





COST Action - BM1204

An integrated European platform for pancreas cancer research: from basic science to clinical and public health interventions for a rare disease.



WG2 Training School on Interactions in Complex Disease Analysis

The world of interactions around us

co-organized by Antwerp University (Joost Weyler and Kristel Sleegers) and cosponsored by the Belgian Society of Statistics Antwerp, Belgium – 27th-29th April 2016

One of the aims of this training is to introduce to course participants the different faces of interactions, depending on the study field. Both the theory and application of methods to identify medically relevant interactions will be covered. Topics that will be addressed by confirmed speakers include statistical versus biological interactions, gene-environment interactions, causality, dynamical interaction systems, symbiotic and pathogenic interactions, protein networks and components-based path modeling. We target an audience with very diverse backgrounds to foster stimulating discussions. Participants will also have the opportunity to discuss or present particular case studies.

Organizing committee: Joost Weyler, Kristel Sleegers, Kristel Van Steen, Núria Malats

For updates, please visit: http://eupancreas.com/meetings-events

The direct link to the registration site is:

https://www.uantwerpen.be/en/forms/external/esoc/trainingschool/





SCIENTIFIC PROGRAM

Antwerp, Belgium – 27th-29th April 2016

Topic description	Invited speaker	Day / Time	Room
Day 1 : Different faces of interactions – a primer	27 April		
Registration		8-8.30am	
An introduction to statistical, causal and epistatic interaction	Stijn Vansteelandt	8.30- 10.30am	C101
Coffee Break		10.30- 11am	C101
Practical considerations in genome-wide interaction studies	Maggie Wang and Kristel Van Steen	11-1pm	C101
W-test	Maggie Wang		
MB MDR	Kristel Van Steen		
Lunch		1-2pm	Free
Dynamical interaction systems	Ronald Westra	2-4pm	C101
Coffee Break		4-4.30pm	C101
Machine learning to uncover biological interactions	Karsten Borgwardt lab	4.30- 6.30pm	C101
Testability and Tarone's method to correct for multiple hypothesis testing	Damian Roqueiro		
Significant interval search with correction for confounders	Laetitia Papaxanthos		
Interactions in a graph via significant subgraph mining	Anja Gumpinger		
Day 2: Complex interactions	28 April		
Registration		8-8.30am	
Gene-gene and gene-environment interactions (with	Heather	8.30-	K201





practicum)	Cordell	10.30am	
Coffee Break		10.30- 11am	K201
Quantitative systems analysis of protein interaction networks,			
3D structural information and protein design	Christina Kiel	11-1pm	K201
to quantify the effect of disease mutations			
Lunch		1-2pm	Free
Molecular interactions between pathogenic fungi, bacteria	Patrick Van Dijck	2-4pm	K201
and their host			
Coffee Break		4-4.30pm	K201
Case-studies from participants		4.30- 6.30pm	K201
Social event		>6.30pm	
Day 3: Analytic tools – an example	29 April		
A tour in components-based path modeling	Giorgio Russolillo	9-5pm	K201
2x Coffee break & Lunch			





Important addresses

C101 - Prinsstraat 13, 2000 Antwerp

K201 – Kleine Kauwenberg 14, 2000 Antwerp

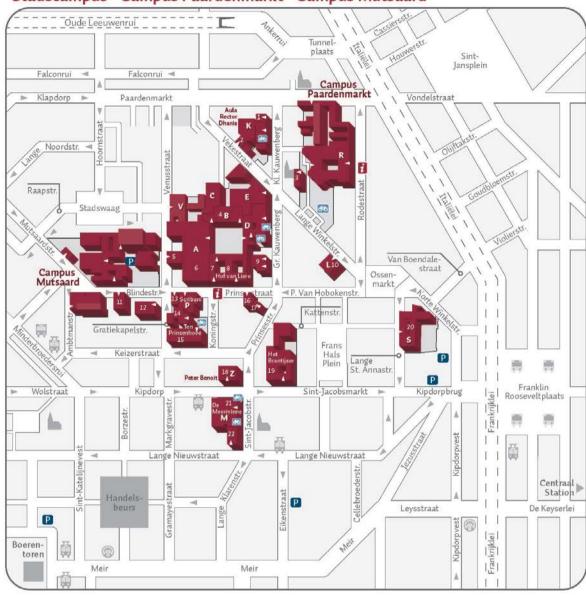
When you come by car - free parking:

- 'de Kaaien' (Waalsekaai, Vlaamsekaai, part of Scheldekaaien, Desguinlei, $^{\sim}$ 15 minutewalk to Stadscampus)
- P+R parking Metropolis, from where you can take a tram (line 6) or bus to the city center. The Stadscampus is close to the Rooseveltplaats where many buses pass.





Stadscampus - Campus Paardenmarkt - Campus Mutsaard





- Gebouw A Prinsstraat 13
- Gebouw B Prinsstraat 13
- Gebouw C Prinsstraat 13
- Gebouw D Grote Kauwenberg 18
 Agora / Sporthal Grote Kauwenberg 2
- Aula Rector Dhanis Kleine Kauwenberg 14
- Gebouw L Lange Winkelstraat 40 De Meerminne Sint-Jacobstraat 2
- Scribani Prinsstraat 10 Gebouw R Rodestraat 14
- Grauwzusters Lange Sint-Annastraat 7
- Gebouw V Venusstraat 23 Peter Benoit Kipdorp 61

- Linguapolis Kleine Kauwenberg 12
- Centraal magazijn Vekestraat 33
- Annexe Rodestraat 14
- Steunpunt Goederenstromen Prinsstraat 13
- IOIW / Moreel Consulent / Preventiedienst Venusstraat 35 Bibliotheek Prinsstraat 13
- 5 6 7
- Hof van Liere Prinsstraat 13
- Universiteitsclub Prinsstraat 13b
- Ruusbroecgenootschap Grote Kauwenberg 32-34
 L. P. Boon Documentatiecentrum / Studiecentrum H. Claus / CLiPS / IJS Lange Winkelstraat 40
 Studiecentrum Open Universiteit/Centrum WeST/
- Centre for Law and Cosmopolitan Values Blindestraat 14 IOIW / Dienst Internationale Samenwerking - Gratiekapelstraat 10 Linguapolis - Prinsstraat 8

- Studentenhome Ten Prinsenhove Koningstraat 8
 Restaurant Ten Prinsenhove / Labotheek Koningstraat 8 15 Zomaar een dak - Prinsstraat 32
- Universitas Prinsesstraat 16 ITMMA Kipdorp 59 17
- 18
- CNO/CVA/AMS Het Brantijser Sint-Jacobsmarkt 13
 IOB/Onderwijsadministratie, Studieadvies en studentenbegeleiding/
 Steunpunt Buitenlands Beleid Lange Sint-Annastraat 7
- 21 OASeS Sint-Jacobstraat 2 22 CeMIS / Steunpunt Gelijkekansenbeleid Lange Nieuwstraat 55







Accommodation

University of Antwerp - Wednesday 27 April till Friday 29 April 2016

Please note that rates are only valid for reservations <u>sent by e-mail directly to the hotel of your choice</u>. Please do not forget to mention the reservation code. All references in the overview below.

<u>Attention</u>: due to a fair in the same period we advise participants to make their hotel arrangements as soon as possible.

FIRST CLASS

LINDNER HOTEL & CITY LOUNGE ANTWERPEN****

Room block of 25 business class rooms until 31 March 2016

Reservation code: WG2 - ref. 8339933

Lange Kievitstraat 125 – 2018 Antwerpen

T+32 3 227 77 00 - F+32 3 227 77 01

www.lindnerhotels.be

reservations.antwerpen@lindnerhotels.be

Business single 130 euro, incl. breakfast, wifi, water in the room, free access to fitness and health center.

A supplement of 37,39 euro/night will be charged In case of double occupancy.

Excl. city tax 2,39 euro/pp/night





BUDGET MINDED

IBIS BUDGET ANTWERPEN CITY CENTER

Room block of 15 rooms untill 31 March 2016

Reservation code: WG2

Lange Kievitstraat 145 – 2018 Antwerpen

T +32 3 202 50 20 - F +32 3 202 50 21

www.ibisbudget.com

h6192-BO@accor.com

Single room 65 euro, double 72 euro and triple 78 euro incl. breakfast and wifi

Excl. city tax 2,39 euro/pp/night





List of software to be used:

- 1. R (see https://cran.r-project.org/)
- 2. The R library ORMDR (see https://cran.r-project.org/web/packages/ORMDR/index.html)
- 3. PLINK (see http://pngu.mgh.harvard.edu/~purcell/plink/download.shtml)
- 4. CASSI (see https://www.staff.ncl.ac.uk/richard.howey/cassi/downloads.html)
- 5. BEAM3 (see http://sites.stat.psu.edu/~yuzhang/)
- 6. R package "plspm"
- ✓ Please make sure that you have installed this software beforehand.
- ✓ Students are requested to bring their own laptop.





Social event:

"Antwerp, a busting metropolis on the river Schelde. Get to know this diverse harbour town during this culinary tour. Discover the rich history, the inspiring architecture and the tasty restaurants that characterize this Flemish city. On the way we stop at 2 different restaurants for a delicious meal.

Stroll along famous monuments such as het Steen, the city hall and the statue of Brabo, Groenplaats and Notre Dame cathedral and discover the places. During this walk our enthusiastic guide tells you funny and instructive stories and facts about the city of "de Sinjoren", its history, its characteristics, the port and much more

Duration: 3 hours, starting at 19h at Campus K

End: in the city center at 22h.

Included: an enthousiastic guide for a tour of three hours with 2 stops for a meat main dish + 1 glass of white or red wine and water on the table and a coffee/thee + dessert.

Brasserie-style.





