

Behavioral Physiologists at the Leibniz Institute for Zoo and Wildlife Research (IZW)

Leibniz Institute for Zoo and Wildlife Research (IZW)

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ACADEMIC EDUCATION

Habilitation (venia legendi Zoology) Humboldt-Universität Berlin 2008

Topic: „Physiology, Behavior and Olfactory Communication in the Greater Sac-winged bat“

Doctor rer. nat. (magna cum laude) University of Erlangen-Nuremberg 1998

Topic: “The Energetic Costs of Flight and Reproduction in Nectar-feeding Bats” (Title translated from German)

Diploma (grade 1.1) University of Erlangen-Nuremberg 1993

*Topic: “The energetic Cost of hovering Flight in the Nectar-feeding Bat *Glossophaga soricina*” (Title translated from German)*

ACADEMIC CAREER

Since 2008 **“Privatdozent”** at the Humboldt University Berlin

Since 2006 Head of the Stable Isotope Facilities at the IZW

Since 2004 **Senior Research Scientist:** Research Group Evolutionary Ecology at the Leibniz Institute for Zoo and Wildlife Research, Berlin, Germany

Since 2002 **Lecturer** at the Humboldt University Berlin

Since 2001 **Research Scientist:** Research Group Evolutionary Ecology at the Leibniz Institute for Zoo and Wildlife Research, Berlin, Germany

September 2000 to June 2001

Postdoc University of Bielefeld; Prof. Dr. Fritz Trillmich. “Behavioral physiology”

March 2000 to August 2000

Postdoc Cornell University. Prof. Dr. Jerrold Meinwald and Prof. Dr. Jack Bradbury. “Sexual selection and olfactory communication in mammals”

March 1999 to February 2000

Postdoc Boston University. Prof. Dr. Thomas H. Kunz. "Social systems and energetics of mammals"

1993-1998

Doctoral research University of Erlangen-Nürnberg. Prof. Dr. Otto von Helversen: (published in Voigt & Winter 1999, Voigt 2000, 2003, Voigt et al. 2003, 2005)

1992-1993

Diploma thesis University of Erlangen-Nürnberg. Prof. Dr. Otto von Helversen, Dr. York Winter. (published in Winter et al. 1998)

1987-1991

Study of Biology University of Erlangen-Nürnberg (Zoology, Microbiology, Geology, Paleontology)

1987-1991 **Study of Biology** at the University of Erlangen-Nürnberg

1986-1987 **Military Service**

1986 **"Abitur"** at the Herder-Gymnasium Forchheim

AWARDS

2008 Co-author of a winning poster presentation (Award given to Dr. Gerold Jerz for his poster during the Countercurrent Chromatography Conference in Rio de Janeiro, Brazil)

2007 Co-author of a winning student paper presentation (**Luis Bacardi Award** given to Dr. Katja Rex for her talk during the International Bat Research Conference in Merida, Mexico)

2006 **Winner of the German Business Plan Competition by McKinsey**

1999 Nato Postdoc-Fellowship from the **German Academic Exchange Service** (DAAD)

1995 Dissertation improvement grant from the **German Academic Exchange Service** (DAAD)

1994 Dissertational grant from the „**Studienstiftung des Deutschen Volkes**“

EDITORIAL TASKS

Associate Editor for *Journal of Mammalogy*

Editor of a supplemental volume of *Ethology*

REVIEWER FOR JOURNALS

Acta Chiropterologica, Animal Behaviour, Behavioral Ecology, Behavioral Ecology and Sociobiology, Biology Letters, Biological Review, Biotropica, Canadian Journal of Zoology, Comparative Biochemistry and Physiology A, Ecography, Ecoscience, Ethology, European Journal of Wildlife Research, Functional Ecology, Journal of Animal Ecology, Journal of Comparative Physiology B, Journal of Ethology, Journal of Experimental Biology, Journal of Mammalogy, Journal of Wildlife Management, Journal of tropical Ecology, Mammal Review, Mammalian Biology,

Naturwissenschaften, Oecologia, Physiological Biochemistry and Zoology, Physiological Entomology, Proceedings of the National Academy of Sciences, Rapid Communication in Mass Spectrometry, Zoology

REVIEWER FOR FUNDING ORGANIZATIONS

*Deutsche Forschungsgemeinschaft
National Geographic Society
National Science Foundation (U.S.A.)*

PROFESSIONAL MEMBERSHIPS

*American Association of Mammalogists
British Ecological Society
German Association for Stable Isotope Research (Arbeitsgemeinschaft Stabile Isotope e.V.)
German Society for Tropical Ecology (Gesellschaft für Tropenökologie)
German Zoological Society (Deutsche Zoologische Gesellschaft)
Ethological Society (Ethologische Gesellschaft)
Society for the Study of Animal Behavior
International Society for Behavioral Ecology*

ORGANIZATION OF CONFERENCES OR SYMPOSIA

2010 Head organizer of “the 2nd Berlin Bat Meeting: Bat Biology and Infectious Diseases”
2009 Co-organizer of the symposium “Nutrition, energetics and stable isotopes” held at the 7th International Conference on Physiology, Behaviour and Genetics of Wildlife Animals, Berlin
2009 Head organizer of “the 1st Berlin Bat Meeting: Symposium on Bat Migration (16.1.-18.1.2009)”
2007 Co-organizer of the 6th International Zoo and Wildlife Research Conference on Behavior, Physiology and Genetics Symposium on Conservation and Physiology of Wildlife, Berlin
2007 Co-organizer of the symposium “Diets and energetics” held at the 6th International Conference on Behavior, Physiology and Genetics of Wildlife Animals, Berlin
2004 Head organizer of the “5th International Symposium on Physiology, Behaviour and Conservation of Wildlife, Berlin”
2004 Co-organizer of the symposium “Communication in animals” held at the 5th International Symposium on Physiology, Behaviour and Conservation of Wildlife, Berlin
2004 Co-organizer of the symposium on “Dietary diversification in bats” held at the 13th International Bat Research Conference in Mikolajki, Poland
2002 Co-organizer of the 4th International Symposium on Physiology, Behaviour and Conservation of Wildlife, Berlin
2002 Co-organizer of the symposium “Olfactory communication in mammals” held at the 4th International Symposium on Physiology, Behaviour and Conservation of Wildlife, Berlin

GROUP MEMBERS

Technical Assistants

Doris Fichte: Logistic support, administration

Karin Sörgel: Laboratory manager of the stable isotope facility

Postdocs

Dr. Detlev Kelm (DFG funded) "Physiology of frugivory and nectarivory in *Glossophaga commissarisi*"

Dr. Ana Popa-Lisseanu (Alexander von Humboldt-Stiftung): "Migration of European Bats"

Visiting guest scientist:

Dr. L. Gerardo Herrera (Universidad Autonoma de Mexico): Jan - August 09

PhD students

Sabine Greiner (DFG funded) "Endocrinological basis of mating tactics in the greater sac-winged bat, *Saccopteryx bilineata*"

Simone Ghanem (DFG funded) "The role of mineral licks for reproduction in fruit-eating bats of the Amazon"

Internal PhD students who collaborate with me:

Mirjam Nadjafzadeh (adviser Dr. Krone, IZW): "Nahrungsspektrum und Fressverhalten des Seeadlers (*Haliaeetus albicilla*) in Deutschland"

Andreas Wilting (adviser Dr. Fickel, IZW): "Carnivores of Southeast Asia"

Julia Schad (adviser Prof. Dr. Sommer, IZW): "MHC diversity of Neotropical bats"

External PhD students

Markus Schuller (adviser PD Dr. Siemers, MPI for Ornithology, Seewiesen): "Metabolism and thermoregulation in bats of the temperate zone"

Diploma students:

Daniel Lewanzik (Humboldt University, Berlin): "Stress response in Neotropical bats" (tentative title)

Anna Juhnke (Humboldt University, Berlin): "Stable hydrogen isotope baseline map of Germany and adjacent regions based on mammalian fur"

Antje Kretzschmar (Humboldt University, Berlin):

Pia Klöckner (University of Bonn): "Validation of a minimally invasive blood-sampling technique for blood parameters"

Former group members

Former Postdocs

Dr. Dina Dechmann (DFG funded) “Social system and olfactory communication in the lesser bulldog bat (*Noctilio albiventris*)” Now: Max-Planck-Institute for Ornithology (Radolfzell)

Former PhD students

Dr. Katja Rex (DFG funded): “Stable isotope ecology of Neotropical bats”

Dr. Barbara Caspers (DFG funded) “Olfactory communication in the greater sac-winged bat (*Saccopteryx bilineata*)” Now: University of Bielefeld

Former Diploma students

Florian Hoffmann (Humboldt University, Berlin) 2006: “Foraging behaviour of the greater sac-winged bat, *Saccopteryx bilineata*” see Hoffmann et al. (2007) Canadian Journal of Zoology 85: 863-872.

Bettina Jarosch (Free University, Berlin) 2007: “Scent producing bacteria from the wing sacs of the greater sac-winged bat *Saccopteryx bilineata*”

Virginia Boye (Humboldt University, Berlin) 2007: “Dietary preferences and foraging behaviour of the nectar-feeding bat *Glossophaga commissaris*”

Sara Correia Carreira (Humboldt University, Berlin) 2007: “Stress induction by conventional bleeding techniques and by minimally-invasive bleeding with triatomine bugs in laboratory mice”

Julia Nowack (Free University, Berlin) 2007: “Olfactory communication in the greater sac-winged bat *Saccopteryx bilineata*”

Patricia Grasse (Free University, Berlin) 2007: “Dietary preferences of the common vampire bat *Desmodus rotundus*”: see: Voigt et al. (2008) J Com Phys B178:9-16.

INVITED LECTURES (SINCE 2001)

2009 Workshop on Nocturnal Pollinators (Bangalore, India): “Sensory Biology of pollinating bats: Seeing with your ears in the darkness of the night”

2009 Workshop on Nocturnal Pollinators (Bangalore, India): “Do plants make life of pollinating plants spin faster?”

2009 Plenary talk (Spring symposium “One Health - Zoonosen von Virchow bis heute” of the Academy of Animal Health (AfT): “Kryptische Diversität und kryptische Ökologie: Fledermäuse als Spezialfall innerhalb der Säugetiere”

2008 Forschungsinstitut für Wildtierkunde und Ökologie (University of Vienna): “Stable isotopes in wildlife research: Bridging the gap between physiology and conservation”

2008 Jacob Blaustein Institute of Desert Research; Ben Gurion University of the Negev, Israel: “Stable isotopes in ecological studies of bats”

2008 Jacob Blaustein Institute of Desert Research; Ben Gurion University of the Negev, Israel “Bat mating systems”

- 2008 Smithsonian Tropical Research Institution, BCNM, Panama: "Stable isotope ecology of Neotropical phytophagous bats"
- 2008 Cornell University, Department of Ecology and Evolutionary Biology, Ithaca, USA: "Mammalian pollinators: Life at the Energetic Knife-Edge"
- 2008 Cornell University, Boyce Thompson Institute, Ithaca, USA: "The role of olfactory signals in social systems of mammals: two case studies"
- 2008 Cornell University, Department of Neurobiology and Behaviour, Ithaca, USA: "Reproductive tactics in the mating system of the greater sac-winged bat: Two sides of the same coin"
- 2008 University of Wyoming, Laramie, USA: "Mammalian pollinators: Life at the Energetic Knife-Edge"
- 2008 Veterinary University of Hanover, Institute of Zoology: "The energetics of bat pollination: When animals and plants meet for selfish reasons"
- 2007 Tiputini Biodiversity Station (Ecuador) "Following the path of stable isotopes in Neotropical rainforest ecosystems"
- 2007 Boston University (USA) "Stable carbon isotope ratios in exhaled breath of bats"
- 2007 La Selva Biological Station, Costa Rica: "Ecology, Physiology and Social Behaviour of Neotropical bats"
- 2007 Göttinger Experimentallabor, Göttingen: "Auf der Jagd nach dem Atem des Geparden"
- 2006 Konrad Adenauer Stiftung, Berlin: "From an idea towards a business plan"
- 2006 Free University, Berlin: "Minimally invasive blood collection with triatomine bugs"
- 2006 IZW, Berlin: "Stable isotopes in wildlife ecology"
- 2006 Max-Planck Institute for Ornithology, Seewiesen: "Following the path of stable isotopes in Neotropical rainforest ecosystems"
- 2005 Federal Institute for Animal Care and Housing, Celle: "Minimal-invasive blood collection with triatomine bugs"
- 2005 Boston University, Boston, USA: "The mating system of the greater sac-winged bat: hormones, perfumes and reproductive tactics"
- 2005 Humboldt University, Berlin: "Following the bloody path in host-parasite food chains"
- 2005 University of Erlangen-Nürnberg: "The mating systems of the greater sac-winged bat: Hormones, pheromones and choosing the right tactic"
- 2005 Animal Care Authority of Berlin: "Minimally invasive blood collection with triatomine bugs"
- 2004 Konrad-Lorenz Research Institute, Grünau, Austria "Blood sucking bugs for minimally invasive blood collection in endotherm animals"
- 2003 Max-Planck Institute for Ornithology, Seewiesen: "Mating tactics in colonies of the greater sac-winged bat"
- 2003 University of Bielefeld: "Stable isotopes as dietary tracers in food webs"
- 2002 IZW, Berlin: "Reproductive tactics in the mating system of the greater sac-winged bat"