Join Radboud Summer School 2017!

Molecules, Mice and Math: A Statistical Toolbox for the Lab

change perspective

Radboud University
Molecules, Mice and Math: A Statistical Toolbox for the Lab

Why do I always have to repeat my experiments 3 times? How should I analyse qPCR data? I always see the effect of the treatment on cells clearly, however due to large variation it is never significant. Which statistical test should I use in that case? How do I determine the number of animals I should use for my experiment? It feels unethical not to use the data of my animal pilot experiment, is there a solution? These are just a few of the questions that basic scientists encounter daily in the laboratory. However, the common statistical courses do not address these questions. In this course we will! This course is especially designed for basic scientists that work in a laboratory setting, for both in vitro and small scale in vivo experiments.

We will discuss a range of different topics related to in vivo and in vitro laboratory experiments:

• How can I make a smart and efficient design for my experiment?
• What types of data will I encounter and what is the appropriate statistical analysis?
• Can I do a statistical analysis that increases the probability that I will have significant results?
• How can I determine the sample size for my experiment?
• What to do with outliers?
• How to handle variation?
• How to visualise your data for publication?

After this course you are able to

• Design laboratory and small animal studies, including sample size calculations
• Identify the type of data that you get out of your experiments
• Select the best way of analysing and interpreting your in vitro and in vivo data
• Write a proper method section for manuscripts.

Numer of EC
2 ECTS credits

Entry level
Master, PhD and Postdoc
Course leader
Ton de Haan, Assistant Professor
Biostatistics, Health Evidence, Radboudumc

This course is designed for
biomedical scientists that do laboratory
experiments and small scale animal studies. It
will be extremely valuable for PhD students, but
certainly also for master students that are
planning to continue doing research in the
laboratory.

Dates
Monday 14 August - Friday 18 August 2017

Course fee
€ 890

Discounts
• 10% discount if you register before April 1,
  2017.
• 15% additional partner-discount for students
  from partners universities on all course fees!
  See website for complete partner list!
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 and 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, sports activity, guest lecture and farewell drink. We offer also a BBQ, River Cruise, City Tour, Pub quiz and excursion for a small fee.

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

And do not forget to register now!

Deadline application
June 1, 2017

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www.ru.nl/radboudsummerschool, August 6-18 2017