# Zeba Wunderlich, PhD

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## Employment

**Boston University** — Boston, MA
Assistant Professor, Department of Biology — July 2021-present

**University of California** — Irvine, CA
Visiting Assistant Professor, Dept. of Developmental and Cell Biology — July 2021-present
Assistant Professor, Dept. of Developmental and Cell Biology — April 2015-June 2021

## Education

**Harvard University** — Cambridge, MA
PhD, Biophysics — June 2008

**Rutgers University** — New Brunswick, NJ
BA, Molecular Biology and Biochemistry, Statistics — May 2003
GPA 4.0, Highest Honors, Phi Beta Kappa, Rutgers College General Honors Program

## Selected Awards and Honors

| | |
|---|---|
| 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 |
| NICHD 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** — Boston, MA
Postdoctoral Fellow in Systems Biology — 2008-2015
Advisor: Angela DePace
*Identified sources of gene expression pattern divergence between Drosophila species in the early embryo using statistical modeling, genetics, and quantitative imaging.*

**Harvard University** — Cambridge, MA
Graduate Student in Biophysics — 2003-2008
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.*

**Rutgers University** New Brunswick, NJ
Undergraduate Researcher 2001-2003
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.*

## PUBLICATIONS

XX. BA Ramirez-Corona, AC Love, S Chandrasekaran, JA Preshcer, **Z Wunderlich**. Longitudinal monitoring of individual infection progression in *Drosophila melanogaster.* (Submitted; available on bioRxiv).

XX. JM Han, S Perera, **Z Wunderlich**, V Periwal. Mechanistic Gene Networks Inferred from Single-Cell Data are Better Predictors than Neural Networks. (Submitted; available on bioRxiv).

35. R Waymack, M Gad, **Z Wunderlich.** Molecular competition can shape enhancer activity in the Drosophila embryo. (Accepted at iScience; available on bioRxiv).

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. (Accepted at GENETICS; available on bioRxiv).

33. R Waymack, **Z Wunderlich.** 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).
*Co-corresponding authors; equal contributions

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).
*Sole corresponding author

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).
*Sole corresponding author

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).
*Authors contributed equally to this work

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).
*Sole corresponding author

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).
*Authors contributed equally to this work.

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).

## GRANT AND FELLOWSHIP SUPPORT

**Current**

UCI Cancer Systems Biology Center $25,000 (Direct) 4/1/21-3/31/22
*Single-cell analysis of immune surveillance using Drosophila*
Role: mPI, along with PI A. Lander

UCI Infectious Disease Science Initiative $15,000 (Direct) 4/1/21-3/31/22
*Using real-time, non-invasive measurements of infection dynamics to uncover drivers of survival*
Role: mPI, along with PI J. Prescher

NSF-Simons Center for Multi-scale Cell Fate Research
$15,000 (Direct) 1/1/21-12/31/21
*Using real-time, non-invasive measurements of infection dynamics to uncover drivers of survival*
Role: mPI, along with PI J. Prescher

NSF/MCB 1953324 $999,999 (Total) 5/1/20-4/30/24
*Uncovering the regulatory DNA logic of the Drosophila innate immune response*
Role: PI

NIH/NICHD R01-HD095246 $1,511,341 (Total) 7/1/18-5/31/23
*Mechanisms of Shadow Enhancer Robustness During Development*
Role: PI

NIH/NIGMS R25-GM126365 $1,361,730 (Total) 9/1/17-7/31/22
*Systems Biology: A Foundation for Interdisciplinary Careers*
Role: Co-I

**Completed**

NIH/NICHD K99/R00-HD073191 $744,509 (R00) 4/1/15-3/31/20 (R00)
*Dissecting Expression Divergence in Developmental Networks Across Drosophilids*
Role: PI

Hellman Foundation $50,000 (Direct) 7/1/17-6/30/18
*Translating Noisy Signals into Predictable Developmental Patterning*
Role: PI

Jane Coffin Childs Memorial Fund Fund Fellowship 7/1/09-6/30/12
*Connecting sequence divergence to quantitative phenotype differences in Drosophila*
Role: Fellowship Awardee

Howard Hughes Medical Institute Predoctoral Fellowship 9/1/03-8/31/08
Role: Fellowship Awardee

## PRESENTATIONS

| | | |
|---|---|---|
| Invited speaker | *University of Wisconsin, Madison, Genetics Colloquium* | 2021 |
| Invited speaker | *Vanderbilt, Quantitive Systems Biology Center* | 2021 |
| Invited speaker | *University of Sheffield, Dept. of Mol. Biology* | 2021 |
| Invited speaker | *Cincinnati Children's, Div. of Developmental Biology* | 2021 |
| Invited speaker | *UCSD, Diversity and Science Lecture Series* | 2020 |
| Invited speaker | *UCLA, Dept. of Molecular, Cell, and Developmental Biology* | 2020 |
| Seminar speaker | *UCLA, QCBio Seminar Series* | 2019 |
| Invited speaker | *Harvard Med School Systems Biology Dept Annual Retreat, ME* | 2019 |
| Seminar speaker | *Rutgers University, Molecular Biology & Biochemistry Seminar* | 2019 |
| Accepted speaker | *Network Biology Meeting, Cold Spring Harbor, NY* | 2019 |
| Invited speaker | *Biophysics Society Thematic Meeting, Santa Cruz, CA* | 2018 |
| Seminar speaker | *UC Irvine, Microbiology and Molecular Genetics Seminar* | 2017 |
| Seminar speaker | *UCLA, Program in Bioinformatics Seminar* | 2017 |
| Seminar speaker | *San Diego State University, Computational Sciences Colloquium* | 2017 |
| Invited speaker | *Southern California Systems Biology Conference, Irvine, CA* | 2016 |
| Invited speaker | *Southern California Drosophila Conference, Irvine, CA* | 2015 |
| Invited speaker | *National Centers for Systems Biology Meeting, Albuquerque, NM* | 2015 |
| Invited speaker | *U01 Center Grant Retreat, USC, Los Angeles, CA* | 2015 |
| Invited speaker | *Center for Complex Biological Systems Annual Retreat, LA, CA* | 2015 |
| Selected speaker | *Annual Drosophila Research Conference, Chicago, IL* | 2015 |
| Selected speaker | *ASBMB Special Symposium, Chicago, IL* | 2013 |
| Selected speaker | *q-bio, Santa Fe, NM* | 2012 |
| Selected speaker | *Systems Biology: Global Regulation of Gene Expression, CSHL* | 2012 |
| Seminar speaker | *Broad Institute, Cambridge, MA* | 2011 |
| Selected speaker | *Annual Drosophila Research Conference, San Diego, CA* | 2011 |
| Selected speaker | *European Society for Evolutionary Developmental Biology, Paris* | 2010 |

## TEACHING EXPERIENCE

**University of California** Irvine, CA

| | |
|---|---|
| Instructor, Topics in Systems Biology (Dev Bio 212) | W17-21 |
| 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*

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|---|---|
| Course Design Certification Program, Center for Engaged Instruction | Fall 15 |
| Advanced Training in Active Learning, Center for Engaged Instruction | Fall 18 |

*Ph.D Student Supervision*

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|---|---|---|---|
| 2021-present | Jillian Ness | Chair | MCBB |
| 2018-present | Kevin Cabrera | Chair | Dev. & Cell Biology |
| 2017-2021 | Rachel Waymack | Chair | Dev. & Cell Biology |
| 2016-present | Bryan Ramirez-Corona | Chair | Dev. & Cell Biology |
| 2015-2021 | Lily Li | Chair | Dev. & Cell Biology |

*Post-doctoral Fellow Supervision*

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|---|---|---|---|
| 2020-present | Lianne Cohen | Supervisor | Dev. & Cell Biology |

*Master's Student Supervision*

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|---|---|---|---|
| 2016-2017 | Marley Hilleger | Chair | Dev. & Cell Biology |
| 2016-2017 | Punya Narayan | Mentor | Biotech. Mgmt. MS |

*Undergraduate Student Supervision* *Honors and Awards*

| | | |
|---|---|---|
| 2020-2021 | Aman Burji | |
| 2020-2021 | Sima Tahmouresie | |
| 2020-2021 | Duncan Hoard | SURP |
| 2019-2021 | Oluchi Ofoegbu | NIH-IMSD/MARC/UROP/Robert Ernst Prize |
| 2017-2019 | Stephanie Fruth | Excellence in Research/UROP/Robert Ernst Prize |
| 2016-2018 | Arash Abiri | Excellence in Research |
| 2015-2016 | Flo Ramirez | UROP |

| *Rotation Student Supervision* | | *PhD Program* |
|---|---|---|
| Fall 2015 | Ceazar Nave | CMB |
| Winter 2016 | Klebea Carvalho | Pham Sci |
| Winter 2017 | Qingda Hu | MCSB |
| Winter 2018 | Jingtian (Josh) Wang | CMB |
| Spring 2018 | Bahareh Sorouri | CMB |
| Winter 2020 | Cassandra Van | MCSB |
| Winter 2021 | Amina Hussein | MCSB |
| Spring 2021 | Daniel Martinez | CMB |

*Other Research Supervision*

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|---|---|---|
| 2020-2021 | Ariana Lee | Jr. Specialist in lab |
| 2019-2020 | Vinay Kumar | Volunteer in lab |

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|---|---|---|
| 2019 | Phoebe Cao | High school student |
| 2019-2020 | Mario Elabd | Jr. Specialist in lab |
| 2017-2018 | Subhapradha Rangarajan | Volunteer in lab |

*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)

**Marine Biological Laboratory** Woods Hole, MA

Lecturer, Gene Regulatory Networks for Development October 2019

Teaching Assistant, Physiology Course, MATLAB & Statistics Bootcamp Summer 2008

**Harvard University** Cambridge, MA

Undergraduate Tutorial Instructor Fall 2009

Teaching Assistant, MATLAB Bootcamp Summer 2009

Teaching Fellow, Mathematics in Biology Fall 2004, Fall 2005

## SERVICE

### Student Committees

| | | | |
|---|---|---|---|
| 2021-present | Alexandra Chasse | Committee Member | Biology (BU) |
| 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-present | 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 |

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|---|---|---|---|
| 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 Mem | Dev. & Cell Biology |

**University, Campus, School, and Department Service**

2020-2021 DEI Task Force, UCI MCSB 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, Biophysical Journal, Cell Systems, Development, eLife, Evolution and Development, F1000 Research, Genome Research, Molecular Biology and Evolution, Molecular Systems Biology, Nature, Nucleic Acids Research, Physical Review Letters, PLoS Computational Biology, PLoS Genetics, PLoS ONE, Scientific Reports.

Guest Editor for PLoS Computational Biology.

**Professional Service**

2019-present New PI Slack, Content Czar (2019-20), Membership Advisory Board (2020-present. 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**

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.

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 (MSP).

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 (MSP).

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 AISS (Achievement Institute of Scientific Students). This program aims to help economically disadvantaged students gain a university education in the STEM fields.