

**Prof. Dr. rer. nat. habil. Steffen U. Pauls**

Head of Department Terrestrial Zoology / Section Head "Entomology III" / Senckenberg Research Institute and Natural History Museum / Senckenberganlage 25 /D-60325 Frankfurt am Main, Germany

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born: July 29, 1975

**Education**

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|-----------------|---|
| 2015            | Umhabilitation in Zoology, Goethe Universität Frankfurt, Germany  |
| 2014            | Habilitation in Zoology, Freie Universität Berlin, Germany.<br>Thesis: „Comparative phylogeography of aquatic insects in Europe”<br>Lecture: “Integrative Biodiversitätsforschung – Von Molekülen hin zu globalen Mustern”.                   |
| 07/2001-12/2004 | Ph.D. in Zoology, University of Duisburg-Essen, Germany.<br>Dissertation: “Phylogeny and Phylogeography of the Montane caddis fly <i>Drusus discolor</i> (Rambur, 1842) (Trichoptera: Limnephilidae, Drusinae).”<br>graded "summa cum laude." |
| 02–11/1998      | German Academic Exchange Service (DAAD) 9-month study abroad grant.<br>Newcastle University, Australia (EUR 12,273)   |
| 10/1995-05/2001 | Diploma (MS) in Ecology, University of Essen, Germany.<br>Thesis: “Development of an assessment system for sandy streams in the lowlands North-Rhine-Westphalia in concordance with the EU Water Framework Directive.”<br>graded “A+.”        |

**Research Interests**

- Molecular systematics, diversification and phylogeography of caddisflies
- Integrative taxonomy and biodiversity research on insects
- Biodiversity genomics and evolutionary ecology of aquatic insects

### ***"Listenplätze" and Professorships offered***

- 2018 W3 Professor for "General Entomology", Justus-Liebig-University Gießen (accepted)
- 2016 Professor for "Hydrobiology and Aquatic Ecosystem Management", Universität für Bodenkultur Wien (offer declined)
- 2012 W3 Professor for "Entomology", Martin Luther Universität, Halle/Saale (Listenplatz)
- 2010 W2 Professor for "Molecular Ecology", J.W. Goethe Universität, Frankfurt am Main (Listenplatz)
- 2010 W1 Professor for "Systematics and Evolution", J.W. Goethe Universität, Frankfurt am Main (Listenplatz)

### ***Professional Experience***

- 01/2019 – present Professor of General Entomology, Faculty of Agricultural Sciences, Nutritional Sciences, and Environmental Management, Institute of Insect Biotechnology
- 07/2018 – present Head of Department Terrestrial Zoology, Senckenberg Research Institute and Natural History Museum
- 01/2017 – present Section Head, Entomology III, Senckenberg Research Institute and Natural History Museum
- 03/2016 – 09/2016 Research Sabbatical, UC Davis, USA
- 05/2015 – 12/2018 Privatdozent, Goethe Universität Frankfurt, FB Biowissenschaften
- 01/2015 – 12/2016 Senior Scientist and Group Leader "Aquatic Evolutionary Ecology", Senckenberg Biodiversity and Climate Research Centre (BiK-F), Frankfurt/Main, Germany.
- 05/2014 – 12/2016 Privatdozent, Freie Universität Berlin, Institut für Biologie/Zoologie
- 09/2010 – 12/2014 Junior Group Leader "Aquatic Evolutionary Ecology", Biodiversity and Climate Research Centre (BiK-F), Frankfurt/Main, Germany.
- 06/2008 – 07/2010 Entomology Graduate Faculty Affiliate Member, University of Minnesota.
- 06/2008 – 07/2010 Museum Associate Bell Museum of Natural History.
- 09/2007 – 07/2010 Research Associate University of Minnesota, Department of Entomology.
- 09/2007 – 08/2009 German Academy of Sciences Leopoldina Research Fellow (PostDoc) University of Minnesota, Department of Entomology. Host: Dr. R.W. Holzenthal. Evolution of Endemism in Biodiversity Hotspots: Speciation Processes and Phylogeography of Aquatic Insects in the Chilean Andes.
- 06/2006 – 08/2007 Associate Researcher (PostDoc) Senckenberg – Research Institute and Natural History Museum, Department of Limnology and Conservation. "Phylogeny of the Drusinae" and "Comparative phylogeography of montane aquatic insects"

04/2005 – 05/2006	Postdoctoral Fellow (German Academic Exchange Service – DAAD) The Field Museum, Department of Zoology, Chicago, USA. Host: Dr. J. Bates. Developing microsatellites to study genetic diversity, population differentiation, dispersal barriers and suture zones in the caddis fly <i>Drusus discolor</i> .
07/2005	Aquatic Ecology Instructor, Programme Biodiversité des Ecosystèmes Aquatiques et Terrestres dans le Rift Albertin (P-BEATRA), Dem. Rep. of Congo.
2001 – 2005	Research Assistant, Department of Limnology and Conservation, Senckenberg Research Institute, Germany. Advisor: Dr. P. Haase.
1999 – 2001	Undergraduate Research Assistant, Department of Hydrobiology, University of Duisburg-Essen, Institute of Ecology, Germany.
1997 – 1998	Undergraduate Teaching Assistant, University of Duisburg-Essen, Botanical Institute, Germany.

### ***Bibliometrics (see publication list below for details)***

- 82 SCI listed publications or papers “in press”
- H-Index: 29 (Google Citations)
- Total citations: 3246 (Google Citations)
- 34 non SCI-listed articles, book chapters, public interest articles, contributions to conference proceedings

### ***Third Party Funding – Overview (see attached list for details)***

- Large grants: LOEWE Centre for Translational Biodiversity Genomics (LOEWE-TBG), co-coordinator €17,6 Mio
- Research Grants: DFG (5 grants totaling €734024,-), FWF (2 grants totaling €72000,-), EU ERANET LAC (€120000)
- Personal Stipends: Leopoldina (€76000,-), DAAD (3 stipends totaling €45378,-)
- Student Stipends: BMBF IPSWaT (€67765,-)
- Other sources: 8 grants and awards totaling €69400,-

### ***Summary of Theses Supervision***

- 3 PhD students as primary scientific and main responsible supervisor
- 3 PhD students as primary scientific supervisor completed, 2 current
- 1 MSc student as primary scientific and main responsible supervisor
- 2 MSc and 1 Diploma student as primary scientific supervisor

## Overview of Courses Taught

### Full Courses & Course Sections

- “Mastermodul Gewässerökologie”, JLU Gießen
- „Phylogeography and Species Delimitation“, Universität Wien
- “Gewässerökologisches Praktikum”, Goethe Universität Frankfurt
- “Integrative Taxonomie und Systematik”, Goethe Universität Frankfurt
- “Biodiversität Ausgewählter Standorte – Fließgewässer der Mittelgebirge”, FU Berlin Universität
- „Exkursionen zur Biologischen Vielfalt“, Goethe Universität Frankfurt
- “Grundlagen der Biogeographie”, Goethe Universität Frankfurt
- “Caddisflies – Aquatic Insect Architects”, Bell Museum, USA
- “Methods in Stream Ecology”, CRSN Lwiro, DR Congo

### Guest Lectures

- “Species Distributions & Genetic Diversity”, Goethe Universität Frankfurt
- “Carbon Footprint Analysis”, Goethe Universität Frankfurt
- “Molecular Systematics”, University of Minnesota
- “Potential uses of DNA Barcoding in stream assessment”, University of Minnesota

## Editorial Experience

- Since 2015: Co-Editor of **Arthropod Systematics and Phylogeny**
- Since 2012: Editorial board member of **Freshwater Biology**.
- 2010: Guest editor for a special series in the **Journal of the North American Benthological Society**: Monaghan M.T., Pauls S.U., Robinson C.T., Hughes, J.M. (eds) Evolutionary ecology, speciation, and molecular systematic in freshwater organisms.

## Referee for International Journals and Funding Agencies

Aquatic Insects, Aquatic Sciences, Arthropod Systematics and Phylogeny, *Biologia*, *Biological Journal of the Linnean Society*, *BMC Evolutionary Biology*, *Diversity*, *Ecography*, *Environmental Entomology*, *Environmental Management*, *Freshwater Biology*, *Freshwater Science*, *Global Change Biology*, *Hydrobiologia*, *Insects*, *Journal of Biogeography*, *Journal of the North American Benthological Society*, *Journal of the Entomological Research Society*, *Journal of Tropical Ecology*, *Limnologica*, *Marine and Freshwater Research*, *Methods in Ecology and Evolution*, *Molecular Ecology*, *Molecular Phylogenetics and Evolution*, *Nature Climate Change*, *PLoS One*, *Zookeys*, *Zoosymposia*, and *Zootaxa*

- National Science Foundation CAREER Awards
- National Science Foundation Division of Environmental Biology (DEB) Program
- Czech Science Foundation
- Deutsche Forschungsgemeinschaft (DFG) Sachbeihilfen
- Swiss National Science Foundation

### ***Field Work***

Australia, Austria, Bulgaria, Chile, Czech Republic, D.R. Congo, France, Germany, Italy, Nepal, Romania, Slovakia, Spain, Switzerland, Turkey

### ***Membership in Scientific Societies***

Deutsche Gesellschaft für Limnologie, Society of Freshwater Science, Society for the Study of Evolution, Gesellschaft für Biologische Systematik, Society of Systematic Biologists

### ***Languages***

English, fluent (mother tongue); German, fluent (mother tongue); French, very good (8 years formal training)



Frankfurt am Main, April 1, 2019