

# Dr. Hannah J. M. Haberkern

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## CURRENT AND PREVIOUS POSITIONS

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<b>Emmy Noether Junior Group Leader</b>   University of Würzburg, Germany.	11.2023 - present
<b>Postdoctoral associate</b>   HHMI Janelia Research Campus Supervisor: Vivek Jayaraman	09.2017 - 10.2023

## EDUCATION

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<b>University of Cambridge, UK / HHMI Janelia Research Campus, USA</b> PhD at the Department of Zoology Thesis: <i>Multisensory navigation in tethered walking insects.</i> Advisors: Berthold Hedwig (University of Cambridge), Vivek Jayaraman (Janelia)	2012-2018
<b>ETH Zürich, Switzerland</b> Master of Science in Computational Biology and Bioinformatics Thesis: <i>Measurement of Drosophila's wing-beat response to mechanosensory disturbances.</i> Advisors: Steven Fry, Ruedi Stoop	2009-2012
<b>Julius Maximilians Universität Würzburg, Germany</b> Bachelor of Science in Biomedicine Thesis: <i>Conditioning of movements of Drosophila larva using vibration stimuli.</i> Advisor: Bertram Gerber	2006-2009

## RESEARCH GRANTS, FELLOWSHIPS

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<b>Emmy Noether Grant</b> , Deutsche Forschungsgemeinschaft: <i>Behavioural strategies and neural mechanisms for robust navigation</i>	2023
<b>PhD fellowship</b> , Howard Hughes Medical Institute: Funding to cover expenses while studying at Cambridge and small research allowance	2012

## TEACHING AND SUPERVISION

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<b>Supervision of Master thesis projects:</b> Laura Porta (University of Pisa), Shivam Chitnis (Indian Institute of Science Education and Research, Pune)	2017-2018, 2021-2022
<b>Supervision of Janelia Undergraduate Scholars:</b> Dimitra Vardalaki (Jun - Jul 2015), Mélanie Basnak (Jun - Aug 2016, coauthor on publication), Laura Porta (Jun - Aug 2017), Shivam Chitnis (Jun - Aug 2019 and Jun - Sep 2020 (virtually)).	2015 - 2020
<b>Supervision of high school student:</b> Vinay Bhaip (Second Place in Virginia Science Fair)	06.2019 – 12.2019
<b>Women's coding circle:</b> Teaching python classes and helping colleagues with program projects	08.2017 – 09.2018
<b>Course curriculum design:</b> Reorganizing the bachelor in biomedicine course curriculum based on the Bologna guidelines.	04.2008 – 07.2009
<b>Teaching Assistant:</b> Supervision of exercises for "Introduction to computer science for biologists and pharmacists" lecture course, ETH Zürich, Switzerland	09.2009 – 07.2010
<b>Teaching Assistant:</b> Exam preparation for "General Biology" lecture course, Universität Würzburg, Germany	05. – 07.2008

## SCIENTIFIC SERVICE

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<b>Peer review:</b> eLife, Journal of Experimental Biology, Journal of Neurogenetics, Neuroinformatics, Frontiers in Neural Circuits, COSYNE abstracts	2019-2023
<b>Grant review:</b> External reviewer for ERC consolidator grant, Wellcome Discovery Award	2021,2022
<b>Conference organization:</b> <i>Bridging Diverse Perspectives on the Mechanistic Basis of Foraging</i> . Janelia Research Campus, Ashburn, USA	2023
<b>Conference organization:</b> <i>Structure and Function of the Insect Central Complex</i> . Janelia Research Campus, Ashburn, USA	2022, 2018
<b>Seminar series (virtual):</b> Co-organizer of “The future of foraging seminar series”, which was broadcasted through crowdcast/World Wide Neuro and open to anyone.	2021, 2022, 2023
<b>Workshop organization:</b> Co-organizer for <i>Junior Scientist Workshop on Mechanistic Cognitive Neuroscience</i> . Janelia Research Campus, Ashburn, USA	2020, 2019, 2018
<b>FENS symposium:</b> Organizer, speaker and chair of session <i>Flexible navigation and the insect central complex: insights from a multifaceted brain region</i> at FENS 2020	2019/2020

## OTHER PROFESSIONAL ACTIVITIES

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<b>Committee member:</b> Member of the Janelia Sustainability Focus group.	2019-2023
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## SELECTED PRESENTATIONS

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<b>Invited talk</b>   <i>Generating a stable neural compass in dynamic, naturalistic visual environments</i> . International Conference on Invertebrate Vision. Bäckaskog Castle, Sweden	08.2023
<b>Invited talk</b>   <i>Stability of a neural compass in dynamic, naturalistic environments</i> . Departmental Seminar, Biology Department of Lund University, Lund, Sweden	04.2022
<b>Invited talk</b>   <i>Stability of a neural compass in dynamic, naturalistic environments</i> . Bernstein Seminar, Bernstein Center, Freiburg, Germany	03.2022
<b>Invited talk</b>   <i>Neural circuits that support robust and flexible navigation in dynamic naturalistic environments</i> . UCL BehavioNeuro Talks (virtual), Institute of Behavioural Neuroscience at University College London, virtual, UK.	08.2021
<b>Invited talk</b>   <i>Lessons from analyzing navigational circuits in the Drosophila hemibrain connectome</i> . Workshop 5, The Brain Connectivity Workshop Series organized by the NIH and DOE, virtual, USA	03.2021
<b>Invited talk</b>   <i>Heading circuit dynamics during spatial navigation in cluttered two-dimensional environments</i> . Entomology 2020, virtual, USA	11.2020
<b>Invited talk</b>   <i>Probing central complex function during context-dependent navigation in two-dimensional environments</i> . Part of FENS symposium “Flexible navigation and the insect central complex: insights from a multifaceted brain region” at FENS, virtual	07.2020
<b>Invited talk</b>   <i>Visually guided behavior of fruit flies in 2D virtual reality</i> . Hosted by Prof. Keram Pfeiffer, PhD, Biozentrum, University of Würzburg, Germany	11.2018
<b>Selected talk</b>   <i>Two-dimensional virtual reality with optogenetic reinforcement to study landmark-guided navigation in head-fixed Drosophila</i> . Structure and Function of the Insect Central Complex, HHMI Janelia Research Campus, Ashburn, USA	10.2018

**Invited talk** | *Landmark-guided navigation in a 2D virtual reality environment.* 12.2016  
Hosted by Andrew Leifer, PhD, Department of Physics & Princeton Neuroscience Institute,  
Princeton University, USA

**Invited talk** | *Dissecting navigation in a visual and virtual thermal landscape.* 04.2016  
University of Cambridge PDN Department Graduate Symposium, Cambridge, UK

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**SCHOOLS AND WORKSHOPS**

**FENS Winter School** | *Neural control of behaviour - Series 1: Navigation.* 12.2017  
Obergurgl, Austria.

**Junior Scientist Workshop** | *Neural Circuits and Behavior.* 10. 2016  
Janelia Research Campus, Ashburn, USA

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