



Join Radboud Summer School 2018!

The Ins & Outs of Kidneys: from Physiomics to Transplantation

change perspective

Radboud University



The Ins and Outs of Kidneys: from Physiomics to Transplantation

In the 1960s, people with kidney failure had little hope of survival. Dialysis was considered an extraordinary treatment and restricted to very few. Transplantation was still experimental. The rise in incidence of patients with chronic kidney disease worldwide, most probably reflecting the global epidemic of type 2 diabetes and the ageing of the populations in developed countries, is seen as a major health burden. Over the last decades, the technical level of research is much higher and the field of renal research uses exciting state-of-the-art methods to uncover new mechanisms in renal physiology and pathophysiology. For example, the identification of the genes and mutations involved in a variety of human kidney diseases has participated in the growth of knowledge and the appearance of new fields of renal research, podocyte biology, ciliopathies, and cystic diseases, as well as the role of the kidney in blood pressure regulation.

New insights in renal research has also led to a new approach to treating kidney diseases and the renal complications of diabetes. Advances in surgical techniques and immunosuppression have made kidney transplantation a more cost-effective alternative to dialysis.

At the Radboudumc, a close collaboration between renal researchers and nephrologists provides (bio)medical students interested in nephrology and renal physiology additional opportunities for research training.

This summer school course will be organized around renal research in general and the actual research in Nijmegen in particular, examining all aspects of kidney function. Topics include: water

homeostasis, salt homeostasis and secretion, acid/base homeostasis, glomerular function, dialysis and transplantation, acute kidney failure, chronic kidney disease, diabetic nephropathy, polycystic kidney failure and a number of syndromes related to renal channelopathies.

During the course you will take part in interactive lectures about each topic, combined with practicals on modern molecular techniques. You will be provided with hands-on demonstration at research labs and will be able to visit a modern renal dialysis unit at the hospital.



After this course you are able to

- Understand renal physiology in depth
- Understand molecular techniques employed in renal research and interpret experimental results
- Interpret the latest insights in nephrology, hypertension, dialysis and transplantation
- Explain the mechanisms behind kidney disorders, hypertension and channelopathies

No admission documents needed

Number of EC

2 ECTS credits

Entry level

Master, PhD, and Postdoc

For whom is this course designed

Master's students (in medicine, biomedical sciences, biology or related disciplines) and for aspiring and early stage PhD students as well as post-docs who are currently working or are planning to start working in the field of renal research.



Course leader

Jojanneke Kooij, PhD Lecturer,
Physiology, Radboudumc

Dates

Monday 6 August – Friday 10 August 2018



Want to be part of the RSS experience?

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

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, guest lecture and farewell drink. We 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 have said about their experience!

Contact

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You can find more details about the courses on our website

www.ru.nl/radboudsummerschool, August 5-17 2018