Join Radboud Summer School 2019!

Zebrafish in Biomedicine and Toxicology

change perspective

Radboud University
Zebrafish in Biomedicine and Toxicology

Zebrafish are being used increasingly as animal models in neuro-behavioural and neuro-endocrine research. Reasons for this are the low costs, easy maintenance and a well-defined genome, among others. Given this, zebrafish now replace mice in many paradigms. While this may be valid from one perspective, zebrafish are clearly different from mammals: they are ectothermic rather than endothermic, their nervous system is organised differently, they have a duplicated genome and their behaviour is tailored to an aquatic environment rather than a terrestrial environment. Therefore, it is relevant and timely to address questions on the ins and outs of gene, brain and behaviour research in zebrafish.

Crucial to the success of using zebrafish as research models is understanding the unique properties of zebrafish. Therefore the following topics will be addressed during the course:

- the phylogenetic position of zebrafish;
- duplicated genome of zebrafish;
- neuro-anatomy including the nervous system's remarkable plasticity;
- social (shoaling and interaction) and non-social (anxiety, fear, reward-related) behaviour of zebrafish;
- neuro-endocrinology (related to stress and metabolism);
- development from the larval to the adult stage;
- the 'ecology' of zebrafish ('the wild and the lab').

State-of-the-art techniques will be discussed and demonstrated to unravel and understand gene, brain and behaviour relationships in zebrafish.

After this course you are able to
- Address pros and cons of using zebrafish as models in brain and behaviour research
- Understand zebrafish brain and behaviour
- Understand zebrafish genetics
- Understand zebrafish neuro-endocrinology

Number of EC
2 ECTS credits

Course leader
Prof dr. Gert Flik
Head Department Animal Physiology
Radboud University
Admission documents
Motivation letter and CV

Entry level
Advanced bachelor, Master, PhD, Postdoc and Professional

For whom is this course designed
Master’s students and researchers who are currently working or are planning to start working with Zebrafish in the field of gene, brain and behaviour.

You can find more details about this course on our website

Course date
Monday 12 August - Friday 16 August 2019

Course fee
€ 600

Deadline application
1 June 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!

Contact
T. +31-248187706
E: Radboudsummerschool@ru.nl
F: RadboudSummerSchool
I: Radboudsummerschool

www.ru.nl/radboudsummerschool