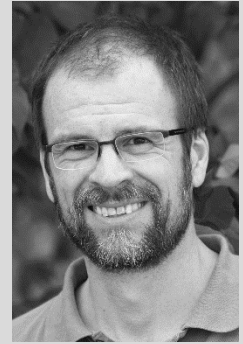


Rüdiger Krahe

Humboldt-Universität zu Berlin
Institute for Biology
Philippstr. 13 | D-10115 Berlin
Phone: +49 (0)30 2093-92378
Email: ruediger.krahe@hu-berlin.de



Curriculum vitae

since 2017	Professor (W3), Behavioural Physiology, Institute for Biology, Humboldt-Universität zu Berlin
2010-2017	Associate Professor, Neurobiology, McGill University, Montreal, CA
2010-2011	Visiting Scientist, Bernstein Center for Computational Neuroscience, Department of Biologie II, Ludwig-Maximilians-Universität München
2004-2010	Assistant Professor, Neurobiology, McGill University, Montreal, CA
2002-2004	Postdoctoral Research Associate, Department of Molecular and Integrative Physiology and Beckman Institute for Advanced Science, University of Illinois, Urbana-Champaign, USA
2001-2002	Postdoctoral Scholar, Department of Physiological Science, University of California Los Angeles, USA
1998-2001	Postdoctoral Scholar, Department of Biology, University of California Riverside, USA
1997-1998	Postdoctoral Scholar, Institut für Biologie, Humboldt-Universität zu Berlin
1997	Doctoral degree, Humboldt-Universität zu Berlin
1991	Diploma in Biology, Friedrich-Alexander-Universität Erlangen-Nürnberg

Research fields

- Topographic sensory representations in the brain
- Neuromodulation of sensory processing
- Evolution of sensory information processing
- Animal communication

Activities in the scientific community, honors, awards

2015-2017	Section Chair of Evaluation Group 1502 Biological Systems and Functions of the Natural Sciences and Engineering Research Council of Canada (NSERC)
2015-2017	Member of McGill University Senate Committee for Physical Development
2013-2017	Building Director of Stewart Biological Sciences Building of McGill University
since 2012	Elected Councillor of International Society for Neuroethology
2005-2008, 2013	Teaching in international summer school Neural Systems & Behavior at the Marine Biological Laboratory in Woods Hole, MA, USA

Selected publications

- Fotowat H, Harvey-Girard E, Cheer JF, Krahe R, Maler L. Sub-second sensory-evoked serotonin dynamics and its relation to ongoing communication behavior. *eNeuro*. 2016;3:e0115-0116.
- Picq SC, Alda F, Bermingham E, Krahe R. Drift-driven evolution of electric signals in a Neotropical knifefish. *Evolution*. 2016;70:2134–2144.
- Dunlap KD, Tran A, Ragazzi MA, Krahe R, Salazar VL. Predators inhibit brain cell proliferation in natural populations of electric fish, *Brachyhyopomus occidentalis*. *Proc R Soc Lond B*. 2016;283:20152113.
- Krahe R, Maler L. Neural maps in the electrosensory system of weakly electric fish. *Curr Opin Neurobiol*. 2014;24:13-21.
- Fotowat H, Harrison RR, Krahe R. Statistics of the electrosensory input in the freely swimming weakly electric fish, *Apteronotus leptorhynchus*. *J Neurosci*. 2013;33:13758-13772.
- Toscano-Marquez B, Dunn R, Krahe R. Distribution of muscarinic acetylcholine receptor mRNA in the brain of the weakly electric fish, *Apteronotus leptorhynchus*. *J Comp Neurol*. 2013;521:1054-1072.
- Reardon EE, Parisi A, Krahe R, Chapman LJ. Energetic constraints on electric signalling in wave-type weakly electric fishes. *J Exp Biol*. 2011;214:4141-4150.
- Krahe R, Bastian J, Chacron MJ. Temporal processing across multiple topographic maps in the electrosensory system. *J Neurophysiol*. 2008;100:852-867.
- Krahe R, Gabbiani F. Burst firing in sensory systems. *Nat Rev Neurosci*. 2004;5:13-23.
- Krahe R, Kreiman G, Gabbiani F, Koch C, Metzner W. Stimulus encoding and feature extraction by multiple sensory neurons. *J Neurosci*. 2002;22:2374-2382.