Sarah L. Keller, Ph.D.

Duane & Barbara LaViolette Endowed Professor of Chemistry

University of Washington, Dept. of Chemistry, Seattle, WA 98195-1700, slkeller@uw.edu

EMPLOYMENT

University of Washington	**Seattle, WA**
Professor of Chemistry	Sept 2009-present
Adjunct Professor of Physics	Dec 2009-present
Associate Dean of Research Activities, College of Arts and Sciences	Aug 2010-July 2014
Associate Professor of Chemistry	Sept 2005-Sept 2009
Assistant Professor of Chemistry	Mar 2000-Sept 2005
Stanford University	**Stanford, CA**
Post-doctoral fellow, lipid biophysics, Mentor: Prof. Harden McConnell	Aug 1997-Mar 2000
University of California	**Santa Barbara, CA**
Post-doctoral fellow, surfactant cryoEM, Mentor: Prof. Joe Zasadzinski	1995-Aug 1997

EDUCATION

Princeton University, Ph.D. in Physics (Biophysics)	**Princeton, NJ**
Membrane/ion-channel interactions, Mentor: Prof. Sol M. Gruner	May 1995
Rice University, B.A. in Physics	**Houston, TX**
Mentor: Prof. Randy G. Hulet	May 1989

HONORS / AWARDS (AS FACULTY)

Science or Technology Advancement & Leadership – Seattle AWIS	2025
Sverdrup Lecturer – Augsburg University	2023
Fellow of the Biophysical Society	
~8/year, globally. Career research achievement in biophysics.	2021
Honorable Mention – UW Distinguished Graduate Mentor Award	2021
Cottrell STAR Award – Research Corporation	
1/year, US and Canada. Career research achievement.	2019
Avanti Award - Biophysical Society	
1/year, globally. Career research in membrane biophysics.	2017
Sommorjai Miller Visiting Professor (UC Berkeley)	2015-2016
Thomas E. Thompson Award, Biophysical Society	
1/year, globally. Mid-career research in membrane biophysics.	2014
Closs Lecture Award, University of Chicago	2013
Fellow of the AAAS (American Assoc. for the Advancement of Science)	2013
UW Postdoctoral Association Mentor Award	2012
Phi Beta Kappa Visiting Scholar	2012-2013
Fellow of the American Physical Society	
0.5% of APS members/year, globally. Research achievement.	2011
Elected to Washington State Academy of Sciences	2011
Avanti Young Investigator in Lipid Research - ASBMB	2010
1/year, globally. Early-career achievement in biophysics	
Haines Annual Lecture in Biochemistry - Wabash College	2008
Distinguished Teaching Award - University of Washington	2006
Margaret Oakley Dayhoff Research Award - Biophysical Society	
1/year, globally. Early-career research in biophysics.	2005
Annual Five Colleges Lecturer “What’s New in Physics” - Smith College	2005
Outstanding Teaching Award - UW Department of Chemistry	2004
Cottrell Scholar Award	2003
NSF CAREER Award	2002
Research Innovation Award (Research Corporation)	2001

HONORS / AWARDS (AS A TRAINEE)

National Institutes of Health Postdoctoral Fellowship (NRSA)	1998-2000
University of California President's Postdoctoral Fellowship	1995-1997
National Institutes of Health Graduate Training Grant	1993-1995
Liposome Company Fellowship	1992-1993
President's Scholarship, Princeton University	1989-1991
Board of Governors Scholarship, Rice University	1985

ARTICLES IN PEER-REVIEWED JOURNALS

WoS Citations

66. G.J. Goetz, S. Naomi, A.M. Madrigal, C.L.A. Chang, C.E. Cornell & S.L. Keller, Micron-scale, liquid-liquid phase separation in ternary membranes containing DPPE, *Biophys. J.*, 124, 3652-3662, 2025.

65. I. Levin, N. Sadaba, A. Nelson & S.L. Keller, Asymmetric flow in helical pipes inspired by shark intestines, *PNAS*, 121, e2406481121, 2024. PMCID: PMC11459177

64. K.J. Wilson, H.Q. Nguyen, J. Gervay-Hague & S.L. Keller, Sterol-lipids enable large-scale, liquid-liquid phase separation in bilayer membranes of only 2 components, *PNAS*, 121, e2401241121, 2024. PMCID: PMC10871287

63. H.M.J. Weakly, K.J. Wilson, G.J. Goetz, E.L. Pruitt, A. Li, L. Xu & S.L. Keller, Several Common methods of making giant vesicles (except an emulsion method) capture intended lipid ratios, *Biophys. J.*, 123, 3452-3462, 2024. PMCID: PMC11480763 **(Cover article)**

62. H.M.J. Weakly & S.L. Keller, Coupling liquid phases in 3D condensates and 2D membranes: Successes, challenges and tools, *Biophys. J.*, 123, 1329-1341, 2024. PMCID: PMC11163299

61. J. Reinhard, C.L. Leveille, C.E. Cornell, A.J. Merz, C. Klose, R. Ernst & S.L. Keller, Remodeling of yeast vacuole membrane lipidomes from the log (one phase) to stationary stage (two phases), *Biophys. J.*, 122, 1043-57, 2023. PMCID: PMC10111276 **(Cover article)**

60. Z.R. Cohen, Z.R. Todd, N. Wogan, R.A. Black, S.L. Keller & D.C. Catling, Plausible sources of membrane-forming fatty acids on the early Earth: A review of the literature and an estimation of amounts, *ACS Earth Space Chem*, 17, 11-27, 2023. PMCID: PMC9869395

59. Z.R. Todd, Z.R. Cohen, D.C. Catling, S.L. Keller & R.A. Black, Growth of prebiotically plausible fatty acid vesicles proceeds in the presence of prebiotic amino acids, dipeptides, sugars, and nucleic acid components, *Langmuir*, 38, 15106-15112, 2022. PMCID: PMC9753748

58. Z.R. Cohen, Z.R. Todd, D.C. Catling & S.L. Keller, Prebiotic vesicles retain solutes and grow by micelle addition after brief cooling below the membrane melting temperature, *Langmuir*, 38, 13407-13413, 2022.

57. T. Portet, Z.R. Cohen, G.J. Goetz, N. Panek, P.N. Holmes, S.A. Stephens, T. Varga, & S.L. Keller, Ripples at edges of blooming lilies and torn plastic sheets, *Biophys. J.*, 121, 2389-2397, 2022. PMCID: PMC9279173 **(Cover article)**

56. Z.R. Cohen, C.E. Cornell, D.C. Catling, R.A. Black & S.L. Keller, Prebiotic protocell membranes retain encapsulated contents during flocculation, and phospholipids preserve encapsulation during dehydration, *Langmuir*, 38, 1304-1310, 2022.

55. C.L. Leveille, C.E. Cornell, A.J. Merz & S.L. Keller, Yeast cells actively tune their membranes to phase separate at temperatures that scale with growth temperatures, *PNAS*, 119, e2116007119, 2021. PMCID: PMC8795566

54. Z.R. Cohen, B.L. Kessenich, A. Hazra, J. Nguyen, R.S. Johnson, M.J. MacCoss, G. Lalic, R.A. Black & S.L. Keller, Prebiotic membranes and micelles do not inhibit peptide formation during dehydration, *ChemBioChem*, e202100614, 2021. PMCID: PMC8957845

53. L.-P. Bergeron-Sandoval, S. Kumar, H.K. Heris, C.L.A. Chang, C.E. Cornell, S.L. Keller, P. François, A.G. Hendricks A.J. Ehrlicher, R.V. Pappu & S.W. Michnick, Endocytic proteins with prion-like domains form viscoelastic condensates that enable membrane remodeling, *PNAS*, 118:e2113789118, 2021. PMCID: PMC8685726

52. M. Xue, R.A. Black, Z.R. Cohen, A. Roehrich, G.P. Drobny, S.L. Keller, Binding of Dipeptides to Fatty Acid Membranes Explains Their Colocalization in Protocells, but Does Not Select for them relative to unjoined amino acids, *J. Phys. Chem. B*, 125, 7933-7939, 2021. PMCID: PMC8323988

51. C.E. Cornell, A. Mileant, N. Thakkar, K.K. Lee, S.L. Keller, Direct Imaging of Liquid Domains in Membranes by Cryo Electron Tomography, *Proc. Nat. Acad. Sci.*, 117, 19713-19719, 2020. PMCID: PMC7443872 **(Cover article)**

50. M. Xue, R.A. Black, C.E. Cornell, G.P. Drobny, S.L. Keller, A Step toward Molecular Evolution of RNA: Ribose Binds to Prebiotic Fatty Acid Membranes, and Nucleosides Bind Better than Individual Bases Do, *ChemBioChem*, 21, 2764-2767, 2020. PMCID: PMC7654510 **(Cover article)**

49. C.E. Cornell, R.A. Black, M. Xue, H.E. Litz, A. Ramsay, M. Gordon, A. Mileant, Z.R. Cohen, J.A. Williams, K.K. Lee, G.P. Drobny & S.L. Keller, Prebiotic Amino Acids Bind to and Stabilize Prebiotic Fatty Acid Membranes, *Proc. Nat. Acad. Sci. USA*, 116, 17239-17244, 2019. PMCID: PMC6717294

48. C.E. Cornell, A.D. Skinkle, S. He, I. Levental, K.R. Levental & S.L. Keller, Tuning Length-Scales of Small Domains in Cell-Derived Membranes and Synthetic Model Membranes, *Biophys. J.*, 115, 690-701, 2018. PMCID: PMC6103737

47. S.P. Rayermann, G.E. Rayermann, C.E. Cornell, A.J. Merz & S.L. Keller, Hallmarks of reversible separation of living, unperturbed cell membranes into two liquid phases, *Biophys. J.*, 113, 2425-2432, 2017. PMCID: PMC5768487

46. C.E. Cornell, N.L.C. McCarthy, K.R. Levental, I. Levental, N.J. Brooks & S.L. Keller, *n*-Alcohol Length Governs Shift in Lo-Ld Mixing Temperatures in Synthetic and Cell-Derived Membranes, *Biophys. J*, 113, 1200-1211, 2017. PMCID: PMC5607138

45. M.C. Blosser, B.G. Horst & S.L. Keller, cDICE Method Produces Giant Lipid Vesicles under Physiological Conditions of Charged Lipid and Ionic Solutions, *Soft Matter*, 12, 7364-7371, 2016. PMCID: PMC5008994

44. J.V. Bleecker, P.A. Cox & S.L. Keller, Mixing Temperatures of Bilayers Not Simply Related to Thickness Differences between Lo and Ld Phases, *Biophys. J.,* 110, 2305-2308, 2016. PMCID: PMC4906269

43. J.V. Bleecker, P.A. Cox, R.N. Foster, J.P. Litz, M.C. Blosser, D.G. Castner & S.L. Keller, Thickness Mismatch of Coexisting Liquid Phases in Non-Canonical Lipid Bilayers, *J. Phys. Chem. B,* 120, 2761-2770, 2016. PMCID: PMC4795991

42. J.P. Litz, N. Thakkar, T. Portet & S.L. Keller, Depletion with Cyclodextrin Reveals Two Populations of Cholesterol in Model Membranes, *Biophys. J.,* 110, 635-645, 2016. PMCID: PMC4744159

41. M.C. Blosser, A.R. Honerkamp-Smith, T. Han, M. Haataja & S.L. Keller, Transbilayer Colocalization of Lipid Domains Explained via Measurement of Strong Coupling Parameters, *Biophys. J.,* 109, 2317-2327, 2015. PMCID: PMC4675890 **(Cover article)**

40. R.A. Black, D.W. Deamer, M.C. Blosser, B.L. Stottrup, R. Tavakley, & S.L. Keller, Nucleobases Bind to and Stabilize Aggregates of a Prebiotic Amphiphile, Providing a Viable Mechanism for the Emergence of Protocells, *Proc. Natl. Acad. Sci. USA,* 110, 13272-13276, 2013. PMCID: PMC3746888 **(F1000Prime Recommended Article)**

39. C.A. Stanich, A.R. Honerkamp-Smith, G.G. Putzel, C.A. Warth, A.K. Lamprecht, P. Mandal E. Mann, T.D. Hua & S.L. Keller, Coarsening Dynamics of Domains in Lipid Membranes, *Biophys. J.,* 105, 444-454, 2013. PMCID: PMC3714885 **(Cover article & feature)**

38. M.C. Blosser, J.B. Starr, C.W. Turtle, J. Ashcraft & S.L. Keller, Minimal Effect of Lipid Charge on Membrane Miscibility Phase Behavior in Three Ternary Systems, *Biophys. J.,* 104, 2629-2638, 2013. PMCID: PMC3686330

37. T. Portet, S.E. Gordon & S.L. Keller, Increasing Membrane Tension Decreases Miscibility Temperatures, an Experimental Demonstration via Micropipette Aspiration, *Biophys. J.,* 103, L35-37, 2012. PMCID: PMC3475388 **(Featured article)**

36. A.R. Honerkamp-Smith, B.B. Machta & S.L. Keller, Experimental Observations of Dynamic Critical Phenomena in a Lipid Membrane, *Phys. Rev. Lett.,* 108, 165702, 2012. PMCID: PMC3722069

35. M.M. Stevens, A.R. Honerkamp-Smith & S.L. Keller, Solubility Limits of Cholesterol, Lanosterol, Ergosterol, Stigmasterol and β-Sitosterol in Electroformed Lipid Vesicles *Soft Matter*, 6, 5882-5890, 2010. PMCID: PMC3156111 **(Cover article)**

34. A.R. Honerkamp-Smith, S.L. Veatch & S.L. Keller, An Introduction to Critical Points for Biophysicists: Observations of Compositional Heterogeneity in Lipid Membranes, *Biochim. Biophys. Acta.,* 1788, 53-63, 2009. PMCID: PMC2426649. **(Invited, Cover article)** **>200 citations**

33. A.R. Honerkamp-Smith, P. Cicuta, M.D. Collins, S.L. Veatch, M. den Nijs, M. Schick & S.L. Keller, Line Tensions, Correlation Lengths, and Critical Exponents in Lipid Membranes near Critical Points, *Biophys. J.*, 95, 236-246, 2008. PMCID: PMC2426649 **>200 citations**

32. M.D. Collins & S.L. Keller, Tuning Lipid Mixtures to Induce Domains across Leaflets of Unsupported Asymmetric Bilayers, *Proc. Natl. Acad. Sci. USA*, 105, 124-128, 2008. PMCID: PMC2224171. **>200 citations**

31. M. Halter, Y. Liao, R.M. Plocinik, D.C. Coffey, S. Bhattacharjee, U. Mazur, G.J. Simpson, B.H. Robinson & S.L. Keller, Molecular Self-Assembly of Mixed High-beta Zwitterionic and Neutral Ground State NLO Chromophores, *Chem. Mater.*, 20,1778-1787, 2008.

30. S.L. Veatch, O. Soubias, S.L. Keller & K. Gawrisch, Critical Fluctuations in Domain-Forming Lipid Mixtures, *Proc. Natl. Acad. Sci. USA*, 104, 17650-17655, 2007. PMCID: PMC20077022 **>300 citations**

29. P. Cicuta, S.L. Keller & S.L. Veatch, Diffusion of Liquid Domains in Lipid Bilayer Membranes, *J. Phys. Chem. B,* 111, 3328-3331, 2007. **>200 citations**

28. S.L. Veatch, K. Gawrisch & S.L. Keller, Closed-loop Miscibility Gap and Quantitative Tie-Lines in Ternary Membranes Containing Diphytanoyl PC, *Biophys. J.,* 90, 4428-4436, 2006. PMCID: PMC1471848 **>100 citations**

27. B.L. Stottrup and S.L. Keller, Phase Behavior of Lipid Monolayers Containing DPPC and Cholesterol Analogs, *Biophys. J.,* 90, 3176-3183, 2006. PMCID: PMC1432104 **>100 citations**

26. S.L. Keller & A.L. Smith, Advice for New Faculty Teaching Undergraduate Science, *J. Chem. Educ.*, 83, 401-406, 2006.

25. S.L. Veatch & S.L. Keller, Seeing Spots: Complex Phase Behavior in Simple Membranes, *Biochim. Biophys. Acta (Invited),* 1746, 172-185, 2005. **(Cover article)** **>600 citations**

24. M.E. Beattie, S.L. Veatch, B.L. Stottrup & S.L. Keller, Sterol Structure Determines **>100 citations**

Miscibility vs. Melting Transitions in Lipid Vesicles, *Biophys. J.*, 89, 1760-1768, 2005. PMCID: PMC1366679

23. S.L. Veatch & S.L. Keller, Miscibility Phase Diagrams of Giant Vesicles Containing Sphingomyelin, *Phys. Rev. Lett.*, 94, 148101, 2005. **>400 citations**

22. B.L. Stottrup, D.S. Stevens & S.L. Keller, Miscibility of Ternary Mixtures of Phospholipids and Cholesterol in Monolayers, and Application to Bilayer Systems, *Biophys. J.*, 88, 269-276, 2005. PMCID: PMC1305005 **>100 citations**

21. S.L. Veatch, I.V. Polozov, K. Gawrisch & S.L. Keller, Liquid Domains in Vesicles Investigated by NMR and Fluorescence Microscopy, *Biophys. J.*, 86, 2910-2922, 2004. PMCID: PMC1304159. **>400 citations**

20. B.L. Stottrup, S.L. Veatch & S.L. Keller, Nonequilibrium Behavior in Supported Lipid Membranes Containing Cholesterol, *Biophys. J.* 86, 2942-2950, 2004. PMCID: PMC1304162 **>100 citations**

19. S.L. Keller, Sequential Folding of a Rigid Wire into Three-Dimensional Structures, *Am. J. Phys.*, 72, 599-604, 2004.

18. S.L. Veatch & S.L. Keller, Separation of Liquid Phases in Giant Vesicles of Ternary Mixtures of Phospholipids and Cholesterol, *Biophys. J.* 85, 3074-3083, 2003. PMCID: PMC1303584. **>1,200 citations**

17. S.L. Veatch & S.L. Keller, A Closer Look at the Canonical Raft Mixture in Model Membrane Studies, *Biophys. J.* 84, 725-726, 2003. PMCID: PMC1302652 **>100 citations**

16. S.L. Keller, Miscibility Transitions and Lateral Compressibility in Liquid Phases of Lipid Monolayers, *Langmuir,* 19, 1451-1456, 2003. **(Invited)**

15. S.L. Veatch & S.L. Keller, Organization in Lipid Membranes Containing Cholesterol, *Phys. Rev. Lett.* 89, 268101, 2002. **>500 citations**

14. S. Bezzine, J.G. Bollinger, S.L. Veatch, S.L. Keller & M.H. Gelb, On the Binding Preference of Secreted Phospholipases A2 for Membranes with Anionic Phospholipids, *J. Biol. Chem.* 277, 48523-48534, 2002. **>100 citations**

13. S.L. Keller, Coexisting Liquid Phases in Lipid Monolayers and Bilayers, *J. Phys.: Condensed Matter* 14, 4763-4766, 2002. **(Invited)**

12. W.H. Pitcher III, S.L. Keller & W.H. Huestis, Interaction of Nominally Soluble Proteins with Phospholipid Monolayers at the Air-Water Interface. *Biochim. Biophys. Acta (Biomembranes)* 1564, 107-113, 2002.

11. S.L. Keller, T.G. Anderson & H.M. McConnell, Miscibility Critical Pressures in Monolayers of Ternary Lipid Mixtures, *Biophys. J.* 79, 2033-2042, 2000. PMCID: PMC1301093

10. S.L. Keller, A. Radhakrishnan & H.M. McConnell, Saturated Phospholipids with High Melting Temperature Form Complexes with Cholesterol in Monolayers *J. Phys. Chem. B.* 104, 7522-27, 2000.

9. S.L. Keller & H.M. McConnell, Stripe Phases in Lipid Monolayers near a Miscibility Critical Point, *Phys. Rev. Lett.* 82,1602-1605, 1999. **>100 citations**

8. S.L. Keller, W.H. Pitcher III, W.H. Huestis & H.M. McConnell, Red Blood Cell Lipids Form Immiscible Liquids, *Phys. Rev. Lett.* 81, 5019-5022, 1998. **>100 citations**

7. S.L. Keller, P. Boltenhagen, D. Pine & J.A. Zasadzinski, Direct Observation of Shear-Induced Structures in Worm-Like Micellar Solutions by Freeze-Fracture Electron Microscopy, *Phys. Rev. Lett.*, 80, 2725-2728, 1998.

6. H.E. Warriner, S.L. Keller, S.H.J. Idziak, N.L. Slack, P. Davidson, J.A. Zasadzinski & C.R. Safinya, The Influence of Polymer Molecular Weight in Lamellar Gels Based on PEG-Lipids, *Biophys. J.*, 75, 272-293, 1998. PMCID: PMC1299699

5. M. Adams, Z. Dogic, S.L. Keller & S. Fraden, Entropically Driven Microphase Transitions in Mixtures of Colloidal Rods and Spheres, *Nature*, 393, 349-352, 1998. **>400 citations**

4. S.L. Keller, H.E. Warriner, C.R. Safinya & J.A. Zasadzinski, Direct Observation of a Defect-Mediated Viscoelastic Transition in a Hydrogel of Lipid Membranes and Polymer-Lipids, *Phys. Rev. Lett.*, 78, 4781-4784, 1997.

3. S.L. Keller, S.M. Gruner & K. Gawrisch, Small Concentrations of Alamethicin Induce a Cubic Phase in Bulk Phosphatidylethanolamine Mixtures, *Biochim. Biophys. Acta*, 1278, 241-246, 1996.

2. Y-S. Lee, J-Z. Yang, T.M. Sisson, D.A. Frankel, J.T. Gleeson, E. Aksay, S.L. Keller, S.M. Gruner & D.F. O'Brien, Polymerization of Nonlamellar Lipid Assemblies, *J. Am. Chem. Soc.* 117, 5573-5578, 1995. **>100 citations**

1. S.L. Keller, S.M. Bezrukov, S.M. Gruner, M.W. Tate, I. Vodyanoy & V.A. Parsegian, Probability of Alamethicin Conductance States Varies with Nonlamellar Tendency of Bilayer Phospholipids, *Biophys. J.*, 65, 23-27, 1993. PMCID: PMC1225696. **>200 citations**

BOOK CHAPTERS / OBITUARIES

3. M.C. Blosser, C.E. Cornell, S.P. Rayermann & S.L. Keller, Phase Diagrams and Tie Lines in GUVs 2nd Edition, *The Giant Vesicle Book*, ed. R. Dimova & C. Marques, Taylor & Francis, 2024.

2. M.C. Blosser, C.E. Cornell, S.P. Rayermann & S.L. Keller, Phase Diagrams and Tie Lines in GUVs Ch. 18, 1st Edition, *The Giant Vesicle Book*, ed. R. Dimova & C. Marques, Taylor & Francis, 2019.

1. S.L. Keller & A.L. Kwiram, Harden Marsden McConnell (obit.), *Physics Today*, 68, 64, 2015.

PRESS (Past decade only, reverse chronological)

10. Ars Technica, "These 3-D printed pipes inspired by shark intestines outperform Tesla valves", Sept 2024 https://arstechnica.com/science/2024/09/these-3d-printed-pipes-inspired-by-shark-intestines-outperform-tesla-valves/

9. New Atlas, "Bio-inspired one-way-flow pipes handle liquid like sharks digest food", Sept 2024 https://newatlas.com/good-thinking/shark-spiral-valve-one-way-flow-pipes/

8. UW News, "Hungry yeast are tiny, living thermometers", Jan 2022 https://www.washington.edu/News/2022/01/25/yeast-phase-separation/

7. Biophysical Society Blog, "A 17-Year-Old BJ Article Explored the Ground Rules of Phase Separation in Lipid Bilayer", Mar 2020 https://www.biophysics.org/blog/a-17-year-old-bj-article-explored-the-ground-rules-of-phase-separation-in-lipid-bilayer

6. The Atlantic, "A new clue to how life originated", Aug 2019 https://www.theatlantic.com/science/archive/2019/08/interlocking-puzzle-allowed-life-emerge/595945/.

5. SciShow News, "How cells got their membranes (maybe)", Aug 2019 https://www.youtube.com/watch?v=MDTk73FJ5hw&t=7s.

4. Discover Magazine, "How cell membranes may have kicked off the origin of life" Aug 2019 https://www.discovermagazine.com/environment/how-cell-membranes-may-have-kicked-off-the-origin-of-life

3. Inside Science, "The origin of life may not be as coincidental as scientists once thought", Aug 2019 https://www.insidescience.org/news/origin-life-may-not-be-coincidental-scientists-once-thought.

2. Physics Today, "Membrane phase demixing seen in living cells", 71, 21-23, Feb 2018, https://physicstoday.scitation.org/doi/10.1063/PT.3.3838.

1. Biophysical Society Spotlight, "Two Phases on Two Faces", Dec 2015, https://biophysicalsociety.wordpress.com/2015/12/01/two-phases-on-two-faces/.

INVITED PRESENTATIONS (Past decade, reverse chronological)

87. Biophysics Seminar, U Michigan, Scheduled Apr 17, 2026.

86. Gordon Research Seminar (Colloidal, Macromolec. & Poly. Solns), Scheduled Jan 31 – Feb 1, 2026.

85. Materials Seminar, UC Santa Barbara, Scheduled Jan 30, 2025.

84. Bioengineering Seminar, UC Merced, Dec 5, 2025.

83. Physics Colloquium, Lehigh University, Nov 20, 2025.

82. BPS Thematic Meeting: Beyond Simple Models, Copenhagen, July 7, 2025.

81. BPS Satellite Meeting: In honor of Adrian Parsegian, Feb. 14, 2025.

80. Cottrell Soft Matter Symposium, Univ. of San Diego, Oct. 25, 2024. (Keynote speaker)

79. Materials Research Society meeting, Seattle, Apr. 23, 2024.

78. Chemical Engineering Seminar, UT Austin, Feb 27, 2024.

77. Sverdrup Endowed Lecture, Augsburg University, Apr 10, 2023.

76. Washington University (St. Louis), Biomedical Engineering Seminar, Apr 6, 2023.

75. ASBMB National Meeting, Lipids and Membranes Section, Mar 25-28, 2023.

74. Duke Materials Initiative Seminar, Duke University, Mar 22, 2023.

73. Physics Colloquium, North Carolina State University, Mar 20, 2023.

72. Living Histories Seminar (online), Mar 15, 2023.

71. Chemistry and Biochemistry Seminar, University of California at San Diego, Feb 23, 2023.

70. Biophysical Society Conference, Symposium speaker, Feb 19, 2023.

69. Keystone Conference: Biomolecular Condensates J7-2023 (Canada), Feb 1, 2023.

68. Chemical Engineering Seminar, University of South Carolina, Jan 19, 2023.

67. Chemistry Seminar, University of Florida, Jan 17, 2023.

66. AMOLF Seminar (FOM Institute for Atomic and Molecular Physics), Dec 19, 2022.

65. Leiden Institute of Physics, Leiden University, Dec 7, 2022.

64. Dutch Soft Matter Meeting, Nov 14, 2022. (Keynote speaker)

63. Bionanoscience Seminar, TU Delft (Netherlands), Oct 21, 2022.

62. Biomembrane Days (Berlin, Germany), Sept 19-21, 2022.

61. ACS National Meeting, Aug 21-25, 2022. (Declined due to travel conflict)

60. Johns Hopkins, Physics Colloquium, April 21, 2022.
59. Princeton University, Biophysics Seminar, April 4, 2022.
58. Virginia Tech, Physics Colloquium, Nov 12, 2021.
57. Cell Physics 2021 (Saarland University, Germany), Sept 29 – Oct 1, 2021.
56. Kavli Institute, Physics of Elastic Films Conference, July 5-9, 2021. (Cancelled - pandemic)
55. New England Complex Fluids Workshop, Dec. 4, 2020. (Virtual)
54. BPPB (Biophysics and Physical Biology) Seminar, Nov. 6, 2020. (Virtual)
53. Physics Seminar, Indian Institute of Science (Bangalore, India), Oct. 20, 2020. (Virtual)
52. Wayne State University, Physics Colloquium, Sept. 24, 2020. (Virtual)
51. SFB 803 Symposium (Kloster Irsee, Germany), Aug 31 - Sept. 3, 2020. (Cancelled - pandemic)
50. Physiology Course Speaker, Woods Hole Marine Biological Lab, Jun. 30, 2020 (Cancelled - pandemic)
49. Decadal Survey of Biophysics, National Academies of Science (Virtual), Apr. 2, 2020.
48. Condensed Matter and Biophysics Seminar, Los Alamos Natl Lab, Mar. 2, 2020.
47. Condensed Matter Seminar, LSU Baton Rouge, Feb. 14, 2020.
46. Chemistry Seminar, Auburn University, Feb. 13, 2020.
45. Microbiology Seminar, UMass – Amherst, Jan. 21, 2020.
44. Molecular Biology Retreat, University of Colorado, Oct. 25, 2019. (Keynote speaker)
43. EMBO Physics and Chemistry of Endocytosis at Multiple Scales (Ischia, Italy), Sept. 3, 2019.
42. MBL Physiology, Physical Biology of the Cell, Woods Hole, July 18, 2019 & Aug. 7, 2019.
41. Cottrell Scholars Conference, July 11, 2019.
40. Evolution of Complex Life Conference, Georgia Tech, May 16, 2019.
39. Stony Brook University, Biochemistry and Cell Biology Seminar, Mar. 28, 2019.
38. Soft Matter Seminar, Georgia Tech, Mar. 26, 2019. (Annual "Distinguished Lecture")
37. Physics Colloquium, Georgia Tech, Mar. 25, 2019.
36. Physics Colloquium, McGill University (Canada), Mar. 22, 2019.
35. University of Virginia, Molec. Physiology & Biological Physics, Feb. 28, 2019.
34. Protein-Membrane Symposium, University of Copenhagen, Nov. 27, 2018.
33. UT Southwestern, Molecular Biophysics Seminar, Oct. 4, 2018.
32. Washington State University, Physics Colloquium, Sept. 20, 2018.
31. Physics Colloquium, University of British Columbia, Sept. 13, 2018.
30. Chemistry Seminar, UC Irvine, Sept. 12, 2018.
29. Five-College Colloquium, Claremont Colleges, Sept. 11, 2018.
28. Physiology Course Speaker, Woods Hole Marine Biological Laboratory, June 25, 2018.
27. FASEB Molecular Biophysics of Membranes Conference, June 17-22, 2018.
26. University of South Florida, Physics Colloquium, Oct. 13, 2017.
25. Biophysical Society of Canada, May 25, 2017. (Keynote speaker)
24. Fermilab, Colloquium, Mar. 22, 2017.
23. Weill Cornell Medicine, Physiology, Biophysics and Systems Bio Seminar, Mar. 8, 2017.
22. Biophysical Society Meeting, Awards Symposium, Feb 14, 2017.
21. Biophysical Society Meeting, BIV Subgroup Symposium, Feb 11, 2017. (Keynote speaker)
20. UC Berkeley, Physics/MCB Colloquium, Sept. 26, 2016.
19. BPS Liposomes, Exosomes and Virosomes, Ascona, Switzerland, Sept 16-19, 2016.
18. Biomembrane Days, Berlin, Sept. 5-7, 2016.
17. CECAM International Workshop on Biomembranes, Helsinki, Aug. 16-19, 2016. (Declined)
16. UCLA California Nanosystems Institute Seminar, Mar. 3, 2016.
15. UC Berkeley, Physical Chemistry Seminar, Feb. 16, 2016.
14. San Francisco State University, Chemistry Seminar, Feb. 12, 2016.
13. UC Davis, Biophysics Seminar, Feb. 5, 2016.
12. UCSF, BBC Special Seminar, Jan. 25, 2016.
11. Stanford University, Physical Chemistry Seminar, Jan. 12, 2016.
10. University of British Columbia, Condensed Matter Seminar, Nov. 26, 2015.
9. Simon Fraser University, Biophysics Seminar, Nov. 25, 2015.
8. UC San Diego, Physics Colloquium, Nov. 12, 2015.
7. UC Boulder, Physical Chemistry / Chemical Physics Colloquium, Oct. 23, 2015.
6. Pacific Lutheran University, Chemistry Seminar, Oct. 12, 2015.
5. University of Illinois at Urbana-Champaign, Physical Chemistry Seminar, Sept. 17, 2015.
4. Princeton University, Intracellular Phase Transitions Conference, Keynote Lecture, April 20, 2015.

3. Stanford University, McConnell Symposium, April 18, 2015.
2. Center for Theoretical Biological Physics, Rice University, March 17, 2015.
1. Harvard University, Origins of Life Initiative, March 11, 2015.

HIGHLIGHTS OF GROUP PRESENTATIONS AT CONFERENCES (Past decade; non-invited)

18. Biophysical Society 2025: (Goetz, Naomi, Madrigal & Keller) / (Noaman, Chicas, Merz & Keller)
17. APS Meeting 2025: (Wilson, Nguyen, Gervay-Hague & Keller) / (Levin & Keller)
16. Biophysical Society 2024: (Levin, Sadaba, Nelson & Keller) / (Wilson, Nguyen & Keller) / (Goetz, Naomi, Chang, Cornell & Keller)
15. Biophysical Society 2023: (Goetz, Spears, Pruitt, Xu & Keller) / (Levin, Sadaba, Nelson & Keller) / Goetz & Keller)
14. Biophysical Society 2022: (Leveille, Cornell, Reinhard, Merz, Ernst & Keller) / (Goetz, Cohen, Portet, Panek, Stephens, Holmes, Varga & Keller)
13. Biophysical Society 2021: (Leveille, Cornell, Merz & Keller) / (Cohen, Cornell, Catling, Black & Keller)
12. Biophysical Society 2020: (Cornell, Mileant, Thakkar, Lee & Keller) / (Leveille, Cornell, Merz & Keller) / (Spears & Keller) / (Cohen, Hazra, Nguyen, Kessenich, Xue, Johnson, Drobny, Black & Keller)
9. AbSciCon 2019: (Black, Cornell, Xue, Litz, Ramsay, Gordon, Mileant, Cohen, Williams, Lee, Drobny & Keller) / (Cohen, Nguyen, Lalic, Black & Keller)
8. Biophysical Society 2019: (Cornell, Skinkle, He, Levental, Levental & Keller) / (Cohen, Ramsay, Cornell, Black & Keller) / (Cornell, Mileant, Lee & Keller)
7. Biophysical Society of Canada 2018: (Chang, Cornell & Keller) / (Leveille, Cornell, Merz & Keller) (Cornell, Skinkle, He, Levental, Levental & Keller) / (Rayermann, Rayermann, Cornell, Merz & Keller)
6. Biophysical Society 2018: (Cornell, Skinkle, He, Levental, Levental & Keller) (Chang, Cornell & Keller)/ (Rayermann, Rayermann, Cornell, Merz & Keller)
5. Gordon Conference on the Origins of Life, Jan. 2018: (Cohen, Ramsay, Cornell, Keller & Black)
4. Biophysical Society 2017: (Cornell, McCarthy, Levental, Levental, Brooks & Keller) / (Rayermann, Rayermann, Cornell, Merz & Keller)
3. AbSciCon 2017: (Black, Gordon, Cornell & Keller)
2. Biophysical Society 2016: (Cornell & Keller) / (Rayermann & Keller) / (Gordon, Black, Cornell, Williams, Lee & Keller)
1. Berkeley Mini Stat Mech Conference, Jan. 2016: (Cornell & Keller)

TEACHING

A. AWARDS

University of Washington Department of Chemistry Outstanding Teaching Award (2005)
University of Washington Distinguished Teaching Award (2006)
UW Postdoctoral Association Mentor Award (2012)
Honorable Mention – UW Marsha Landolt Distinguished Graduate Mentor Award (2021)

B. LECTURE COURSES TAUGHT (2 courses per year)

Chem 144, 152, 155, 162	(General Chemistry)	30 lectures, 10 weeks, 240-330 students
Chem 452	(Physical Chemistry for Biochemists)	30 lectures, 10 weeks, 80-150 students

NATIONAL / INTERNATIONAL SERVICE ACTIVITIES (Subset from past decade)

A. JOURNAL REVIEWS

Proc. Natl. Acad. Sci. / Phys. Rev. Lett. / Phys. Rev. E / Biophys. J.
J. Phys. Chem. B / J. Memb. Biol. / Langmuir / Soft Matter

B. PROPOSAL REVIEW PANELS

BIO and/or CHEM Directorate Panels: 2014, 2016, 2017, 2024

C. AD HOC PROPOSAL REVIEWS

National Science Foundation / Research Corporation

D. EXTERNAL ADVISING

ESPRC (UK Research Council) Advisory Board on Sculpting Dynamic Amphiphilic Structures 2012 – 2017
Presentation to National Academies Decadal Survey of Biophysics 2020

E. PROFESSIONAL SOCIETIES

American Physical Society, Fellow and Lifetime Member
Biophysical Society, Fellow and Member
Washington State Academy of Science, Fellow and Member

F. MENTORING / OUTREACH

Founding member and listserv moderator of the Membrane Chix, a networking and mentoring group

SERVICE ACTIVITIES WITHIN UW (Subset from past decade)

A. CHEMISTRY DEPARTMENT COMMITTEES

Chemistry Dept. Awards Committee, 2018 – 2022, 2024 – present (Chair)
Chemistry Dept. PhD Training Committee, 2020 – 2022, 2024 – present
Chemistry Dept. Representative at SACNAS Conference, 2024
Chemistry Dept. Teaching Faculty Search Committee, 2023 – 2024
Chemistry Dept. Chair's Advisory Committee, 2020 – 2022
Chemistry Dept. Personnel Committee, 2016 – 2018

B. UNIVERSITY-WIDE AND COMMUNITY SERVICE

UW First Year Programs Presentations to Mentor Undergraduates: 2010 – 2012, 2014 – present
UW Freshman Convocation Faculty Speaker, 2017
UW College of Arts and Sciences C21 Faculty Advisor Board, 2016 – 2017
UW Sackler Fellow Selection Committee, 2010 – 2017
UW Proposal Review for Royalty Research Fund, 2004 – present
UW Presentations to Advise Faculty through the UW Faculty Fellows Program 2012, 2017, 2018
UW Lab Tour for LSAMP students (2024) and for Local Middle/High School Students: 2012, 2013, 2017

UNDERGRADUATE, GRADUATE, AND POSTDOCTORAL ADVISING

A. POSTDOCTORAL FELLOWS

Ido Levin	2021 - present	
Thomas R. Portet	2011 - 2013	(Current Software Engineer, Microsoft - Data Science Group)
Marcus D. Collins	2006 - 2008	(Current Scientist/Senior Fellow at Placed, Inc.)
Michael Halter	2004 - 2005	(Current NIST Research Scientist)

Awards to Postdoctoral Fellows while in the Keller Lab / UW:

I. Levin: *Fulbright Fellow, HFSP Fellow (declined), Washington Research Fdn. Fellow, Best Poster Award at 2023 Gordon Conference on Complex Active & Adaptive Material Systems, Best Talk Award at Frontiers in Biophysics 2024, APS Gallery of Soft Matter Competition 2025*

T.R. Portet: *UW Sackler Fellow, Fondation Bettencourt Schueller Prix pour les Jeunes Chercheurs, Prix de l'Académie des Sciences de Toulouse, Prix Novela - City of Toulouse, 2011 Travel Award Soft Condensed Matter Gordon Conference, Skinner Prize: Best Poster Faraday Discussion 161*

M.D. Collins: *NIH Kirschstein Postdoctoral Fellowship*

M. Halter: *UW-MDITR STC Postdoctoral Travel Grant*

B. Ph.D. STUDENTS

Hena Kachroo	2025 - present	
Sarah Alvarez	2025 - present	
Sena Noaman	2023 - present	
Kent J. Wilson	2021 - present	
Gunnar J. Goetz	2020 - 2025	
Heidi M.J. Weakly	2018 - 2024	
Zack R. Cohen	2017 - 2023	(Current Postdoctoral Fellow, NASA)
Chantelle L. Leveille	2016 - 2022	(Current Staff Scientist, Allen Brain Institute, Seattle)
Caitlin E. Cornell	2014 - 2020	(Current Postdoctoral Fellow, UC Berkeley)
Glennis E. Rayermann	2015 - 2018	(Current Assistant Professor, Buffalo State University)
Scott P. Rayermann	2013 - 2017	(Current Teaching Faculty, University of Washington Tacoma)
Jonathan P. Litz	2013 - 2015	(Current Software Engineer, Microsoft - Data Science Group)
Joan V. Bleecker	2010 - 2015	(Current Teaching Faculty, University of Washington Tacoma)
Matthew C. Blosser	2009 - 2014	(Current Data Scientist)
Cynthia A. Stanich	2008 - 2012	(Current Chemistry Instructor, University of Washington Seattle)
Aurelia R. Honerkamp-Smith	2005 - 2010	(Current Assoc. Prof. of Physics, Lehigh University)
Adrienne R. Battle	2004 - 2007	(Current Prof. of Physics, Green River College)
Ben L. Stottrup	2002 - 2005	(Current Prof. of Physics, Augsburg University)
Sarah L. Veatch	2000 - 2004	(Current Prof. of Biophysics, Univ. of Michigan)

Awards to Ph.D Students while in the Keller Lab / UW:

H. Kachroo: *2025 Chemistry Husky Award, 2025 UW Astrobiology Fellowship*

S. Noaman: *2023 UW Excellence in Chemistry Grad Fellowship, 2023 Honnen Endowed Fellowship in Chemistry, 2024 Helmsley Fellowship to Cold Spring Harbor Course on Yeast Genetics & Genomics, 2025 UW GPSS Travel Award, 2025 Biophysical Society SRAA Award, 2025 Lindau Nobel Laureate Meeting Fellow, 2026 BPS Travel Award*

K.J. Wilson: *2023-24 UW Excellence in Chemistry Grad Fellowship, 2024 BPS Travel Award, 2024 Finalist BPS Student Research Achievement Award Poster Competition, 2024 Boulder Summer School in Biological Physics Fellowship, 2025 UW GPSS Travel Award, 2025 DSOFT Travel Award, 2025 Deutscher Akademischer Austauschdienst (DAAD) RISE Internship*

G.J. Goetz: *2020 Finalist for NSF GRFP Fellowship, 2020 UW Excellence in Chemistry Grad Fellowship, 2025 UW GPSS Travel Award*

H.M.J. Weakly: *2019-2021 NIH Molecular Biophysics Fellowship, 2019 UW MBTG Retreat Poster Award, 2019-20 UW Chemistry Merit Fellowship, Washington Research Foundation Venture Analyst*

Z.R. Cohen: *2017 UW Astrobio Scholar, 2018 Young Investigator Presenter - Origins of Life Gordon Conf., 2018 Pacific Science Ctr - Science Communication Fellowship, 2018 NSF GRFP Fellow, 2019 Finalist for BPS Student Research Achievement Award, 2019 UW Chemistry Merit Fellowship, 2021 Josep Comas i Sola International Summer School Travel Award, 2022 UW GPSS Travel Award, 2022 NASA Astrobiology Travel Grant, 2023 NASA Postdoctoral Fellowship*

C.L. Leveille: *2016 UW Excellence in Chemistry Graduate Fellowship, 2018 Biophysical Society of Canada Poster Award, 2019 BPS Student Research Achievement Award, 2019 BPS Travel Award, 2020 Travel Grant from The Company of Biologists, 2021 BPS Student Research Achievement Award*

G.E. Rayermann: *2018 Biophysical Society Travel Award, 2018 UW Graduate & Professional Student Senate Travel Award, 2018 UW Graduate School Travel Award, 2018 Doerner Institut Conference on Tempera Painting 1800-1950 (Munich) Travel Award, 2017 Fdn. of the Amer. Inst. for Conservation of Historic and Artistic Works Travel Award, NSF GRFP Fellow, NDSEG Fellow, ARCS Fellow*

C.E. Cornell: *2018 NC State Building Future Faculty Fellow, 2017 MBL Physiology Post-Course Research Fellow, 2017 MBL Physiology Summer Course Fellowship, 2017 BPS Travel Award, 2016 BPS Student Research Achievement Award, 2015-2017 Molecular Biophysics NIH Traineeship, 2015 NSF GRFP Honorable Mention, 2015 Pavlou & Strayer Dept. of Chemistry Fellowship, 2018 Biophysical Society of Canada Travel Award + Poster Award, 2019-2020 UW Alma Mater Travel Award, 2020 Hoffman Award for Outstanding Graduate Research in Chemistry, 2020 James S. McDonnell Postdoctoral Fellowship, 2020 iBiology Finalist, 2021 UW Grad School Distinguished Dissertation in Biological Sciences, 2021 CGS/ProQuest Distinguished Dissertation in Biological & Life Sciences*

S.P. Rayermann: *2016 Biophysical Society Travel Award, 2013-14 Alpha Epsilon Delta Teaching Excellence Award, 2013 George and Agnes Irene Cady Dept. of Chemistry Endowed Fellowship, 2013 Lloyd and Florence West Dept. of Chemistry Endowed Fellowship*

J.P. Litz: *2013 BPS Travel Award, 2012 Lindau Fellow to the Lindau Meeting of Nobel Laureates, NSF Graduate Fellow, 2010 Leon J. Slutsky & Brian R. Reid Dept. of Chemistry Endowed Fellowships*

J.V. Bleecker: *2015 Ford Fellowship Honorable Mention, 2013 Biophysical Society Travel Award, 2013 Lindau Fellow - Lindau Meeting of Nobel Laureates, 2011-2013 Molecular Biophysics NIH Traineeship*

M.C. Blosser: *2014 Physics Dept. Dehmelt Prize in Experimental Physics, 2014 UW NASA Space Grant Consortium Fellowship, 2014 University of Washington Lindau Fellow Nominee, 2012 Biophysical Society Travel Award (to MCB), Molecular Biophysics NIH Traineeship, 2012 Fellowship to Boulder Summer School in Condensed Matter Physics, 2010 Biophysical Society Student Research Achievement Award Finalist, 2009 UW Graduate School Top Scholar Award*

C.A. Stanich: *2012 Travel Award to TRUSE - Transforming Research in Undergraduate STEM Education, 2012 Biophysical Society Student Research Achievement Award, 2010-2011 Dept. of Chemistry Outstanding Teaching Award, 2011 Biophysical Society Student Research Achievement Award – 2nd Place, 2010 Biophysical Society Travel Award, 2008 Honen Dept. of Chemistry Endowed Fellowship*

A.R. Honerkamp-Smith: *2011 Hoffman Award for Outstanding Graduate Research in Chemistry, 2011 UW Distinguished Dissertation Award, 2011 UW College of Arts & Sciences Dean's Medal for Outstanding Graduate Student in Natural Sciences, 2010 National IGERT Poster Award, Rowland, Rabinovitch and Lingafelter Dept. of Chemistry Endowed Fellowships, 2009 UW CNT Best Presentation Award & Travel Award, 2009 Soft Condensed Matter Gordon Conference Travel Award, Best Poster Award at Advanced Study Institute's Winter School on Order, Robustness & Instabilities in Complex Systems (Norway), Fellowship to Boulder Summer School for Complex Fluids & Biological Materials, 2007 Mechanisms of Cell Signaling Gordon Conference Travel Award, 2007 Biophysical Society Travel Award, UW Molecular Biophysics NIH Traineeship, UW Nanotechnology Fellowship*

A.R. Battle: *UW Nanotechnology Fellowship, ARCS Fellowship*

B.L. Stottrup: *UW Nanotechnology Fellowship, ASCB Travel Award*

S.L. Veatch: *2003 Biophysical Society Student Research Achievement Award, Biophysical Society Travel Award, ASCB Travel Award, Poster Competition and Travel Award at NATO Biophysics Summer School, Molecular Biophysics NIH Traineeship, Nanotechnology Fellowship, Dept. of Physics Karrer Prize, Dept. of Physics Henderson Prize for Best Physics Dissertation*

C. MASTERS STUDENTS

Jack Gipson	2024 - 2025	
Sasha Naomi	2023 - 2024	
Kim Giebenhain	2020	(Became PhD student at Uni. Giessen, Germany)
Christina (Faller) Guvench	2015	(Current Technical Marketing Manager at SilcsBio)
Jake R. Ashcraft	2008 - 2009	(Current Assoc. Dean and Prof. at South Seattle College)
Heena Lakhani	2004 - 2007	(Current Research Scientist at UW, PhD in Learning Sciences)
Ryan Rule	2004 - 2005	(Current Engineer at Boeing, past President of SPEEA)
Mebbie (Beattie) Landsness	2003 - 2005	(Current High School Chemistry and Forensics Teacher)
Marci DeLeon	2001 - 2002	(Current FDA Analytical Chemist)

Awards to Masters Students while in Keller Lab / UW:

K. Giebenhain: *DAAD (Deutscher Akademischer Austausdeinst) German Academic Exchange*

J.R. Ashcraft: *Puget Sound Society for Technical Communication Scholarship, UW Natt-Lingafelter Award*

H. Lakhani: *UW GK-12 Fellowship*
M.E. Beattie: *UW GK-12 Fellowship*

D. UNDERGRADUATE RESEARCHERS

Takashi Kuroyanagi	2025 - present	
Angelique M. Madrigal	2024 - 2025	
Alex Kirkpatrick	2022 - 2023	(Became student researcher in UW neurology lab)
Peter Duff	2019 - 2020	(Became staff at UW Virology)
Bob Weng	2019 - 2020	(Became medical student at Creighton University)
Sean Dickson	2018 - 2019	(Became synthetic biology engineer at Recombia Bioscience)
Ana Duarte	2018 - 2019	(Became graduate student in physics at CalTech)
Andrew Ramsay	2017 - 2018	(Became employee at Adaptive Biotechnologies)
Catherine Chang	2016 - 2018	(Became psychiatry resident U of Nevada, Reno, MD at UW)
Ranee C. James	2013 - 2016	(Became chemistry major at UW)
Moshe T. Gordon	2014 - 2016	(Became postdoctoral researcher, PhD at UC Boulder)
Peter N. Holmes	2012 - 2013	(Became a dentist, DDS degree from UW)
Marie Higinbotham	2012	(Became employee at M3 Biotechnology)
Pokuan (Paul) Ho	2012	(Became instructor in Taiwanese Military Service)
Ben G. Horst	2010 - 2011	(Became chem instructor City College of SF, PhD at Berkeley)
Andrea K. Lamprecht	2010	(Became physician, MBBS and Mphil at U. of Queensland)
Thien-An D. Hua	2009 - 2010	(Became IT infrastructure manager at SightLife)
Cameron W. Turtle	2009	(Became VP at Cantero, Rhodes Scholar D. Phil at Oxford)
Jordan B. Starr	2009	(Became anesthesiologist, MD at Univ. of Michigan)
Marissa Hackett	2008 - 2009	(Became staff scientist at Applied Precision)
Jialing Li	2005	(Became machine learning engineer at Apple, PhD at MIT)
Mark M. Stevens	2004 - 2009	(Became co-founder and VP at Travera, PhD at MIT)
Daniel S. Stevens	2003 - 2004	(Became staff scientist at PATH)
Matthew Loo	2003 - 2004	(Became construction engineer)
Rayna Matsuno	2001 - 2002	(Became Assoc Dir Epidemiology Syapse, PhD Johns Hopkins)
Nathan Pennock	2001 - 2002	(Became Research Asst Prof OHSU, PhD U. Colo, Denver)
Kathy Toreson	2001	(Became neuroscience researcher, Albany Med. Coll. degree)
LaNiesha Cobb	2001	(Became chief product officer at Braven)
Kim Klonoff	2000	

Awards to Undergraduate Researchers at UW:

A.M. Madrigal: *2024 LSAMP Summer Research Fellow, ACS Grad School Readiness and Professional Development Bootcamp Scholarship.*
A. Duarte: *2017-18 UW Mary Gates Scholar (declined)*
C. Chang: *2017 UW Dept. of Chemistry Donald Hanahan Scholarship, 2018 UW URP Travel Award, Terry Scurry Scholarship, University Scholarship-Seattle*
M.T. Gordon: *2016 Dept. of Chemistry Undergraduate Research Award, UW Dept. of Chemistry 2015 Benson Scholarship and 2016 Robinson Scholarship, 2015-16 UW Mary Gates Research Scholar*
R.C. James: *2014 Dept. of Chemistry Boeing Scholarship, 2014 APS Minority Scholarship, 2014 UW Mary Gates Research Scholar*
B.G. Horst: *UW Mary Gates Scholar, UW Washington Research Foundation Fellow*
J. Li: *NSF REU Undergraduate Researcher*
C.W. Turtle: *2009-10 UW Mary Gates Scholar, 2011 Goldwater Scholar, 2012 Rhodes Scholar*
M.M. Stevens: *2007-2008 UW Mary Gates Scholar, UW Arts & Science Research Award, Department of Chemistry Merck Index Award*
N. Pennock: *UW Mary Gates Scholar*
K. Klonoff, *UW Chemical Sciences Research Fellow*

GRANT ACTIVITY (PAST 5 YEARS ONLY, US DOLLARS)

A. CURRENT

National Science Foundation MCB (PI: Keller)	2023 – 2027	$1,200,000
LEA Lipidomics Excellence Award (PI: Keller)	2019 –	€1,500

B. FUNDED AND COMPLETED

National Science Foundation MCB (PI: Keller)	2019 – 2025	$900,000
NASA (PI: Keller, Co-PI Lalic and Drobny)	2017 – 2022	$548,909
UW Royalty Research Fund (PI: Keller, Co-PI Kelly Lee)	2017 – 2020	$32,684

C. FELLOWSHIPS TO POSTDOCS AND GRAD STUDENTS

NSF Graduate Fellowship (to Zack Cohen)	2018 – 2021	$138,000
NIH Molecular Biophysics Fellowship (to Heidi Spears)	2019 – 2021	$79,874
Fulbright Fellowship (to Ido Levin)	2021 – 2022	$47,500
Washington Research Fellowship (to Ido Levin)	2022 – 2025	$202,500