

RYAN MCGORTY

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ACADEMIC POSITIONS

Associate Professor	2021–present
Assistant Professor Department of Physics and Biophysics, University of San Diego	2015–2021
Postdoctoral Researcher University of California, San Francisco	2011–2015

EDUCATION

Harvard University , Cambridge, MA Ph.D. in Physics <i>Advisor:</i> Vinothan Manoharan <i>Committee:</i> David Weitz, Michael Brenner, George Barbastathis Thesis: “Colloids at Liquid Interfaces and Liquid Interfaces of Colloids”	2011
University of Massachusetts , Amherst, MA B.S. in Physics and Journalism Honor’s Thesis: “Flow Fields in a Viscous Spherical Interface”	2005

EXTERNAL GRANTS

National Institutes of Health – R15 <i>Biomimetic cytoskeleton and advanced microscopy to reveal intracellular DNA dynamics and distributions</i> , \$395k <i>Co-PI with Rae M. Robertson-Anderson</i>	2021-2024
Research Corporation – Cottrell Instrumentation Supplements <i>Upgraded laser-scanning confocal microscope system for research and teaching</i> , \$10k	2020-2021
National Science Foundation – Major Research Instrumentation <i>MRI: Acquisition of a rheometer for interdisciplinary material science research and training of undergraduate researchers</i> , \$264k <i>Co-PIs: P. Iovine, J. Prairie & R. Robertson-Anderson</i>	2019-2022
Research Corporation – Cottrell Scholars Award <i>Optical microscopy of sheared phase-separating soft matter systems</i> , \$100k.	2019-2022
National Institutes of Health – R15, GM123420 <i>A novel in vitro microscopy suite to elucidate intracellular transport and conformational dynamics of nucleic acids</i> , \$391k <i>Co-PI with Rae M. Robertson-Anderson</i>	2017-2020
American Chemical Society – Petroleum Research Fund Undergraduate New Investigator Award <i>Nucleation of a fluid phase in a colloid-polymer system studied with light-sheet microscopy</i> , \$55k	2017-2020
American Society of Cell Biology COMPASS Outreach Grant <i>Covered lab material for Prison University Project biology course</i> , \$500	2014

INTERNAL GRANTS

Teaching and Learning Grant	2021
<i>Funds for student projects promoting underrepresented physicists</i>	
Faculty Research Grant, University of San Diego	2016–2017
<i>Light microscopy with adaptive optics for deep tissue imaging, \$1k</i>	

AWARDS AND RECOGNITION

OUR's Outstanding Undergraduate Research Mentor Award	2019
National Defense Science and Engineering Graduate Fellowship	2006–2010
Harvard University Certificate of Distinction in Teaching	2009
Harvard Physics Dept.'s Harold J. White Prize	2009
<i>Based on student evaluations of courses taught</i>	
National Science Foundation Honorable Mention	2006
<i>Honorable mention in competition for NSF Graduate Fellowship</i>	

COURSES TAUGHT

University of San Diego	2015–
<ul style="list-style-type: none"> • Introductory Physics: Courses for both life science majors and engineering/physics majors, lecture and lab • Upper division lecturer courses: Analytical Mechanics, Biological Physics, Condensed Matter Physics • Experimental Optics Lab for lower division physics & biophysics students <i>I developed and taught this projects-based course for the first time in spring 2018. In fall 2018, it was approved as a requirement for physics and biophysics majors.</i> • Experimental Biophysics for upper division students <i>I have developed a new lab module which highlights a very recent discovery in biophysics. A student who took that course with me in 2017 published the details of that module in a biophysics education journal in 2020.</i> 	
University of California, San Francisco	2011–2015
<ul style="list-style-type: none"> • Delivered lectures for biological light microscopy courses 	
Prison University Project, San Quentin and Patten University	2014
<ul style="list-style-type: none"> • Taught elementary and intermediate algebra • Co-led biology lecture/lab course 	
University of San Francisco	2013
<ul style="list-style-type: none"> • Introductory astronomy lab course 	
Harvard University	2008, 2011
<ul style="list-style-type: none"> • Teaching fellow for introductory lab/lecture physics course 	

PUBLICATIONS AND CONFERENCE PROCEEDINGS

WHILE AT USD (2015 -):

(undergraduates, postdocs[#])

33. G. Lee[#], G. Leech, P. Lwin, J. Michel, C. Currie, M.J. Rust, J.L. Ross, R. McGorty, M. Das, & R.M. Robertson-Anderson. “Active Cytoskeletal Composites Display Emergent Tunable Contractility and Restructuring,” *Soft Matter* (2021). DOI: 10.1039/D1SM01083B
32. R. You and **R. McGorty**, “Light sheet fluorescence microscopy illuminating soft matter,” *Frontiers in Physics*, 9:760834 (2021). DOI: 10.3389/fphy.2021.760834
31. S. Dang, J. Brady, R. Rel, S. Surineni, C. O’Shaughnessy, & **R. McGorty**, “Core-shell droplets and microcapsules formed through liquid-liquid phase separation of a colloid-polymer mixture,” *Soft Matter*, **17**, 8300-8307 (2021). DOI: 10.1039/D1SM01091C
30. S.J. Anderson, J. Garamella[#], R. Adalbert, **R. McGorty**, & R.M. Robertson-Anderson, “Subtle changes in crosslinking drive diverse anomalous transport characteristics in actin-microtubule networks,” *Soft Matter*, **17**, 4375-4385 (2021). DOI: 10.1039/D1SM00093D
29. R. You & **R. McGorty**, “Two-color differential dynamic microscopy for capturing fast dynamics,” *Review of Scientific Instruments*, **92**, 023702 (2021). DOI: 10.1063/5.0039177
28. G. Lee, G. Leech, M.J. Rust, M. Das, **R. McGorty**, J.L. Ross, & R.M. Robertson-Anderson, “Myosin-driven actin-microtubule networks exhibit self-organized contractile dynamics,” *Science Advances*, **7**, 6 eabe4334 (2021). DOI: 10.1126/sciadv.abe4334
27. J. Garamella[#], K. Regan, G. Aguirre, **R. McGorty**, & R.M. Robertson-Anderson, “Anomalous and heterogeneous DNA transport in biomimetic cytoskeleton networks,” *Soft Matter*, **16**, 6344-6353 (2020). DOI: 10.1039/D0SM00544D
26. C.P. Riedstra & **R. McGorty**, “Liquid-liquid phase separation: Undergraduate labs on a new paradigm for intracellular organization,” *The Biophysicist*, 1(1) (2020). DOI: 10.35459/tbp.2019.000104
25. D.M. Wulstein, K.E. Regan, J. Garamella[#], **R. McGorty**, & R.M. Robertson-Anderson, “Topology-dependent anomalous dynamics of ring and linear DNA are sensitive to cytoskeleton crosslinking,” *Science Advances*, 5(12) (2019). DOI: 10.1126/sciadv.aay5912
24. S.J. Anderson, C. Matsuda, J. Garamella[#], K.R. Peddireddy, R.M. Robertson-Anderson, & **R. McGorty**, “Filament rigidity vies with mesh size in determining anomalous diffusion in cytoskeleton,” *Biomacromolecules*, **20**, 4380-4388 (2019). DOI: 10.1021/acs.biomac.9b01057
23. A. Wang, J.W. Zwanikken, D.M. Kaz, **R. McGorty**, A.M. Goldfain, W.B. Rogers & V.N. Manoharan, “Before the breach: Interactions between colloidal particles and liquid interfaces at nanoscale separations,” *Physical Review E*, **100**, 042605 (2019). DOI: 10.1103/PhysRevE.100.042605
22. J. Wang & **R. McGorty**, “Measuring Capillary Wave Dynamics Using Differential Dynamic Microscopy,” *Soft Matter*, **15**, 7412-7419 (2019). DOI: 10.1039/C9SM01508F
21. S. Barkley, T. Dimiduk, J. Fung, D. Kaz, V.N. Manoharan, **R. McGorty**, R. Perry & A. Wang, “Holographic Microscopy with Python and HoloPy,” *Computing in Science & Engineering*, (2019). DOI: 10.1109/MCSE.2019.2923974
20. K.E. Regan, D.M. Wulstein, H. Rasmussen, **R. McGorty** & R.M. Robertson-Anderson, “Bridging the spatiotemporal scales of macromolecular transport in crowded biomimetic systems,” *Soft Matter*, **15**, 1200-1209 (2019). DOI: 10.1039/C8SM02023J
19. J. Wang, E. Gerald & **R. McGorty**, “Programmable illumination for multimodal microscopy using an electric paper (ePaper) display,” *Optical Tomography and Spectroscopy* (pp JTU3A-17). Optical Society of America (2018). DOI: 10.1364/TRANSLATIONAL.2018.JTu3A.17
18. D.M. Wulstein & **R. McGorty**, “Point-spread function engineering enhances digital Fourier microscopy,” *Optics Letters*, **42**, 4603-4606 (2017). DOI: 10.1364/OL.42.004603

17. X. Shi, G. Garcia III, J.C. Van De Weghe, **R. McGorty**, G.J. Pazour, D. Doherty, B. Huang & J.F. Reiter, "Super-resolution microscopy reveals that disruption of ciliary transition-zone architecture causes Jourbert syndrome," *Nature Cell Biology*, **19**, 1178-1188 (2017). DOI: 10.1038/ncb3599
16. **R. McGorty**, D. Xie & B. Huang, "High-NA open-top selective-plane illumination microscopy for biological imaging," *Optics Express*, **25**, 17798-17810 (2017). DOI: 10.1364/OE.25.017798
15. A. Wang, **R. McGorty**, D.M. Kaz & V.N. Manoharan, "Contact-line pinning controls how quickly colloidal particles equilibrate with liquid interfaces," *Soft Matter*, **12**, 8958-8967 (2016).
14. D.M. Wulstein, K.E. Regan, R.M. Robertson-Anderson & **R. McGorty**, "Light-sheet microscopy with digital Fourier analysis measures transport properties over large field-of-view," *Optics Express*, **24**, 20881-20894 (2016). DOI: 10.1364/OE.24.020881

PRIOR TO USD:

13. P. Bieling, T.-D. Li, J. Weichsel, **R. McGorty**, P. Jreij, B. Huang, D.A. Fletcher & R.D. Mullins, "Force Feedback Controls Motor Activity and Mechanical Properties of Self-Assembling Branched Actin Networks," *Cell*, **164**, 115-127 (2016). DOI: 10.1016/j.cell.2015.11.057
12. **R. McGorty** & B. Huang, "Selective-plane illumination microscopy for high-content volumetric biological imaging," Proc. SPIE 9720, High-Speed Biomedical Imaging and Spectroscopy: Toward Big Data Instrumentation and Management, 97200P (March 7, 2016).
11. D. Kamiyama, **R. McGorty**, R. Kamiyama, M.D. Kim, A. Chiba & B. Huang, "Specification of Dendritogenesis Site in Drosophila aCC Motoneuron by Membrane Enrichment of Pak1 through Dscam1," *Developmental Cell*, **35**, 93-106 (2015). DOI: 10.1016/j.devcel.2015.09.007
10. **R. McGorty**, H. Liu, D. Kamiyama, Z. Dong, S. Guo & B. Huang. "Open-top selective plane illumination microscope for conventionally mounted specimens," *Optics Express*, **23**, 16142 (2015). DOI: 10.1364/OE.23.016142
9. **R. McGorty**, J. Schnitzbauer, W. Zhang & B. Huang, "Correction of depth-dependent aberrations in 3D single molecule localization and super-resolution microscopy," *Optics Letters*, **39**, 275-278 (2014). DOI: 10.1364/OL.39.000275
8. J. Schnitzbauer, **R. McGorty**, & B. Huang, "4Pi fluorescence detection and 3D particle localization with a single objective," *Optics Express*, **21**, 19701-19708 (2013).
7. **R. McGorty**, D. Kamiyama, & B. Huang, "Active microscope stabilization in three dimensions using image correlation," *Optical Nanoscopy*, **2**, 3 (2013).
6. D. Kaz*, **R. McGorty***, M. Mani, M. P. Brenner, & V. N. Manoharan, "Physical ageing of the contact line on colloidal particles at liquid interfaces," *Nature Materials*, **11**, 138-142 (2012). *Co-first authors
5. J. Fung, K. E. Martin, R. W. Perry, D. M. Kaz, **R. McGorty**, & V. N. Manoharan, "Measuring translational, rotational, and vibrational dynamics in colloids with digital holographic microscopy," *Optics Express*, **19**, 8051-8065 (2011).
4. **R. McGorty**, J. Fung, D. Kaz, & V. N. Manoharan, "Colloidal self-assembly at an interface," *Materials Today*, **13**(6), 34-42 (2010).
3. **R. McGorty**, J. Fung, D. Kaz, S. Ahn, & V. N. Manoharan, "Measuring Dynamics and Interactions of Colloidal Particles with Digital Holographic Microscopy," In *Digital Holography and Three-Dimensional Imaging Proceedings, OSA Technical Digest (CD)* (p. paper DTuB1). Optical Society of America. (2008).
2. M. L. Henle, **R. McGorty**, A. B. Schofield, A. D. Dinsmore & A. J. Levine, "The Effect of Curvature and Topology on Membrane Hydrodynamics," *Europhysics Letters*, **84**, 48001 (2008).
1. T. Pavlin, R. Wang, **R. McGorty**, M.S. Rosen, D.G. Cory, D. Candela, R.W. Mair & R.L. Walsworth, "Noninvasive measurements of gas exchange in a three-dimensional fluidized bed using hyperpolarized ¹²⁹Xe NMR," *Applied Magnetic Resonance*, **32**, 93-112 (2007).

PRESENTATIONS (*SINCE 2016*)

- Anticipating the Future of Science: A Look Back and a Look Ahead, Celebration of Research Corporation for Scientific Advancement at UCSD, Undergraduate-driven research in the optics, soft matter, & biophysics lab at the University of San Diego, *invited talk* **2/2020**
- Frontiers in Soft Matter and Macromolecular Networks “Diffusive Dynamics of Beads, Molecules and Droplets: Soft Matter Probed with Novel Microscopy Methods”, *contributed talk* **9/2019**
- Physics Colloquium at California State University Fullerton “DNA Diffusion and Capillary Waves: Soft Matter Studied with Novel Microscopy Methods”, *invited talk* **3/2019**
- Bio-Math Meeting at San Diego State University “Measuring Dynamics with Digital Fourier Microscopy Techniques”, *invited talk* **11/2018**
- Physics Colloquium at the University of California, Merced “Measuring Dynamics with Digital Fourier Microscopy Techniques: From DNA Diffusing in Cytoskeletal Network to Waves at Fluid Surfaces,” *invited talk* **10/2018**
- Quantitative BioImaging Conference “Selective-plane illumination differential dynamic microscopy,” *contributed talk and poster* **1/2017**
- American Association of Physics Teachers – Summer Meeting “Advanced undergraduate biophysics lab on fluid-fluid phase separation,” *poster* **7/2016**
- Society of Photo-Optical Instrumentation Eng – Biomedical Optics Conference “Open-top selective plane illumination microscope for high-content imaging,” *contributed talk* **2/2016**

STUDENT AND TRAINEE NATIONAL PRESENTATIONS

- American Physical Society – 2021 March Meeting, virtual
 “Tuning Dynamics of Myosin-Driven Actin-Microtubule Networks”, G. Lee, G. Leech, C. Currie, M. Rust, M. Das, J.L. Ross, R. McGorty, R.M. Robertson-Anderson. Contributed oral presentation. 3/16/21
- “Light sheet microscopy for fast volumetric imaging of colloidal fluids under shear”, R. You and R. McGorty. Poster presentation. 3/17
- “Colloidal gels displaying both flow-aligned and vorticity-aligned flocs under shear”, D. Terwilliger, J.C. Brady, R. McGorty. Poster presentation. 3/17
- “Differential Dynamic Microscopy of Active Actin-Microtubule Networks”, G. Leech, G. Lee, M. Rust, M. Das, J.L. Ross, R. McGorty, R.M. Robertson-Anderson. Poster presentation. 3/17
- “Active Restructuring of Myosin-Driven Actin-Microtubule Networks”, C. Currie, G. Lee, M. Rust, M. Das, J.L. Ross, R. McGorty, R.M. Robertson-Anderson. Poster presentation. 3/17
- “Mapping the nonlinear stress propagation in topological polymer blends”, K. Peddireddy, G. Aguirre, J. Garamella, R. McGorty, R.M. Robertson-Anderson, Contributed oral presentation. 3/18
- “DNA transport and conformational dynamics in active cytoskeleton composites”, J. Garamella, S. Adalbert, G. Aguirre, R. McGorty, R.M. Robertson-Anderson. Contributed oral presentation. 3/19

- International Congress on Rheology, virtual **12/2020**
 “Cycling between flow-aligned and vorticity-aligned flocs using temperature sensitive colloid-polymer mixtures”, D. Terwilliger, J. Brady, and R. McGorty. Poster presentation.
- American Physical Society – 2020 March Meeting (~~Denver, CO~~ **VIRTUAL**) **3/2020**
 “Observing phase separation in colloid-polymer mixtures with a custom light-sheet rheoscope”, J. Wang and R. McGorty. Contributed oral presentation.
 “Temporal super-resolution differential dynamic microscopy for detecting fast dynamics”, R. You and R. McGorty. Poster presentation.
 “Observing phase separation of temperature-responsive colloids under shear”, J. Brady and R. McGorty. Poster presentation.
 “Anomalous transport across scales in crosslinked actin-microtubule composites”, S. Anderson, J. Garamella, R. McGorty, R. Robertson-Anderson. Contributed oral presentation.
 “Connecting microscale stresses to macromolecular motion in entangled ring-linear DNA blends”, K.R. Peddireddy, M. Lee, J. Garamella, R. McGorty, R. Robertson-Anderson. Contributed oral presentation.
 “Non-ergodic transport and conformational dynamics of DNA in biomimetic cytoskeleton networks”, J. Garamella, G. Aguirre, K. Regan, R. McGorty, R. Robertson-Anderson. Contributed oral presentation.
- Biophysical Society – 2020 National Meeting (San Diego, CA) **2/2020**
 “Non-Ergodic Transport and Conformational Dynamics of DNA in Biomimetic Cytoskeleton Networks”, J. Garamella, G. Aguirre, R. McGorty, R. Robertson-Anderson. Poster presentation.
- American Physical Society – 2019 March Meeting (Boston, MA) **3/2019**
 “Diffusion and Conformational Dynamics of Linear and Circular DNA in Crosslinked Cytoskeleton Composites”, K. Regan, D. Wulstein, S. Ricketts, R. McGorty, R. Robertson-Anderson. Contributed oral presentation.
 “Paper-based Controllable Illumination for Multi-Mode Microscopy”, S. Kaur, R. McGorty. Poster presentation.
 “Measuring Particle Diffusion in Cytoskeleton Networks with Light-Sheet and Differential Dynamic Microscopy”, C. Matsuda, S. Anderson, R. McGorty, R. Robertson-Anderson. Poster presentation.
 “Particle-Tracking Reveals Heterogeneous Subdiffusion in *in vitro* Cytoskeleton Composites”, S. Anderson, C. Matsuda, R. McGorty, R. Robertson-Anderson. Poster presentation.
 “Quantifying the Surface Tension of Non-Equilibrium Colloidal Fluids”, C. Riedstra, J. Wang, R. McGorty. Poster presentation.
 “Measuring the Dispersion Relation of Capillary Waves Using Differential Dynamic Microscopy”, J. Wang, R. McGorty. Contributed oral presentation.
 “Ensemble Dynamics of Large DNA Molecules within Entangled and Crosslinked Cytoskeleton Networks”, D. Wulstein, K. Regan, S. Ricketts, R. Robertson-Anderson, R. McGorty. Contributed oral presentation.
- The Optical Society’s Biophotonics Congress: Biomedical Optics (Hollywood, FL) **4/2018**
 “Programmable illumination for multimodal microscopy using an electric paper (ePaper) device,” J. Wang, E. Gerald & R. McGorty. Poster presentation.

American Physical Society – 2018 March Meeting (Los Angeles, CA) **3/2018**
 “Selective-plane illumination microscopy to characterize diffusion of DNA in cytoskeletal networks,” D. Wulstein, K. Regan, S. Ricketts, R.M. Robertson-Anderson & R. McGorty. Contributed oral presentation.
 “Determining forces in macroscopic fiber networks using conductive fabric,” J. Clapp & R. McGorty. Poster presentation.

American Physical Society – 2017 March Meeting (New Orleans, LA) **3/2017**
 “Selective-plane illumination differential dynamic microscopy with adaptive optics,” D. Wulstein & R. McGorty
3rd Place Winner of Soft Matter Topical Group Poster Presentation
 “Active microrheology of entangled biopolymer composites link polymer flexibility and length to molecular force response,” R. Fitzpatrick, C. Hauer, C. Kyriillos, R. McGorty & R.M. Robertson-Anderson. Poster presentation.
 “Mobility and conformational dynamics of large DNA diffusing through cytoskeletal networks,” K. Regan, S. Ricketts, D. Wulstein, R. McGorty, R.M. Robertson-Anderson. Poster presentation.

STUDENT REGIONAL PRESENTATIONS

Frontiers in Soft Matter and Macromolecular Networks **9/2019**
 “Active Brownian Particles Studied with Differential Dynamics Microscopy”, K. Tran & R. McGorty. Poster presentation.
 “Dual-Color Differential Dynamics Microscopy”, R. You & R. McGorty. Poster presentation.
 “Probing the Fluid-Fluid Interfacial Dynamics of Phase-Separated Colloid-Polymer Mixtures”, J. Wang & R. McGorty. Poster presentation.

Frontiers in Soft Matter and Macromolecular Networks **9/2018**
 “SPIDDM to Characterize DNA Dynamics in Crowded Cytoskeleton Networks,” D. Wulstein, C. Matsuda, K. Regan, R. McGorty & R.M. Robertson-Anderson. Poster presentation.
 “Measuring the Dispersion Relation of Capillary Fluctuations using Differential Dynamic Microscopy,” J. Wang & R. McGorty. Poster presentation.
 “Lab Module for Characterizing Liquid-Liquid Phase Separation,” C. Riedstra & R. McGorty. Poster presentation.
 “Diffusion in Cytoskeletal Networks Using Light-Sheet Microscopy,” C. Matsuda, S. Anderson & R. McGorty. Poster presentation.
 “Single Molecule and Ensemble Dynamics of DNA Molecules Crowded by Cytoskeletal Proteins,” K. Regan, D. Wulstein, H. Rassumussen, S. Ricketts, R. McGorty & R.M. Robertson-Anderson. Oral presentation.

APS Conference for Undergraduate Women in Physics @ SoCal **1/2018**
 “Point-Spread Function Engineering Enhances Digital Fourier Microscopy,” D. Wulstein & R. McGorty. Poster presentation.

UC San Diego’s Summer Research Conference **8/2017**
 “Liquid-Gas Phase Separation in Colloid-Polymer Systems,” A. Boghossian & R. McGorty. Poster presentation.

- Frontiers in Soft Matter and Macromolecular Networks **9/2017**
 “Novel microscopy techniques for probing soft matter,” D. Wulstein
 & R. McGorty. Oral presentation.
 “Force propagation through fiber networks using conductive fabric,”
J.T. Clapp & R. McGorty. Poster presentation.
- University of San Diego Creative Collaborations (all poster presentations)
- “Model for Active Particle Swarming Analyzed”, R. Snyder **4/2021**
 “A digital holographic microscope for polarimetry measurements to
 characterize living from non-living specimens”, A. Ramirez
- “Observing Demixed Colloid-Polymer Mixtures Using a Custom Light-
 Sheet Microscope”, J. Wang. **4/2020**
 “Achieving Temporal Super-Resolution with Dual-Color Differential
 Dynamic Microscopy”, R. You.
- “Paper-Based Controllable Illumination for Multi-Mode Microscopy”,
S. Kaur. **4/2019**
 “Quantifying the Surface Tension of Non-Equilibrium Colloidal Fluids”,
C. Riedstra.
 “Quantitative Phase Imaging Using Structured Illumination”, S. Voss.
 “Measuring the Dispersion Relation of Capillary Fluctuations Using
 Differential Dynamic Microscopy”, J. Wang.
- “Selective-Plane Illumination Microscopy to Characterize Diffusion of
 DNA in Cytoskeletal Networks”, D. Wulstein & C. Matsuda **4/2018**
 “Characterizing Liquid-Liquid Phase Separation”, C. Riedstra
 “Determining Forces in Macroscopic Fiber Networks Using Conductive
 Fabric”, J.T. Clapp
 “Programmable Illumination for Multimodal Microscopy Using an
 Electric Paper (ePaper) Display”, J. Wang & E. Gerald.
- “Capillary Wave Dynamics in Fluid-Fluid Phase Separated
 Solutions,” W. Helmer. **4/2017**
 “Selective Plane Illumination Dynamic Differential Microscopy
 with Adaptive Optics,” D. Wulstein.
- “Using SPIM to Understand Fluid-Fluid Phase Separation,” **4/2016**
D. Wulstein.
 “Traction Force Microscopy of Plant Germination and Early Root
 Growth,” C. Potter.

DEPARTMENT, COLLEGE AND UNIVERSITY SERVICE

University Research Council	2020–
Copley Library Undergraduate Research Award reviewer	2020–
Junior Faculty Council	2019–
Academic Review Committee (CAS Math & Sci representative)	2019–
Interim Chair of Physics and Biophysics Dept.	Spring 2019
Chair of Campus Goldwater Scholarship Committee	2018–2019
<i>Served on Goldwater Committee since 2015</i>	
New Science Building Early Planning Committee	2018–
Leading Dept.'s efforts on 136/137 revisions	2017–2019
Department liaison with Career Services	2017–
Office of Undergraduate Research Advisory Committee	2016–
Faculty Research Grant and University Professorship Committee	2016–2018
Summer Undergraduate Research Experience Reviewer	2016–