

Eviatar Yemini, Ph.D.
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University of Massachusetts Chan Medical School
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Education

Ph.D., Neurobiology, MRC LMB, University of Cambridge, Cambridge, UK 2/2013
Thesis Title: High-throughput, single-worm tracking and analysis in *C. elegans*
Advisor: William Schafer, Ph.D.

M.S., Computational Neurobiology, University of California San Diego, San Diego, CA 9/2007

Post Baccalaureate, Neurobiology and Digital Signal Processing, 6/2004
Columbia University, New York, NY

B.A., Pre-Medical Concentration in Computer Science and Mathematics, Dean's List, 2/1997
Columbia University, New York, NY

Postdoctoral Training

Postdoctoral Fellow, HHMI Research Specialist, 2/2013-
Biological Sciences Department, Columbia University, New York, NY 11/2021
Supervisor: Oliver Hobert, Ph.D.

Academic Appointments

Assistant Professor 1/2022-
Neurobiology Department, University of Massachusetts Chan Medical School, Worcester, Present
MA

Other Positions and Employment

Chief Software Engineer, NeXtorage (Activium), New York, NY 1999-2003
Led research and software development for failsafe network-based data storage and wire-speed network routing for video and telephony.

Senior Software Engineer, Arbitrade (Knight Capital Group), Ardsley, NY 1998-1999
Led software design and development for a global, 24/7 financial-arbitrage trading system and statistical evaluation of financial risk.

Associate, Morgan Stanley, New York, NY 1997-1998
Software engineer for foreign-exchange currency desk.

Honors and Awards

Scialog Fellow: Neurobiology and Changing Ecosystems 2025-2028

Hypothesis Fund Grant 2023-2024

Klingenstein-Simons Fellowship Award in Neurosciences 2022-2025

Gates Cambridge Scholarship 2007-2011

Educational Activities**Teaching Activities in Programs and Courses**

Systems and Circuits Neuroscience (BBS-820), Lecturer (3 hrs/yr), ~10 Graduate Students, Session Title: Connectomics	2022-Present
Cellular, Molecular and Developmental Neuroscience (BBS-780): Nervous System Development, Lecturer (3 hrs/yr), ~15 Graduate Students, Session Title: Neurogenesis and Cell Fate Specificity/Diversity	2022-Present
Foundation Course: Scientific Inquiry in Biomedical Research (BBS 614), Assistant Lecturer (1 hr/yr), ~60 Graduate Students, Workshop Title: Genetic Screen Activity	2022

Internal Educational Activities

Thesis Research Advisory Committee (TRAC), Mary Shay Capps, Summer Thyme Lab	2025-Present
Thesis Research Advisory Committee (TRAC), Selene Flemming, David Grunwald Lab	2024-Present
Qualifying Exam (QE) Committee, Selene Flemming, David Grunwald Lab	2023

External Educational Activities

Neuromatch Academy (NMA) Online Course, Computational Neuroscience, Project Mentor (6 hrs/yr), ~8 Students, https://academy.neuromatch.io	2022-Present
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Advising and Mentoring**Postdoctoral Trainees**

Molly Martin, Postdoctoral Fellow, Postdoctoral Mentor Postdoctoral Fellow (Yemini Lab), University of Massachusetts Chan Medical School, MA	2024-Present
Woojung Heo, Postdoctoral Fellow, Postdoctoral Mentor Postdoctoral Fellow (Yemini Lab), University of Massachusetts Chan Medical School, MA	2023-Present
Xingyang Fu, Postdoctoral Fellow, Postdoctoral Mentor Postdoctoral Fellow (Yemini Lab), University of Massachusetts Chan Medical School, MA	2022-2024

PhD Trainees

Bedanta Barik, Ph.D. Candidate, Ph.D. Advisor Neurobiology Ph.D. Student (Yemini Lab), UMass Chan Medical School, MA	2024-Present
Ruixuan Xiao, Ph.D. Candidate, Ph.D. Co-Advisor (Dorothy Schafer 2 nd Ph.D. Co-Advisor) Neurobiology Ph.D. Student (Yemini & Schafer Labs), UMass Chan Medical School, MA	2023-Present
Maria Cristina Pop, Ph.D. Candidate, External Ph.D. Advisor Metabolic Programming Ph.D. Student (Vogt Lab), Helmholtz Munich, Germany	2022-Present

Graduate Mentorship

Caroline Zhang, Ph.D. Candidate, Thesis Committee Synthetic Neurobiology Ph.D. Student (Boyden Lab), MIT, MA	2025-Present
Caecilia Thuermer, Ph.D. Candidate, Thesis Committee Developmental Biology Ph.D. Student (Carlson Lab), Yale, CT	2025-Present
Quilee Simeon, Ph.D. Candidate, Thesis Committee Computational Neuroscience Ph.D. Student (Boyden Lab), MIT, MA	2025-Present
Brendan Philippon, Ph.D. Candidate, Career Mentor Neurobiology Ph.D. Student (Byrne Lab), UMass Chan Medical School, MA	2023-Present

Rishabh Raj, M.S. Student, Master's Thesis Defense Committee Neuroinformatics M.S. Student (Varol Lab), NYU Tandon School of Engineering, NY	2025
Maedeh Seyedolmohadesin, Ph.D. Candidate, Mentor Neurobiology Ph.D. Student (Venkatachalam Lab), Northeastern University, MA	2022-2024
Richard Yan, Ph.D. Candidate, Mentor Biomedical Engineering Ph.D. Student (Hillman Lab), Columbia University, NY	2019-2024
Tian Xia, Research Volunteer, Mentor Data Analytics and Computational Social Science M.A. Candidate, UMass Amherst, MA	2022

Undergraduate Mentorship

Caroline Martino, Undergraduate, Mentor Summer Undergraduate Research Program (SURP), UMass Chan Medical School	2026
Daniel Yutaka Sprague, Undergraduate, Mentor Research Assistant (Kato Lab), University of California San Francisco, CA	2023-2024
Chukwudumebi Okonkwo, Summer Research Intern, Mentor Microbiology, B.S. Candidate, University of Pittsburgh, Pittsburgh, PA	2023
Noah Rotman, Summer Research Volunteer, Mentor Pre-Medical Neuroscience, B.S. Candidate, Georgia State University, GA	2023

High School Mentorship

Diya Sharma, Research Volunteer, Mentor Shrewsbury High School, Shrewsbury, MA	2025-Present
Tanay Gali, Research Volunteer, Mentor Shrewsbury High School, Shrewsbury, MA	2025

Investigation

Grants

Current

Agency: Research Corporation for Science Advancement Award: Scialog: Neurobiology and Changing Ecosystems Project Number: SA-NCE-2026-031 Title: Too Fast and Too Furious: Tradeoffs in Stress-Induced Accelerated Neurodevelopment Description: Investigating the tradeoffs of heat stress induced accelerated neurodevelopment in ectotherms and opposing protection mechanisms in endotherms. Total, direct & indirect costs: \$66,000 Role: Principal Investigator (1% effort)	PI: Eviatar Yemini	06/2026- 05/2027
Agency: Research Corporation for Science Advancement Award: Scialog: Neurobiology and Changing Ecosystems Project Number: SA-NCE-2025-013c Title: Comparative TRPV1 Function in Sensory Adaptability and Resilience to Global Warming Description: Determining how cross-taxa TRP channel molecular composition and cellular milieu regulate temperature sensing and functional neuronal resilience. Total, direct & indirect costs: \$66,000 Role: Principal Investigator (1% effort)	PI: Eviatar Yemini	06/2025- 05/2027

Agency: Massachusetts Life Sciences Center PI: Christina Baer and Eviatar Yemini 12/1/2024-11/30/2027
 Award: MLSC Bits to Bytes
 Project Number: No award number
 Title: Expanding into 3 dimensions: a new spatial -omics technology at UMass Chan
 Description: 3D spatial multi-omics to compare healthy versus diseased retinas and thereby identify previously unknown cell populations that drive retinal diseases.
 Total, direct & indirect costs: \$800,000
 Role: Co-Investigator (10% effort)

Agency: NIH/NIMH PI: Eviatar Yemini 12/2024-11/2026
 Award: Small Business Innovation Research (SBIR)
 Project Number: 1R43MH136847-01A1
 Title: Fast multicolor confocal fluorescence imager for neural network mapping
 Description: Developing a multi-wavelength confocal imager capable of simultaneous detection of multiple fluorophores and labeled neurons at high speed.
 Total, direct & indirect costs: \$60,000
 Role: Co-Investigator (1% effort)

Completed

Agency: Klingenstein Philanthropies and Simons Foundation PI: Eviatar Yemini 7/1/2022-7/1/2025
 Award: Klingenstein-Simons Fellowship Award in Neuroscience
 Project Number: No award number
 Title: Developmental changes in neural dynamics that drive new behaviors: a systems-biology approach
 Description: Developmental changes in neural activity that drive age-appropriate behaviors.
 Total, direct & indirect costs: \$225,000
 Role: Principal Investigator (3% effort)

Agency: Hypothesis Fund PI: Eviatar Yemini 1/1/2023-6/30/2024
 Award: Hypothesis Fund Grant
 Project Number: No award number
 Title: Evolutionary changes in behavioral circuits: Comparing whole nervous systems across 15 million years of ecological adaptation
 Description: Evolutionary changes in neurobehavioral circuits
 Total, direct & indirect costs: \$100,000
 Role: Principal Investigator (1% effort)

Agency: Gates Cambridge Trust PI: Eviatar Yemini (William Schafer Lab) 10/1/2007-11/29/2011
 Award: Gates Scholar
 Project Number: No award number
 Title: Worm Behavioural Phenome Project
 Description: Hardware, software, and database of mutant worm phenotypes.
 Total, direct & indirect costs: £49,000 stipend + £36,849 university fees
 Role: Ph.D. Student (100% effort)

Scholarship

Peer-Reviewed Publications

1. Barrett A, Varol E, Weinreb A, Taylor SR, McWhirter R, Cros C, Basavaraju M, Poff A, Tipps JA, Majeed M, Vidal B, Wang C, **Yemini E**, Bayer EA, Sun HS, Hobert O, Miller DM, Hammarlund M. Integrating bulk and single cell RNA-seq refines transcriptomic profiles of specific *C. elegans* neurons. *eLife* April 11 (2025).
2. Weinreb A, Varol E, Barrett A, McWhirter RM, Taylor SR, Courtney I, Basavaraju M, Poff A, Tipps JA, Collings B, **CeNGEN Consortium** (Cros C, Vidal B, Majeed M, Wang C, Bayer EA, Reilly M, **Yemini E**, Sun H, Oliver Hobert), Krishnaswamy S, Miller DM 3rd, Hammarlund M. Alternative splicing across the *C. elegans* nervous system. *Nature Communications*. May 16;16(1):4508 (2025).
3. Sprague DY, Rusch K, Dunn RL, Borchardt JM, Ban S, Bubnis G, Chiu GC, Wen C, Suzuki R, Chaudhary S, Lee HJ, Yu Z, Dichter B, Ly R, Onami S, Lu H, Kimura KD, **Yemini E***, Kato S*. Unifying community

whole-brain imaging datasets enables robust neuron identification and reveals determinants of neuron position in *C. elegans*. *Cell Reports Methods* Jan 15:100964 (2025).

*** Senior co-corresponding author.**

4. Guo M, Wu Y, Su Y, Qian S, Krueger E, Christensen R, Kroeschell G, Bui J, Chaw M, Zhang L, Liu J, Hou X, Han X, Lu Z, Ma X, Zhovmer A, Combs C, Moyle M, **Yemini E**, Liu H, Liu Z, Benedetto A, La Riviere P, Colón-Ramos D, Shroff H. Deep learning-based aberration compensation improves contrast and resolution in fluorescence microscopy. *Nature Communications* Jan 2;16(1):313 (2025).
5. Dyballa L, Lang S, Haslund-Gourley A, **Yemini E***, Zucker SW*. Learning dynamic representations of the functional connectome in neurobiological networks. *International Conference on Learning Representations* Jan 16 (2024).
*** Senior co-corresponding author.**
**** Note: The ICLR conference papers are among the top peer-reviewed international publications for machine learning. [ICLR has an impact factor approximately equivalent to Cell and JAMA.](#)**
6. Nejatbakhsh A, Dey N, Venkatachalam V, **Yemini E**, Paninski L, Varol E. Learning Probabilistic Piecewise Rigid Atlases of Model Organisms via Generative Deep Networks. *International Conference on Information Processing in Medical Imaging* Jun 8 (pp. 332-343) (2023).
7. Masoudi N, Schnabel R, **Yemini E**, Leyva-Diaz E, Hobert O. Cell-specific effects of the sole *C. elegans* Daughterless/E homolog, HLH-2, on nervous system development. *Development* Jan 3 (2022).
8. Gadenne M, Hardege I, **Yemini E**, Suleski D, Jagers P, Beets I, Schafer W, and Chew Y. Neuropeptide signalling shapes feeding and reproductive behaviours in male *C. elegans*. *Life Science Alliance* Vol 5(10) (2022).
9. Skuhersky M, Wu T, **Yemini E**, Nejatbakhsh A, Boyden E, Tegmark M. Toward a more accurate 3D atlas of *C. elegans* neurons. *BMC Bioinformatics* May 28;23(1):195 (2022).
10. Tekieli T, **Yemini E**, Nejatbakhsh A, Varol E, Fernandez RW, Masoudi N, Paninski L, Hobert O. Visualizing the organization and differentiation of the male-specific nervous system of *C. elegans*. *Development* Vol 148(18) (2021).
11. Emmons SW, **Yemini E**, Zimmer M. Methods for analyzing neuronal structure and activity in *Caenorhabditis elegans*. *Genetics* Vol 218(4) (2021).
12. Taylor SR, Santpere G, Weinreb A, Barrett A, Reilly MB, Xu C, Varol E, Oikonomou P, Glenwinkel L, McWhirter R, Poff A, Basavaraju M, Rafi I, **Yemini E**, Cook SJ, Abrams A, Vidal B, Cros C, Tavazoie S, Sestan N, Hammarlund M, Hobert O, Miller DM. Molecular topography of an entire nervous system. *Cell* Vol 184(16): 4329-4347 (2021).
13. Glenwinkel L, Taylor SR, Langebeck-Jensen K, Pereira L, Reilly MB, Basavaraju M, Rafi I, **Yemini E**, Pocock R, Sestan N, Hammarlund M, Miller DM, Hobert O. In silico analysis of the transcriptional regulatory logic of neuronal identity specification throughout the *C. elegans* nervous system. *eLife* Vol 10: e64906 (2021).
14. Masoudi N, **Yemini E**, Schnabel R, Hobert O. Piecemeal regulation of convergent neuronal lineages by bHLH transcription factors in *Caenorhabditis elegans*. *Development* Vol 148(11): dev199224 (2021).
15. ***Yemini E**, Lin A, Nejatbakhsh A, Varol E, Sun R, Mena GE, Samuel ADT, Paninski L, Venkatachalam V, Hobert O. NeuroPAL: A Multicolor Atlas for Whole-Brain Neuronal Identification in *C. elegans*. *Cell* Vol 184(1): 278-288 (2021).
*** Corresponding author.**
16. Cook SJ, Crouse CM, **Yemini E**, Hall DH, Emmons SW, Hobert O. The connectome of the *Caenorhabditis elegans* pharynx. *Journal of Comparative Neurology* Vol 528(16): 2767-2784 (2020).
17. Reilly MB, Cros C, Varol E, **Yemini E**, Hobert O. Unique homeobox codes delineate all the neuron classes of *C. elegans*. *Nature* Vol 584(7822): 595-601 (2020).
18. Nejatbakhsh A, Varol E, **Yemini E**, Venkatachalam V, Lin A, Samuel ADT, Hobert O, Paninski L. Demixing Calcium Imaging Data in *C. elegans* via Deformable Non-negative Matrix Factorization. *Medical Imaging Computing and Computer Assisted Intervention* Vol 12265:14-24 (2020).
19. Varol E, Nejatbakhsh A, Sun R, Mena GE, **Yemini E**, Hobert O, Paninski L. Statistical Atlas of *C. elegans*

- Neurons. *Medical Imaging Computing and Computer Assisted Intervention* Vol 12265:119-129 (2020).
20. Nejatbakhsh A, Varol E, **Yemini E**, Hobert O, Paninski L. Probabilistic Joint Segmentation and Labeling of *C. elegans* Neurons. *Medical Imaging Computing and Computer Assisted Intervention* Vol 12265:130-140 (2020).
 21. Javer A, Currie M, Lee CW, Hokanson J, Li K, Martineau CN, **Yemini E**, Grundy LJ, Li C, Ch'ng Q, Schafer WR, Nollen EAA, Kerr R, Brown AEX. An open-source platform for analyzing and sharing worm-behavior data. *Nature Methods* Vol 15(9): 645-646 (2018).
 22. Bentley B, Branicky R, Barnes CL, Chew YL, **Yemini E**, Bullmore ET, Vértés PE, Schafer WR. The Multilayer Connectome of *Caenorhabditis elegans*. *PLoS Computational Biology* Vol 12(12): e1005283 (2016).
 23. Kato S, Kaplan HS, Schrödel T, Skora S, Lindsay TH, **Yemini E**, Lockery S, Zimmer M. Global brain dynamics embed the motor command sequence of *Caenorhabditis elegans*. *Cell* Vol 163(3): 656-669 (2015).
 24. Butler VJ, Branicky R, **Yemini E**, Liewald JF, Gottschalk A, Kerr RA, Chklovskii DB, Schafer WR. A consistent muscle activation strategy underlies crawling and swimming in *Caenorhabditis elegans*. *Journal of the Royal Society Interface* Vol 12(102): 20140963 (2015).
 25. **Yemini E**, Grundy L, Jucikas T, Brown AEX, Schafer WR. A database of *Caenorhabditis elegans* behavioral phenotypes. *Nature Methods* Vol (9): 877-879 (2013).
 26. Brown AEX, **Yemini E**, Grundy L, Jucikas T, Schafer WR. A dictionary of behavioral motifs reveals genes affecting *C. elegans* locomotion. *Proceedings of the National Academy of Sciences of the USA* Vol 110(2): 791-796 (2013).
 27. Cohen E, **Yemini E**, Schafer WR, Feitelson DG, Treinin M. Locomotion analysis identifies roles of mechanosensory neurons in governing locomotion dynamics of *C. elegans*. *Journal of Experimental Biology* Vol 215(20): 3639-3648 (2012).
 28. **Yemini E**, Kerr RA, Schafer WR. Preparation of samples for single-worm tracking. *Cold Spring Harbor Protocols* Vol (12): 1475-1479 (2011).
 29. **Yemini E**, Kerr RA, Schafer WR. Illumination for worm tracking and behavioral imaging. *Cold Spring Harbor Protocols* Vol (12): 1480-1482 (2011).
 30. **Yemini E**, Kerr RA, Schafer WR. Tracking movement behavior of multiple worms on food. *Cold Spring Harbor Protocols* Vol (12): 1483-1487 (2011).

Books & Chapters

1. **Yemini EI**, Brown AE. Tracking Single *C. elegans* Using a USB Microscope on a Motorized Stage. *Methods in Molecular Biology (Second Edition)*. Vol 1327:181-197. Springer, Humana Press (2015).

Preprints and Other Interim Research Products

1. Kinger S, Bertram J, Dyballa L, Lang S, **Yemini E***, Zucker SW*. Inferring Active Neural Circuits Using Diffusion Scores. (2026). Available from *arXiv* (<https://arxiv.org/html/2605.02852v1>).
* **Senior co-corresponding author.**
2. Seyedolmohadesin M, Fu X, Torkashvand M, Rasouli S, Lang S, Li L, Kalinski C, Cook SJ, Schroeder FC, **Yemini E***, Venkatachalam V*. Whole-brain chemosensory responses of both *C. elegans* sexes. (2025). Available from *bioRxiv* (<https://doi.org/10.1101/2025.05.15.654129>).
* **Senior co-corresponding author.**
3. Rusu I, Cecere ZT, How JJ, Quach KT, **Yemini E**, Sharpee TO, Chalasani SH. A framework for analyzing *C. elegans* neural activity using multi-dimensional hyperbolic embedding. (2025). Available from *bioRxiv* (<https://doi.org/10.1101/2021.04.09.439242>).
4. Haspel G, Baker B, Beets I, Boyden ES, Brown J, Church G, Cohen N, Colon-Ramos D, Dyer E, Fang-Yen C, Flavell S, Goodman MB, Hart AC, Izquierdo EJ, Kagias K, Lockery S, Lu Y, Marblestone A, Matelsky J, Mensh B, Pereira TD, Pfister H, Rajan K, Rotstein HG, Scholz M, Shaevitz JW, Shlizerman E, Simeon Q, Skuhersky M, Tiruvadi V, Venkatachalam V, Wei D, Wester B, Yang GR, **Yemini E**, Zimmer

M, Kording KP. The time is ripe to reverse engineer an entire nervous system: simulating behavior from neural interactions. (2025). Available from *arXiv* (<https://arxiv.org/abs/2308.06578>).

5. Cecere ZT, Quach KT, **Yemini E**, How JJ, Sharpee TO, Chalasani SH. State-dependent network interactions differentially gate sensory input at the motor and command neuron level in *Caenorhabditis elegans*. (2021). Available from *bioRxiv* (<https://doi.org/10.1101/2021.04.09.439242>).

Non-peer-reviewed Publications

1. Current Biology Q&A: **Eviatar Yemini**. *Current Biology*. 2024 Apr 8.
2. **Yemini, E**. Systems neuroscience: Foraging through serotonin's tangled web. *Current Biology* Jul 24;33(14):R767-R770 (2023).

Non-print / Online materials

1. **Yemini E**. Yemini Lab Public Plasmid Library. *Addgene* (https://www.addgene.org/Eviatar_Yemini/). 2022.
2. **Yemini E**. In Living Color: Whole-Nervous-System Cell IDs. *Open Science Presentations* (<https://www.youtube.com/watch?v=C3VrDqG1voU>). 2022.
3. **Yemini E**. NeuroPAL: A Multicolor Atlas for Whole-Brain Neuronal Identification in *C. elegans*. *JRNlclub* (<https://jrnclub.org/research-films/neuropal>). 2022.
4. Nejatbakhsh A, **Yemini E**, Rusch KW, Varol E, Mena GE, Sun R, Seyedolmohadesin M, Creamer M, Leifer A, Venkatachalam V, Paninski L, Hobert O. *NeuroPAL Auto-ID Software*. *GitHub* (https://github.com/Yemini-Lab/NeuroPAL_ID) and *Academic Website* (<https://www.yeminilab.com/neuropal>) 2021, updated 2022.
5. Varol E, **Yemini E**, Paninski L, Hobert O. *NeuroPAL Optimal-Coloring Software*. *Zenodo* (<https://zenodo.org/record/4620227#.YRcKPS1h3xl>) and *GitHub* (https://github.com/Yemini-Lab/Optimal_Coloring) 2021.
6. Venkatachalam V, **Yemini E**, Lin A, Samuel ADT, Hobert O. *NeuroPAL Neuronal Activity Scripts*. *Zenodo* (<https://zenodo.org/record/4620225#.YRcKIS1h3xl>) 2021.
7. **Yemini E**, Lin A, Nejatbakhsh A, Varol E, Sun R, Mena GE, Samuel ADT, Paninski L, Venkatachalam V, Hobert O. *NeuroPAL Activity, Image Volumes, and Cell-Type Identities – Raw Data*. *Zenodo* (<https://zenodo.org/record/4516655#.YRcNay1h3xL>) 2021.
8. **Yemini E**, Hobert O. *NeuroPAL Reporter Plasmid Maps*. *Zenodo* (<https://zenodo.org/record/4516620#.YRcLeS1h3xl>) 2021.
9. **Yemini E**, Hobert O. *NeuroPAL ID Manuals and their Image Volumes*. *Zenodo* (<https://zenodo.org/record/4516558#.YRcLfc1h3xl>) 2021.
10. **Yemini E**, Lin A, Nejatbakhsh A, Varol E, Sun R, Mena GE, Samuel ADT, Paninski L, Venkatachalam V, Hobert O. *NeuroPAL Activity, Image Volumes, and Cell-Type Identities – Processed Data*. *Zenodo* (<https://zenodo.org/record/3906530#.YRXHqS1h3xl>) 2020.
11. **Yemini E**, Grundy L, Jucikas T, Brown AEX, Schafer WR. *Database of Caenorhabditis elegans Behavioral Phenotypes*. *Academic Websites* (<http://movement.openworm.org> and <https://www.yeminilab.com/behavior>) 2013, updated 2018.
12. **Yemini E**, Jucikas T, Brown AEX, Schafer WR. *Hardware and Software to Record and Analyze Worm Phenotypes*. *GitHub* (<https://github.com/Yemini-Lab/WT2>) and *Academic Website* (<https://www.yeminilab.com/behavior>) 2012.

Invited Presentations

International

“A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior”, NEURO2026, Structural basis for functions of neural circuits, Kobe, Japan

8/1/2026

* *Invited future presentation.*

- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", *C. elegans* Topic Meeting on Neuronal Development, Synapse Function and Behavior, Bordeaux, France
* *Invited future presentation.* 7/1/2026
- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", Seminar Series, Helmholtz Zentrum München, Germany 9/21/2023
- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", iBehave Seminar Series, Max Planck Institute for Neurobiology of Behavior, Germany 9/18/2023
- "In Living Color: Whole-Nervous-System Cell IDs to Map Neural Communication and Fate *In Vivo*", Monthly Maggot Monday, International Virtual Seminar 2/14/2022

National

- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", Neuroscience Seminar Series, UT Southwestern Medical Center 2/3/2026
- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", 2025 Klingenstein Fellowship Awards in Neuroscience Conference, New York City, NY 4/28/2025
- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", Department of Genetics Seminar Series, Washington University in St. Louis, MO 5/23/2024
- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", Seminar Series, Chan Zuckerberg Biohub, San Francisco, CA 3/8/2024
- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", Kavli and Weill Institutes Special Seminar Series, University of California San Francisco, CA 3/7/2024
- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", Superworm Seminar Series, Stanford University, CA 3/4/2024
- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", 6th Puerto Rico Mini-Brains Symposium, San Juan, Puerto Rico 3/1/2024
- "Towards a Grand Unified Theory of a Simple Nervous System", Functional Logic of Neural Circuits: Diamonds in the Rough (FLNDR 2024), San Juan, Puerto Rico 2/28/2024
- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", Allen Institute, Seattle, WA 10/18/2023
- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", Scientific Seminar Series, Fred Hutch Cancer Center, Seattle, WA 10/16/2023
- "In Living Color: Whole-Nervous-System Cell IDs to Map Neural Communication and Fate *In Vivo*", Duke Thursday Seminar Series, Duke University, NC 4/20/2023
- "In Living Color: Whole-Nervous-System Cell IDs to Map Neural Communication and Fate *In Vivo*", Special Seminar, University of California San Diego, CA 11/18/2022
- "Biologist, Know Thy Cells - A Colorful Barcoding Method to ID Cell Types, their Fate, and Decode Brainwide Communication", Houston Area Worm Group Seminar, Houston, TX 2/4/2022

Regional

- "A Tale of Two Sexes: The Neural Dynamics of Dimorphic Behavior", Department of Neurobiology Seminar Series, UMass Chan Medical School, MA 4/21/2025
- "In Living Color: Whole-Nervous-System Cell IDs to Map Neural Communication and Fate *In Vivo*", Physiology & Biophysics Seminar, Boston University, Boston, MA 2/28/2023
- "Nervous-System Reprogramming During Development & Evolution", UMass Chan 27th Annual Research Retreat, Amherst, MA 11/4/2022
- "In Living Color: Whole-Nervous-System Cell IDs to Map Neural Communication and Fate *In Vivo*", Epigenetics Club Seminar, UMass Chan Medical School, MA 11/2/2022

“In Living Color: Whole-Nervous-System Cell IDs to Map Neural Communication and Fate In Vivo”, Science on Tap Seminar, UMass Chan Medical School, MA	6/17/2022
“In Living Color: Whole-Nervous-System Cell IDs to Map Neural Communication and Fate In Vivo”, Worcester Area Worm Meeting, Boston, MA	5/4/2022
“In Living Color: Whole-Nervous-System Cell IDs to Map Neural Communication and Fate In Vivo”, Boston Area Worm Meeting, Boston, MA	3/23/2022

Academic Service

Internal Administration and Service

School

Mouse Behavioral Core Review, Core Reviewer, UMass Chan Medical School	2025
Biophysical, Chemical, and Computational Biology (BCCB), Graduate Student Candidate Interviews and Recruitment Events, UMass Chan Medical School	2025-Present
Co-Representative of the Committee on Scientific & Research Affairs, UMass Chan Medical School	2024-Present
Committee on Equal Opportunity and Diversity (CEOD), Neurobiology Department Liaison, UMass Chan Medical School	2023-Present
Voices in Science (Seminar Series Highlighting Underrepresented Scientists), Faculty Advisor, UMass Chan Medical School	2022-Present
Morningside Graduate School of Biomedical Sciences (GSBS), Graduate Student Candidate Interviews and Recruitment Events, UMass Chan Medical School	2022-Present
UMass Chan Early Independence Fellows Program, Interviews and Departmental Evaluations, UMass Chan Medical School	2025
Diversity, Equity & Inclusion (DEI) Committee, Neurobiology Department Liaison, UMass Chan Medical School	2022-2023
UMass Chan Graduate School of Biomedical Sciences Student Recruitment at the Society for Neuroscience Conference, Recruitment Staff, UMass Chan Medical School	2022
UMass Chan Program in Neuroscience 2022 Harold M. Weintraub Graduate Student Award Selection Committee, Committee Member, UMass Chan Medical School	2022
Investigator Career Advancement Program (iCAP), Program Manager and Senior Scientific Writer Interviews, UMass Chan Medical School	2022

External Administration and Service

International Service

24 th International <i>C. elegans</i> Conference, Session Co-Chair, Neuronal cell biology, degeneration, & behavior, Glasgow, Scotland	2023
24 th International <i>C. elegans</i> Conference, Workshop Co-Organizer, “So you have whole-brain traces, now what?”, Glasgow, Scotland	2023

National Service

25 th International <i>C. elegans</i> Conference, Workshop Co-Organizer, “Novel Methods to Investigate Cell-type Identity and Diversity Throughout Development and Aging”, University of California, Davis, CA	2025
25 th International <i>C. elegans</i> Conference, Workshop Co-Organizer, “Collaborative multiscale nervous-system models that integrate neuronal molecules, synapses, activity, and behavior”, University of California, Davis, CA	2025
Automated Neural Identification, Tracking, and Behavioral Quantification Conference, Conference Creator and Co-Organizer (with Konrad Kording), an international conference with the inaugural meeting held at UMass Chan Medical School, MA	2024

The Allied Genetics Conference (TAGC), Neurobiology Presentation Selection Subcommittee, Committee Member https://genetics-gsa.org/tagc/	2023
Regional Service	
Launchpad Venture Group, Angel Investment Network, Member https://www.launchpadventuregroup.com	2026-Present
SideCar Angels, Angel Investment Group, Advisory Committee https://sidecarangels.com	2024-Present
External Companies	
Scientific Advisory Board, BetterFit, Jerusalem, Israel AI decision support for sperm selection in IVF - https://betterfitivf.ai	2025-Present
Scientific Advisory Board, LatiGen, East Lansing, Michigan Evidence engine for personalized health - https://latigen.com	2025-Present
Grant Review	
NIH Neurodifferentiation, Plasticity, Regeneration and Rhythmicity (NDPR) Study Section, Early Career Grant Reviewer	2026
Israel Science Foundation, Grant Reviewer	2025
Ad Hoc Review	
Cell, Reviewer	
Nature Communications, Reviewer	
Neuron, Reviewer	
Current Biology, Reviewer	
Proceedings of the National Academy of Sciences (PNAS), Reviewer	
Cell Reports Methods, Reviewer	
PLoS Computational Biology, Reviewer	
Genetics, Reviewer	
Journal of the Royal Society Interface, Reviewer	
BMC Bioinformatics, Reviewer	
eLife, Reviewer	
microPublication Biology, Reviewer	
Professional Development	
Center for the Improvement of Mentored Experiences in Research (CIMER): Fostering Independence and Promoting Professional Development (UMass Chan Medical School)	2024
Advance Series: Facilitating Active Learning & Participation (UMass Chan Medical School)	2022
Accessibility in STEM Workshop (Genetics Society of America)	2022
Inclusive Leadership: Leading with Intention (UMass Chan Medical School)	2022
Raising a Resilient Scientist (NIH)	2022
Computational Neuroscience Course (Neuromatch Academy), https://academy.neuromatch.io	2021