



Alumnus Karsten Rinke

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Head of the Department
of Lake Research,
Helmholtz-Centre for
Environmental
Research (UFZ), Leipzig



Karsten Rinke



Karsten Rinke remembers the interdisciplinary approach of the Zukunftskolleg clearly: “Part of the deal was not only to focus on your academic speciality, but also to move out of your comfort zone and actively interact with experts in disciplines far removed from yours.” Today Rinke is head of the Department of Lake Research at the Helmholtz-Centre for Environmental Research (UFZ) and considers interdisciplinary research a foundation of his work.

Karsten Rinke became a Fellow of the Zukunftskolleg in 2008. At the time, he was already a postdoctoral researcher in the Limnological Institute at the University of Konstanz, and had applied in-house for a Fellowship. His research included the management and computer modelling of Lake Constance’s water quality, hydrodynamic processes in lakes in general and the modelling of zooplankton population dynamics. Being a Fellow at the Zukunftskolleg was important for the advancement of his research. Allowances provided by the Zukunftskolleg helped him obtain new equipment and were beneficial to the interaction between the Zukunftskolleg and the Department of Biology in which he worked. He greatly enjoyed his time as a Fellow and the freedom of doing his research in a secure and supportive environment.

Karsten Rinke thinks that every young scientist should have the experience of attending interdisciplinary meetings like the *Jour Fixe* ¹. “If you put lots of people with different backgrounds into one room, there has to be an initial phase of listening to each other, before you can even think about collaborations.” He admits that it is hard for young researchers, who have just found their own specialty and are still looking to define their profile, but also thinks that it gives “a different perspective to solving problems in your own field!”

Karsten Rinke knew long before finishing school that he wanted to study biology. “I come from a family background of agriculture and farming, so nature was always of interest and something I could relate to.” But his main interest was not to use nature; he wanted to understand it. “I was always fascinated by water. I can’t really explain why, but it is definitely much more interesting than terrestrial environments.” Still, at the beginning of his studies, he wanted to focus on molecular biology “just like everybody else. It was quite the thing to do and there was lots of enthusiasm about it.” It took him some time at the beginning of his study of biology to change direction, but finally “I listened to my heart and not my head.” He focused on limnology – and has ever since. Starting a career in academia was always an option and a desire, but he did not rely on it. The chances are very small and he wanted to be realistic. “After postdoctoral research, you have to decide if it is possible to continue, and that was when I applied to the Zukunftskolleg.”

He received an offer from the UFZ in 2010 and is happy with his permanent position, although it meant he had to shorten his time at the Zukunftskolleg. The UFZ has 37 departments and, within the Department of Limnology, Karsten Rinke organises the work and research of 20 to 30 people, which involves a lot of management and administration: “I don’t do active research that often anymore – and still it’s a job I enjoy tremendously.”

His group conducts applied research of natural lakes as well as constructed dams and water reservoirs. One focus is the management of dams, another their water quality. They also use modelling to predict how lakes develop. Because there are various ways of approaching this subject, they have a team consisting not only of limnologists, but also physicists, chemists and geologists. He also has worked with political sci-

tists, economists and engineers, and thinks it is very important to maintain an interdisciplinary perspective. Also, “to manage research on systems like reservoirs or lakes, you need two parties: The scientific side with expertise and equipment; and someone on site who knows the grounds and people.” It is easy to work within the EU, where guidelines are similar and language barriers non-existent, but to do similar research in China can be complicated. Therefore, it is important to have skills that help build peoples’ trust. Skills that go beyond pure science are, for Karsten Rinke, “something the Zukunftskolleg promoted.”



“The Zukunftskolleg promoted skills that go beyond pure science.”

Curriculum Vitae

Education

- 2006** PhD, Institute of Hydrobiology, Dresden University of Technology
“Species-oriented model approaches to Daphnia spp.: Linking the individual level to the population level”
- 2001 – 2006** PhD student under Prof. J. Benndorf, Dresden University of Technology
- 2001** Diploma thesis, Institute of Hydrobiology, Dresden University of Technology
“Individual based simulation of diel vertical migration of Daphnia”
- 1997 – 2001** Study of Biology (hydrobiology, microbiology and water engineering), Dresden University of Technology
- 1995 – 1996** Study of Biology, University of Göttingen

Scientific Career

- since 2010** Department Head, Helmholtz-Centre for Environmental Research (UFZ), Department Lake Research, Leipzig
- 2005 – 2010** Postdoctoral Researcher, Department of Biology, Limnological Institute, University of Konstanz
- 2001 – 2005** PhD Research Assistant, Institute of Hydrobiology, Dresden University of Technology

Distinctions, Awards and Honorary Posts

- 2008 – 2010** Fellow of the Zukunftskolleg, University of Konstanz
- 2006** Young Scientists Award, Deutsche Gesellschaft für Limnologie e.V. [German Limnological Society]