# Emanuel Heitlinger

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### Education

Jun 2008 - Feb 2012 Doctoral studies, Karlsruhe Institute of Technology.

**Dissertation:** Divergence of an introduced population of the swimbladder-nematode *Anguillicola crassus* - a transcriptomic perspective.

Supervisors: Prof. Dr. Horst Taraschewski and Prof. Mark Blaxter.

Jun 2007 - Feb 2008 Work on diploma thesis, University of Karlsruhe, Zoological Institute, Department for Parasitology and Ecology.

Thesis title: Vergleichende licht- und elektronenmikroskopische Untersuchungen am Intestinaltrakt des invasiven Schwimmblasennematoden Anquillicola crassus aus verschiedenen Aalarten.

2001 - 2007 Undergraduate studies in Biology, University of Karlsruhe.

Main subject: Zoology

Subsidiary subjects: Genetics, Botany

1991 - 2000 Secondary school, Gymnasium St.Paulusheim Bruchsal.

1987 - 1991 Pirmary school, Kraichtal Oberöwisheim.

## **Employment**

May 2014 - now Juniorprofessor, Humboldt University of Berlin, Institute for Biology, Department for Molecular Parasitology and Leibniz Institute for Zoo and Wildlife research.

March 2012 - May 2014 Postdoctoral researcher, Humboldt University of Berlin, Institute for Biology, Department for Molecular Parasitology.

Jun 2008- Jul 2011 Research assistant, Karlsruhe Institute of Technology, Zoological Institute, Department for Parasitology and Ecology.

#### Fields of Research Interest

Ecology and evolution of host-parasite interactions, transcriptomics and genomics, molecular evolution

#### Research

#### Peer Reviewed Publications

**Emanuel Heitlinger**, Horst Taraschewski, Urszula Weclawski, Karim Gharbi and Mark Blaxter. (2014) Transcriptome analyses of Anguillicola crassus from native and novel hosts. PeerJ; in press.

Emanuel Heitlinger, Simone Spork, Richard Lucius, and Christoph Dieterich. (2014) The Genome of Eimeria Falciformis - Reduction and Specialization in a Single Host Apicomplexan Parasite. BMC Genomics 15 (1): 696.

Urszula Weclawski, **Emanuel Heitlinger**, Tobias Baust, Bernhard Klar, Trevor Petney, Yu-San Han, and Horst Taraschewski (2014) Rapid Evolution of Anguillicola Crassus in Europe: Species Diagnostic Traits Are Plastic and Evolutionarily Labile. Frontiers in Zoology 11 (1): 74.

Manuela Schmid, **Emanuel Heitlinger**, Simone Spork, Hans-Joachim Mollenkopf, Richard Lucius, and Nishith Gupta (2013) *Eimeria falciformis* infection of the mouse caecum identifies opposing roles of IFNÎş-regulated host pathways for the parasite development. Mucosal immunology, 25 December.

Urszula Weclawski, **Emanuel Heitlinger**, Tobias Baust, Bernhard Klar, Trevor Petney, Yu San Han and Horst Taraschewski (2013) Evolutionary divergence of the swim bladder nematode *Anguillicola crassus* after colonization of a novel host, Anguilla anguilla. BMC Evolutionary Biology, 13:78.

Emanuel Heitlinger, Stephen Bridgett, Anna Montazam, Horst Taraschewski and Mark L Blaxter (2013) The transcriptome of the invasive eel swimbladder nematode parasite *Anguillicola crassus*. BMC Genomics, 14:87.

Dominik R Laetsch, **Emanuel Heitlinger**, Horst Taraschewski, Steven A Nadler and Mark L Blaxter (2012) The phylogenetics of Anguillicolidae (Nematoda: Anguillicolidea), swimbladder parasites of eels. BMC Evolutionary Biology, 12:60.

Emanuel Heitlinger, Dominik R Laetsch, Urszula Weclawski, Yu-San Han and Horst Taraschewski (2009) Massive encapsulation of larval *Anguillicoloides crassus* in the intestinal wall of Japanese eels. Parasites & Vectors, 2:48.

# Honors, Awards, & Fellowships

2008 Volkswagen Stiftung PhD Fellowship, Funding Initiative Evolutionary Biology, full funding of research position and research material (€131k)