

Kristin Henderson

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EDUCATION

Master of Science in Data Science, expected graduation 2026, Southern Methodist University, Dallas, TX
Bachelor of Science, emphasis in Biology, The Evergreen State College, Olympia, WA

Other Courses:

- Calculus, 2023, Northern Virginia Community College, Sterling, VA
- MATLAB Onramp, 2022, Mike X. Cohen, Udemy
- Complete Python Developer, 2020, Zero to Mastery Academy
- Software Design, 2019, Northern Virginia Community College, Sterling, VA

EXPERIENCE

Howard Hughes Medical Institute, Janelia Research Campus, Ashburn, VA

Research Technician II, Jayaraman Lab. Dec 2021 – Present

- Pioneers the use of mature *Danionella*, tiny, translucent fish, to study the neuronal basis of navigation
- Collaboratively designs, tests and optimizes a multi-component behavioral rig, including a fish tank, maze arena, IR lighting, synchronous cameras, automated feeding, and sound stimuli and recording
- Establishes replicability by using MATLAB and python for machine learning based animal tracking
- Builds team knowledge by regularly presenting data and scientific literature at lab meetings

Howard Hughes Medical Institute, Janelia Research Campus, Ashburn, VA

Research Technician II, Keleman Lab. Jan 2017 – Dec 2021

- Published novel findings on memory formation and persistence in neural circuits
- Conducted courtship conditioning, sleep, and neural luminescence assays with precision and speed
- Expertly applied *Drosophila* genetics for flawless execution of crosses and stock maintenance
- Ensured successful publication via contributions to scientific discussions and manuscript revision
- Employed multiple software applications to accurately record, rigorously analyze and visualize data

Howard Hughes Medical Institute, Janelia Research Campus, Ashburn, VA

Research Technician I, Project Technical Resources. June 2015 – Dec 2016

- Expertly dissected and mounted adult *Drosophila* central nervous systems
- Reliably provided precise immunohistochemistry and confocal microscopy data to collaborators

PUBLICATIONS

Meissner, G *et al.* [including **Henderson, K.**] A split-GAL4 driver line for *Drosophila* CNS cell types. *bioRxiv* (2024). <https://doi.org/10.1101/2024.01.09.574419>

Lei, Z., **Henderson, K.** & Keleman, K. A neural circuit linking learning and sleep in *Drosophila* long-term memory. *Nat Commun* **13**, 609 (2022). <https://doi.org/10.1038/s41467-022-28256-1>

VOLUNTEER SERVICE

Certified Virginia Master Naturalist, Banshee Reeks Chapter, Leesburg, VA. May 2018 – Present

- Secretary, Board of Directors, Nov 2018 – Dec 2021
- 450+ administrative, outreach, stewardship and citizen science volunteer hours

TECHNICAL SKILLS

Programming / Languages

- R
- Python
- MATLAB

Data Visualization

- ggplot2
- Graphpad Prism

Other Tools

- Version control – Git & GitHub
- Data cleaning & manipulation
- Machine learning & computer vision