## Name Position Affiliation

## Prof. Dr. Wolfgang Rössler

short CV

Professor and Chair

Behavioral Physiology & Sociobiology

(Zoology II), Biozentrum University of Würzburg

Am Hubland

Since

97074 Würzburg, Germany phone +49 931 318 4306 fax +49 931 318 4309

roessler@biozentrum.uni-wuerzburg.de

#### Career

10/2011	II), Biozentrum, University of Würzburg.
01/2022 – 12/2023	Speaker of the Biocenter, University of Würzburg
10/2011 – 09/2013	Dean of the Faculty of Biology, University of Würzburg and Chair Zoology II
10/2001 – 09/2011	Professor in Neuroethology (C3), Behavioral Physiology & Sociobiology, Biozentrum, Biology, University of Würzburg
11/1999 – 10/2001	Associate Professor (C2), Molecular Neurophysiology, Medical School, University of Göttingen
04/1997 – 10/1999	Research Associate (NIH funded), ARLDN, University of Arizona, Tucson, USA
04/1995 – 03/1997	DFG Fellowship, Arizona Res. Labs. Div. Neurobiology (ARLDN), University of Arizona, Tucson, USA
03/1990 – 02/1995	Postdoc, Neurobiology, University of Marburg, Habilitation in Zoology Animal Physiology (12/1994)
07/1987 – 02/1990	Doctoral studies (Stipend from Studienstiftung des deutschen Volkes), Neurobiology, Biology, University of Marburg. Dr. rer. nat, (summa cum laude) 02/1990
04/1981 – 06/1987	Studies in Biology, University of Marburg (finals in Zoology, Plant Physiology, Biochemistry, Physics)

Chair (W3), Behavioral Physiology & Sociobiology (Zoology

# Research Fields

Neuroethology of social insects: mechanisms and evolution of olfactory systems, multimodal navigation, communication, behavioral and structural synaptic plasticity, sensory coding, behavioral development

## Professional Activities

University: 2013-2018 Vice Speaker, Collaborative Research Center SFB 1047 "Insect Timing"; 2013-2015 Vice Dean, Faculty of Bioogy; 2011-2013 Dean Faculty of Biology; since 2011 Session speaker Grad. Sch. Life Sci; 2008-2011 Speaker, 2004-2008 Vice Speaker SFB554; 2004-2011 Vice Dean Faculty of Biology; since 2004 Fakultätsrat, Fakultätsvorstand, Faculty of Biology; since 2004 Bachelor/Master study committee Biology, Univ. Würzburg; 2000-2001 chair of recruitment committee, Intern. Master/PhD Prg. in Neuroscience, Univ. Göttingen

*Editorial:* since 2008 Advisory Board Member and since 2022 Editorial Board Member J Comp Physiol A; since 2006 Section Editor Arthropod Structure & Development; 2020 Guest Editor Frontiers in Physiology; 2013 Guest Editor for J Comp Physiol A.

## **WOLFGANG RÖSSLER**

detailed CV

Professor Dr.

Chair, Behavioral Physiology and Sociobiology (Zoology II) University of Würzburg Biozentrum, Am Hubland 97074 Würzburg, Germany

phone office: +49 931 318 4306 fax. office: +49 931 318 4309

email: <u>roessler@biozentrum.uni-wuerzburg.de</u> internet: <u>http://zoo2.biozentrum.uni-wuerzburg.de/</u>

#### **ACADEMIC DEGREES:**

Habilitation in Zoology/Animal Physiology, Univ. of Marburg, Germany.
 Dr. rer. nat. (*summa cum laude*), Faculty of Biology, Univ. of Marburg, Germany.

1987 Diploma in Biology, Univ. of Marburg, Germany.

1981 – 1987 Studies in Biology, University of Marburg, Germany (Finals in Zoology, Plant Physiology, Biochemistry, Physics)

Thysiology, blochemistry, Thysics)

### **RESEARCH EXPERIENCE AND POSITIONS:**

since 2011 **Professor (W3) and Chair**, Behavioral Physiology & Sociobiology (Zoology II), Biozentrum, University of Würzburg, Germany.

2022 – 2024 **Speaker of the Biocenter**, University of Würzburg

2011 - 2013 **Dean, Faculty of Biology**, University of Würzburg, Germany

2001 - 2011 **Professor (C3)** in Neuroethology, Behavioral Physiology and Sociobiology (Zoology II), Biozentrum, University of Würzburg, Germany.

Neuroethology and evolution of olfactory communication, sensory orientation,

and behavioral plasticity in social insects.

1999 - 2001 **Assistant Professor (C2)**, Institute for Physiology, Dept. Molecular Neurophysiology, Medical School, University of Göttingen, Germany. Olfactory

processing in the clawed frog: calcium imaging and confocal odor mapping.

1997 - 1999 Research Associate (NIH), Arizona Research Laboratories Division of

Neurobiology, Univ. of Arizona, USA. Functional organization of the pheromone-specific system in the moth

Manduca sexta.

1995 - 1997 Visiting Scholar (DFG), Arizona Research Laboratories Division of

Neurobiology, Univ. of Arizona, USA, collaboration with Profs. John G.

Hildebrand and Leslie P. Tolbert.

Developmental plasticity of the male-specific olfactory system in the moth

Manduca sexta.

1990 - 1995 Assistant Research Scientist (Wissenschaftlicher Mitarbeiter, DFG),

Zoology, Univ. of Marburg, Germany, SFB "Ecophysiology".

i. Neurophysiology, development and evolution of auditory and

mechanosensory systems in bushcrickets.

ii. *In vitro* patch-clamp analyses of neurosecretory neurons in locusts.

- 1987 1990 Graduate Research Assistant (Fellow Studienstiftung des deutschen Volkes), Zoology, Univ. of Marburg, Germany. Parallel processing of communication signals in the auditory pathway of bushcrickets. Doctoral thesis supervisor: Prof. K. Kalmring.
- 1986 1987 **Undergraduate Student Research Assistant**, Zoology/Neurobiology, Univ. of Marburg, Germany. Diploma thesis supervisor: Prof. K. Kalmring. Multi-unit electrophysiological analyses of auditory-signal processing in bushcrickets.

## AWARDS, GRANTS, SCHOLARSHIPS:

- 2022 2027 Principle Investigator DFG Project RO1177/10-1 (within FOR 5424 ) "TP6: Modulation of olfaction by recurrent centrifugal connections after olfactory-visual convergence in the honeybee
- 2018 2022 Principle Investigator DFG Project RO1177/7-1 "The ontogeny of navigation in *Cataglyphis* ants.
- 2013 2018 Principle Investigator Project B6 within the SFB 1047 "Insect Timing: mechanisms, plasticity and interactions"
- 2013 2018 Principle Investigator within the DFG priority program (SPP 1392, 2<sup>nd</sup> period) on "Integrative Analysis of Olfaction"
- 2013 2015 Principle Investigator Exchange Grant DAAD / Go8 Australia
- 2010 2013 Principle Investigator of a project awarded within the DFG priority program (SPP 1392, 1st period) on "Integrative Analysis of Olfaction"
- 2007 2011 Awarded a Human Frontier Science Program (HFSP) Grant together with E. Plettner, Y. LeConte, J. Watmough
- Nominator and host for A.v.-Humboldt price winner Prof. Dr. Rüdiger Wehner, University of Zürich. Research visits during 2007-2011.
- 2006-2010 Principle Investigator, Projects A6 and A8 awarded within the collaborative research program (Sonderforschungsbereich) SFB 554 "Mechanisms and Evolution of Arthropod behavior", DFG
- 2003-2006 Principle Investigator, Project A6 awarded within the collaborative research program (Sonderforschungsbereich) SFB 554 "Mechanisms and Evolution of Arthropod behavior", DFG
- 2000-2003 Principle Investigator, Project A12 awarded within the Program Grant (Sonderforschungsbereich) SFB 406 "Synaptic interactions in neuronal assemblies" DFG, Univ. Göttingen.
- 1995-1997 International Research Fellowship (Forschungsstipendium, USA, 2 years) awarded by the Deutsche Forschungsgemeinschaft (DFG)
- 1992 Presidential Doctoral Thesis Award, Philipps-University of Marburg for one of the 5 best Ph.D. theses in the period 1990-1992.
- 1987 1989 Doctoral Scholarship awarded by the Studienstiftung des Deutschen Volkes (German National Scholarship Foundation).

#### ADMINISTRATIVE ACADEMIC SERVICES:

- 2022 2024 Speaker of the Biocenter, university of Würzburg
- 2013 2018 Vice Speaker of the collaborative research center (SFB 1047) "Insect Timing: mechanisms, plasticity and interactions".
- 2013 2015 Vice Dean, Faculty of Biology, Univ. of Würzburg
- 2011 2013 Dean, Faculty of Biology, Univ. of Würzburg
- since 2011 Section speaker, class Integrative Biology, Graduate School for Life Sciences (GSLS), University of Würzburg
- 2009 2011 Board member for planning of an interdisciplinary cluster of excellence in "Behavior Sciences", Univ. of Würzburg.

- Speaker of the collaborative research program (Sonderforschungsbereich) 2008 - 2011 SFB 554 of the DFG, Univ. Würzburg 2004 - 2008 Vice speaker of the collaborative research program (Sonderforschungsbereich) SFB 554 of the DFG, Univ. Würzburg 2004 - 2011 Vice Dean (Prodekan) and member of the executive board (Fakultätsrat und Fakultätsvorstand) of the faculty of Biology, Univ. of Würzburg (re-elected in 2007, 2009 and 2017). since 2004 Member of the Bachelor/Master study-planning committee for Biology and for Biomedicine, Univ. of Würzburg. Studienberater of the Faculty of Biology, Univ. Würzburg 2003 - 2006since 2002 Member / chair in several Professorship search committees, Biozentrum, Univ. Würzburg. 2000 - 2001Chair of the recruitment committee, International Master/PhD Program for
- Neurosciences, Univ. Göttingen
  since 1995 Consultant for scholars of the German National Scholarship Foundation
- Since 1995 Consultant for scholars of the German National Scholarship Foundation (Studienstiftung des Deutschen Volkes) seeking advice in planning laboratory stays in the United States and for the administration evaluation process.

## ORGANIZATION OF CONFERENCES AND SCIENTIFIC SERVICE

- 2022 Organizer, together with F. Locatelli, of the Symposium 'Plasticity in insect olfactory systems' at the International Conference of Entomology (ICE), Helsinki.
- 2018 Co-Organizer of 28<sup>th</sup> ECRO (European Chemoreception Organization) Conference in Würzburg (together with F Zufall, W Meyerhoff and local organizer R Scheiner)
- 2017 Organization of the 15<sup>th</sup> European Symposium for Insect Taste and Olfaction (ESITO XV), Villasimius Sardinia (together with C Groh and M Strube-Bloss)
- 2015 Co-organization (together with Christian Wegener) of a symposium on "Neuronal mechanisms of behavioural timing", Göttingen Neuroscience Meeting 2015
- 2014 Co-organization of the international symposium "Frontiers in Insect behavior" in Würzburg (together with Jürgen Gadau, Arizona State University)
- 2012 Co-Organization of the international symposium "Olfaction in insects: from molecules to behavior" in Würzburg (together with M Stengl)
- 2012 Establishment of a tuition-free "Collaboration and student exchange program" between Arizona State University and the University of Würzburg
- 2011 Organziation (with Sylvia Anton, Versailles) of a Symposium on "Olfactory plasticity in insects" for the Göttingen Neurobiology Conference in 2011.
- 2007 Establishment of a tuition-free "Collaboration and student exchange program" between the INRA Versailles / Marie Curie Univ. Paris.
- 2008 Co-Organisation of a Symposium of the SFB 554. Fabrikschleichach
- 2007 Establishment of a tuition-free "Collaboration and student exchange program" between the Center of insect Science, University of Arizona
- 2007 Permanent Board member of the Conference "European Symposium on Insect Taste and Olfaction" (ESITO).
- 2007 Organization of the Symposium "Olfactory development: common principles and differences across phyla", Göttingen Neurobiology Conference (together with J. Schachtner)
- 2005 Organization of the Symposium "New perspectives in insect behavior: mechanisms und evolution", University of Würzburg
- 1999 Organization of the Symposium "Plasticity in the insect nervous system", Göttingen Neurobiology Conference (together with R. Lakes-Harlan)

#### **EDITORIAL WORK AND REVIEWER**

#### **Editorial work:**

2020-21 Guest Editor Frontiers in Physiology since 2008 Member Advisory Board of "The Journal of Comparative Physiology A" since 2006 Section Editor "Arthropod Structure & Development" Section: Sensory structures, peripheral, autonomic and central nervous systems, including neuroendocrine systems 2013 Guest Editor Special Issue Olfaction: Journal of Comparative Physiology A since 2011 **Reviewing Editor** Frontiers in Physiology (Invertebrate Physiology) since 2016 Reviewing Editor Frontiers in Behavioral Neuroscience 2020 Research Topic Guest Editor Frontiers in Physiology

**Reviewer (Journals) for:** Nature, Science, PNAS, Current Biology, Proceedings Royal

Soc London B, Journal of Comparative Neurology, Journal of Neurobiology, Biology Letters, Developmental Neurobiology, Journal of Comparative Physiology A, Scientific Reports, Brain, Behavior & Evolution, Progress in Neurobiology, Neuroscience

Letters, Cell Tissue Research, Frontiers in Behavioral

Neuroscience, Frontiers in Physiology, PLOS One, Arthropod Structure & Development, Physiological Entomology, Bee

World, and others.

## Reviewer (Grants, Stipends etc.) for:

Deutsche Forschungsgemeinschaft (DFG)

National Science Foundation (NSF)

Human Frontier Science Program (HFSP)

Smithsonian Institute Research Council Norway

Swiss National Science Foundation

German-Israeli Foundation for Scientific Research and

Development (GIF)

AERES France (Agence d'evaluation de recherche et de

l'enseignement superieur)

US-Israel Binational Science Foundation (BSF)

Alexander von Humboldt Foundation Studienstiftung des deutschen Volkes

Zukunftskolleg Konstanz

## MEMBERSHIPS IN SCIENTIFIC AND ACADEMICAL ASSOCIATIONS

Neurowissenschaftliche Gesellschaft (German Neuroscience Society) German Zoological Society (Deutsche Zoologische Gesellschaft, DZG)

International Society for Neuroethology (ISN)

Associated Member of the Center for Insect Science (CIS), Univ. of Arizona, USA

Studienstiftung des Deutschen Volkes

Deutscher Hochschulverband

Unibund Würzburg