Join Radboud Summer School 2018!

Brain Imaging Genetics: Genetics for Imagers

change perspective

Radboud University
This intensive one-week course covers various aspects of genetics analyses of neuroimaging data. The course will start with basic information on the architecture of the human genome and the basis of heritability. We will then move on to the statistical analysis of single common genetic variant for the different imaging modalities (structural imaging based on (sub)cortical volumetry or diffusion tensor imaging and brain activity/functional connectivity based on (resting state) (MRI).

This will be followed by analyses of whole gene and genome-wide association studies and the meta analysis of such data, including high-dimensional whole genome association studies. Other important topics include the integration across levels of investigation and linking genetics to behaviour via the brain – the essence of Cognomics research.

The lecture programme will be supplemented with hands-on computer exercises and demonstrations. More importantly, you will also learn how to genotype single nucleotide polymorphisms and score the genotypes in the wetlab.

The faculty includes researchers involved in the largest imaging genetics consortium world-wide – the ENIGMA Consortium – and the Dutch Cognomics Program.

The evenings will be reserved for social activities.

After this course you are able to
• Prepare genetics data for imaging genetics analyses
• Genotype single nucleotide polymorphisms and determine the quality of genotyping data
• Perform analyses combining imaging and genetics data
• Determine whether the effects of a gene on behaviour are mediated by brain phenotypes

For whom is this course designed
PhD candidates or Junior Postdocs; for some Master students it might also be possible to follow the course after a relevant internship.

Entry level
Master (after relevant internship), PhD and Postdoc
**Number of EC**
2 ECTS credits

**Course leaders**
- Prof. Dr. Barbara Franke, Chair of the Nijmegen Cognomics Initiative
- Dr. Elena Shumskaya, Research coordinator of the Nijmegen Cognomics Initiative
Donders Institute for Brain, Cognition and Behaviour, Radboudumc

**Admission documents**
Motivation letter and CV

**Dates**
Monday 13 August – Friday 17 August 2018

**Course fee**
€ 535

**Discounts**
- 10% discount for early bird applicants. The early bird deadline is 1 April 2018.
- 15% discount for students and PhD candidates from partner universities.

**Deadline application**
1 June 2018

You can find more details about the courses on our website
Want to be part of the RSS experience?

More than just a course!
Radboud Summer School is more than an academic event. It is a unique opportunity to meet other international students and researchers, to get to know Radboud University and the city of Nijmegen. Our participants come from all over the world and have different cultural and academic backgrounds. Our programme includes the following activities free of charge: welcome reception, guest lecture and farewell drink. We also offer sports activities, a BBQ, a river cruise on a Pancake Boat and a city tour for a small fee.

Have a look at what participants had to say about their experience!

Register now!

Contact
T. +31-248187706
E: Radboudsummerschool@ru.nl
W: www.ru.nl/radboudsummerschool
F: RadboudSummerSchool

www.ru.nl/radboudsummerschool, 5-17 August 2017