

# RAGHUVeer PARTHASARATHY

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## PROFESSIONAL PREPARATION

| Postdoctoral Institution           | Area                       | Dates         |
|------------------------------------|----------------------------|---------------|
| University of California, Berkeley | Chemistry / Biophysics     | 2002-2006     |
| Graduate Institution               | Major/Area                 | Degree & Year |
| University of Chicago              | Physics / Condensed Matter | Ph.D. (2002)  |
| Undergraduate Institution          | Major                      | Degree & Year |
| University of California, Berkeley | Physics                    | A.B. (1997)   |

## APPOINTMENTS

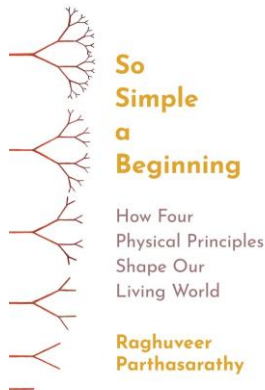
|                      |                                                                                                                                |
|----------------------|--------------------------------------------------------------------------------------------------------------------------------|
| Nov. 2022-present    | • Associate Member, Center for Science Communication Research, University of Oregon                                            |
| Aug. 2019-present    | • Associate Member, Knight Campus for Accelerating Scientific Impact                                                           |
| Sept. 2017-present   | • Professor, Department of Physics, University of Oregon                                                                       |
| Sept. 2016-June 2022 | • Alec and Kay Keith Professor, The University of Oregon                                                                       |
| June 2016-present    | • Co-director, University of Oregon Science Literacy Program                                                                   |
| Sept. 2011-present   | • Associate Professor, Department of Physics, University of Oregon                                                             |
| May 2008-present     | • Associate Member, Institute of Molecular Biology, University of Oregon                                                       |
| June 2006-present    | • Member, Materials Science Institute, University of Oregon                                                                    |
| June 2006-Aug. 2011  | • Assistant Professor, Department of Physics, University of Oregon                                                             |
| 2002-2006            | • Miller Research Fellow / Postdoctoral Fellow, University of California, Berkeley, Department of Chemistry                    |
| 1997-2002            | • Graduate research fellow, University of Chicago, Department of Physics. Advisors: Heinrich M. Jaeger and Thomas F. Rosenbaum |

## AWARDS

|           |                                                                                                                                                                                |
|-----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 2023      | Fellow, American Association for the Advancement of Science (AAAS)                                                                                                             |
| 2021      | Williams Fellow, University of Oregon, for demonstrating "...an extraordinary commitment to undergraduate education"                                                           |
| 2020      | Fellow, American Physical Society, "For creative and innovative contributions to biological physics especially to our understanding of the gut microbiome and lipid bilayers." |
| 2016-2022 | Alec and Kay Keith Professorship, The University of Oregon                                                                                                                     |
| 2008      | National Science Foundation CAREER Award                                                                                                                                       |
| 2007-2009 | Alfred P. Sloan Research Fellowship                                                                                                                                            |
| 2002-2005 | Miller Research Fellowship, University of California, Berkeley                                                                                                                 |
| 2001-2002 | Grainger Graduate Fellowship, Department of Physics, University of Chicago                                                                                                     |

|           |                                                                                  |
|-----------|----------------------------------------------------------------------------------|
| 1997-2000 | NSF Graduate Research Fellowship                                                 |
| 1997-2000 | McCormick Fellowship, Department of Physics, University of Chicago               |
| 1997-1998 | Sachs Fellowship, Department of Physics, University of Chicago                   |
| 1997      | Departmental Citation, Department of Physics, University of California, Berkeley |
| 1995      | Educational Initiatives Award, University of California, Berkeley                |

## PUBLICATIONS: BOOKS



Raghuveer Parthasarathy, *So Simple a Beginning: How Four Physical Principles Shape Our Living World* (Princeton University Press, Princeton, 2022).

A general-audience book on how physical principles orchestrate the workings of living things.

Publisher's site:

<https://press.princeton.edu/books/hardcover/9780691200408/so-simple-a-beginning>

## PUBLICATIONS: PAPERS

- Márquez Rosales S, Bouchard PI, Olmstead EM, Parthasarathy R. UV-irradiated rotifers for the maintenance of gnotobiotic zebrafish larvae. *mSphere* 0:e00698-24. (2025). <https://doi.org/10.1128/msphere.00698-24>
- Julia S Ngo, Piyush Amitabh, Jonah G Sokoloff, Calvin Trinh, Travis J Wiles, Karen Guillemin, and Raghuveer Parthasarathy, "The *Vibrio* Type VI Secretion System Induces Intestinal Macrophage Redistribution and Enhanced Intestinal Motility." *mBio*. e0241924 (2024). DOI: 10.1128/mbio.02419-24, PMID: 39576112
- Raghuveer Parthasarathy, "A Microscope Medley for High School Students." *The Biophysicist* **5**: 47-54 (2024). DOI: 10.35459/tbp.2024.000261
- T. Jarrod Smith, Deepika Sundarraman, Ellie Melancon, Laura Desban, Raghuveer Parthasarathy, and Karen Guillemin, "A mucin-regulated adhesin determines the spatial organization and inflammatory character of a bacterial symbiont in the vertebrate gut." *Cell Host and Microbe* **31**:1371-1385 (2023). DOI: 10.1016/j.chom.2023.07.003, PMID: 37516109, PMCID: PMC10492631
- Deepika Sundarraman, T. Jarrod Smith, Jade V. Z. Kast, Karen Guillemin, and Raghuveer Parthasarathy, "Disaggregation as an interaction mechanism among intestinal bacteria." *Biophysical Journal* **121**: 3458-3473 (2022). DOI: 10.1016/j.bpj.2022.08.010, PMID: 35982615, PMCID: PMC9515126
- Victoria Palma, María Soledad Gutiérrez, Orlando Vargas, Raghuveer Parthasarathy, and Paola Navarrete, "Methods to Evaluate Bacterial Motility and Its Role in Bacterial-Host Interactions." *Microorganisms* **10**:563 (2022). DOI: 10.3390/microorganisms10030563. PMID: 35336138, PMCID: PMC8953368
- Jennifer Hampton Hill, Michelle Sconce Massaquoi, Emily Goers Sweeney, Elena S. Wall, Philip Jahl, Rickesha Bell, Karen Kallio, Daniel Derrick, L. Charles Murtaugh, Raghuveer Parthasarathy, S. James Remington, June L. Round, Karen Guillemin, "BefA, a microbiota-secreted membrane disrupter disseminates to the pancreas and increases  $\beta$  cell mass." *Cell Metabolism* **34**: 1779-1791.e9 (2022). <https://doi.org/10.1016/j.cmet.2022.09.001>, PMID: 36240759, PMCID: PMC9633563

- Philip E. Jahl and Raghuv​eer Parthasarathy, “Assessing the use of ellipsoidal microparticles for determining lipid membrane viscosity.” *Biophysical Journal* **120**: 5513-5520 (2021). [https://doi.org/10.1016/j.bpj.2021.11.020] PMID: 34800470 PMCID: PMC8715235
- Raghuv​eer Parthasarathy, “Resource Letter: Biological Physics,” *The American Journal of Physics* **89**: 1071 (2021). [https://doi.org/10.1119/5.0060279]
- Brandon H Schlomann and Raghuv​eer Parthasarathy, “Gut bacterial aggregates as living gels.” *eLife* **10**: e71105 (2021) [https://doi.org/10.7554/eLife.71105] PMID: 34490846, PMCID: PMC8514234
- Deepika Sundarraman, Edouard A. Hay, Dylan M. Martins, Drew S. Shields, Noah L. Pettinari, and Raghuv​eer Parthasarathy, “Higher-Order Interactions Dampen Pairwise Competition in the Zebrafish Gut Microbiome.” *mBio* **11**:e01667-20 (2020). [https://mbio.asm.org/content/11/5/e01667-20]
- T. J. Wiles, B. H. Schlomann, E. S. Wall, R. Betancourt, R. Parthasarathy, K. Guillemin, “Swimming motility of a gut bacterial symbiont promotes resistance to intestinal expulsion and enhances inflammation.” *PLoS Biol.* **18**, e3000661 (2020). [https://doi.org/10.1371/journal.pbio.3000661] PMID: 32196484
- Philip E. Jahl, Raghuv​eer Parthasarathy, “Lipid Bilayer Hydrodynamic Drag.” *Phys. Rev. Research* **2**, 013132 (2020). [https://journals.aps.org/prresearch/abstract/10.1103/PhysRevResearch.2.013132]
- Brandon H Schlomann and Raghuv​eer Parthasarathy, “Timescales of gut microbiome dynamics.” *Current Opinion in Microbiology*, **50**: 56-63 (2019). [https://www.sciencedirect.com/science/article/abs/pii/S1369527419300463]
- B. H. Schlomann, T. J. Wiles, E. S. Wall, K. Guillemin, R. Parthasarathy, “Sublethal antibiotics collapse gut bacterial populations by enhancing aggregation and expulsion.” *Proc. Natl. Acad. Sci.*, **116**: 21392-21400 (2019). [https://doi.org/10.1073/pnas.1907567116] PMID 31591228, PMCID: PMC6815146
- Catherine D. Robinson, Helena S. Klein, Kyleah D. Murphy, Raghuv​eer Parthasarathy, Karen Guillemin, Brendan J. M. Bohannon, “Experimental bacterial adaptation to the zebrafish gut reveals a primary role for immigration.” *PLoS Biology* **16**: e2006893 (2018). PMID: 30532251 [https://doi.org/10.1371/journal.pbio.2006893]
- E. A. Hay and R. Parthasarathy, “Performance of convolutional neural networks for identification of bacteria in 3D microscopy datasets.” *PLOS Computational Biology* **14**: e1006628 (2018). PMID: 30507940 [https://journals.plos.org/ploscompbiol/article?id=10.1371/journal.pcbi.1006628]
- Brandon H Schlomann, Travis J Wiles, Elena S Wall, Karen Guillemin, Raghuv​eer Parthasarathy, “Bacterial cohesion predicts spatial distribution in the larval zebrafish intestine.” *Biophysical Journal* **115**: 1-7 (2018). https://doi.org/10.1016/j.bpj.2018.10.017 PMID: 30448038
- Savannah L Logan, Christopher Dudley, Ryan P Baker, Michael J Taormina, Edouard A Hay, Raghuv​eer Parthasarathy, “Automated High-Throughput Light-Sheet Fluorescence Microscopy of Larval Zebrafish,” *PLOS ONE* **13**: e0198705 (2018). PMID: 30427839 [https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0198705]
- S. L. Logan, J. Thomas, J. Yan, R. P. Baker, D. S. Shields, J. B. Xavier, B. K. Hammer, R. Parthasarathy, “The *Vibrio cholerae* Type VI Secretion System Can Modulate Host Intestinal Mechanics to Displace Commensal Gut Bacteria.” *Proc. Natl. Acad. Sci.* **115**: E3779-E3787 (2018). PMID: 29610339 https://doi.org/10.1073/pnas.1720133115
- [Single-author paper from one of my students] Brandon Schlomann, “Stationary moments, diffusion limits, and extinction times for logistic growth with random catastrophes.” *Journal of Theoretical Biology* **454**: 154-163 (2018). [https://doi.org/10.1016/j.jtbi.2018.06.007]
- T. J. Wiles, E. S. Wall, B. H. Schlomann, E. A. Hay, R. Parthasarathy, K. Guillemin, “Modernized tools for streamlined genetic manipulation of wild and diverse symbiotic bacteria.” *mBio*, **9**: e01877-18 (2018). https://mbio.asm.org/content/9/5/e01877-18 PMID: 30301859 PMCID: PMC6178617

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- R. Parthasarathy, “Monitoring microbial communities using light sheet fluorescence microscopy.” *Curr. Opin. Microbiol.* **43**, 31–37 (2018). [<https://doi.org/10.1016/j.mib.2017.11.008>] PMID: 29175679 PMCID: PMC5963963
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- Travis J. Wiles, Matthew L. Jemielita, Ryan P. Baker, Brandon H. Schlomann, Savannah L. Logan, Julia Ganz, Ellie Melancon, Judith S. Eisen, Karen Guillemin, Raghuvveer Parthasarathy, “Host Gut Motility Promotes Competitive Exclusion within a Model Intestinal Microbiota.” *PLoS Biol.* **14**: e1002517 (2016). [PMID 27458727] [<http://journals.plos.org/plosbiology/article?id=info:doi/10.1371/journal.pbio.1002517>] Writeup in *phys.org*: [<http://phys.org/news/2016-07-real-time-imaging-fish-gut-ties.html>]
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- M. D. Hammers, M. J. Taormina, M. M. Cerda, L. A. Montoya, D. T. Seidenkranz, R. Parthasarathy, M. D. Pluth, “A Bright Fluorescent Probe for H<sub>2</sub>S Enables Analyte-Responsive, 3D Imaging in Live Zebrafish Using Light Sheet Fluorescence Microscopy.” *J. Am. Chem. Soc.* **137**: 10216–10223 (2015). [PMID 26061541] [<http://pubs.acs.org/doi/abs/10.1021/jacs.5b04196>]
- Raghuvveer Parthasarathy, “The Physics of Life: an undergraduate general education biophysics course,” *Phys. Educ.* **50**: 358–366 (2015). DOI: 10.1088/0031-9120/50/3/358 [<http://iopscience.iop.org/0031-9120/50/3/358/>]
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- Kyle J. Welch, Isaac Hastings-Hauss, Raghuv​eer Parthasarathy, and Eric I. Corwin, “Ballistic and diffusive dynamics in a two-dimensional ideal gas of macroscopic chaotic Faraday waves,” *Phys. Rev. E* **89**: 042143 (2014). [<http://journals.aps.org/pre/abstract/10.1103/PhysRevE.89.042143>]
- Alexander R. Small and Raghuv​eer Parthasarathy, “Superresolution Localization Methods,” *Annual Reviews of Physical Chemistry* **65**: 107-125 (2014). [<http://www.annualreviews.org/doi/abs/10.1146/annurev-physchem-040513-103735>]
- Andrew F. Loftus, Sigrid Noreng, Vivian L. Hsieh, and Raghuv​eer Parthasarathy, “Robust Measurement of Membrane Bending Moduli Using Light Sheet Fluorescence Imaging of Vesicle Fluctuations,” *Langmuir* **29**: 14588–14594 (2013). [<http://pubs.acs.org/doi/abs/10.1021/la403837d>] PMID: 24180269
- Matthew Jemielita\*, Michael J. Taormina\*, April DeLaurier, Charles B. Kimmel, and Raghuv​eer Parthasarathy, “Comparing phototoxicity during the development of a zebrafish craniofacial bone using confocal and light sheet fluorescence microscopy techniques,” *J. Biophotonics* **6**: 920-928 (2013) [\* = equal contributors] [<http://onlinelibrary.wiley.com/doi/10.1002/jbio.201200144/abstract>].
- Andrew F. Loftus, Vivian Hsieh, and Raghuv​eer Parthasarathy, “Modulation of membrane rigidity by the human vesicle trafficking proteins Sar1A and Sar1B,” *Biophys. Biochem. Res. Comm.* **426**: 585-589 (2012). [<http://dx.doi.org/10.1016/j.bbrc.2012.08.131>] PMID: 22974979
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- Michael J. Taormina\*, Matthew Jemielita\*, W. Zac Stephens, Adam R. Burns, Joshua V. Troll, Raghuv​eer Parthasarathy, and Karen Guillemin, “Investigating Bacterial-Animal Symbioses with Light Sheet Microscopy,” *Biol. Bulletin* **223**: 7-20 (2012). [\* = equal contributors] (Part of a special issue on “Discoveries in Animal Symbiosis in the ‘omics’ Age.”)
- Raghuv​eer Parthasarathy, “Rapid, accurate particle tracking by calculation of radial symmetry centers,” *Nature Methods* **9**: 724-726 (2012). [PMID 22688415]  
[<http://www.nature.com/nmeth/journal/vaop/ncurrent/abs/nmeth.2071.html>]
- Emily Goers Sweeney, J. Nathan Henderson, John Goers, Christopher Wreden, Kevin G. Hicks, Jeneva K. Foster, Raghuv​eer Parthasarathy, S. James Remington, and Karen Guillemin, “Structure and Proposed Mechanism for the pH-Sensing *Helicobacter pylori* Chemoreceptor TlpB,” *Structure* **20**: 1177-1188 (2012). (Featured on the journal cover; <http://www.cell.com/structure/issue?pii=S0969-2126%2812%29X0007-8>) [<http://www.sciencedirect.com/science/article/pii/S0969212612001815>]
- [Book Chapter] Raghuv​eer Parthasarathy, “Optics: Basic Physics,” in *Handbook of Biomedical Optics*, ed. D.A. Boas, C. Pitris, N. Ramanujam (CRC Press, 2011).
- Edward I. Settles\*, Andrew F. Loftus\*, Alesia N. McKeown, and Raghuv​eer Parthasarathy, “The vesicle trafficking protein Sar1 lowers lipid membrane rigidity,” *Biophys. J.* **99**: 1539-1545 (2010). [\* = equal contributors] [<http://www.cell.com/biophysj/abstract/S0006-3495%2810%2900803-9>] PMID: 20816066
- Yupeng Kong and Raghuv​eer Parthasarathy, “Different modulation mechanisms of attractive colloidal interactions by lipid and protein functionalization,” *Langmuir* **26**: 10541-10545 (2010) [<http://pubs.acs.org/doi/abs/10.1021/la1005538>].
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- Kamil Godula, K., Marissa L. Umbel, David Rabuka, Zsafia Botyanszki, Carolyn R. Bertozzi, and Raghuv​eer Parthasarathy. Control of the molecular orientation of membrane-anchored biomimetic

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- Christopher W. Harland\*, Zsotia Botyanszki\*, David Rabuka, Carolyn R. Bertozzi, and Raghuvver Parthasarathy, "Synthetic trehalose glycolipids confer desiccation resistance to supported lipid monolayers," *Langmuir* **25**: 5193-5198, (2009) [<http://dx.doi.org/10.1021/la804007a>]. [\*These authors contributed equally to this work]
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- Raghuvver Parthasarathy\*, Cheng-han Yu\*, and Jay T. Groves, "Curvature modulated phase separation in lipid bilayer membranes," *Langmuir*, **22**: 5095-5099 (2006). [\*These authors contributed equally to this work]
- Raghuvver Parthasarathy and Jay T. Groves, "Coupled membrane fluctuations and protein mobility in supported intermembrane junctions," *J. Phys. Chem. B*, **110**: 8513-8516 (2006).
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#### INVITED RESEARCH TALKS (2011-2024)

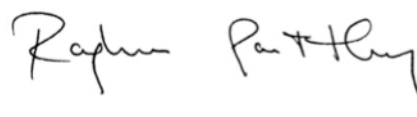
- APS Community engagement seminar on Teaching Biophysics on June 13, 2023
- “Space: The Final Frontier of Microbial Communities” – Princeton University, January 2023
- University of Chicago, “Changes of State” Symposium, April 2022
- American Physical Society March Meeting 2021.
- EPFL (École Polytechnique Fédérale de Lausanne, Switzerland), Jan. 24, 2020.
- ETH Zurich (Swiss Federal Institute of Technology, Zurich); Materials Science seminar, Jan. 29, 2020.
- Virtual seminar: *Biophysics and Physical Biology*, June 12, 2020.  
<https://iyerbiswas.com/outreach/bppbseminars/schedule/> . The Zoom audience was 155 people.
- Virtual seminar: Reed University, Department of Biology, Sept. 25, 2020.
- Virtual seminar: NYU (Biology) Oct 6, 2020.
- Virtual seminar: University of Minnesota Biotechnology Institute, Oct 22, 2020.
- Virtual “Transport in the digestive tract” conference, mostly based in Paris, France. 23 Oct. 2020.
- American Physical Society March Meeting, focus sessions on *The Physics of Microbiomes and Microbial Communities*, March 5, 2019
- Carnegie Institution in Baltimore, MD, 2019 *Mini-Symposium on Biological Interactions*, June 14th, 2019
- University of Delaware, Physics Colloquium – Sept. 11, 2019.
- University of Texas at Austin, Physics Colloquium – Oct. 2, 2019.

- National Centre for Biological Sciences (NCBS), Bengaluru, India; Seminar Nov. 4, 2019
- Indian Institute of Technology – Madras, Chennai, India; Physics Colloquium Nov. 5, 2019
- Indian Institute of Science, Education, and Research – Tirupati, Tirupati, India; Seminar Nov. 8, 2019
- Indian Institute of Science, Bengaluru; Seminar Nov. 11, 2019
- University of Alberta, Physics Colloquium – Nov. 22, 2019.
- Arizona State University, Physics Colloquium – Dec. 5, 2019.
- McGovern Medical School at UTHealth, Houston, TX, Oct. 18, 2018.
- Aspen Center for Physics workshop on “Organizational principles of microbial communities,” June 11, 2018.
- Biophysical Society of Canada, May 23, 2018.
- Oregon Health Sciences University, Biomedical Engineering Seminar, April 27, 2018.
- University of California, Merced, Physics Colloquium, Sept. 1, 2017.
- Reed College, Pacific Northwest Quantitative Biology Conference, Sept. 2017.
- International Center for Theoretical Physics, Trieste, Italy: Joint ICGEB-ICTP-APCTP Workshop on Systems Biology and Molecular Economy of Microbial Communities, July 2017.
- Light Sheet Fluorescence Microscopy International Conference, Singapore, June 2017.
- Princeton University, Biophysics Seminar, April 2017.
- American Chemical Society National Meeting, August 2016. Symposium: “Advances in Biological Imaging”
- Aspen Center for Physics Winter Conference on “Physics of Development and Disease,” March 2016.
- American Physical Society Meeting, invited symposium: “Complex microbial communities,” March 2016.
- Oregon Health Sciences University, April 2015.
- Simon Fraser University, Dept. of Physics, April 2015.
- Oregon Institute of Marine Biology, April 2015.
- American Physical Society Meeting, March 2014.
- Biophysical Society Meeting, Feb. 2014.
- University of Washington, Department of Chemistry, May 2013.
- Life Technologies, Eugene, OR, March 2013.
- Oregon State University, Physics Department Colloquium, January 2013.
- American Physical Society Northwest Section Meeting, Oct. 2012.
- University of Southern California, Physics Colloquium, March 2011.

## GRADUATE STUDENTS SUPERVISED

- I am presently the thesis advisor for two University of Oregon graduate students: Julia Ngo, Susana Marquez Rosales, and Piyush Amitabh.
- Julia Ngo (Ph.D., Biology, 2023). Dissertation: *An Actin Cross-Linking Effector of the Vibrio Type Six Secretion System Increases Intestinal Motility Through Macrophage Redistribution*. Present position: Research Scientist, Thermo Fisher.

- Deepika Sundarraman (Ph.D., Physics, 2022). Dissertation: *Investigating Multi-Species Interactions and Spatial Structure Of Gut-Bacterial Communities Using Live Imaging*. Present position: Research Scientist, Chan Zuckerberg BioHub, San Francisco.
- Philip Jahl (Ph.D., Physics, 2021). Dissertation: *Measurement of Hydrodynamic Boundary Conditions and Viscosity of Lipid Membranes*. Present position: Image Analysis Software Engineer, Canfield Scientific.
- Brandon H. Schlomann (Ph.D., Physics, 2020). Dissertation: *Learning Biophysical Rules of Gut Bacterial Communities through Live Imaging of Zebrafish*. Present position: Postdoctoral Researcher, Department of Physics, UC Berkeley.
- Edouard A. Hay (Ph.D., Physics, 2019). Dissertation: *Identifying gut bacteria and their interactions using deep learning based image analysis and gnotobiotic experiments*. Present position: Founder, Emanometrics.
- Savannah L. Logan (Ph.D., Physics, 2018). Dissertation: *Imaging Vibrio Cholerae Invasion And Developing New Tools For 3d Microscopy Of Live Animals*. Present position: Postdoctoral Fellow, Colorado School of Mines.
- Ryan P. Baker (Ph.D., Physics, 2017). Dissertation: *Imaging And Analysis Of Larval Zebrafish Gut Motility, And Automated Tools For 3d Microscopy*. Present position: Software engineer, Pipeworks Software.
- Matthew L. Jemielita (Ph.D., Physics, 2015). Dissertation: *Imaging Bacterial Population Dynamics In The Zebrafish Intestine*. Present position: Research Scientist at Berkeley Lights.
- Tristan T. Hormel (Ph.D., Physics, 2015). Dissertation: *The Microrheology of Lipid Bilayers*. Present position: Postdoctoral researcher, Oregon Health Sciences University.
- Michael J. Taormina (Ph.D., Physics, 2014). Dissertation: *Developing methods based on light sheet fluorescence microscopy for biophysical investigations of larval zebrafish*. Present position: Research Scientist, Allen Institute for Brain Science.
- Andrew F. Loftus (Ph.D., Chemistry, 2014). Dissertation: *Measurement of membrane rigidity and its modulation by the vesicle trafficking protein Sar1*. Present position: Thermo-Fisher.
- Yupeng Kong (Ph.D. Physics, 2010). Dissertation: *Modulation of like-charge attraction by lipid and protein functionalized silica microparticles*. Present position: unknown.
- Christopher Harland (Ph.D. 2010). Dissertation: *Desiccation resistance and viscoelasticity in model membrane systems*. Present position: Director of Machine Learning and Data Engineering at Remitly.
- Maunta Manandhar (M.S. 2012). Present position: Nepal Bureau of Standards and Metrology.



**Raghuveer Parthasarathy**

September 17, 2024