

ZEBA WUNDERLICH, PHD

610 Commonwealth Ave.
Boston, MA 02446

zeba@bu.edu
617-353-3833

EMPLOYMENT

Boston University

Associate Professor, Department of Biology
Associate Professor (Affiliate), Department of Biomedical Engineering
Assistant Professor, Department of Biology
Assistant Professor (Affiliate), Department of Biomedical Engineering
Member of the Bioinformatics and MCBB Graduate Program faculties,
Affiliate of the Genome Science Institute

Boston, MA
May 2023-present
May 2023-present
July 2021-May 2023
July 2021-May 2023

July 2021-present

Irvine, CA
July 2021-June 2023
April 2015-June 2021

University of California

Visiting Assistant Professor, Dept. of Developmental and Cell Biology
Assistant Professor, Dept. of Developmental and Cell Biology

EDUCATION

Harvard University

PhD, Biophysics

Cambridge, MA
June 2008

Rutgers University

BA, Molecular Biology and Biochemistry, Statistics
Highest Honors, Phi Beta Kappa, Rutgers College General Honors Program

New Brunswick, NJ
May 2003

SELECTED AWARDS AND HONORS

Nominee for Boston University's Supervisor of the Year Award	2024
Learning Experience Design and Online Teaching Award	2021
Excellence in Undergraduate Teaching: Dean's Honoree	2020
Chancellor's Award for Excellence in Fostering Undergraduate Research	2019
NICHHD Nominee, Presidential Early Career Awards for Scientists & Engineers	2019
Hellman Fellowship	2017
NIH K99/R00 Pathway to Independence Award	2012- 2020
Jane Coffin Childs Memorial Fund Postdoctoral Fellow	2009- 2012
Howard Hughes Medical Institute Predoctoral Fellowship	2003- 2008
Hanson Prize for Special Service to Graduate Students	2007
Biophysics Student Recognition Award	2006
Certificate of Distinction in Teaching	2004
CABM/Dreyfus Outstanding Undergraduate Award	2003
Henry Rutgers Scholar	2003
Rutgers College Dean's Award for Excellence	2003

RESEARCH EXPERIENCE

Harvard Medical School

Postdoctoral Fellow in Systems Biology
Advisor: Angela DePace

Boston, MA
2008-2015

Identified sources of gene expression pattern divergence between Drosophila species in the early embryo using statistical modeling, genetics, and quantitative imaging.

Harvard University

Graduate Student in Biophysics

Advisor: Leonid Mirny

Using a broad range of computational tools, studied the information content of transcription factor binding specificity, transcription factor diffusion in bacteria, protein-ligand binding in the SH2 protein domain family, and the necessity of metabolic genes in E. coli and yeast.

Cambridge, MA

2003-2008

Rutgers University

Undergraduate Researcher

Advisor: Gaetano Montelione

Created bioinformatic tools and a website to track protein targets in a structural genomics consortium and developed a website to validate a NMR-inspired homology modeling technique.

New Brunswick, NJ

2001-2003

PUBLICATIONS

*Corresponding author, ^Graduate Student in my laboratory, **Undergraduate Student in my laboratory, #Technician in my laboratory, ***Authors contributed equally

XX. Y Zhu, **Z Wunderlich**, AD Lander. Epithelial cell competition is directed by signaling from immune cells. (Revised and resubmitted to *Nature Communications*, 2024).

40. JR Gibbs^, C Mei**, **Z Wunderlich***. Beyond the heat shock pathway: Heat stress responses in *Drosophila* development. (Accepted, *Developmental Biology*, 2024).

39. K Cabrera^, DS Hoard**, Olivia Gibson**, Daniel I. Martinez, **Z Wunderlich***. *Drosophila* immune priming to *Enterococcus faecalis* relies on immune tolerance rather than resistance. *PLOS Pathogens* (2023).

38. A Fletcher, **Z Wunderlich***, G Enciso*. Shadow enhancers mediate trade-offs between transcriptional noise and fidelity. *PLOS Computational Biology* (2023).

37. BA Ramirez-Corona^***, AC Love***, S Chandrasekaran, JA Prescher, **Z Wunderlich***. Longitudinal monitoring of individual infection progression in *Drosophila melanogaster*. *iScience* (2022).

36. JM Han, S Perera, **Z Wunderlich**, V Periwal. Mechanistic Gene Networks Inferred from Single-Cell Data are Better Predictors than Neural Networks. *Mathematical Biosciences* (2021).

35. R Waymack^, M Gad#, **Z Wunderlich***. Molecular competition can shape enhancer activity in the *Drosophila* embryo. *iScience* (2021).

34. L Li^, R Waymack^, M Gad#, **Z Wunderlich***. Two promoters integrate multiple enhancer inputs to drive wild-type *knirps* expression in the *D. melanogaster* embryo. *GENETICS* (2021).

33. R Waymack^, **Z Wunderlich***. Embryonic development across space and time (News & Views). *Nature Computational Science*. (2021).

32. BA Ramirez-Corona^, S Fruth**, O Ofoegbu**, **Z Wunderlich***. The mode of immune-responsive gene expression divergence in *D. melanogaster* is infection-specific. *Genome Research*. (2021).

31. E Kvon*, R Waymack^, M Gad#, **Z Wunderlich***. Enhancer Redundancy in Development and Disease. *Nature Reviews Genetics*. (2021).

30. F Lopez-Rivera, OK Foster, BJ Vincent, ECG Pym, MDJ Bragdon, J Estrada, AH DePace, **Z Wunderlich***. A mutation in the *Drosophila melanogaster* eve stripe 2 minimal enhancer is buffered by flanking sequences. *G3: Genes, Genomes, Genetics*. (2020).

29. R Waymack[^], A Fletcher, G Enciso, **Z Wunderlich***. Shadow enhancers suppress input transcription factor noise through distinct regulatory logic. *eLife*. (2020).
28. **Z Wunderlich***, CC Fowlkes, KB Eckenrode, MDJ Bragdon, A Abiri^{**}, AH DePace. Quantitative comparison of the anterior-posterior patterning system in the embryos of five *Drosophila* species. *G3: Genes, Genomes, Genetics*. (2019).
27. J Park, J Estrada, G Johnson, BJ Vincent, C Ricci-Tam, MDJ Bragdon, Y Shulgina, A Cha, **Z Wunderlich**, J Gunawardena, AH DePace. Dissecting the sharp response of a canonical developmental enhancer reveals multiple sources of cooperativity. *eLife*. (2019).
26. BJ Vincent, MV Staller, F Lopez-Rivera, MDJ Bragdon, EJ Pym, KM Biette, **Z Wunderlich**, J Estrada, AH DePace. Hunchback is counter-repressed to regulate even-skipped stripe 2 expression in *Drosophila* embryos. *PLoS Genetics*. (2018).
25. X Wang, T Zhou, **Z Wunderlich**, MT Maurano, AH DePace, SV Nuzhdin, R Rohs. Analysis of Genetic Variation Indicates DNA Shape Involvement in Purifying Selection. *Molecular Biology and Evolution*. (2018).
24. NM Osman, S Vlaho, TH Kitapci, **Z Wunderlich**, SV Nuzhdin. Inference of transcription factor regulation patterns using gene expression covariation in natural populations of *Drosophila melanogaster*. *Biophysics*. (2018).
23. MAH Samee, T Lydiard-Martin, KM Biette, BJ Vincent, MD Bragdon, KB Eckenrode, **Z Wunderlich**, J Estrada, S Sinha, AH DePace. Quantitative Measurement and Thermodynamic Modeling of Fused Enhancers Support a Two-Tiered Mechanism for Interpreting Regulatory DNA. *Cell Reports*. (2017).
22. L Li[^], **Z Wunderlich***. An Enhancer's Length and Composition Are Shaped by Its Regulatory Task. *Frontiers in Genetics*. (2017).
21. J Estrada, T Ruiz-Herrero, C Scholes, **Z Wunderlich**, AH DePace. SiteOut: an online tool to design binding site-free DNA sequences. *PLoS ONE*. (2016).
20. **Z Wunderlich**, MDJ Bragdon, Ben J Vincent, Jonathan A White, Javier Estrada, AH DePace. Kruppel expression is conserved through compensatory evolution of shadow enhancers. *Cell Reports*. (2015).
19. BJ Vincent^{***}, C Scholes^{***}, MV Staller^{***}, **Z Wunderlich**^{***}, J Estrada^{***}, J Park^{***}, MD Bragdon^{***}, F Lopez Rivera^{***}, KM Biette^{***}, AH DePace^{***}. Yearly Planning Meetings: Individualized Development Plans Aren't Just More Paperwork. *Molecular Cell*. (2015).
18. MV Staller, MDJ Bragdon, **Z Wunderlich**, J Estrada, AH DePace. A gene expression atlas of a *bicoid*-depleted *Drosophila* embryo reveals early canalization of cell fate. *Development*. (2015).
17. MV Staller, BJ Vincent, MDJ Bragdon, **Z Wunderlich**, J Estrada, AH DePace. Shadow enhancers enable Hunchback bifunctionality in the *Drosophila* embryo. *PNAS*. (2015).
16. **Z Wunderlich**, MD Bragdon, and AH DePace. Comparing mRNA levels using *in situ* hybridization of a target gene and co-stain. *Elsevier Methods*. (2014).
15. MV Staller, D Yan, S Randklev, MD Bragdon, **Z Wunderlich**, R Tao, LA Perkins, AH DePace, N Perrimon. Depleting gene Activities in Early *Drosophila* Embryos with the "maternal-Gal4 - shRNA" system. *Genetics*. (2012).

14. **Z Wunderlich**, MD Bragdon, K Eckenrode, T Martin, S Pearl, and AH DePace. Dissecting sources of quantitative gene expression pattern divergence between *Drosophila* species. *Molecular Systems Biology*. (2012).
13. **Z Wunderlich**, AH DePace. Modeling transcriptional networks in *Drosophila* development at multiple scales. *Current Opinion in Genetics and Development*. (2011).
12. CC Fowlkes, K Eckenrode, MD Bragdon, M Meyer, **Z Wunderlich**, L Simirenko, CL Luengo Hendriks, SVE Keränen, C Henriquez, DW Knowles, MD Biggin, MB Eisen, AH DePace. A conserved developmental patterning network produces quantitatively different output in multiple species of *Drosophila*. *PLoS Genetics*. (2011).
11. L Mirny, M Slutsky, **Z Wunderlich**, A Tafvizi, J Leith, A Kosmrlj. How a protein searches for its site on DNA: the mechanism of facilitated diffusion. *Journal of Physics A*. (2009).
10. **Z Wunderlich**, LA Mirny. Different gene regulation strategies revealed by analysis of binding motifs. *Trends in Genetics*. (2009).
9. **Z Wunderlich**, LA Mirny. Using genome-wide measurements for computational prediction of SH2-peptide interactions. *Nucleic Acids Research*. (2009).
8. **Z Wunderlich***, LA Mirny. Spatial effects on the speed and reliability of protein-DNA search. *Nucleic Acids Research*. (2008).
7. **Z Wunderlich**, K Kuchibhotla. Non-traditional publishing choices can enrich science (Letter to the editor). *Nature*. (2008).
6. W Tian, LV Zhang, M Tasan, FD Gibbons, OD King, J Park, **Z Wunderlich**, JM Cherry, FP Roth. Combining guilt-by-association and guilt-by-profiling to predict *Saccharomyces cerevisiae* gene function. *Genome Biology*. (2008).
5. A Bhattacharya, **Z Wunderlich**, D Monleon, R Tejero, GT Montelione. Assessing model accuracy using the Homology Modeling Automatically (HOMA) Software. *Proteins: Structure, Function, Bioinformatics*. (2007).
4. G Kolesov***, **Z Wunderlich*****, ON Laikova, MS Gelfand, LA Mirny. How gene order is influenced by the biophysics of transcription regulation. *PNAS*. (2007).
3. **Z Wunderlich** and LA Mirny. Using topology of the metabolic network to predict viability of mutant strains. *Biophysical Journal*. (2006).
2. **Z Wunderlich**, TB Acton, J Liu, G Kornhaber, J Everett, P Carter, N Lan, N Echols, M Gerstein, B Rost, and GT Montelione. The protein target list of the Northeast Structural Genomics Consortium. *Proteins: Structure, Function, Bioinformatics*. (2004).
1. C-S Goh, N Lan, N Echols, S Douglas, D Milburn, P Bertone, R Xiao, L-C Ma, D Zheng, **Z Wunderlich**, TB Acton, GT Montelione, and Mark Gerstein. SPINE 2: A system for collaborative structural proteomics within a federated database framework. *Nucleic Acids Research*. (2003).

PRESENTATIONS

Invited speaker	Presidential Symposium, Society of Dev. Biology Annual Meeting	2024
Selected speaker	Molecular and Developmental Biology of <i>Drosophila</i> , Crete	2024
Invited speaker	New York University, Dept. of Physics	2023
Invited speaker	Network Biology Meeting, Cold Spring Harbor, NY	2023
Invited speaker	Harvard Medical School Systems Biology Theory Lunch	2022
Invited speaker	University of Massachusetts Boston, Biology Seminar	2022
Invited speaker	BU Genome Science Institute Research Symposium	2022

Invited speaker	<i>Boston Systems & Quantitative Immunology Symposium</i>	2022
Selected speaker	<i>Evolution & Core Processes in Gene Expression, Kansas City</i>	2022
Invited speaker	<i>Boston Area Drosophila Meeting</i>	2022
Invited speaker	<i>Biophysical Society Virtual Networking Event: Stochastic dynamics and physics of protein-DNA interaction</i>	2022
Seminar speaker	<i>Emory University, Biology Department Seminar</i>	2022
Seminar speaker	<i>Cornell University, Molecular Biology and Genetics Seminar</i>	2021
Invited speaker	<i>Boston University, Biological Design Center Symposium</i>	2021
Seminar speaker	<i>Boston University, Systems Biology Seminar Series</i>	2021
Seminar speaker	<i>University of Wisconsin, Madison, Genetics Colloquium</i>	2021
Seminar speaker	<i>Vanderbilt University, Quantitative Systems Biology Center</i>	2021
Seminar speaker	<i>University of Sheffield, Dept. of Mol. Biology</i>	2021
Seminar speaker	<i>Cincinnati Children's, Div. of Developmental Biology</i>	2021
Invited speaker	<i>UCSD, Diversity and Science Lecture Series</i>	2020
Seminar speaker	<i>UCLA, Dept. of Molecular, Cell, and Developmental Biology</i>	2020
Seminar speaker	<i>UCLA, QCBio Seminar Series</i>	2019
Invited speaker	<i>Harvard Medical School Systems Biology Dept Annual Retreat</i>	2019
Seminar speaker	<i>Rutgers University, Molecular Biology & Biochemistry Seminar</i>	2019
Selected speaker	<i>Network Biology Meeting, Cold Spring Harbor, NY</i>	2019
Invited speaker	<i>Biophysics Society Thematic Meeting, Santa Cruz, CA</i>	2018
Seminar speaker	<i>UC Irvine, Microbiology and Molecular Genetics Seminar</i>	2017
Seminar speaker	<i>UCLA, Program in Bioinformatics Seminar</i>	2017
Seminar speaker	<i>San Diego State University, Computational Sciences Colloquium</i>	2017
Invited speaker	<i>Southern California Systems Biology Conference, Irvine, CA</i>	2016
Invited speaker	<i>Southern California Drosophila Conference, Irvine, CA</i>	2015
Invited speaker	<i>National Centers for Systems Biology Meeting, Albuquerque, NM</i>	2015
Invited speaker	<i>Center for Complex Biological Systems Annual Retreat, LA, CA</i>	2015
Selected speaker	<i>Annual Drosophila Research Conference, Chicago, IL</i>	2015
Selected speaker	<i>ASBMB Special Symposium, Chicago, IL</i>	2013
Selected speaker	<i>q-bio, Santa Fe, NM</i>	2012
Selected speaker	<i>Systems Biology: Global Regulation of Gene Expression, CSHL</i>	2012
Seminar speaker	<i>Broad Institute, Cambridge, MA</i>	2011
Selected speaker	<i>Annual Drosophila Research Conference, San Diego, CA</i>	2011
Selected speaker	<i>European Society for Evolutionary Developmental Biology, Paris</i>	2010

TEACHING EXPERIENCE

Boston University

	Boston, MA
Guest Lecturer, Introduction to Biological Feedback Control	S24
Sole Instructor, Systems Developmental Biology (BI 708)	F22
Co-Instructor, Molecular Biology Lab (BB 522)	S22, S23, S25
Sole Instructor, Professional Development for Biology PhDs (BI 582/714)	S22, S24, S25

University of California

	Irvine, CA
Sole Instructor, Topics in Systems Biology (Dev Bio 212)	W17-21
Co-Instructor, Genetics (Bio Sci 97)	F16, 18-20
Lab Module Director, National Short Course in Systems Biology	W16, S18, W19, W20
Guest Lecturer, Dev. and Cell Bio. Majors Seminar (Bio Sci D114)	S16
Guest Lecturer, Critical Thinking in Systems Biology (Dev Bio 203A)	F15, 18, 19
Guest Lecturer, Principles of Genomics (Dev Bio 214)	F15
Guest Lecturer, Systems Biology of Development (Dev Bio 203C)	S15-20

Lecturer, Mathematical, Computational and Systems Biology Bootcamp F14-16, 19
(F = Fall, W = Winter, S = Spring)

Trainings Attended

Boston University CAS Mentoring Initiative, Pilot Cohort	2024
Advancing Your Mentoring Relationships, American Society for Cell Biology	2021
Advanced Training in Active Learning, UCI Center for Engaged Instruction	2018
Course Design Certification Program, UCI Center for Engaged Instruction	2015

Ph.D Student Advisees

2024-present	Victoria Guarino	Cell and Molecular Biology (BU)
2023-present	Emily (Yu) Yang	Cell and Molecular Biology (BU)
2022-present	Julia Gibbs	Cell and Molecular Biology (BU)
2022-present	Noshin Nawar	Biomedical Engineering (BU)
2021-present	Jillian Ness	Molecular Bio., Cell Bio., & Biochemistry (BU)
2018-2023	Kevin Cabrera	Dev. & Cell Biology (UCI), now at Dana-Farber
2017-2021	Rachel Waymack	Dev. & Cell Biology (UCI), now Sound Agriculture
2016-2021	Bryan Ramirez-Corona	Dev. & Cell Biology (UCI), now postdoc at UW
2015-2021	Lily Li	Dev. & Cell Biology (UCI), now postdoc at UVA

Post-doctoral Fellow Advisees

2022-2024	Antonio Serrato-Capuchina (Postdoctoral Associate Lecturer Program), now Assistant Professor of the Practice, Boston College	
2020-present	Lianne Cohen	

Master's Student Advisees

2023-2024	Ishan Ranjan	Data Science Program (BU)
2016-2017	Marley Hilleger	Dev. & Cell Biology (UCI), now at Eurofins
2016-2017	Punya Narayan	Biotech. Mgmt. MS (UCI), now at BD Biosciences

Undergraduate Student Supervision

Boston University

2024-present	Yu Wang	UROP; STARS Summer Research
2023-present	Caitlin Sauer	STEM Pathways
2023-2024	Francis Vu	
2023-present	Emma Rits (BA/MS)	continued as part time staff after graduation
2023-2024	Demi Ring	
2022-present	Christian Mei (BA/MS)	UROP; STEM Pathways
2021-2023	Olivia Gibson	UROP; STEM Pathways
2021-2022	Ila Rosen	now at Boston Children's

University of California, Irvine

2020-2021	Aman Burji	now at UCLA program in Public Health
2020-2021	Sima Tahmouresie	now at UC Berkeley School of Optometry
2020-2021	Duncan Hoard	SURP, now Master's student at UCI
2019-2021	Oluchi Ofoegbu	NIH-IMSD/MARC/UROP/Robert Ernst Prize, now PhD student at USC
2017-2019	Stephanie Fruth	Excellence in Research/UROP/Robert Ernst Prize, now at Thermo Fisher
2016-2018	Arash Abiri	Excellence in Research, now MD/PhD at UCI
2015-2016	Flo Ramirez	UROP, now at Vincent Coates Genomic Seq. Lab

Rotation Student Supervision

Winter 2024	Susie Black
Winter 2024	Mariana Suaya
Spring 2024	Sofya Gaydukova
Winter 2023	Benedetta D'Elia
Fall 2023	Kristen Harder
Spring 2023	Renata Serio
Fall 2022	Georgette-Vanelle Wandji
Fall 2021	Anne-Marie Abbas-Demitrus
Spring 2021	Daniel Martinez
Winter 2021	Amina Hussein
Winter 2020	Cassandra Van
Spring 2018	Bahareh Sorouri
Winter 2018	Jingtian (Josh) Wang
Winter 2017	Qingda Hu
Winter 2016	Klebea Carvalho
Fall 2015	Ceazar Nave

PhD Program

CM (BU)
CM (BU)
Bioinformatics (BU)
MCBB (BU)
MCBB (BU)
CM (BU)
CM (BU)
CM (BU)
CMB (UCI)
MCSB (UCI)
MCSB (UCI)
CMB (UCI)
CMB (UCI)
MCSB (UCI)
Pham Sci (UCI)
CMB (UCI)

(CMB = Cell and Molecular Biosciences; CM = Cell and Molecular Biology; MCSB = Mathematical, Computational and Systems Biology; MCBB = Molecular Biology, Cell Biology, and Biochemistry)

Other Research Supervision

2024	Mufleha Hossain	High School student from GROW program
2024	Yan Wan	High School student from GROW program
2023	Jessica Wang	High school student from GROW program
2020-2021	Ariana Lee	Jr. Specialist, now MS student at Cal State LB
2019-2020	Vinay Kumar	Volunteer
2019	Phoebe Cao	High school student, now at Emory U.
2019-2020	Mario (Elabd) Gab	Jr. Specialist, now a DDS student UCSF
2017-2018	Subhapradha Rangarajan	Volunteer, now MD student at Western U.

Support and Awards for Wunderlich Lab Graduate Students

Lily Li: NIBIB MCSB T32 training grant (2015-2017), GAANN Fellowship (2017-2018), CCBS Opportunity Award (2016), NSF GRFP Honorable Mention

Bryan Ramirez-Corona: Bridge to Doctorate Fellowship (2015-2017), CCBS Opportunity Award (2017)

Rachel Waymack: NSF GRFP Honorable Mention, ARCS Award (2018-2020), Genetics Society of America DeLill Nasser Award (2021), Howard Schneiderman Award (2021)

Kevin Cabrera: NIH-IMSD Fellowship (2018-2019), NSF GRFP (2019-2022)

Jillian Ness: Multicellular Design Center Kilachand Fellowship (2022-2024), Marian Kramer Award (Summer 2024), BU Nano Fellowship (2024-2025)

Noshin Nawar: NIH Synthetic Biology and Biotechnology T32 Predoctoral Training Program (2020-2022)

Emily (Yu) Yang: NSF GRFP Honorable Mention (2024), Multicellular Design Center Kilachand Fellowship (2024-2025)

Victoria Guarino: NSF GRFP Honorable Mention (2024)

Marine Biological Laboratory

Lecturer, Gene Regulatory Networks for Development

Teaching Assistant, Physiology Course, MATLAB & Statistics Bootcamp

Woods Hole, MA

October 2019, 2023

Summer 2008

Harvard University

Undergraduate Tutorial Instructor
Teaching Assistant, MATLAB Bootcamp
Teaching Fellow, Mathematics in Biology

Cambridge, MA

Fall 2009

Summer 2009

Fall 2004, Fall 2005

SERVICE**Graduate Student Committees****Boston University (33 total, 23 current)**

2024-present	Anthony Garza	Committee Member	Bioinformatics
2024-present	Hia Ming	Committee Member	BME
2024-present	Georgette-Vanelle Wandji	Committee Member	Biology
2024-present	Sophie Bodine	Committee Member	Biology, MS
2024-present	Sarah Loshinsky	Committee Member	BME
2024-present	Fereshteh Jafarbeglou	Committee Member	BME
2024-present	Pamela Garcia Lopez	Committee Member	Biology
2024-present	Maryam Dashtiahangar	Committee Member	MCBB
2024-present	Gayatri Thorat	Committee Member	Biology
2024	Anna Berenson	Committee Member	MCBB
2023	Lauren Sullivan	Outside Examiner	Harvard U.
2023-present	Christina Tous	Committee Member	BME
2023-present	Tommy Taslim	Committee Member	MCBB
2023-present	Alexandra Lion	Committee Member	MCBB
2023-present	Quan Le	Committee Member	BME
2023-2024	Amanda Pinheiro	Chair	MCBB
2023-present	Eric South	Committee Member	MCBB
2023-present	Maya Peters Kostman	Committee Member	MCBB
2023-present	M. Alejandra Camargo Cely	Chair	Biology
2023-present	Christine Carroll	Chair	Biology
2023-present	Hellen Huang	Committee Member	MCBB
2023-present	Chelsea Stephens	Committee Member	Biology
2023-present	JK Da-Anoy	Chair	Biology
2023-present	Jason Samaroo	Committee Member	Biology
2023	Mark Aronson	Committee Member	BME
2023	Aram Shin	Second Reader	Biology
2022	Yi Cao	Third Reader	Biology, MS
2022	Diane Lebo	Third Reader	Biology
2022	Meghan Bragdon	Second Reader	MCBB
2022-2024	Cameron Dixon	Chair	MCBB
2022-present	Christopher Kuffner	Committee Member	BME
2022-present	Samantha (Drinan) Patalano	Committee Member	MCBB
2021-2024	Alexandra Chasse	Chair/Second Reader	MCBB

(BME = Biomedical Engineering; MCBB = Molecular Biology, Cell Biology & Biochemistry)

Undergraduate Thesis Committees

2024	Iana Nikorich	Third Reader	Biochem & Mol Bio
2024	Douglas Alvarado	Committee Member	Biology

Graduate Student Committees**University of California, Irvine (31 total)**

2020-2021	Fairlie Reese	Committee Member	Dev. & Cell Biology
2020	David Au	Committee Member	Phys & Biophys
2020-2021	Nam Nguyen	Committee Member	Biological Chemistry
2019-2022	Alvaro Fletcher	Committee Member	MCSB
2019-2021	Karissa Munoz	Committee Member	Dev. & Cell Biology
2019-2021	Katherine Williams	Committee Member	Dev. & Cell Biology
2019-2020	Sorena Rahmanian	Committee Member	MCSB
2019-2021	Jeff Zhou	Committee Member	Dev. & Cell Biology
2019	Bryan Clifton	Oversight Member	Ecology & Evo. Bio.
2019	Robert West	M.S. Committee Member	Biomed. Engineering
2018-2021	Gabriela Balderrama Gutierrez	Committee Member	Dev. & Cell Biology
2018-2021	Paula Pham	Committee Member	Dev. & Cell Biology
2018-2020	Dana Wyman	Committee Member	MCSB
2017-2021	Tuyen Nguyen	Committee Member	Dev. & Cell Biology
2017-2021	Lianna Fung	Committee Member	Dev. & Cell Biology
2017-2020	Lorrayne Serra	Committee Member	Dev. & Cell Biology
2016-2021	David Tatarakis	Committee Member	Dev. & Cell Biology
2016-2020	Leonila Lagunes	Committee Member	Dev. & Cell Biology
2015-2019	Stephanie Wu	Committee Member	Dev. & Cell Biology
2015-2019	Camden Jansen	Committee Member	Dev. & Cell Biology
2015-2019	Jin Cho	Committee Member	Dev. & Cell Biology
2018	Julien Morival	Oversight Member	Biomed. Engineering
2017	Lara Clemens	Oversight Member	MCSB
2017	Paige Radtke	M.S. Committee Member	Dev. & Cell Biology
2016	Bryan Boubion	Committee Member	Dev. & Cell Biology
2016	Nicole Godfrey	Oversight Member	Chemistry
2015-2018	Sarah Carmona	Committee Member	Dev. & Cell Biology
2015-2018	Shan (Mandy) Jiang	Committee Member	Dev. & Cell Biology
2015	Sridevi Maharaj	Oversight Member	Computer Science
2015	Mark Phillips	Oversight Member	Ecology & Evo. Bio.
2015-2016	Maja Bialecka-Fornal	Post-Doc Committee	Dev. & Cell Biology

(MCSB = Mathematical, Computational and Systems Biology)

University, Campus, School, and Department Service

Boston University

2024-present	Molecular Biology, Cell Biology and Biochemistry Graduate Program, Director.
2024	Claire Booth Luce Graduate Fellowships, Reviewer.
2024	ARROWS Lunch & Learn Series, Guest Speaker, "Lab Finances."
2023-2024	Molecular Biology, Cell Biology and Biochemistry Graduate Program, Associate Director.
2023	College of Arts & Sciences Lecture Series Selection Committee, Member.
2023-present	Biological Design Center Travel Grant Selection Committee, Member.
2022-2023	BME/Biological Design Center Faculty Search Committee, Member.
2022-present	Kilachand Multicellular Design Program Advisory Committee, Member.
2022-present	SB2 Training Grant Selection Committee, Member.
2022-2023	Biology Graduate Committee, Chair.
2021-2022	Biology Graduate Committee, Cell and Molecular Representative.
2021-2022	Systems Biology Faculty Search Committee, Member.
2021	Developed the "New Faculty Handbook" for new faculty in the department, which includes guidance for starting their lab, applying for grants, teaching, etc.

2021 Biology Prospective Scholars Program, Mock Interviewer.

University of California, Irvine

2020-2021 DEI Task Force, UCI Mathematical, Computational, and Systems Biology Graduate Program, Chair.

2020 Hellman Fellowship Review Panel, Member.

2019-2021 Mentor for 3 junior faculty members in the UCI School of Biological Sciences.

2018-2021 UCI Molecular, Systems and Computational Biology Graduate Program, Advisor.

2017-2020 UCI Campuswide Honors Program Board, Member.

2015-2020 UCI Cell & Molecular Biosciences Preliminary Exam Committee, Member.

2016-2020 UCI Cell & Molecular Biosciences Admissions Committee, Member.

2018-2019 UCI Evo-Devo Faculty Search Committee, Chair.

2018 Developed the "New Faculty Handbook" for new faculty in the UCI School of Biological Sciences, which includes guidance for starting their lab, applying for grants, teaching, etc.

4/2018 Panelist for discussion on applying for NIH K99/R00 awards.

2/2017 Panelist for discussion on applying for faculty jobs.

2017 Completed a Peer Teaching Evaluation for Scott Atwood, Cell Biology, UCI D103.

2016-2017 UCI Developmental and Cell Biology Faculty Search Committee, Member.

2016-2017 UCI Drosophila Interest Group, Organizer.

2016 UCI Optical Biology Core Steering Committee, Member.

2016 Recruitment Committee for Department Financial Analysts, Member.

8/2015 Featured in a "UCI Researcher and Research Spotlight" video, Guest Speaker.

<https://www.youtube.com/watch?v=maxcA7x4Prw>

5/2015 Opportunity Award reviewer for the UCI Center for Complex Biological Systems.

Reviewer and Editor Service

Reviewer for ACS Synthetic Biology, Bioinformatics, BMC Genomics, Cell Press Community, Cell Reports, Cell Systems, Current Opinion in Systems Biology, Development, Developmental Cell, eLife, Evolution and Development, F1000 Research, G3: Genes|Genomes|Genetics, Genome Research, iScience, Lab on a Chip, microPublication Biology, Molecular Biology and Evolution, Molecular Systems Biology, Nature, Nature Ecology & Evolution, Nature Structural & Molecular Biology, Nucleic Acids Research, Physical Review Letters, PLOS Genetics, PLOS ONE, Scientific Reports.

Guest Editor for PLOS Computational Biology.

Grant Reviews

2024 National Institutes of Health, Fellowship Panel: Cell Biology, Developmental Biology, and Bioengineering

2023 National Institutes of Health, Mail Reviewer

2022 Israeli Science Foundation, Mail Reviewer

2022 National Science Foundation, Panelist

2021 Human Frontier Science Program Organization Postdoctoral Fellowships, Mail Reviewer

2021 European Research Council, Mail Reviewer

2021 Austrian Science Foundation, Mail Reviewer

Professional Service

3/2024 The Allied Genetics Conference, Session Chair.
National Harbor, MD

2023-present Genetics Society of America, DeLill Nassar Awards Committee, Member.

- 2023-present RedFly Regulatory Element Database for Drosophila, Scientific Advisory Board, Member.
- 2019-2022 New PI Slack, Content Czar (2019-20), Membership Advisory Board (2020-2022). <https://newpislack.wordpress.com>
- 8/2017 Genetics Society of America's "Genes to Genomes" Blog, Guest Post Author. <http://genestogenomes.org/take-control-of-your-academic-job-search/>
- 6/2016 The Allied Genetics Conference, Trainee Track Steering Committee, Member. Orlando, FL
- 3/2015 Annual Drosophila Research Meeting, Session Chair. Chicago, IL
- 2013-2015 Genetics Society of America, Postdoctoral Representative, Conferences Committee.
- 7/2010 European Society for Evolutionary Developmental Biology, Symposium Organizer. Paris, France

Diversity Activities and Community Outreach

- 2024-present Mentor for students as part of BU's College Access & Student Success program, include Boston Public Schools Community Service Program students and Community College Scholars Program students.
- 6/2024 Led a presentation and activity about using fruit flies as a research model in a first grade classroom at a Brookline Public School.
- 2022, 23, 24 Led a discussion about starting a lab with URM post-doctoral fellows as part of the Biology Department's Emerging Scholars program.
- 6/2022 Gave a talk and answered questions for undergraduate research trainees participating in the STEM Pathways program, a program aimed at broadening participation of underrepresented minorities in the synthetic biology field.
- 2021-present ASCB MOSAIC Scholar Mentor, serving as an outside mentor for a URM post-doctoral fellow to help her secure her first tenure-track position. Attending full-day mentoring training as part of this commitment.
- 2015-2021 UCI First Generation Faculty Initiative, Participant.
- 12/2020 Interviewed for the IHeartRadio podcast "Prodigy", "The Source Code" episode. <https://www.prodigypodcast.com/episodes/source-code/>
- 10/2020 Served on a panel discussion "Creating a safe and inclusive environment for trainees" as part of the UCSD Diversity and Science Lecture Symposium.
- 7/2019 Gave a talk and answered questions for undergraduate research trainees participating in a summer UCI Minority Student Program.
- 3/2019 Served as a panelist on a gender equity panel at CSHL's Network Biology meeting.
- 2/2018 Attended a workshop entitled "Accounting for Race and Culture in the STEM Classroom."
- 8/2017 Gave a talk and answered questions for undergraduate research trainees participating in a summer UCI Minority Student Program.
- 12/2016 Attended UCI AB540 UndocuAlly training to become an ally for undocumented students.
- 10/2015 Irvine Unified School District, Ask-a-Scientist Night, Irvine, CA.
- 8/2015 Hosted a group of elementary school teachers for a lab tour. The teachers are participants in the UCI ESCAPE program, a project to promote equity in science education for English language learners.

8/2015 Gave a lecture and lab tour to students in the Achievement Institute of Scientific Students program. This program aims to help economically disadvantaged students gain a university education in the STEM fields.