Join Radboud Summer School 2019!

Integrative X-omics Analyses Empowering Personalized Healthcare

change perspective

Radboud University
Molecular indicators for health, disease and response to treatment are increasingly guiding personalized healthcare. At the same time, single biomarkers will never fully reflect the interplay between the genetic make-up and environmental exposure. This asks for a more holistic view on human health, and integrated analyses of large-scale molecular and clinical data. This course will lay a firm basis for such an integrative approach.

The course provides a comprehensive overview of state-of-the-art biomarker discovery strategies using -omics analysis platforms, gives practical cues to the most fit-for-purpose experimental approaches, based on real-life examples. The basic principles and workflows of genomics, transcriptomics, proteomics, and metabolomics experiments will be covered. The course will contain demonstrations and hands-on computer practicals of commonly used open-source analysis and visualization packages. Special attention will be paid to the different ways to integrate X-omics data, ranging from pure statistical integration approaches (including machine learning) to knowledge-based data integration.

After this course you are able to:

- Design a X-omics experiment using the most adequate -omics technologies
- Apply basic -omics analysis workflows
- Discuss the advantages and disadvantages of different data integration strategies

Number of EC

2 ECTS credits

Course leader

- P.A.C. ’t Hoen, Professor of Bioinformatics, Center for Molecular and Biomolecular Informatics (CMBI), Radboudumc
- A.J. van Gool, Professor of Personalized Healthcare, Laboratory Medicine, Translational Metabolic Laboratory, Radboudumc
Admission document
Motivation letter

Entry level
Master, PhD and Postdoc

This course is designed for
Researchers who would like to set-up or are starting a molecular biomarker profiling study in human individuals and have an understanding of biomolecular processes and pathways, and the basics of biostatistics. Experience with Linux/unix and R is preferred

You can find more details about this course on our website

Course date
Monday 1 July - 5 July 2019

Course fee
€ 550

Deadline application
1 May 2019

Discounts
• 10% discount for early bird applicants. The early bird deadline is 1 March 2019.
• 15% discount for students and PhD candidates from partner universities. Please note that these discounts can be combined if you apply before 1 March 2019.

Apply now!
What is the RSS experience?

RSS is more than just a course!

Radboud Summer School offers you a unique opportunity to meet other students and researchers from all over the world with different cultural and academic backgrounds. You will also get to know Radboud University and the city of Nijmegen.

Our social programme includes a welcome reception, guest lecture and farewell drinks. And for a small fee you can join our BBQ, River Cruise on a pancake boat, a Pub Quiz, Sports Activities or a City Game.

Want to know more?
Have a look at what participants have said about their experience on our website!

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