

Sarah L. Keller, Ph.D.
Professor of Chemistry

University of Washington, Box 351700
Seattle, WA 98195-1700
email: skeller@chem.washington.edu

EMPLOYMENT

University of Washington	Seattle, WA
Associate Dean of Research, College of Arts and Sciences	Aug 2010-present
Professor of Chemistry	Sept 2009-present
Adjunct Professor of Physics	Dec 2009-present
Associate Professor of Chemistry	Sept 2005-Sept 2009
Adjunct Associate Professor of Physics	Sept 2005- Dec 2009
Assistant Professor of Chemistry	Mar 2000-Sept 2005
Adjunct Assistant Professor of Physics	Feb 2002-Sept 2005
Stanford University	Stanford, CA
Post-doctoral researcher in lipid interactions. Mentor: Professor Harden M. McConnell	Aug 1997-Mar 2000
University of California	Santa Barbara, CA
Post-doctoral researcher in electron-microscopy of surfactants. Mentor: Professor Joseph A. Zasadzinski	1995-Aug 1997
Fermilab Nat'l Accelerator Lab/ Rice University	Batavia, IL
Research Asst. in particle drift chamber construction.	Jun 87-Aug 87

EDUCATION

Princeton University	Princeton, NJ
Ph.D. in Physics, May 30 1995. Mentor: Professor Sol M. Gruner Thesis Topic: Interaction between Ion-channels and Lipid Membranes	
Rice University	Houston, TX
B.A. in Physics, May 1989; Thesis advisor: Professor Randy G. Hulet	

HONORS AND AWARDS

Phi Beta Kappa Visiting Scholar	2012-2013
Fellow of the American Physical Society	2011
Elected to Washington State Academy of Sciences	2011
Avanti Young Investigator in Lipid Research - ASBMB	2010
Proposal Review Panel: NSF Molecular Biophysics (BIO Directorate)	2009
Haines Annual Lecture in Biochemistry - Wabash College	2008
Distinguished Teaching Award - University of Washington	2006
Margaret Oakley Dayhoff Research Award - Biophysical Society	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
Proposal Review Panel: NSF Molecular Biophysics (BIO Directorate)	2003
NSF CAREER Award	2002
Research Innovation Award (Research Corporation)	2001
Proposal Review Panel: NASA Biophysics in Microgravity	2000
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

PUBLICATIONS IN PEER-REVIEWED JOURNALS
(Reverse Chronological)

Publications with
>25 citations

36. A.R. Honerkamp-Smith and S.L. Keller, Dynamic Critical Exponent in a 2D Membrane with Conserved Order Parameter, (submitted *Phys. Rev. Lett.*), 2011.
35. M.M. Stevens, A.R. Honerkamp-Smith and S.L. Keller, Solubility Limits of Cholesterol, Lanosterol, Ergosterol, Stigmasterol and β -Sitosterol in Electroformed Lipid Vesicles *Soft Matter*, 6, 5882-5890, 2010. (Cover article)
34. A.R. Honerkamp-Smith, S.L. Veatch, and S.L. Keller, An Introduction to Critical Points for Biophysicists: Observations of Compositional Heterogeneity in Lipid Membranes, *Biochim. Biophys. Acta. (Invited)*, 1788, 53-63, 2009. (Cover article) **(32 citations)**
33. A.R. Honerkamp-Smith, P. Cicuta, M.D. Collins, S.L. Veatch, M. den Nijs, M. Schick, and S.L. Keller, Line Tensions, Correlation Lengths, and Critical Exponents in Lipid Membranes near Critical Points, *Biophys. J.*, 95, 236-246, 2008. **(64 citations)**
32. M.D. Collins and S.L. Keller, Tuning Lipid Mixtures to Induce Domains across Leaflets of Unsupported Asymmetric Bilayers, *PNAS*, 105, 124-128, 2008. **(64 citations)**
31. M. Halter, Y. Liao, R.M. Plocinik, D.C. Coffey, S. Bhattacharjee, U. Mazur, G.J. Simpson, B.H. Robinson and S.L. Keller, Molecular Self-Assembly of Mixed High-beta Zwitterionic and Neutral Ground State NLO Chromophores, *Chemistry of Materials*, 20, 1778-1787, 2008.
30. S.L. Veatch, O. Soubias, S.L. Keller, and K. Gawrisch, Critical Fluctuations in Domain-Forming Lipid Mixtures, *PNAS*, 104, 17650-17655, 2007. **(83 citations)**
29. P. Cicuta, S.L. Keller, and S.L. Veatch, Diffusion of Liquid Domains in Lipid Bilayer Membranes, *J. Phys. Chem. B*, 111, 3328-3331, 2007. **(70 citations)**
28. S.L. Veatch, K. Gawrisch, and S.L. Keller, Closed-loop Miscibility Gap and Quantitative Tie-Lines in Ternary Membranes Containing Diphytanoyl PC, *Biophys. J.*, 90, 4428-4436, 2006. **(60 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. **(34 citations)**
26. S.L. Keller and A.L. Smith, Advice for New Faculty Teaching Undergraduate Science, *J. Chem. Educ.*, 83, 401-406, 2006.
25. S.L. Veatch and S.L. Keller, Seeing Spots: Complex Phase Behavior in Simple Membranes, (*Biochim. Biophys. Acta (Invited)*, 1746, 172-185, 2005. (Cover article) **(228 citations)**
24. M.E. Beattie, S.L. Veatch, B.L. Stottrup, and S.L. Keller, Sterol Structure Determines Miscibility vs. Melting Transitions in Lipid Vesicles, *Biophys. J.*, 89, 1760-1768, 2005. **(44 citations)**
23. S.L. Veatch and S.L. Keller, Miscibility Phase Diagrams of Giant Vesicles Containing Sphingomyelin, *Phys. Rev. Lett.*, 94, 148101, 2005. **(154 citations)**
22. B.L. Stottrup, D.S. Stevens, and S.L. Keller, Miscibility of Ternary Mixtures of Phospholipids and Cholesterol in Monolayers, and Application to Bilayer Systems, *Biophys. J.*, 88, 269-276, 2005. **(48 citations)**
21. S.L. Veatch, I.V. Polozov, K. Gawrisch, and S.L. Keller, Liquid Domains in Vesicles Investigated by NMR and Fluorescence Microscopy, *Biophys. J.*, 86, 2910-2922, 2004. **(193 citations)**
20. B.L. Stottrup, S.L. Veatch, and S.L. Keller, Nonequilibrium Behavior in Supported Lipid Membranes Containing Cholesterol, *Biophys. J.*, 86, 2942-2950, 2004. **(70 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 and S.L. Keller, Separation of Liquid Phases in Giant Vesicles of Ternary Mixtures of Phospholipids and Cholesterol, *Biophys. J.*, 85, 3074-3083, 2003. **(372 citations)**
17. S.L. Veatch and S.L. Keller, A Closer Look at the Canonical Raft Mixture in Model Membrane Studies, *Biophysical J.* 84, 725-726, 2003. **(64 citations)**
16. S.L. Keller, Miscibility Transitions and Lateral Compressibility in Liquid Phases of Lipid Monolayers, *Langmuir, (Invited)* 19, 1451-1456, 2003.
15. S.L. Veatch and S.L. Keller, Organization in Lipid Membranes Containing Cholesterol, *Phys. Rev. Lett.* 89, 268101, 2002. **(233 citations)**

14. S. Bezzine, J.G. Bollinger, S.L. Veatch, S.L. Keller, and M.H. Gelb, On the Binding Preference of Secreted Phospholipases A2 for Membranes with Anionic Phospholipids, *J. Biol. Chem.* 277, 48523-48534, 2002. (68 citations)
13. S.L. Keller, Coexisting Liquid Phases in Lipid Monolayers and Bilayers, *J. Phys.: Condensed Matter (Special Issue Article - Invited)* 14, 4763-4766, 2002.
12. W.H. Pitcher III, S.L. Keller, and 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, and H.M. McConnell, Miscibility Critical Pressures in Monolayers of Ternary Lipid Mixtures, *Biophys. J.* 79, 2033-2042, 2000. (28 citations)
10. S.L. Keller, A. Radhakrishnan, and H.M. McConnell, Saturated Phospholipids with High Melting Temperature Form Complexes with Cholesterol in Monolayers *J. Phys. Chem. B.* 104, 7522-27, 2000. (49 citations)
9. S.L. Keller and H.M. McConnell, Stripe Phases in Lipid Monolayers near a Miscibility Critical Point, *Phys. Rev. Lett.* 82, 1602-1605, 1999. (74 citations)
8. S.L. Keller, W.H. Pitcher III, W.H. Huestis and H.M. McConnell, Red Blood Cell Lipids Form Immiscible Liquids, *Phys. Rev. Lett.* 81, 5019-5022, 1998. (95 citations)
7. S.L. Keller, P. Boltenhagen, D. Pine and 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. (57 citations)
6. H.E. Warriner, S.L. Keller, S.H.J. Idziak, N.L. Slack, P. Davidson, J.A. Zasadzinski, and C.R. Safinya, The Influence of Polymer Molecular Weight in Lamellar Gels Based on PEG-Lipids, *Biophys. J.*, 75, 272-293, 1998. (37 citations)
5. M. Adams, Z. Dogic, S.L. Keller and S. Fraden, Entropically Driven Microphase Transitions in Mixtures of Colloidal Rods and Spheres, *Nature*, 393, 349-352, 1998. (233 citations)
4. S.L. Keller, H.E. Warriner, C.R. Safinya and 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. (26 citations)
3. S.L. Keller, S.M. Gruner and K. Gawrisch, Small Concentrations of Alamethicin Induce a Cubic Phase in Bulk Phosphatidylethanolamine Mixtures, *Biochim. Biophys. Acta*, 1278, 241-246, 1996. (67 citations)
2. Y-S. Lee, J-Z. Yang, T.M. Sisson, D.A. Frankel, J.T. Gleeson, E. Aksay, S.L. Keller, S.M. Gruner and D.F. O'Brien, Polymerization of Nonlamellar Lipid Assemblies, *J. Am. Chem. Soc.*, 117, 5573-5578, 1995. (83 citations)
1. S.L. Keller, S.M. Bezrukov, S.M. Gruner, M.W. Tate, I. Vodyanoy and V.A. Parsegian, Probability of Alamethicin Conductance States Varies with Nonlamellar Tendency of Bilayer Phospholipids, *Biophys. J.*, 65, 23-27, 1993. (185 citations)

NATIONAL / INTERNATIONAL PRESS COVERAGE (Since 2001 only, reverse chronological)

2. ASBMB Today, "Keller Garners Avanti Young Investigator Award", Jan 2010, p19.
1. Chemical and Engineering News, "Simulating Life's Envelopes", Feb. 9 2009, p31-33.

INVITED CONFERENCE PRESENTATIONS (Since 2001 only, reverse chronological)

46. Berkeley Mini-Statistical Mechanics Meeting, accepted Jan. 14-15, 2012.
45. ERATO Symposium on Lipid Structures around Proteins (Osaka, Japan), accepted Nov. 11-14, 2011.
44. Gordon Conference on Chemistry and Physics of Lipids, July 14-29, 2011.
43. Gordon Conference on Molecular Cell Biology of Lipids, July 17-22, 2011.
42. Undergraduate Women in Chemistry Conference, Portland OR, Apr. 16-17, 2011.
41. Biophysics of Membrane Transformations (Bad Honnef, Germany), Oct. 26-30, 2010.
40. Physical Chemistry of Biointerfaces (San Sebastian, Spain), July 19-24, 2010.
39. Experimental Biology 2010, ASBMB Avanti Award Symposium, Apr. 24-28, 2010.

38. ISWOLD Workshop on Lipid Domains (Rehovot, Israel), accepted for Mar. 8-12, 2010.
37. Biophysical Society Meeting, Membrane Zoology Workshop, Feb. 20-24, 2010.
36. University of Oregon NSF-IGERT Material Science Institute Retreat, Dec. 15-17 2009.
35. Gordon Research Conference on Soft Condensed Matter Physics, Aug. 9-13 2009.
34. Gordon Research Conference on Molecular Membrane Biology, Jul. 5-9 2009.
33. Biophysical Society Meeting, Membrane Structure and Assembly Subgroup, Feb. 28 2009.
32. Royal Society of Chemistry / Institute of Physics, Meeting on Phase Separation and Mixing, Plenary Lecture (Trinity College, Cambridge), Sept. 3-5 2008.
31. FASEB Summer Conference, Molecular Biophysics of Cell Membranes, Jul. 19-24 2008.
30. ACS Meeting, Symposium on Structure, Property and Function of Membranes, Apr. 6-10 2008.
29. Nonequilibrium Soft Matter Physics Symposium, (Tokyo, Japan), Mar. 17-19 2008.
28. Keystone Symposium, Molecular Basis for Biological Membrane Organization, Jan. 13-16 2008.
27. Annual Berkeley Statistical Mechanics Meeting, Jan. 11-13 2008.
26. Sci Foo Camp (Googleplex, CA), Aug. 3-4 2007.
25. American Physical Society Meeting, Mar. 9 2007.
24. Biophysical Society Meeting, Symposium, Mar. 6 2007.
23. ACS Meeting, Physical Chemistry Symposium, Sept. 2006.
22. Bio-Systems Conference, MPI Colloids and Interfaces (Germany), June 27 2006.
21. EMBO Workshop, (Bilbao, Spain), June 2006 (declined due to maternity).
20. Keystone Symposium on Lipid Rafts and Cell Function, March 2006 (declined due to maternity).
19. Annual Australian Society for Biophysics Meeting, (Canberra, Aus), Sept. 29 2005.
18. Gordon Research Conference on Liquid Crystals, June 19 2005.
17. Gordon Research Conference on Chemistry of Supramolecules and Assemblies, June 15 2005.
16. Lecture Series, Expts in Physical Biology, Inst. for Mathematics and its Applications, UMinn, May 18 2005.
15. Biophysical Society Awards Symposium, Feb. 2005.
14. Physics of Soft Matter Complexes (Tokyo, Japan), Nov 30 2004.
13. 2004 Asilomar Biophysical Discussions, Oct. 2004.
12. FASEB Summer Research Conference, Jul. 2004.
11. ACS German-American Frontiers of Chemistry Symposium (Kloster Seeon, Germany), Jul. 2004.
10. Cottrell Scholar Conference, Jul. 2004.
9. Newton Institute Programme: Statistical Mechanics of Molecular and Cellular Biological Systems (Cambridge University, UK), May 2004.
8. New England Complex Fluids Workshop, Mar. 2004.
7. The Pittsburg Conference, Mar. 2004.
6. National Academy of Sciences: Japanese-American Frontiers of Science Symposium, (Kanagawa, Japan), Dec. 2003.
5. ACS Meeting, Physical Chemistry of Complex Fluids Symposium, Sept. 2003.
4. ACS Meeting Colloid and Surface Science Symposium, Jun. 2003.
3. Biophysical Society, Mar. 2003.
2. National Academy of Sciences: Japanese-American Frontiers of Science Symposium, Dec. 2002.
1. Statphys 21 Satellite: Current Problems in Complex Fluids (Oaxaca, Mexico), Jul. 2001.

INVITED UNIVERSITY / INSTITUTE PRESENTATIONS (Since 2001, reverse chronological)

50. Seminar, UT Austin, accepted Jan. 25 2012.
50. Physical Chemistry Seminar, UC Berkeley, accepted Mar. 15 2011.
49. Biocomplexity Seminar, Indiana University at Bloomington, Sept. 28 2010.
48. Biochemistry Seminar, University of Washington, Apr. 29 2010.
47. Princeton Inst. for Science and Technology of Materials, Princeton University, Apr. 21 2010.

46. Physics Colloquium, Syracuse University, Nov. 13 2008.
45. Cornell University Medical School, Nov. 12 2008.
44. Condensed Matter Seminar, NYU, Nov. 11 2008.
43. Center for Self Assembly Seminar, University of Montreal, Apr. 23 2008.
42. Center for Self Assembly Seminar, McGill University, Apr. 22 2008.
41. Bill and Wilma Haines Annual Public Lecture in Biochemistry, Wabash College, Apr. 4 2008.
40. Bill and Wilma Haines Annual Research Lecture in Biochemistry, Wabash College, Apr. 3 2008.
39. Special Seminar, Deutsches Krebsforschungszentrum, Heidelberg, Nov 22 2007.
38. Bioquant Seminar, Deutsches Krebsforschungszentrum, Heidelberg, Nov 20 2007.
37. Physics Seminar, Hamilton College, Sept. 17 2007.
36. Physical Chemistry Seminar, University of Wisconsin, Sept. 11 2007.
35. Condensed Matter Seminar, University of California, Los Angeles, May 21 2007.
34. Chemistry Seminar, Imperial College (England), May 15 2007.
33. CIC BiomaGUNE, San Sebastian (Spain), May 10 2007.
32. Physiology and Biophysics Seminar, University of Washington, Apr. 18 2007.
31. Graduate Student Hosted Seminar, Stanford University, Chemistry Dept., Apr. 5 2007.
30. Condensed Matter Seminar, Max Born Institute (Berlin), June 29 2006.
29. Biophysics Seminar, Rice University, Physics Dept., Aug. 26 2005.
28. Seminar, Western Washington University, May 13 2005.
27. Annual "What's New In Physics?" - Five Colleges Lecture, Smith College, Phys. Dept., Apr. 1 2005.
26. Condensed Matter Seminar, Univ. of Massachusetts Amherst, Physics Dept., Mar. 31 2005.
25. Condensed Matter Seminar, Harvard University, DEAS, Mar. 29 2005.
24. Seminar, Claremont Colleges, Nov 9 2004.
23. Condensed Matter Seminar, Univ. of Washington, Physics Dept., Nov. 2 2004.
22. Colloquium, Univ. of Memphis, Physics Dept., Sept. 15 2004.
21. Physical/Biological Chem. Seminar, Univ. of Utah, Chem. Dept., Sept. 13 2004.
20. Seminar, MPI für Polymerforschung, Mainz (Germany), Jul. 19 2004.
19. Physical Chemistry Seminar, Penn State University, Chemistry Dept., Apr. 23 2004.
18. Physical Chemistry Seminar, Purdue University, Chemistry Dept., Apr. 21 2004.
17. Department Colloquium, University of Virginia, Chemistry Dept., Apr. 2 2004.
16. Joint CBIMMS and CBTE Seminar, Duke University, Apr. 1 2004.
15. Biophysics Seminar, Cornell University, Mar. 17 2004.
14. Condensed Matter Seminar, Northwestern University, Physics Dept., Mar. 11 2004.
13. Seminar, University of Chicago, Institute of Biological Dynamics, Mar. 9 2004.
12. Condensed Matter Seminar, University of Michigan, Physics Dept., Feb. 2 2004.
11. Special Seminar, Nagoya University (Japan), Dept. of Biological Science, Dec. 11 2003.
10. Department Colloquium, IUPUI, Physics Department, Nov. 6 2003.
9. Liquid Crystal Institute Seminar, Kent State University, Nov. 5 2003.
8. Physical Chemistry Seminar, UC Santa Cruz, Chemistry Dept., Apr. 2 2003.
7. Physical Chemistry Seminar, UC Berkeley, Chemistry Dept., Apr. 1 2003.
6. Polymer Science and Engineering Seminar, UMass Amherst, Mar. 21 2003.
5. Biophysics Seminar, Boston University, Mar. 20 2003.
4. Biophysics and Condensed Matter Seminar, UC Davis, Feb. 20 2003.
3. Advances in Soft Matter Seminar, UCLA, Chemistry Dept., May 31 2002.
2. Materials Research Seminar, UC Santa Barbara, Chemistry Dept., May 29 2002.
1. Department Colloquium, Pacific Lutheran University, Chemistry Dept., May 6 2002.

HIGHLIGHTS OF GROUP PRESENTATIONS AT CONFERENCES (since 2001; non-invited)

17. Biophysical Society, Mar. 2011:
(C. Stanich, A.R. Honerkamp-Smith, G.G. Putzel, T.D. Hua, A.K. Lamprecht, C.S. Warth, and S.L. Keller)
(A.R. Honerkamp-Smith, B.B. Machta, and S.L. Keller) / (M. Blosser, C.W. Turtle, J.B. Starr,
and S.L. Keller) /
16. Biophysical Society, Feb. 2010:
(A.R. Honerkamp-Smith and S.L. Keller) / (M. Blosser, J. Ashcraft, and S.L. Keller) /
(C. Stanich, A.R. Honerkamp-Smith, and S.L. Keller), Feb. 2010.
15. Gordon Conference on Soft Condensed Matter Physics, Aug. 2009:
(A.R. Honerkamp-Smith and S.L. Keller)
14. Biophysical Society, Mar. 2009:
(A.R. Honerkamp-Smith and S.L. Keller) / (M.M. Stevens, A.R. Honerkamp-Smith, and S.L. Keller) /
(J.R. Ashcraft and S.L. Keller)
13. Biophysical Society, Feb. 2008:
(A.R. Honerkamp-Smith, P. Cicuta, M.D. Collins, S.L. Veatch, M. den Nijs, M. Schick, and S.L. Keller) /
(M.D. Collins and S.L. Keller)
12. Gordon Conference on Mechanisms of Cell Signaling, Magdalen College, Oxford, Sept. 2007:
(A.R. Honerkamp-Smith, P. Cicuta, S.L. Veatch, M.D. Collins, M. Schick, M. den Nijs, and S.L. Keller)
11. Biophysical Society, Mar. 2007:
(A.R. Honerkamp-Smith, P. Cicuta, and S.L. Keller) / (M.D. Collins and S.L. Keller)
10. Biophysical Society, Feb. 2006:
(S.L. Veatch, K. Gawrisch, and S.L. Keller) / (B.L. Stottrup and S.L. Keller)
9. Biophysical Society, Feb. 2005:
(S.L. Veatch, R.A. Johnson, and S.L. Keller) / (B.L. Stottrup and S.L. Keller)
8. American Society for Cell Biology, Dec. 2004:
(S.L. Veatch and S.L. Keller) / (B.L. Stottrup and S.L. Keller)
7. Biophysical Society: Asilomar Biophysical Discussions, Oct 2004: (S.L. Veatch and S.L. Keller)
6. Biophysical Society, Feb. 2004:
(M.E. Beattie and S.L. Keller) / (B.L. Stottrup and S.L. Keller) /
(S.L. Veatch, I.V. Polozov, K. Gawrisch, and S.L. Keller), Feb. 2004.
5. American Society for Cell Biology, Dec. 2003:
(S.L. Veatch and S.L. Keller) / (B.L. Stottrup and S.L. Keller)
4. American Physical Society, March Meeting 2003:
(S.L. Veatch, K. Gawrisch, and S.L. Keller) / (S.L. Keller, S.L. Veatch, and B.L. Stottrup)
3. Biophysical Society, Mar. 2003: (S.L. Veatch and S.L. Keller)
2. American Society for Cell Biology, Dec. 2002: (S.L. Veatch and S.L. Keller)
1. Biophysical Society, Feb. 2002: (S.L. Veatch and S.L. Keller)

TEACHING

A. AWARDS

University of Washington Department of Chemistry Outstanding Teaching Award in 2005.
University of Washington Distinguished Teaching Award in 2006.

B. LECTURE COURSES TAUGHT (2 per year when not serving as Associate Dean)

Chem 155	(Honors Freshman Chemistry)	30 lectures, 10 weeks, 80 students
Chem 144, 162	(Freshman Chemistry)	30 lectures, 10 weeks, 240 students
Chem 452	(Physical Chemistry for Biochemistry Majors)	30 lectures, 10 weeks, 150 students

C. OTHER COURSES TAUGHT (0-1 per year)

Chem 461	(Physical Chemistry Laboratory)
Chem 585	(Graduate Physical Chemistry 2nd Year Exam)
Chem 590	(Graduate Colloquium)
Chem 595	(Physical Chemistry Seminar)

NATIONAL / INTERNATIONAL SERVICE ACTIVITIES (Representative subset since 2001)

A. JOURNAL REVIEWS

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

B. PROPOSAL REVIEW PANELS

National Science Foundation, Molecular Biophysics (BIO Directorate), 2003 & 2009

C. AD HOC PROPOSAL REVIEWS

National Science Foundation / NASA / Research Corporation / Isaac Newton Trust (UK)
American Chemical Society - Petroleum Research Foundation

D. PROFESSIONAL SOCIETIES

American Physical Society, Lifetime member, Nominating Committee 2000-2001
American Chemical Society, Symposium Organizer for Northwest Meeting, 2001
National Academy of Science, Frontiers of Science Symposium Organizer, Japan 2003

E. MENTORING / OUTREACH

Renaissance Weekend seminar "Using Freshman Chemistry and Physics to
Understand 21st Century Energy Issues" Dec. 31, 2009
NSF ADVANCE Workshop to advise future faculty (Rice Univ.), Oct. 6, 2008

SERVICE ACTIVITIES WITHIN UW (Representative subset since 2001)

A. DEPARTMENTAL COMMITTEES

Physical Chemistry Second-Year Graduate Exam Committee, 2003, 2007, 2010-Chair
Physical Chemistry Faculty Search Committee, 2004-2008, (Chair, 2005-2006)
Physical Chemistry First-Year Graduate Advisor, 2007-2008
Physical Chemistry Seminar Organizer, Spring 2000, Fall 2003, Fall 2004, Fall 2005
Physical Chemistry P.C. Cross Lecture Organizer, Spring 2004
Physical Chemistry Subcommittee to Assess Undergraduate Mathematics Preparation, Fall 2003

Chemistry Dept. Development Committee, 2009-2010

Chemistry Dept. Graduate Student Colloquium Chair, 2000-2004, 2006

Chemistry Dept. Graduate Student Recruiting Committee, 2000-2005

Chemistry Dept. Undergraduate Curriculum Committee, 2007-2008

UW Undergraduate Chemistry Society - Research Presentation to Alpha Chi Sigma, 2003

UW Undergraduate Research Society - Research Presentation, 2002

UW Nanotech Student Association - Research and Mentoring Presentation, 2002

UW Organizer "Women in Chemistry" Discussion for Graduate Students, 2001

B. UNIVERSITY-WIDE AND COMMUNITY SERVICE

UW Associate Dean for Research Activities for the College of Arts and Sciences, 2010 - present

Biological Futures, Advisory Board, 2011 – present

Advanced Materials for Energy Institute, Advisory Board, 2011 – present

UW Mathematics Review Panel, 2011

UW Office of Research Proposal Review Committee, 2010 – present

UW ADVANCE Workshops to advise pre-tenure faculty, May 29, 2008 and Mar. 2, 2011

UW Molecular Biophysics NIH Training Grant Selection Committee, 2008, 2010

UW Educational Outreach, Waseda University (Japan) Faculty Development Program, Feb. 2010

UW College of Arts and Sciences Curriculum Committee, 2009-2010

UW Panel to advise Academy of Young Scholars, Sept. 28, 2009

UW Collegium on Large Classroom Instruction, Sept. 23, 2009

UW Honors Program Panel on balancing family and career, Feb. 28, 2008

UW Panel to advise new UW faculty, Feb. 20, 2008

UW "Leadership Lunch" Speaker, advising science/engineering students and postdocs, Nov. 2, 2007

UW Graduate School Panel to advise postdocs on careers and family, May 30, 2007

UW Committee to Evaluate the Dean of Arts and Sciences, David Hodge, 2005
UW Faculty Connections Advising of Freshmen, Aut 2004, and Transfer Students, Spr 2005
UW Proposal review for Royalty Research Fund, 2004 – present

UNDERGRADUATE, GRADUATE, AND POSTDOCTORAL ADVISING

A. POSTDOCTORAL FELLOWS

Thomas Portet 2011 - present
Jennifer Chen 2009 (Current Postdoctoral Fellow at University of Washington)
Marcus Collins 2006 - 2008 (Current Postdoctoral Fellow at University of Washington)
Michael Halter 2004 - 2005 (Current NIST Research Scientist)

Awards to Postdoctoral Fellows while at UW: NIH Kirschstein Postdoctoral Fellowship, UW-MDITR STC Postdoctoral Travel Grant, Sackler Fellow in Integrative Biophysics, Fondation Bettencourt Schueller Prix pur les Jeunes Chercheurs, Travel Award to 2011 Soft Condensed Matter Conference, Prix Novela (Awarded by the City of Toulouse), Prix de l'Académie des Sciences de Toulouse.

B. Ph.D. STUDENTS

Joan Bleecker 2010 - present
Matthew Blosser 2009 - present
Cynthia A. Stanich 2008 - present
Aurelia Honerkamp-Smith 2005 - 2010 (Current Postdoctoral Fellow at University of Cambridge)
Adrienne Battle 2004 - 2007 (Current Asst. Prof. of Physics Seminole Commun. College)
Ben L. Stottrup 2002 - 2005 (Current Asst. Prof. of Physics at Augsburg College)
Sarah L. Veatch 2000 - 2004 (Current Asst. Prof. of Biophysics at Univ. of Michigan)

Awards to Ph.D Students at UW: Biophysical Society Student Research Achievement Award (1st place, 2nd place, and finalist), UW Henderson Prize, UW Karrer Prize for best PhD thesis, UW Nanotechnology Fellowship (x3), UW Molecular Biophysics Fellowship (x3), UW Rabinovitch Graduate Student Fellowship, UW Natt-Lingafelter Award, UW Rowland Fellowship in Chemistry, Honen Fellowship, Fellowship to Boulder Summer School for Complex Fluids and Biological Materials, Chemistry Dept 2010-11 Outstanding Teaching Award, UW Rowland Fellowship, UW Graduate School Top Scholar Award, Anna Louise Hoffman Award for Outstanding Graduate Research in Chemistry (Iota Sigma Pi), 2011 College of Arts & Sciences Dean's Medal for Outstanding Natural Sciences Graduate Student 2011 UW Graduate School Distinguished Dissertation Award.

Presentation and Travel Awards: Award for Best Presentation at UW CNT Student Symposium, Best Poster Award and Travel Award to the NATO Biophysics Summer School in Edinburgh, Best Poster Award and Travel Award to Geilo (Norway) Advanced Study Winter School, Travel to 2007 Gordon Conference on Mechanisms of Cell Signaling, Travel to 2009 Gordon Conference on Soft Condensed Matter Meets Biology, Travel to Chemistry Education Research Conference, to Biophysical Society Conference (x5), Travel to ASCB Conference, from UW Physics (x2), from UW Chemistry (x3).

C. MASTERS STUDENTS

Jake R. Ashcraft 2008 - 2009 (Current Chemistry Instructor at Seattle University)
Heena Lakhani 2004 - 2007 (Current research assistant at Harvard)
Ryan Rule 2004 - 2005 (Current engineer at Boeing)
Mebbie Beattie 2003 - 2005 (Current chemistry teacher)
Marc DeLeon 2001 - 2002 (Current USDA analytical chemist)

Awards to Masters Students at UW: UW GK-12 Fellowship (x2), UW Natt-Lingafelter Award, UW Chemistry Travel Award, Puget Sound Society for Technical Communication Scholarship.

D. UNDERGRADUATE RESEARCHERS

Ben Horst	2010 - present	
Andrea K. Lamprecht	2010	
Thien-An D. Hua	2009 - 2010	
Cameron W. Turtle	2009	(Became Rhodes Scholar, Oxford)
Jordan B. Starr	2009	(Became medical student at Univ. of Michigan)
Marissa Hackett	2008 - 2009	(Became staff scientist at Applied Precision)
Jialing Li	2005	(Became physics graduate student at MIT)
Mark M. Stevens	2004 - 2009	(Became biology graduate student at MIT)
Daniel S. Stevens	2003 - 2004	(Became staff scientist at PATH)
Matthew Loo	2003 - 2004	(Became construction engineer)
Rayna Matsuno	2001 - 2002	(Became PhD in cancer epidemiology at Johns Hopkins)
Nathan Pennock	2001 - 2002	(Became immunology graduate student at U. Colo, Denver)
Kathy Toreson	2001	(Became neuroscience graduate student at Albany)
LaNiesha Cobb	2001	(Became managing director at Teach for America)
Kim Klonoff	2000	

Awards to Undergraduate Researchers at UW: UW Mary Gates Research Fellowship (x3), NSF REU (x3), UW Arts and Sciences Undergraduate Research Fellowship, Merck Index Award, UW Space Grant Summer Research Scholar, Washington Research Foundation Fellowship,