeck² (ULg), Catherine Legrand² (UCL), Tom Loeys¹ (MERCK), Annie Robert^{1, 2, 3} (UCL), Sophie Vanbelle¹ (ULg), Kristel Van Steen² (ULg), Stijn Vansteenlandt¹ (UGent)

¹ for the Adolphe Quetelet Society

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

- PRE COURSE in LIEGE on September 15: check www.statgen.be
- CONFERENCE in LIEGE on September 15: check www.statgen.be
- COURSE at UCL – BRUSSELS:

Statistics in gene-mapping studies & SAS JMPgenomics – Amy ANDERSON

on September 16, 17, and 18, 2008

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

Mr/Ms/Mrs

Title

Company/Institution

Address

Address

Address

Phone fax.....

e-mail

Fees: no fees

- Not a SBS-BVS or Quetelet member: 0 euros
- SBS-BVS or Quetelet members:
 - Academia 0 euros
 - Others 0 euros
- Student (regardless of membership): 0 euros

I will (Yes – No) participate to the introduction to Genetics on **Monday 15 September**

I will (Yes – No) participate on **Monday 15 September** to the Short conferences (ULg, Liège)

I will (Yes – No) participate on **Tuesday 16, Wednesday 17, and Thursday 18 September.**

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

Annie ROBERT

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