

Chris J. Dallmann

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Research Focus

I study how neural circuits enable animals to control their limbs flexibly across behaviors, focusing on how descending commands and sensory feedback shape movement. My work in *Drosophila* combines connectomics, calcium imaging, optogenetics, and quantitative behavioral analysis.

Positions

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| 2023–present | Postdoctoral Fellow
Neurobiology and Genetics, University of Würzburg, Germany (Jan M. Ache) |
| 2018–2023 | Postdoctoral Fellow
Neurobiology and Biophysics, University of Washington, USA (John C. Tuthill) |
| 2013–2018 | Doctoral Researcher
Biological Cybernetics, Bielefeld University, Germany (Josef Schmitz) |
| 2009, 2012 | Visiting Student Researcher
Integrative Biology, University of California at Berkeley, USA (Robert J. Full) |

Education

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| 2019 | PhD (Dr. rer. nat., Neuroscience), <i>summa cum laude</i>
Biological Cybernetics, Bielefeld University, Germany |
| 2013 | MSc in Systems Biology of Brain and Behavior , highest grade
Bielefeld University, Germany |
| 2011 | BSc in Biomimetics
University of Applied Sciences Bremen, Germany |

Fellowships and Awards

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| 2023–2025 | Marie Skłodowska-Curie Postdoctoral Fellowship |
| 2020–2022 | German Research Foundation (DFG) Postdoctoral Fellowship |
| 2018–2020 | Raymond and Beverly Sackler Postdoctoral Fellowship |
| 2016 | Best Talk Award, Arthropod Neuroscience Network Meeting |
| 2013 | German National Scholarship (Deutschlandstipendium) |

Publications

19 peer-reviewed publications, 2 manuscripts in revision, 1 manuscript submitted
Google Scholar (October 2026): h-index 16, >820 citations; ORCID: 0000-0002-4944-920X

Selected Publications

Dallmann CJ, Luo Y, Agrawal S, Mamiya A, Chou GM, Cook A, Sustar A, Brunton BW, Tuthill JC (2025). Selective presynaptic inhibition of leg proprioception in behaving *Drosophila*. *Nature* 647, 445–453. doi:10.1038/s41586-025-09554-2

Dallmann CJ, Mukthar Iqbal F, Liebscher S, Erginkaya M, Liessem S, Sauer EL, Soyka H, Cascino-Milani F, Goldammer J, Ito K, Ache JM (2026). A dedicated brain circuit controls forward walking in *Drosophila*. bioRxiv 2026.01.04.697356. doi:10.64898/2026.01.04.697356

Dallmann CJ*, Karashchuk P*, Brunton BW, Tuthill JC (2021). A leg to stand on: computational models of proprioception. *Current Opinion in Physiology* 22, 100426. *Co-first authors.
doi:10.1016/j.cophys.2021.03.001

Invited Talks and Seminars

2027	Göttingen Meeting of the German Neuroscience Society, Göttingen, Germany (scheduled)
2026	Leibniz Institute for Neurobiology, Germany; Imperial College London, UK; International Congress for Neuroethology, Vancouver, Canada; Bielefeld University, Germany
2025	Computing Cords: Sensorimotor Control by Nerve Cord Circuits Across Species, Janelia Research Campus, USA (invited talk; substitute for Jan M. Ache)
2024	University of Cologne, Germany; Arthropod Neuroscience Network, virtual
2023	Society for Integrative and Comparative Biology Annual Meeting, Austin, USA
2022	University of Würzburg, Germany

Competitively Selected Oral Presentations

2024	The Brain Conference: Circuits for Movement, Rungsted Kyst, Denmark
2023	Motor Control: Spinal Circuits and Beyond, St. Andrews, UK
2021	CSHL Neurobiology of Drosophila Meeting, virtual
2017	German Zoological Society Annual Meeting, Bielefeld, Germany

Mentoring and Leadership

- Mentored 2 PhD students and co-supervised 11 additional students on a day-to-day basis (4 MSc and 3 BSc thesis students, 3 rotation students, 1 research assistant)
- Completed a two-year PI leadership program, University of Würzburg
- Reviewed 19 manuscripts for journals including *Nature Communications*, *Current Biology*, *Current Opinion in Neurobiology*, and *eLife*
- Abstract reviewer for *COSYNE 2025*
- Co-organized *NeuroDoWo 2016*, an annual national neuroscience conference for PhD students

Teaching

2025–present	Guest lecture on neural control of movement, MSc course <i>Neurogenetics of Behavior</i> , University of Würzburg
2023–present	Guest lecture and practical course on connectomics, BSc course <i>Neurobiology</i> , University of Würzburg
2021	Guest lecture on proprioception, BSc course <i>Neurobiology</i> , University of Washington
2014–2016	Teaching Assistant, MSc course <i>Control of Behavior</i> and BSc course <i>Neural Mechanisms of Behavior</i> , Bielefeld University
2011	Teaching Assistant, BSc course <i>Locomotion</i> , University of Applied Sciences Bremen

Outreach

2024	2 public talks with Q&A (Brain Awareness Week, Unibund Würzburg)
2021	Designed experiments for high school students, Rainier Scholars program, University of Washington
2016, 2019	Interview for <i>The New York Times</i> (2016) and <i>Inside JEB</i> (2019)
2012–2015	Mentored underrepresented high school students via TABULA e.V., a local non-profit association for educational equity