

**PERSONAL INFORMATION****Full Name:** Janie Michelle Ondracek**ORCID:** 0000-0002-4570-447X**URL:** [www.ondraceklab.com](http://www.ondraceklab.com)**Date of Birth:** 12.04.1982**Nationality:** Switzerland and USA**Languages:** English (native), German (B2.2/C1)**Contact:** Technical University of Munich  
Chair of Zoology, Liesel-Beckmann-Str. 4,  
85354 Freising, Germany**Email:** [janie.ondracek@tum.de](mailto:janie.ondracek@tum.de)**Phone:** +49 8161 71 2808

**Profile:** My research investigates sleep-dependent memory consolidation in non-mammalian animal models. I use an interdisciplinary approach that incorporates diverse methods such as:

- **Neurophysiology** to examine brain dynamics during learning and sleep
- **Slice electrophysiology** to map large-scale brain dynamics
- **Behavioral paradigms** to study natural learning
- **Molecular and genetic tools** to perturb neural circuits in real time
- **Computational approaches** to analyze behavior and brain state network dynamics

**EDUCATION**

- 2020-            **Habilitation in Zoology**  
Technical University of Munich, Munich, Germany
- 2014            **Dr. sc. ETH Zurich – Physics**  
ETH Zurich, Zurich, Switzerland  
PhD Supervisor: Prof. Dr. Richard H.R. Hahnloser
- 2009            **MSc – Neural Systems and Computation**  
University of Zurich, Zurich, Switzerland
- 2005            **BA – Neuroscience**  
Lawrence University, Appleton, Wisconsin, USA

**CURRENT POSITION**

- 2017-            **Lecturer and Postdoctoral Researcher**  
Technical University of Munich, Chair of Zoology, Freising, Germany

**PREVIOUS POSITIONS**

- 2013-2017      **SNSF Postdoctoral Research Fellow**  
MPI for Brain Research, Frankfurt, Germany
- 2009-2013      **PhD student**  
Institute of Neuroinformatics, Zurich, Switzerland
- 2005-2007      **Research Associate**  
Rosalind Franklin University of Medicine and Science, North Chicago, IL, USA

**CAREER BREAKS**

- 07.04.2020 - 5.10.2020    Parental leave (6 months)
- 15.07.2022 - 17.08.2023    Parental leave (13 months)

**RESEARCH FELLOWSHIPS AND AWARDS**

<b>2021-2022:</b>	<b>Dr.-Ing. Leonhard Lorenz-Stiftung - Research Grant</b> Technical University of Munich, Freising, Germany
<b>2021-2022</b>	<b>Bernstein - Computational Neuroscience - Startup Funds</b> Technical University of Munich, Freising, Germany
<b>2021-2022</b>	<b>International Emerging Actions (CNRS) - Mobility Fellowship</b> Technical University of Munich, Freising, Germany
<b>2020-2021:</b>	<b>Bayerisch-Französisches Hochschulzentrum - Mobility Fellowship</b> Technical University of Munich, Freising, Germany
<b>2019</b>	<b>Grass Foundation - Independent Investigator Fellowship</b> Technical University of Munich, Freising, Germany
<b>2019-2021</b>	<b>Daimler and Benz Foundation - Postdoctoral Scholarship</b> Technical University of Munich, Freising, Germany
<b>2018-2022</b>	<b>German Research Foundation (DFG) - Research Grant</b> Technical University of Munich, Freising, Germany
<b>2014-2016</b>	<b>SciMento Hessenweit - Mentoring Program für Wissenschaftlerinnen</b> MPI for Brain Research, Frankfurt, Germany
<b>2013-2014</b>	<b>Swiss National Science Foundation - Early Postdoc Mobility Fellowship</b> ETH Zurich, Zurich, Switzerland
<b>2004-2005</b>	<b>Thomas J. Watson Fellowship</b> Lawrence University, Appleton, Wisconsin, USA

**RESEARCH SUPERVISION**

**MSNE Program Mentor:** (2020-) Master of Science in Neuroengineering program, Department of Electrical and Computer Engineering, Technical University of Munich

**Technical University of Munich, Freising, Germany (2017-present)**

PhD Students:	<b>N=1</b>
Bachelor Students:	<b>N=5</b>
Master Students:	<b>N=2</b>
Research Internships:	<b>N=20</b>

**MPI for Brain Research, Frankfurt, Germany (2013-2017)**

Research Internships:	<b>N=7</b>
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**Member of PhD thesis committees: N=2**

- 2022 - G. Khot, Radboud University, Nijmegen, Netherlands
- 2022 - H. Yeganegi, LMU, Munich, Germany (1st examiner)

**Selected Student Projects:**

- Identifying sharp wave-ripple activity in avian brain slices using multielectrode arrays
- AAV-mediated delivery of optogenetic constructs to the avian brain
- Spike sorting approaches for multichannel recordings from the avian brain
- Serotonin and parvalbumin immunohistochemistry in the avian brain
- Using DeepLabCut for 3D markerless pose estimation in zebra finches
- Electrophysiological investigation of sleep and behavior in embryonic chickens
- Mathematical modeling of surfacing behavior in sleeping turtles

**REVIEWING ACTIVITIES**

<b>Expert Reviewer:</b>	Science
<b>Expert Reviewer:</b>	Journal of Neural Engineering
<b>Expert Reviewer:</b>	Brain Structure and Function
<b>Expert Reviewer:</b>	Journal of Smart Materials and Structures

**Web of Science profile:** <https://www.webofscience.com/wos/author/record/AAA-6135-2021>

**TEACHING EXPERIENCE****Academic courses - acting as course coordinator and lecturer (N=4)**

- 2021- Neuroethology of Predation and Escape, Technical University of Munich
- 2021- Rhythms of the Brain, Technical University of Munich
- 2018- Neuroscience of Vision, Technical University of Munich
- 2018- Neurobiology of Birds, Technical University of Munich

**Academic courses - acting as lecturer (N=7)**

- 2018- Principles of Neurobiology, Technical University of Munich
- 2018- Sensory Physiology, Technical University of Munich
- 2017 Advanced Methods in Neurophysiology, Technical University of Munich
- 2009-11 Computational Neuroscience, ETH Zurich
- 2010-11 Laboratory Animal Science (Instructor, Avian Section), ETH Zurich
- 2010 Neuroscience: From Networks to Systems, ETH Zurich
- 2009 Auditory Informatics, ETH Zurich

**Certificates:** ProLehre Intensiv: Certificate for Teaching for the Bavarian Universities (2020)

**INVITED CONFERENCES AND PRESENTATIONS****Faculty Interviews (N=2)**

- 2018 Tenure Track Professor, Neurobiology of Vocal Communication, University of Tübingen
- 2018 Tenure Track Professor, Digital Health and Behaviour Monitoring, Technical University of Munich

**Invited Conference Presentations (N=5)**

- 2019 Daimler and Benz Foundation Alumni Meeting, Ladenburg, Germany
- 2019 European Birdsong Meeting, Cappelletti, Italy
- 2018 Avian Cognitive Neuroscience, Ruhr University Bochum, Bochum, Germany
- 2018 A Comparative Approach to Cracking Circuit Function II, Janelia Research Campus, Ashburn, USA
- 2017 Neuroethology Satellite Symposium, German Zoological Society, Bielefeld, Germany

**Scientific Colloquiums (N=9)**

- 2019 Flash Talk, Marine Biological Laboratory, Woods Hole, USA
- 2019 Grass Laboratory Trustee Meeting, Woods Hole, USA
- 2018 Biopsychology Research Colloquium, Ruhr University Bochum, Bochum, Germany
- 2018 GSN Neurolunch, Ludwig-Maximilians-University Munich, Munich, Germany
- 2018 Loren Frank Lab, Center for Integrative Neuroscience, UC San Francisco, USA
- 2018 Life Sciences and Computation Meetup, Technical University Munich, Munich, Germany
- 2017 Neurolunch Talk, Cortexlab, University College London, London, UK
- 2016 Georges Lab, University of Canberra, Canberra, Australia
- 2016 Lizard Lab, Macquarie University, Sydney, Australia

**INTERNATIONAL AND NATIONAL RESEARCH COLLABORATIONS**

<b>Name</b>	<b>Affiliation, Country</b>
N. Giret	Neuroscience Paris-Saclay Institute, Université Paris Sud, <b>France</b>
A. Leblois	Bordeaux Neurocampus, Université de Bordeaux, <b>France</b>
M. Shein-Idelson	Sagol School for Neuroscience, Tel-Aviv University, <b>Israel</b>
R. Hahnloser	Institute of Neuroinformatics, ETH Zurich, <b>Switzerland</b>
M. A. Tosches	Columbia University, Department of Biological Sciences <b>USA</b>
D. Vallentin	Max Planck Institute for Biological Intelligence, <b>Germany</b>
B. Wolfrum	TUM Department of Electrical and Computer Engineering, <b>Germany</b>

**SOCIETY MEMBERSHIP**

- 2018- Bernstein Center for Computational Neuroscience - Munich, Germany
- 2006- Society for Neuroscience, USA
- 2010- Federation of European Neuroscience Societies, European Union
- 2017- German Neuroscience Society, Germany
- 2017- German Zoological Society, Germany