

AMY CHENG VOLLMER

Department of Biology
Swarthmore College
500 College Avenue
Swarthmore, PA 19081-1390

610-328-8044 (voice)
610-328-8663 (fax)
avollme1@swarthmore.edu
<http://www.swarthmore.edu/profile/amy-vollmer>

Education and Training

- 1983-1985 Post-doctoral fellow in Immunology, Stanford University School of Medicine,
Division of Immunology, Stanford, CA
1983 Ph.D. in Biochemistry, University of Illinois, Urbana – Champaign
1977 B.A. in Biochemistry, Rice University, *cum laude*

Positions Held and Teaching Experience

- 2017 - present Director, Swarthmore Summer Scholars Program, Swarthmore College
2016 - present* *Isaac H. Clothier, Jr.* Professor of Biology, Swarthmore College
2013 – 2016* Chair of Biology, Swarthmore College
2004 – 2016* Professor of Biology, Swarthmore College
2009 – 2010 Visiting Professor (part time), Rice University, Institute for Bioscience and
Bioengineering; Department of Biochemistry and Cell Biology
2005 – 2006 Visiting Scientist, University of Pennsylvania (sabbatical in Mark Goulian's lab)
2003 - 2005 Chair of Biology, Swarthmore College
1997 – 1998 Visiting Scientist, E. I. du Pont Company, Wilmington DE (sabbatical in Bob LaRossa's lab)
1996 – 2004* Associate Professor of Biology, Swarthmore College
1993 - 1994 Visiting Scientist, E. I. du Pont Company, Wilmington DE (sabbatical in Bob LaRossa's lab)
1992 – 1996* Assistant Professor of Biology, Swarthmore College
**Teaching courses and seminars with weekly lab sections: Cellular and Molecular Biology,
Microbiology, Microbial Pathogenesis & the Immune Response, Bioethics & Biotechnology;
honors seminar in Microbial Processes & Biotechnology,
*Swarthmore Life Long Studies courses: Microbiology: Why we get sick...or don't;
The Gut-Brain Axis: Do you have that gut feeling?*
1989 – 1992 Visiting Assistant Professor of Biology, Swarthmore College
*Teaching courses and seminars with weekly lab sections: Cellular and Molecular Biology,
Microbiology, Developmental Biology; honors seminars in Microbial Adaptation &
Development and Cellular Basis for Transformation*
1985 - 1989 Assistant Professor of Biology, Mills College
*Teaching courses with weekly lab sections: Immunology, Developmental Biology, Cell Biology,
Neurobiology, and General Biology*
1988 Visiting Lecturer, University of California, Berkeley, Psychobiology Program
Teaching: Seminar in Genetics and Cancer
1977 – 1980 Graduate Teaching Assistant, University of Illinois, School of Chemical Sciences
Teaching: Biochemistry laboratory course
1976 – 1977 Undergraduate Teaching Assistant, Rice University, Chemistry Department
Teaching: Introductory chemistry laboratory

Research Experience

At Swarthmore

- 2014 – 2016 Co-investigator (with Alison Holliday, Department of Chemistry at Swarthmore and now at Moravian College): *Isolation and characterization of fungicide degrading bacteria: the case for chiral degradation*
- 2007 - present Co-investigator (with Sara Hiebert Burch Department of Biology)
Correlating dietary fat intake, migration and other metabolic factors of rodents and hummingbirds with intestinal microbiota profiles
- 2006 – 2009 Co-investigator (with Stephen Miller, Department of Chemistry and Biochemistry)
Investigation of the structure/function of universal stress protein family members
- 2004 - 2017 Co-investigator (with Jose-Luis Machado, Department of Biology, Swarthmore):
Identification of soil mycorrhizae in the Crum Woods
- 2003 - 2009 Co-investigator (with Julie Hagelin, formerly of the Department of Biology):
Identification of bacterial associated with bird feathers and scent
- 2002 - 2003 Co-investigator (with Andrea Stout, formerly of the Department of Physics and Astronomy): *Measuring the amount of stress experience by bacteria when captured with laser tweezers.*
- 1994 – 2009 Co-investigator (with E. C. Everbach, Department of Engineering, Swarthmore):
Investigation of the physical, chemical and biological effects of ultrasound on bio-engineered luminescent bacteria
- 1993 HHMI Collaborator (with J. Voet, Department of Chemistry, Swarthmore):
Screening an Arabidopsis cDNA library for clones bearing membrane transport proteins
- 1989 - present Principal Investigator, Swarthmore College, Department of Biology:
Bacterial responses to stress and environmental challenge in the enteric bacterium, Escherichia coli (current collaborator, 2017 - present, Steven Bark, University of Houston)

Research Experience

Elsewhere

- 2005 – 2006 Sabbatical Leave Research: Visiting Scientist, University of Pennsylvania: Department of Physics and Astronomy (Laboratory of Mark Goulian)
Investigations of microbial stress response using single-cell fluorescent imaging.
- 2003 – 2005 Consultant, Ashland Specialty Chemical, Drew Industrial (Dr. Winston Goh):
Ultrasound and bacterial survival
- 1997 – 1998 Consultant, Southeastern Company, Madison, AL (Richard Gregg II, president):
Ultrasound and bacterial survival
- 1997 – 1998 Sabbatical Leave Research: Visiting Scientist, E.I. DuPont de Nemours & Co.: Central Research and Development, Biochemical Sciences and Engineering (Laboratory of R.A. LaRossa). *The application of microbial genetics to the development of high through-put screens for agrichemicals*
- 1993 – 1994 Sabbatical Leave Research: Visiting Scientist, E.I. DuPont de Nemours & Co.: Central Research and Development, Environmental Microbiology (Laboratory of R.A. LaRossa). *The application of microbial genetics to environmental microbiology, particularly exploiting the stress regulons of Escherichia coli*
- 1986 – 1987 Visiting Summer Postdoctoral Research Scientist, Stanford University: Department of Biochemistry (Laboratory of D. Kaiser). *Physiological and genetic studies in Myxococcus xanthus*
- 1985 – 1989 Principal Investigator, Mills College, Department of Biology: *Physiology and gene expression in the developmental life cycle of the soil bacterium, Myxococcus xanthus*

- 1983 – 1985 Postdoctoral Fellow, Stanford University, Department of Medicine: Division of Immunology (Laboratory of J.R. Parnes). *Molecular cloning and characterization of T cell specific differentiation antigens in mouse and human immune systems*
- 1977 – 1983 NIH Predoctoral Fellow in Cell Biology/Graduate Research Assistant: University of Illinois, Urbana - Champaign, Department of Biochemistry (Laboratory of R. L. Switzer). *Genetic organization and regulation of the pyrimidine gene cluster in the sporulating bacterium, Bacillus subtilis*
- 1976 – 1977 Undergraduate Research Assistant, Rice University: Department of Biochemistry (Laboratory of the late F. B. Rudolph). *Synthesis and characterization of possible metabolic inhibitors of the adenylosuccinate synthetases from rat liver and Escherichia coli*
- 1975 - 1977 Summer Research Intern, Midwest Research Institute: Analytical Chemistry Division (Laboratory of W. Hagerty). *Quantitative analysis of the metabolic fate of experimental pharmaceuticals from the National Cancer Institute*
- 1974 Summer Research Intern, University of Missouri at Kansas City: Department of Chemistry (Laboratory of K. L. Cheng, no relation). *Optimization of conditions for ion exchange separation of intermediates in organic synthetic reactions*

Fellowships, Grants and Awards/Recognition

Research grants

- 2016 - 2017 Faculty sabbatical support, Swarthmore College
- 2014 - 2016 Research Corporation Multi-Investigator Cottrell College Science Award
Co-PI with Alison Holiday, Department of Chem/Biochem \$100K
- 2009 – 2010 Merck AAAS Collaborative Research Grant, Biology and Chemistry \$60K
Co-PI with Sara Hiebert Burch, Kathleen Howard and Stephen Miller
- 2006 – 2007; 2009 – 2010 Mellon Foundation \$3K
- 2005 – 2006 Swarthmore Lang Faculty Fellowship, sabbatical support
- 2005 – 2006 Pennsylvania Department of Health \$8K
- 2012, 2009, 2008, 2007, 2005 (2), 2004, 2002, 2001 (2), 2000 (2), 1997 (2), 1996, 1995
Undergraduate Research Fellow Mentor, American Society for Microbiology \$56K
- 2005 - 2013 Organizer, Regional Microbiology Educators' Network \$6K
Funded by ASM and HHMI
- 1999 Mentor, Undergraduate Research Fellow, Merck-AAAS \$4K
- 1998 – 2000 DuPont Company Aid to Education Research Grant: \$10K
- 1996 – 1998 National Science Foundation Grant, bioengineering: \$25K
- 1995 – 1997 Integrated Math and Science Teaching Faculty Support, \$15K
Pennsylvania Commonwealth Partnership
- 1994 - 2016 Co-program director for continuous support to Swarthmore College
from HHMI for undergraduate research and outreach \$6.5M
(rather than submitting an individual faculty research proposal,
substantially contributed to writing and administering 6 awards
to the College)
- 1993 – 1994 Swarthmore Lang Faculty Fellowship, sabbatical support
- 1992 Howard Hughes Medical Institute Faculty Research Funds: \$5K
- 1992 – 2016 Part of a faculty team at Swarthmore that were awarded grants from
HHMI continuously \$7.58M
- 1989 - Swarthmore College Faculty Research Grant: \$40K
- 1989 – 1992 Research Corporation Cottrell Science Grant: \$50K

1989 – 1990	Monsanto Corporation Research Grant:	\$10K
1987 – 1989	National Science Foundation Research Grant:	\$10K
1985 - 1989	Mills College Faculty Development Awards:	\$5K
1985	Mills College, Heller Foundation Grant:	\$50K
1984 – 1985	Stanford Medical School Cancer Biology Postdoctoral Fellowship	
1983 – 1984	Stanford Medical School Dean's Postdoctoral Fellowship	
1979 – 1983	National Institutes of Health Predoctoral Fellowship	

Awards and recognition

2020	AP Visiting Fellowship in Assessment (College Board)
2019	Senior class' selection as faculty speaker at the Last Collection. https://www.swarthmore.edu/commencement-2019/amy-vollmer-last-collection
2018	Naming of the Biology Department's 'front porch' in Singer Hall in my honor Fellow, American Academy of Microbiology
2017 – 2020	American Society for Microbiology, inaugural Board of Directors, elected by Council on Microbial Science members
2017 – 2019	American Society for Microbiology, Council on Microbial Sciences, Councilor-at-large, elected nationally
2017 – 2018	Phi Beta Kappa Visiting Scholar (8 multi-day, multiple lectures, campus visits)
2017	Douglas Eveleigh Lecturer, Microbial Diversity Course, Woods Hole, MA
2014 - 2015	National Academies Education Fellow in Science
2013 - 2015	Inaugural Luhrs Faculty Fellow, Center for Innovation and Leadership, Swarthmore College
2011 – 2013	ASM Distinguished Lecturer
2007 - 2017	President, Waksman Foundation for Microbiology
2009 - 2010	Lindback Teaching Fellowship, Swarthmore College (sabbatical funding)
2007 - 2009	Chair-elect, chair, advisor, General Microbiology Division, ASM
2006	Carski Foundation Distinguished Undergraduate Teaching Award (awarded by the ASM's American Academy for Microbiology)
2003 – 2006	Member, Nominating Committee - American Academy of Microbiology's Founders Distinguished Service Award (appointed for a 3-year term):
2002	Who's Who Among America's Teachers, 7 th edition, nominated by C. Cardemil '01
2002	ASM Eastern Pennsylvania Branch's Annual Education Speaker
2001 – 2017	Trustee, Waksman Foundation for Microbiology
2001	Swarthmore Asian Organization: Certificate of Recognition (nominated by students)
2000	Member, Undergraduate Research Committee of the American Society for Microbiology's Education Board: ASM Board of Education and Training, <i>which received the 2000 Presidential Award for Excellence in Science, Mathematics and Engineering Mentoring</i>
1994	DuPont Company Research Accomplishment Award
1979	Outstanding Teaching Assistant Award, School of Chemical Sciences, Univ. of Illinois
1973 – 1974	Arthur B. Cohn Scholarship, Rice University

Professional Societies

American Association for the Advancement of Science
 American Association of University Women
 American Society for Microbiology
 NEMPET (North East Microbial Physiology, Ecology and Taxonomy)
 Sigma Xi

Additional Professional Training

- 2017 Biotrac Next Generation Sequencing (NGS) workshop, Bethesda, MD
- 2014 National Academy of Sciences Summer Institute on Undergraduate Education in Science; Harvard University, Cambridge, MA
- 2013 Genome Consortium for Active Teaching (GCAT) Synthetic Biology Workshop
Janelia Farm, MD (HHMI)
- 2003 Genome Consortium for Active Teaching (GCAT) Microarray analysis
Dickinson University, Carlisle, PA
- 1998 Center for Advanced Training in Cell and Molecular Biology - Hybridization
Catholic University of America, Washington DC

Publications - *Books, articles, invited chapters and reviews* (* indicates undergraduate student co-authors)

- Vollmer, AC. 2019. Encouraging Diversity and Inclusion in Science Via the Book *Opening Doors: Joan Steitz and Jennifer Doudna of the RNA World*. *J Microbiol Biol Educ.* 20 (2). doi:10.1128/jmbe.v20i2.1885
- Vollmer, AC and Bark, S. 2018. Twenty-five years of Investigating the Universal Stress Protein: Function, structure and applications. *Advances in Applied Microbiology.* 102: 1-36.
- Daines, D, Elshahed, M, Fiorenza, S, Hansen, T, Lazazzera, B, Ontiveros, F, Perez-Jimenez, J, Pileggi, M and AC Vollmer. 2018. Networking in Microbiology. American Society for Microbiology. [https://www.asm.org/Articles/2017/April/Careers-Education-Career-Options-Planning-\(2\)#.XcOYZIT8NFo.gmail](https://www.asm.org/Articles/2017/April/Careers-Education-Career-Options-Planning-(2)#.XcOYZIT8NFo.gmail)
- Vollmer, AC. 2016. Adopting a Pathogen. (edited by M Schaechter), posted on September 5, 2016. <http://schaechter.asmblog.org/schaechter/2016/09/adopting-a-pathogen.html>
- Vollmer, AC, Balke, V, Frantz, C and TE Hanson. 2016. Teaching at Primarily Undergraduate Institutions: Entering the Profession. Microbe Mentor column in *Microbe*. American Society for Microbiology: Washington, DC. <https://www.asm.org/index.php/careers-blog/item/99-teaching-at-primarily-undergraduate-institutions-a-guide-to-entering-the-profession>.
- Vollmer, AC. 2016. "Hello Again, Metabolism!" In *Small Things Considered: In the Company of Microbes: Ten Years of Small Things Considered* (edited by M Schaechter). ASM Press: Washington, DC.
- Vollmer, AC. 2012. Seeing Biology through the Eyes of a Visually Impaired Student. (Edited by M Schaechter and M Youle), posted on July 26, 2012. <http://schaechter.asmblog.org/schaechter/2012/07/seeing-biology-through-the-eyes-of-visually-impaired-students.html>
- Liu, T*, Hougen, H*, Vollmer, AC, Hiebert, SM. 2012. "Gut Bacteria Profiles of *Mus musculus* at the Phylum and Family Levels are Influenced by Saturation of Dietary Fatty Acids. *Anaerobe* 18 (3): 331-337.
- Cardemil, CV*, Smulski, DR, LaRossa, R A, and AC Vollmer. 2010. "Bioluminescent *Escherichia coli* Strains for the Quantitative Detection of Phosphate and Ammonia in Coastal and Suburban Watersheds" *DNA and Cell Biology*, 29(9): 519-31.
- Vollmer, AC. 2010. Making it Personal. In *Small Things Considered* (Edited by M Schaechter and M Youle), posted on September 9, 2010. <http://schaechter.asmblog.org/schaechter/2010/09/making-it-personal.html>
- Vollmer, AC. 2010. Hello Again, Metabolism! In *Small Things Considered* (Edited by M Schaechter and M Youle), posted on July 22, 2010. <http://schaechter.asmblog.org/schaechter/2010/07/hello-again-metabolism.html>
- Vollmer, AC. 2010. Taking Risks: ASMCUE Musings. In *Small Things Considered*

- (Edited by M Schaechter and M Youle), posted on June 17, 2010.
<http://schaechter.asmblog.org/schaechter/2010/06/taking-risks-asmcuc-musings.html>
- Vollmer, AC. 2009. Teaching Resources, Microbiology, in *The Encyclopedia of Microbiology*, 3rd Edition, edited by Moselio Schaechter, Elsevier: London.
- Vollmer, AC. 2007. Establishment and maintenance of an ASM student chapter. *Microbe* 2(8): 405.
- Shawkey MD, Hussain MJ*, Strong AL*, Hagelin JC, Vollmer AC. and Hill G.E. 2006. Use of culture-independent methods to compare bacterial assemblages on feathers of crested and least Auklets (*Aethia cristatella* and *Aethia pusilla*) with those of passerines. *Waterbirds* 29 (4): 507-511.
- Vollmer, AC. 2006. It's Not What We Say. *Microbe* 1(11): 516-520.
- Vollmer, AC. 2006. Jump-Starting Your Brain in the Morning. In *Strategies for Success* (C Johnson, Ed). No. 45, pp. 1-2. Benjamin Cummins: San Francisco.
- Vollmer, AC, and SJ Vollmer. 2005. Book review of: The Microbial Models of Molecular Biology: From Genes to Genomes, by Roland H. Davis. *Bull. Hist. Med.* 79: 358-360.
- Vollmer, AC. 2005. Connecting Branches to Student Activities. *ASM News*. 71:90-91.
- Vollmer, AC. 2005. Networking: A Lifeline for Faculty at Small Colleges. In *Focus on Microbiology Education*, American Society for Microbiology Press, Washington, DC., Vol 11 (2): 4-5.
- Vollmer, AC. and TK Van Dyk. 2004. Stress Responsive Bacteria: Biosensors as Environmental Monitors. In *Advances in Microbial Physiology* (Poole, RK, ed) Vol. 49: 131-174. Academic Press: London.
- Vollmer, AC. 2004. Resource Review: Bacterial Genetics. *Develop. Cell* 6: 1-3.
- Vollmer, AC. 2004. Teaching students to write short documents for diverse audiences. In *Great Ideas in Teaching Microbiology* (Johnson, C, ed) Vol. 1: p7-8. Benjamin Cummins: San Francisco.
- Vollmer, AC. Critical thinking questions for each of all 22 chapters. In *Microbiology*, 5th edition 2002 (Prescott, LM, Harley, JP and Klein, DA) McGraw Hill: Boston.
- Smulski, DR, Huan, LL, McCluskey, MP, Gladnick-Reeve, M, Vollmer, AC, Van Dyk, TK and RA LaRossa. 2001. A Combined, Functional Genomic-Biochemical Approach to Intermediary Metabolism: The Interaction of Acivicin with *Escherichia coli*, *J. Bacteriol.* 183: 3353-3364. <<http://jb.asm.org/cgi/reprint/183/11/3353.pdf>>
- Wei, Y, Vollmer, AC and RA LaRossa. 2001. In Vivo Titration of Mitomycin C Action by the Presence of Four *Escherichia coli* Genomic Regions on Multicopy Plasmids, *J. Bacteriol.* 183: 2259--2264. <<http://jb.asm.org/cgi/reprint/183/7/2259.pdf>>
- Benson, SP and AC Vollmer. 2000. *Microbiology Education: A New Venue for Scholarship in Microbiology Education*. In *Focus on Microbiology Education*, Spring 2000. American Society for Microbiology Press, Washington, DC.
- Vollmer, AC. 2000. Passing the Torch: In Love with My Job. In *Many Faces, Many Microbes* (R Atlas, ed) American Society for Microbiology Press, Washington, DC. pp 293-298, also reprinted in 2000 *ASM News* 66: 459-462. <<http://206.64.120.149/asmnews/aug00/images/f1.pdf>>
- Vollmer, AC. Plasmids, In *Microsoft Encarta Encyclopedia*, 2000 Deluxe edition. (Sarah De Weerd, Life Science Editor, Microsoft)
- Davidov, Y, Smulski, D, Van Dyk, TK, Vollmer, AC, Elsemore, DA, LaRossa, RA and S Belkin. 2000. Improved bacterial SOS promoter::*lux* fusions for genotoxicity detection. *Mutation Research* 466: 97-107.
- Davidov, Y, Smulski, DR, Van Dyk, TK, Vollmer, AC, LaRossa, RA and S Belkin. 1999. Genotoxicity detection by bacterial strains harboring *recA'*::*lux* fusions. In: *Bioluminescence and Chemiluminescence: Perspectives for the 21st Century*. (A Roda, M Pazzagli, LJ Kricka and

- PE Stanley, eds) John Wiley & Sons, Chichester. pp. 597-600.
- Vollmer, AC. 1999. Mentoring Undergraduate Students in the Laboratory. In *Focus on Microbiology Education*, Spring 1999. American Society for Microbiology Press, Washington, DC.
- Vollmer, AC. 1998. Visualization of Bioluminescence. In *Methods in Molecular Biology: Bioluminescence Methods and Protocols*. (LaRossa, RA, ed). Humana Press, Totowa, NJ.
- Vollmer, AC. 1998. Genotoxic Sensors. In *Methods in Molecular Biology: Bioluminescence Methods and Protocols*. (LaRossa, RA, ed). Humana Press, Totowa, NJ.
- Vollmer, AC, Kwayke, S*, Halpern, M* and Everbach, EC. 1998. Use of Bioluminescent *Escherichia coli* to Detect Damage Due to Ultrasound, *Appl. Environ. Microbiol*, 64(10): 3927-3931.
<<http://aem.asm.org/cgi/reprint/64/10/3927.pdf>>
- Belkin, S, Smulski, DR, Dadon, S, Vollmer, AC, Van Dyk, TK, and LaRossa, RA. 1997. A Panel of Stress-Responsive Luminous Bacteria for Toxicity Detection. *Water Research*, 31(12): 3009-3016.
- Vollmer, AC, Belkin, S, Smulski, DR, Van Dyk, TK and RA LaRossa. 1997. Detection of DNA damage by use of *Escherichia coli* carrying *recA'::lux*, *uvrA'::lux* or *alkA'::lux* reporter plasmids, *Appl. Environ. Microbiol.* 63(7), 2566-2571. <<http://aem.asm.org/cgi/reprint/63/7/2566.pdf>>
- Belkin, S, Van Dyk, TK, Vollmer, AC, Smulski, DR, Reed, TR, and RA LaRossa. 1996. Monitoring Sub-Toxic Environmental Hazards by Stress Responsive Luminous Bacteria, *Environ. Tox. and Water Qual.* 11(3):179-185.
- Belkin, S, Smulski, DR, Vollmer, AC, Van Dyk, TK and RA LaRossa. 1996. Oxidative stress detection with *Escherichia coli* harboring a *katG'::lux* fusion. *Appl. Environ. Microbiol.* 62: 2252-2256.
<<http://aem.asm.org/cgi/reprint/62//2252.pdf>>
- Van Dyk, TK, Smulski, DR, Reed, TR, Belkin, S, Vollmer, AC, and RA LaRossa. 1995. Similar Response to Adverse Environmental Conditions by *Escherichia coli* Strains Carrying *uspA'::lux* or *grpE'::lux* Genetic Fusions, *Appl. Environ. Microbiol.* 61: 4124-4127.
<<http://aem.asm.org/cgi/reprint/61/11/4124.pdf>>
- Van Dyk, TK, Reed, TR, Vollmer, AC and RA LaRossa. 1995. Synergistic Induction of the Heat Shock Response in *Escherichia coli* by Simultaneous Treatment with Chemical Inducers, *J. Bacteriol.* 177: 6001-6004. <<http://jb.asm.org/cgi/reprint/177/20/6001.pdf>>
- Van Dyk, TK, Belkin, S, Vollmer, AC, Smulski, DR, Reed, TR and RA LaRossa. 1994. Fusions of *Vibrio fischeri lux* Genes to *Escherichia coli* Stress Promoters: Detection of Environmental Stress. In *Bioluminescence and Chemiluminescence: Fundamentals and Applied Aspects*. (Campbell, AK, Kricka, LJ and Stanley, PE, eds.) Chichester, UK: John Wiley & Sons Ltd, pp. 147-150.
- Belkin, S, Vollmer, AC, Van Dyk, TK, Smulski, DR, Reed, TR and RA LaRossa. 1994. Oxidative and DNA Damaging Agents Induce Luminescence in *E. coli* Harboring *lux* Fusions to Stress Promoters. In *Bioluminescence and Chemiluminescence: Fundamentals and Applied Aspects*. (Campbell, AK, Kricka, LJ and Stanley, PE, eds) Chichester, UK: John Wiley & Sons Ltd, pp. 509-512.
- Sukhatme, VP, Vollmer, AC, Erickson, E, Isobe, M, Croce, C and JR Parnes. 1985. Gene for the Human T Cell Differentiation Antigen Leu-2/T8 Is Closely Linked to the Kappa Light Chain Locus on Chromosome 2. *J. Exp. Med.* 161: 429-434.
- Zamoyska, R, Vollmer, AC, Sizer, KC, Liaw, CW and JR Parnes. 1985. Two Lyt-2 Polypeptides Arise from a Single Gene by Alternative Splicing Patterns of mRNA. *Cell* 43: 153-163.
- Sukhatme, VP, Sizer, KC, Vollmer, AC, Hunkapiller, T and JR Parnes. 1985. The T Cell Differentiation Antigen Leu 2/T8 is Homologous to Immunoglobulin. *Cell* 40: 591-597.

Peer-reviewed Abstracts (* indicates undergraduate student co-authors and presenters)

- Adjei-Danquah, E.* and A. C. Vollmer. 2020. "A Novel Application of Biolog® Gen III MicroPlates: Characterizing the Metabolism of *Escherichia coli* Carrying Mutant Alleles of the Universal

- Stress Protein A". Accepted for presentation at Microbe 2020, the annual meeting of the American Society for Microbiology, June 18-22, Chicago, IL. *Accepted through peer-reviewed process for presentation, but meeting was canceled due to SAR-cov-2 pandemic.*
- Bush St George, C*, Hiebert, SM and AC Vollmer. 2020. "An Analysis of the Gut Microbiota in Migratory and Non-Migratory Hummingbirds in Comparison to Hummingbird Age and Fat Content". Accepted for presentation at Microbe 2020, the annual meeting of the American Society for Microbiology, June 18-22, Chicago, IL. *Accepted through peer-reviewed process for presentation, but meeting was canceled due to SAR-cov-2 pandemic.*
- Stanton, R*, Vollmer, AC, and SM Hiebert. 2020. "Differences in Hummingbird Gut Microbiome Composition as Related to Host Physiological Protein Requirements". Accepted for presentation at Microbe 2020, the annual meeting of the American Society for Microbiology, June 18-22, Chicago, IL. *Accepted through peer-reviewed process for presentation, but meeting was canceled due to SAR-cov-2 pandemic.*
- Robert, J *, Hiebert, SM and AC Vollmer. 2020. "Differential survival of Corynebacteria to low temperatures may explain their surprising abundance in the gut microbiome of hummingbirds". Accepted for presentation at Microbe 2020, the annual meeting of the American Society for Microbiology, June 18-22, Chicago, IL. *Accepted through peer-reviewed process for presentation, but meeting was canceled due to SAR-cov-2 pandemic.*
- Vu, L* and AC Vollmer. 2019. "Pseudomonas aeruginosa biofilm formation after cultivation in simulated microgravity." Abstr 3962, presented at Microbe 2019, the annual meeting of the American Society for Microbiology, June 20-24, San Francisco, CA.
- Vollmer, AC and I Erickson*. 2018. "Changes in Hummingbird Gut Microbiomes in Relation to Migratory Fattening Cycles." Abstr 7381, presented at Microbe 2018, the annual meeting of the American Society for Microbiology, June 7 – 11, Atlanta, GA.
- Dong, M* and AC Vollmer. 2018. "Characterization of Mutant Universal Stress Protein A in *Escherichia coli*." Abstr 4845, presented at Microbe 2018, the annual meeting of the American Society for Microbiology, June 7 – 11, Atlanta, GA.
- Fakoya B*, Washburn R, Vollmer AC, Gottesman M. 2016. "Leaderless phage λ CI activity requires the coupling of transcription and translation through NusG and NusE in *E. coli*." Presented at: 2016 Molecular Genetics of Bacteria and Phages Meeting; August 2016; Madison, WI.
- Eppley, L*, Morris, R*. Burson, R*, Mathay, M*, Vollmer, AC and A.Holliday. 2015. "Characterization and Analysis of Soil Bacterial Degradation of the Triazole Fungicide Myclobutanil", Abstr Q-1295, In *Abstracts of the 115th General Meeting of the American Society for Microbiology*, ASM: Washington, D.C
- Burson, R., Eppley, L. and AC. Vollmer. 2014. "Isolation of soil bacteria capable of degrading the triazole fungicide myclobutanil." Presented at the 11th annual regional Microbiology Educators Research Conference at Penn State, Berks campus, Reading, PA
- Kogekar, N*, Holliday, A, and AC Vollmer. 2013. Isolation, Enrichment, and Characterization of Soil Bacteria Capable of Metabolizing the Triazole Fungicide Epoxiconazole. In *Abstracts of the 113th General Meeting of the American Society for Microbiology*, ASM: Washington, DC.
- Spady, E* and AC Vollmer. 2013. The Effect of Universal Stress Protein A Phosphorylation on Heat Shock Response in *Escherichia coli*. In *Abstracts of the 113th General Meeting of the American Society for Microbiology*, ASM: Washington, DC.
- Morris, R*, Parker, A*, Goh, T*, Kazakar, S*, Samra J* and AC Vollmer. 2012. "Universal Stress Protein from *Escherichia coli*: Characterization of 38 alleles of the *uspA* gene" at ABRCMS meeting in San Jose, CA.
- Parker, A*, Goh, T*, Kazaklar, S*, Samra, J,* Morris, R* and AC Vollmer. 2012. "Universal Stress Protein from *Escherichia coli*: Production of a green pigment from *uspA* alleles carrying a *lux* reporter plasmid" at ABRCMS meeting in San Jose, CA. (Best poster award for A. Parker)

- McIntosh, BK, Renfro, DP, Lovering, R, Ades, S, Britton, R, Friedberg, I, Hughes, L, Trevino, S, Vollmer, AC, McCarthy, F, Willey, J, Pruess, B, Perdue, S, Kowalski, J, Paustian, T, Migl, D, Siegele, DA and AE Zweifel, J. C. Hu. 2012. CACAO: Competitive Annotation of Gene Function. Oral abstract session 129. In *Abstracts of the 112th General Meeting of the American Society for Microbiology*, ASM: Washington, DC.
- Liu, T*, Hougen, H*, Hiebert, SM, and AC Vollmer. 2010. *Bacteroidetes/Firmicutes* Ratios in *Mus musculus* are Affected by Saturation of Dietary Fatty Acids. I-252. In *Abstracts of the 110th General Meeting of the American Society for Microbiology*, ASM: Washington, DC.
- Weiser, N*, Lascano, D* and AC Vollmer. 2010. Investigating the effects of mutations in the gene encoding the *Escherichia coli* Universal Stress Protein A. Abstr. I-3070 In *Abstracts of the 110th General Meeting of the American Society for Microbiology*, ASM: Washington, DC.
- Barton, S*, EC Everbach, and AC Vollmer. 2009. Ultrasonic destruction of microbial biofilms revealed by confocal microscopy. Abstr Q-289 In *Abstracts of the 109th General Meeting of the American Society for Microbiology*, ASM: Washington, DC.
- Benjamin, C*, Zee, B*, Hiebert Burch, S and AC Vollmer. 2009. Gut microbial profiles: Investigating the influence of dietary fatty acid consumption on *Phodopus sungorus* colonic microbiota using 16S rRNA gene sequence analysis. Abstr I-037 In *Abstracts of the 109th General Meeting of the American Society for Microbiology*, ASM: Washington, DC.
- Bice, T*, Gilchrist-Scott, D*, Hiebert Burch, S, and AC Vollmer 2009. Environmentally dependent differential fatty acid consumption does not significantly alter *Mus musculus* colonic microbial profiles. Abstr I-036 In *Abstracts of the 109th General Meeting of the American Society for Microbiology*, ASM: Washington, DC.
- Handler, JS* and AC Vollmer. 2009. Investigation of the function of *Escherichia coli uspC* in motility and stress response. Abstr I-053 In *Abstracts of the 109th General Meeting of the American Society for Microbiology*, ASM: Washington, DC.
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- Krasyty, B*, Yoon, D*, and AC Vollmer 2008. Purification and Characterization of *Escherichia coli* Universal Stress Proteins. Abstr I-56 In *Abstracts of the 108th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- Barash, NR*, Condon, KA*, and AC Vollmer. 2008. Probing the Function of *Escherichia coli* Universal Stress Protein A Using Site Specific Mutagenesis and Synthetic Lethality. Abstr I-57 In *Abstracts of the 108th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- Anguah, K*, Velez, R*, Vollmer, AC and E Carr Everbach. 2007. Effect of 810 kHz ultrasound on bacterial biofilms. *J. Acoust. Soc. Am.* 122(5):3052.
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- Buffie, CG* and AC Vollmer. 2006. Regulation of Oxidative and Nitrogen Starvation Stress Responses by the Universal Stress Proteins A and C in *Escherichia coli*. abstr I-14. In *Abstracts of the 106th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- Glick, A* and AC Vollmer. 2006. Characterization of the Universal Stress Protein A Paralog *uspE* of *Escherichia coli*: Survival and Stress Response. Abstr I-23 In *Abstracts of the 106th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
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- Kishor, A*, Everbach, EC and AC Vollmer. 2005. Determination of the effects of treatment by high frequency ultrasound on several bacterial species in liquid culture, abstr Q-135. In *Abstracts of the 105th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- Hussain, MJ*, Strong, A*, Hagelin, J, Hill, G, Shawkey, M, Roberts, S, and AC Vollmer. 2005. Identification of bacterial species associated with the tangerine-scent of an Artic Seabird, abstr N-123. In *Abstracts of the 105th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- Gaskell, JC *, Stout, AL and AC Vollmer. 2003. Measurement of oxidative stress response as reported by a *katG':luxCDABE* fusion of *Escherichia coli* subjected to optical traps, abstr. I-31. In *Abstracts of the 103rd General Meeting of the American Society for Microbiology*. ASM: Washington, DC. *Recognized by a Student Travel Award to JCG from the ASM.*
- McFalls. JM*, Marshall, KL* and AC Vollmer. 2003. The Regulation of the *Escherichia coli uspA* Gene and Its Product: Effects of Transcriptional Regulators and the Role of Phosphorylation, abstr. I-32. In *Abstracts of the 103rd General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- So, MJ*, Everbach, EC and AC Vollmer. 2003. Reduction of *Escherichia coli* viability through ultrasound exposure from a novel apparatus, abstr. Q-282. In *Abstracts of the 103rd General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- Vollmer, AC 2003. Scientists Who Publish Education Research: How Does It Impact Their Careers? 2003. Learning to Change Conference - American Association for Higher Education, Washington, DC.
- Alderete, AP*, Valentine, LE*, Willman, AM*, Kim, H* and AC Vollmer. 2001. The Universal Stress Protein of *E. coli*: Its Evolutionary Conservation and Influence in Regulating Stress Responses and Biofilm Formation, abstr. I-17. In *Abstracts of the 101st General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
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- Nobile, CJ* and AC Vollmer. 2000. Stress Response Profiling: Using Bioluminescent *Escherichia coli* to Measure the Possible Targets of Antimicrobials and Other Compounds, abstr. I-68, p396. In *Abstracts of the 100th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- Alderete, AP* and AC Vollmer. 2000. A Possible Role in the Universal Stress Protein (UspA) in *Escherichia coli* in the Regulation of Stress Response, abstr. I-70, p396-397. In *Abstracts of the 100th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- Vollmer, AC, Halpern, M*, Kwakye, S* and EC Everbach. 1998. Bacterial Response to Acoustic Cavitation. *Gordon Conference on Microbial Stress Response*.
- Vollmer, AC and Ruzinova, M* 1998. Downstream Regulatory Targets and Phylogenetic Conservation of the Universal Stress Protein of *E. coli*. *Gordon Conference on*

Microbial Stress Response.

- Halpern, M*, Kwakye, S*, Everbach, EC, and AC Vollmer. 1998. An Investigation of the Effects of Ultrasound Exposure on *Escherichia coli* Using a Bioluminescent Reporter System, abstr. A-98, p.55. In *Abstracts of the 98th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- Ruzinova, M* and AC Vollmer. 1998. A Study of the Possible Roles and the Extent of Evolutionary Conservation of the Universal Stress Protein Gene from *Escherichia coli*, abstr. I-84, p. 322. In *Abstracts of the 98th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- Glater, E* and AC Vollmer. 1997. A Study of the Oxidative Stress Response in *Escherichia coli* Using a Plasmid Carrying a *katG::lux* Promoter Fusion, abstr. I-007, p 323. In *Abstracts of the 97th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- Tepavcevic, J* and AC Vollmer. 1997. Transcriptional Activation of the *recA* Promoters from *Escherichia coli* and *Deinococcus radiodurans* as Measured by Bioluminescence, abstr. I-008, p 323. In *Abstracts of the 97th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
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- Suprpto, A* and AC Vollmer. 1996. Construction of an *in vivo* Reporter System for Use in Both *Escherichia coli* and *Myxococcus xanthus*, abstr. H-35, p 489. In *Abstracts of the 96th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
- Vollmer, AC, Makin, IRS and EC Everbach. 1996. Induction of the Heat Shock Response and the SOS Response in *Escherichia coli* by the Effects of Acoustic Cavitation from Ultrasound, abstr. I-85, p317. In *Abstracts of the 96th General Meeting of the American Society for Microbiology*. ASM: Washington, DC.
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- LaRossa, RA, Smulski, DR, Vollmer, AC, Reed, TR, Belkin, S and TK Van Dyk. 1995. Environmental Stress Detection with Universal Stress Protein Gene-Bioluminescence Gene Fusions in *Escherichia coli*. abstr. K-130. p 559. In *Abstracts of the 95th General Meeting of the American Society for Microbiology*. ASM, Washington, DC.
- Vollmer, AC, Smulski, DR, Van Dyk, TK, Belkin, S and RA LaRossa. 1994. Promoter-*lux* Fusions Responsive to Nutritional Deprivation in *E. coli*. *Gordon Conference on Microbial Stress Response*.
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- Belkin, S, Vollmer, AC, Van Dyk, TK, Smulski, DR and RA LaRossa. 1994. Bioluminescent Responses to Oxidative Stress and DNA Damage in *E. coli*. abstr. Q-250, p 432. In *Abstracts of the 94th General Meeting of the American Society for Microbiology*. ASM, Washington, DC.
- LaRossa, RA, Smulski, DR, Belkin, S, Vollmer, AC, Reed, TR and TK Van Dyk. 1994. A Panel of *Escherichia coli* Promoter-*lux* Fusions for the Detection of Environmental Insults. abstr. Q-249, p 432. In *Abstracts of the 94th General Meeting of the American Society for Microbiology*. ASM, Washington, DC.

- Vollmer, AC, Sukhatme, VP, Sizer, KC, Hunkapiller, T and JR Parnes. 1985. Leu-2/T8 is Homologous to Immunoglobulin and T Cell Receptor Variable Regions. *FASEB Federation Proceedings*. 44(3): 790.
- Zamoyska, R, Vollmer, AC, Sukhatme, VP, Sizer, KC and JR Parnes. 1985. Sequence and Expression of Lyt-2. *FASEB Federation Proceedings*. 44(4): 1177.
- Vollmer, AC and RL Switzer. 1983. Molecular Cloning of the *pyrB* Gene from *Bacillus subtilis*. *American Society for Microbiology Abstracts*.

Vollmer - Research Experience mentoring Students at Swarthmore College

Student (class year) major (H= honors) current/last known position

*= ASM undergraduate research fellow

Previous lab members

Ryan Stanton '20	Biology H	current student
Calla Bush St. George '20	Biology	current student
Eva Adjei-Danquah '20	Biology	current student
Jean-Baptiste Robert '21	Biology	current student
Andrew Zhu '21	Biology	current student
Andi Cheng '21	Biology H	current student
Linda Vu '19	Biology H	Graduate student, University of Cincinnati, OH
May Dong '18	Biology	Research Assistant, Wistar Inst, Philadelphia, PA
Isabel Erickson '18	Biology H	Research Assistant, NIH (IRTA)
Bennett Parrish '18	Biology	Research Assistant, Federal Reserve <i>co-mentored with Jose Luis Machado</i>
Luke Eppley, '17	Biology	applicant to medical school
Bolutife Fakoya '17	Biology	graduate student, Harvard
Veda Khadka '16	Biology	graduate student, MIT
Randall Burson '15	Biology H	Fulbright fellow; Medical student, Univ of Penn
Roxanne Morris '15	Biochemistry H	Research Assistant, Univ of Penn
Martin Mathay '15	Biochemistry	PhD, NSF fellow, Univ of Washington, WA
Natalie Campen '14	Environ Studies H	Medical student, UCLA
Jasmeet Samra '14	Biology	Research Assistant, Penn State Univ, PA
Stephanie Chia '13	Biology	Medical student, Einstein Medical College
Erik Tvetenstrand '14	Biology	Graduate student, Columbia <i>co-mentored with Brad Davison</i>
Karan Padda '14	Biology H	Medical Student, University of Toledo
Emma Spady '13	Biochemistry H	Graduate student, Harvard
Nina Kogekar '13*	Biology H	MD NYU; resident, internal medicine
Ted Goh '14	Biology	Research assistant, UPenn
Sinan Kazaklar '14	Biology	MBA, London School of Econ; analyst, Goldman Sachs
Roxanne Morris '15	Biology	Research Assistant
Ariel Parker '15	Biology	graduate student, Johns Hopkins Univ
Tom Liu '12	Biology	MD, Univ Penn <i>co-mentored with Sara Hiebert Burch</i>
Michelle Walters '12	Biology	Research assistant, Univ of Texas
Elizabeth Matlock '12	Biology	Medical Student, Georgia Medical School, Athens, GA
Laura Rodgers '12	Biology H	MD-PhD, Univ Illinois Chicago; NIH
Amy Langdon '11	Biology H	PhD, Washington Univ. St. Louis
Nicole Machac '11	Biology H	MD Cornell; OB-Gyn, Cooper Hospital, NJ

Cory Benjamin '10	Biology	MD student, West VA School of Medicine, VA
Danny Lascano '10	Biology	MD Columbia, surgery resident, NY
Natasha Weiser '10*	Biology H	MD-PhD, Univ. Michigan
Sunjay Barton '09*	Biochemistry H	MD Columbia University; radiation oncologist, NY <i>co-mentored with Carr Everbach, Engineering</i>
Tristan Bice '09	Biology	Post doct, Federal University of Bahia, Brazil
Jesse Handler '09	Biochemistry H	MD-PhD, NYU; preventative medicine Beth Israel Deaconess Medical Center, Boston, MA
Anna deRegt '09	Biochemistry/Engineering	PhD, MIT; postdoc Fred Hutchinson Center, WA <i>co-mentored with Carr Everbach, Engineering</i>
Nanelle Barash '08*	Biology H	DVM-PhD, UC Davis; veterinary resident, UNC
Kathleen Condon '08	Biology H	Peace Corps - Mozambique
Benjamin Krasity '08	Biochemistry H	MD-PhD Univ. Wisconsin, Pediatrics, U Chicago
Dan Yoon '08	Biology	MD NYU, otolaryngologist, MN
Meagan Bolles '06*	Biology H	MD-PhD UNC-Chapel Hill, infectious diseases, Baltimore MD
Charlie Buffie '06*	Biology H	MD-PhD Sloan Kettering, Internist, NY
Alex Glick '06	Biology H	MD Tufts, Pediatrician, NYU
Stephanie Losq '05	Biology	MD, Family Medicine, LA
Ryan Esquejo '05	Biology	PhD, UC Irvine; Research manager, Pfizer
Aaron Strong '06	Biology H	PhD, Stanford; Assistant Professor, Univ of Maine <i>co-mentored with J. Hagelin, Biology</i>
M. Jawaad Hussain '05	Biology H	MD, New York University, Radiologist, MA <i>co-mentored with J. Hagelin, Biology</i>
Aparna Kishor '05*	Biochemistry H	MD, Univ. VA, surgeon, Baltimore, MD <i>co-mentored with C. Everbach, Engineering</i>
Jorge Aguilar '05	Biology	MD-PhD, Albert Einstein Medical College; pediatric resident, UPenn
Melanie Johncilla '05	Biology	MD, Pathology, MA
Joanne Gaskell '03	Biology H	PhD student, Stanford Univ.; agricultural advisor, World Bank <i>co-mentored with Andrea Stout, Physics</i>
Jeanne McFalls '03*	Biology H	MD (UPenn), clinical asst professor of pathology, UPenn
Mathew So '03*	Biology H	MD (Mayo), diagnostic Radiology, Winston-Salem, NC <i>co-mentored with C. Everbach, Engineering</i>
Krista Marshall '03	Biochemistry	MD, Univ. Pittsburgh
Laura Valentine '02	Biology	PhD, Univ. Wisconsin, postdoc UCSF
Nicolle Gorby '03	Biology	MD, MPH, OB-Gyn, PA
Semhar Madmud '02	Biology	MD, Drexel Univ., OB-Gyn, PA
Andrew Alderete '02*	Biology	Head, Communications and Public Relations, Cineconcerts
Russell Shigeura '02	Biology	deceased
Haena Kim '02	Biology	MD (Univ. Pittsburgh), Plastic surgeon, CA <i>co-mentored with C. Everbach, Engineering</i>
Greg Bokinsky '01	Biochemistry H	PhD (Harvard); Faculty at TU Delft <i>co-mentored with A. Jain, Chemistry</i>
Cristina Cardemil '01*	Biology	MD (Univ. Pennsylvania); Molecular Epidemiology CDC
Anne Willman '01	Biology	MD (Univ. Pittsburgh); Oncologist, NJ <i>co-mentored with C. Everbach, Engineering</i>
Clarissa Nobile '01*	Biology	PhD (Columbia); Associate Prof, UC Merced, CA
Joseph Tucker '00	Biology H	MD-PhD (UNC-Chapel Hill); Associate Professor UNC

Andrew Caffrey '99	Biology H	JD (Harvard); Assistant US Attorney, NY <i>co-mentored w/ R. Latham, Biology</i>
Nathaniel Hanson '99*	Biology H	MS (MIT) <i>co-mentored with T. Mysliwicz, leave replacement</i>
Anna Tischler '99*	Biology H	PhD (Tufts); Associate Prof, Univ of MN <i>co-mentored with T. Mysliwicz, leave replacement</i>
Marianna Ruzinova '98*	Biochemistry H	MD-PhD (Columbia); Faculty member, WUSTL, MO
Matthew Halpern '98*	Biology H	MD (Harvard); dermatology and surgery, PA <i>co-mentored with C. Everbach, Engineering</i>
Sylvia Kwakye '98	Engineering	PhD (Cornell); Legal Information Institute (Cornell Univ) <i>co-mentored with C. Everbach, Engineering</i>
Tinsley Davis '98	Biology	MA *Univ Wisc); Exec. Director, Natl. Asso. Science Writers
Elizabeth Glater '97*	Biology H	PhD (Harvard); Associate Prof, Pomona College, CA
Jovanka Tepavcevic '97	Biochemistry H	PhD (Univ of Washington) Associate Prof, Wheaton College, IL
Steven Vokes '97	Biology	PhD, Associate Prof., UT Austin, TX
Brenda Ayers '97	Biochemistry	MD, internal medicine, NY <i>co-mentored with T. Van Dyk, DuPont Co.</i>
Karli Watson '97	Biophysics	PhD (CalTech); postdoctoral fellow, Duke Univ Univ. of Colorado; ICS Executive Committee, Research Associate Institute of Cognitive Science <i>co-mentored with R. Pasternack, Chemistry; P. Collings, Physics</i>
Adisetyantari Suprpto '96*	Biology H	PhD (Rockefeller); Rockefeller Univ., Intellect. Property Senior Advisor, External Innovation at Elanco
Chi Yun '95	Biology	PhD (UCSD), director NYU Core RNAi facility
L. Christine Turtzo '94	Biology H	MD-PhD (Johns Hopkins Univ.); faculty JHU <i>co-mentored with S. Gilbert, Biology</i>
Todd Kim '94	Biology	MD (Stanford); orthopedic surgeon, CA
Elizabeth Campbell '92	Biology	PhD (Rockefeller); Professor, Rockefeller Univ.
Chris Chon '92	Biology	MD (Stanford); urology, TX
Maarten Hoek '92	Biology	Principle Scientist, Merck Co.

Summer students from other colleges hosted at Swarthmore

2000	Anna Rafalski, Tufts Univ. '01	PhD, Univ. Arizona
1993	Mary Anne Hirshfeld, Williams College '95	PhD in Geology
1991	Nat Gordon-Clark, Oberlin College '93	Attorney (Intellect. Prop), Washington, DC

Swarthmore Faculty hosted in the laboratory**

2005	Cheryl Grood, Department of Mathematics and Statistics
2005	Philip Jefferson, Department of Economics
2007	Bruce Maxwell, Department of Engineering
2007	Barbara Milewski, Department of Music and Dance
2011	Timothy Burke, Department of History
2013	Rachel Burma, Department of English

Swarthmore Staff hosted in the laboratory

2012	Melissa Mandos, Assistant Dean, fellowships and prizes
2012	Leslie Hempling, Assistant Dean, disabilities
2013	Eric Behrens, ITS

**Highlighted in articles:

April 2013 *Swarthmore Bulletin*: "Unlikely Scientists" Microbiologist Amy Cheng Vollmer unites two cultures in her 'only-at-Swarthmore' lab experiment

<http://bulletin.swarthmore.edu/bulletin-issue-archive/index.html%3Fp=1048.html>

October 2005 *The Chronicle of Higher Education*, by Philip Jefferson: "Economist as Biologist"

<http://chronicle.com/temp/reprint.php?id=tq9bsqzvbytpvqquf9ovi4cbm8m8uf>

Summer research students mentored at Mills College

Sondra Henderson '89	1989
Phillippa Amick '88	1987
Christina Stimmann '87	1986

High School Students and Teachers Hosted in the Summer

Brandywine High School (DE) student:	Victoria Rafalski '01
Strath Haven High School (PA) students:	Tim Ripper '05, Lipsa Bhagat '02, John Scott '02, Naasiha Siddiqui '00, Hwa-Jia Yu '98
Ridley High School (PA) students:	Dana Kozubal '05, Matthew Bramucci '95
Cheltenham High School (PA) student:	Andrew Levy '01 (2 summers)
Penn Crest High School (PA) student:	Sandra Sun '94
Chester High School (PA) student	Charles Garnet '92
Chester High School (PA) teacher:	Judith Odom
Upper Darby High School (PA) teacher:	Kelly Byrne

1995 – 1996 Along with 4 other Swarthmore science faculty, hosted 24 elementary/secondary teachers from 4 local school districts: Upper Darby, Lower Merion, Wallingford-Swarthmore, Baldwin School in the IMAST program (integrated math and science teaching) to develop teaching units for middle school teams of English, Social Studies, Math and Science

Invited Lectures on Research

2019 Fireside chat, Molecular Biology and Physiology ASM Microbe, San Francisco, CA
2018 Fireside chat, Molecular Biology and Physiology ASM Microbe, Atlanta, GA
2018 Neil Welker Memorial Keynote speaker: What Bacteria Can Teach Us about Stress Response, 62nd Wind River Conference on Prokaryotic Biology, Estes Park, CO (invited by graduate students)
Phi Beta Kappa Lecture: Bacterial Stress Response, Butler University, Indianapolis, IN
2017 Phi Beta Kappa Lecture: Bacterial Stress Response, Randolph-Macon College, VA
Phi Beta Kappa Lecture: Gut Microbiome, Randolph-Macon College, VA
Phi Beta Kappa Lecture: Dancing with the Bugs: Choreography for Humans and their Microbial Partners, University of Maine, Orono, ME
Phi Beta Kappa Lecture: Bacterial Stress Response, University of Maine, Orono, ME
Phi Beta Kappa Lecture: Gut Microbiome, Elmira College, NY
Phi Beta Kappa Lecture: Bacteria Stress Response, Elmira College, NY
Marine Biological Laboratories Microbial Diversity Course, Woods Hole, MA
California Institute of Technology, Pasadena, CA
University of California, Los Angeles, CA
Pomona College, Claremont, CA
2016 Amherst College, Amherst, MA
University of Massachusetts, Amherst, MA
Smith College, Northampton, MA

- University of Texas Medical Center, ASM Student Chapter, Houston, TX
Gordon Research Conference on Microbial Stress Response, session chair
- 2014 Allegheny Branch ASM speaker, Lycoming College, PA
- 2013 ASM speaker, Delta University, University Center, MI
University of Georgia, Department of Microbiology, Athens, GA
National Institutes of Health, Microbiology Division, Bethesda, MD
ASM Distinguished Lecturer – Ohio Branch, Ashland, OH
- 2012 ASM Distinguished Lecturer – North Central Branch, Fargo, ND
ASM Distinguished Lecturer – Indiana Branch, Crawfordsville, IN
ASM Distinguished Lecturer – Missouri Branch, St. Joseph, MO
Bryn Mawr College, Department of Biology, Bryn Mawr, PA
- 2010 Rice University Institute for Biosciences and Bioengineering, Houston, TX
- 2008 Allegheny Branch of the American Society for Microbiology annual symposium,
Bucknell University, Lewisburg, PA
- 2007 Eastern Michigan University, Department of Biology, Ypsilanti, MI
North East Microbiologists - Physiology, Ecology, Taxonomy conference, Willowbrook, NY
Coastal Carolina University, Myrtle Beach, SC
Cornell University, Department of Microbiology, Ithaca, NY
- 2006 University of Texas-Arlington, TX (Microbiology Student Chapter invitation)
University of Pennsylvania, Philadelphia, PA
Bristol Myers Squibb, New Brunswick, NJ
The Pennsylvania State University, State College, PA
Emory University, Atlanta, GA
University of Washington, Seattle, WA
- 2005 Shenandoah Valley VA (Combined communities of: Bridgewater College, James Madison Univ.,
Eastern Mennonite Univ., Mary Baldwin College) Student Chapter of the ASM - Inaugural Lecture
Gettysburg College, Gettysburg, PA
Oklahoma State University and the Missouri Valley Branch of the ASM
University of Arizona, Tucson, AZ
- 2003 Villanova University, Philadelphia, PA
Dickinson College, Carlisle, PA
Lehigh University, Bethlehem, PA
Responder to Richard Lewontin, Symposium in Honor of Hugh Lacey's retirement from
Swarthmore College
- 2002 St. Joseph's University, Philadelphia, PA
Bucknell University, Department of Biology, Lewisburg, PA
University of Georgia, Athens, GA, Research Experience for Undergraduate (REU):
Inaugural Summer Program Speaker
- 2001 Drexel University, Department of Biology and Biotechnology, Philadelphia, PA
Indiana University, Department of Biology, Bloomington, IN
- 2000 Williams College, Department of Biology
Linda Hall Library, Kansas City, MO
Gordon Research Conference on Microbial Stress Response
Swarthmore College, Alumni Weekend Lecture
- 1999 Swarthmore College, Board of Managers Meeting
Swarthmore College, Faculty Noon Lecture
- 1998 Univ. of Pennsylvania, School of Medicine, Dept. of Microbiology
- 1997 Rice University, Department of Cell Biology and Biochemistry

- Ursinus College, Department of Biology
Hofstra University, Department of Biology
- 1996 Texas A & M University, Department of Biochemistry and Biophysics
- 1995 Hamilton College, Department of Biology
The Second Tri-College Symposium on Research in the Life Sciences, Haverford, PA
Swarthmore College, Alumni Weekend
Swarthmore College, Faculty Lecture
- 1993 University of Chicago, Department of Biochemistry & Molecular Biology
The First Tri-College Symposium on Research in the Life Sciences, Swarthmore, PA
- 1992 North East Microbial Physiology, Ecology and Taxonomy Meeting
Swarthmore College, Sigma Xi Noon Lecture
Nineteenth International Conference on the Biology of Myxobacteria
Swarthmore College, Department of Biology
- 1991 Eighteenth International Conf. on the Biology of Myxobacteria; session chair
Temple University, Biology Department
- 1990 Philadelphia College of Pharmacy and Science, Department of Chemistry
Swarthmore College, Department of Biology
- 1989 University of Delaware, Department of Life Sciences
Swarthmore College, Department of Biology
Pomona College, Department of Chemistry, Pomona, CA
- 1988 Cutter Biological Laboratories, Berkeley, CA
- 1985 University of California, Santa Cruz, Department of Biology
University of California, Berkeley, Department of Genetics
Mills College, Department of Biology
SRI International, Menlo Park, CA
Genentech, Inc. South San Francisco, CA
- 1984 International Mid-Winter Conference in Immunology, Pacific Grove, CA
- 1983 American Society for Microbiology Annual Meeting, New Orleans, LA

Invited Lectures on Education/Careers/Public Face of Microbiology/Science Communication

- 2020 International Conference on Talent Development and Honors Education 2020, *postponed from 10-12 June 2020 in Groningen, the Netherlands due to COVID-19*
- 2019 Garnet Weekend: Lecture on the Gut-Brain Axis: Influence of the gut microbiome
- 2018 Rice University Center for Teaching Excellence: Integrating Teaching and Research at a Small Liberal Arts College, Houston, TX
Rice University Center for Teaching Excellence: Networking and Mentoring - Two professional lifelines, Houston TX
Wind River Conference on Prokaryotic Biology: Diverse Careers in Microbiology, Estes Park, CO
ASM Microbe 2018: Fireside chat about ASM governance and careers
Phi Beta Kappa Lecture: The Gut Microbiome and Its Effect on Host Behavior, St. Mary's College of Maryland, St. Mary's City, MD
Phi Beta Kappa Lecture: Staying Healthy in a Microbial World, St. Mary's College of Maryland, St. Mary's City, MD
Phi Beta Kappa Lecture: The Gut Microbiome and Its Effect on Host Behavior, Butler University, Indianapolis, IN
Phi Beta Kappa Lecture: The Microbial World: Small and ancient is not primitive and Unsophisticated, Butler University, Indianapolis, IN
Phi Beta Kappa Lecture: Science Literacy: Building Bridges and Trust, Butler University,

- Indianapolis, IN
Phi Beta Kappa Lecture: Science Literacy: Building Bridges and Trust, Vanderbilt University, Nashville, TN
Phi Beta Kappa Lecture: Swarthmore's Summer Scholars Program, Vanderbilt University, Nashville TN
Phi Beta Kappa Lecture: The Microbial World, Illinois College, Jacksonville, IL
Phi Beta Kappa Lecture: Swarthmore's Summer Scholars Program, Illinois College, Jacksonville, IL
Phi Beta Kappa Lecture: Staying Healthy in a Microbial World, Illinois College, Jacksonville, IL
Phi Beta Kappa Lecture: The Gut Microbiome and Its Effect on Host Behavior, Illinois College, Jacksonville, IL
- 2017 Phi Beta Kappa Lecture: Science Literacy: Building Bridges and Trust, Howard University, Washington, DC
Phi Beta Kappa Lecture: Science Literacy: The Gut Microbiome: the Gut Brain Axis, Howard University, Washington, DC
Phi Beta Kappa Workshop with Women in STEM on Networking and Mentoring, Howard University, Washington, DC
Phi Beta Kappa Lecture: Science Communication, Randolph-Macon College, VA
Phi Beta Kappa Lecture: Science Literacy, the case for Vaccines, Randolph-Macon College, VA
Phi Beta Kappa Lecture: Diverse Career Trajectories for Science Majors, University of Maine, Orono, ME
Phi Beta Kappa Lecture: Living the Scientific Method: Science Communication and Credibility, University of Maine, Orono, ME
Phi Beta Kappa Lecture: Mentoring and Networking, your professional lifelines, University of Maine, Orono, ME
Phi Beta Kappa Lecture: Science Communication and Science Literacy, Elmira College, NY
HHMI Biointeractive High School Educators conference on Microbiology and the Microbiome: speaker and workshop leader, HHMI, Chevy Chase, MD
Microbial Diversity Course, Woods Hole, MA: lecture on diverse careers in microbiology
Massachusetts Institute of Technology, Cambridge, MA
four lectures: career at a small college; professional lifelines: networking and mentoring
consultant to women in science on self-promotion
California Institute of Technology, Pasadena, CA
three lectures: careers; active learning; metabolism
Keynote speaker, St. Joseph's University's Annual Teaching and Learning Forum
Workshop leader, St. Joseph's University's Annual Teaching and Learning Forum
- 2016 University of Illinois, Urbana/Champaign, Department of Microbiology
Amherst College, Department of Biology, Amherst, MA
Davidson College, Department of Biology, Davidson, NC
University of Texas Medical Center, ASM Student Chapter, Houston, TX
Career Panel, University of Pennsylvania Postdoctoral and Career Services offices
Dunwoody Village, Newtown Square, PA: Are We Alone? Astrobiology's inquiry into the life on earth and elsewhere, on the origin of the earth and life on it (co-presenter with Eric Jensen, astronomer)
Distinguished speaker, 7th Annual Baylor College of Medicine NIH Institutional Research and Career Development Award (IRACDA) Research Symposium, Houston TX
Science for Everyone: Encouraging professional, personal and public enthusiasm for science
- 2015 Dunwoody Village: Nature and Nurture. Newtown Square, PA
Brown University Sheridan Teaching Center, speaker on teaching in the sciences

- 2014 American Society for Microbiology, public outreach panel discussion at the General Meeting
Dunwoody Village: Microbiology in our lives. Newtown Square, PA:
- 2013 White Horse Village Retirement Community, (co-presenter with Eric Jensen, astronomer,
on the origin of the earth and life on it), Media, PA
American Society for Microbiology, Theobald J Smith Society ASM Branch,
New Brunswick, NJ
National Institutes of Health, Pharmacology Research Associate (PRAT)
Program Seminar Series, Bethesda, MD
ASM Distinguished (Branch) Lecturer - Ohio Branch, Ashland, OH
University of Delaware, Life Long Studies, Wilmington, DE
Rutgers University's celebration of the 60th anniversary of Selman Waksman's Nobel Prize
- 2012 University of Delaware, Life Long Studies, Wilmington, DE
Rotary Club, Swarthmore, PA
St. Joseph's University McNulty Scholar's Program Speaker
Invited presenter at Pearson's Biology Leadership Conference 9, Kiawah Island, SC
ASM Distinguished (Branch) Lecturer – North Central Branch, Fargo, ND
ASM Distinguished (Branch) Lecturer – Missouri Branch, St. Joseph, MO
- 2011 ASM Branch Lecturer – Western New York Branch, Albany, NY
Rotary Club, Christiana, DE
- 2010 Plenary speaker – reprise of Carski award lecture, ASMCUE, San Diego, CA
National Institutes of Health, Career Panel, Bethesda, MD
Rice University, Institute for Biosciences and Bioengineering, Houston, TX
Rice University, Department of Biochemistry and Cell Biology, Houston, TX
University of Texas Health Sciences Center, Microbiology program, Houston, TX
Texas Medical Center, Student Chapter of the American Society for Microbiology, Houston, TX
University of Pennsylvania Career Services, Philadelphia, PA
University of Pennsylvania Medical School postdoctoral fellows career panel, Philadelphia, PA
- 2009 College of Physicians- panel on antibiotic resistance and MRSA, Philadelphia, PA
Indiana University, Biology Department, Bloomington, IN
Keynote speaker, Strategies for Success Workshop, Pearson Publishing,
Quinsigamond Community College, Worcester, MA
- 2008 Allegheny Branch of the American Society for Microbiology annual symposium
held at Bucknell University, Lewisburg, PA
Ballenger Lecture Series: Eminent Scientists, Mott Community College, Flint, MI
Keynote speaker on Mentoring and Networking, ABRCMS, Orlando, FL
University of Pennsylvania, Graduate School of Arts and Sciences, Philadelphia, PA
Harvard University, Graduate School of Arts and Sciences, Cambridge, MA
Boston University, Women in Biology, MA
AAAS Meeting, Careers involving scientific training and interpersonal communication, Boston, MA
Keynote speaker, Strategies for Success Workshop, Pearson Publishing, Ohlone Community College,
Newark, CA
Keynote speaker, Strategies for Success Workshop, Pearson Publishing, Toronto, Canada
- 2007 Keynote speaker on Mentoring and Networking, ABRCMS, Austin, TX
University of Michigan, Life Sciences Post-doc Association, Ann Arbor, MI
Keynote speaker, Strategies for Success Workshop, Pearson Publishing, Henry Ford
Community College, Dearborn, MI
ASM Kadner Institute: Career Preparation-Graduate Students & Postdocs, Boulder, CO
Cornell University, Department of Microbiology, Ithaca, NY

- MIT, Department of Biology, Masters Education Group, Cambridge, MA
Tufts University, Department of Microbiology, Boston, MA
Harvard University, Office of Career Services, Cambridge, MA
Harvard University, Microbial Sciences Program. Cambridge, MA
Albert Einstein College of Medicine/Yeshiva University, NY
- 2006 Panelist, Johns Hopkins University (School of Medicine): Careers in Academics
University of Texas-Arlington, TX (Microbiology Student Chapter invitation)
ASM (American Society for Microbiology) Education Board Sponsored Kadner Institute:
Careers Workshop Panelist on Liberal Arts College Faculty Careers, University of Connecticut,
Storrs, CT
Virginia Polytechnic Institute and State University, Career Symposium, Blacksburg, VA
University of Illinois, Urbana-Champaign, IL
University of Wisconsin, Madison, WI
University of Pennsylvania Biomedical Postdoctoral Programs - Career Workshop Series:
Pursuing an Academic Career, Philadelphia, PA
Swarthmore College Alumni in Atlanta, GA
Swarthmore College Alumni in Seattle, WA
ASM General Meeting - Student Brown Bag Lunch Series: Non-bench Career Trajectories
ASM Conference for Undergraduate Educators: Teaching Metabolism Interactively
- 2005 American Society for Microbiology General Meeting - Student Brown Bag Lunch Series:
Non-bench Career Trajectories
Strategies for Success Workshop at Prince George's Community College, MD (Pearson,
Benjamin Cummins Publisher)
University of Pennsylvania - Career Workshop for biomedical postdoctoral fellows
ASM Education Board Sponsored GAP (Graduate students & Postdoc) Sumner Institute:
Careers Workshop Panelist on Liberal Arts College Faculty Careers, University of
Connecticut, Storrs, CT
- 2004 Swarthmore College Alumni in London, UK
Strategies for Success Workshop at Montgomery County Community College, PA
(Benjamin Cummins Publisher)
ASM Education Board Sponsored GAP (Graduate students & Postdoc) Sumner Institute: Careers
Workshop Panelist on Liberal Arts College Faculty Careers, University of Connecticut, Storrs, CT
- 2003 ASM Undergraduate Education Conference, College Park, MD
- 2002 ASM Eastern Pennsylvania Branch, Philadelphia, PA
ASM Undergraduate Education Conference, Salt Lake City, UT
ASM General Meeting, Committee on the Status of Women in Microbiology: Session on
Careers in Microbiology, Salt Lake City, UT
University of Georgia, Athens, GA, Research Experience for Undergraduate (REU):
Inaugural Summer Program Speaker
National Association of Biology Teachers National Meeting, Cincinnati, OH
- 2001 Drexel University, Department of Biology and Biotechnology, Philadelphia, PA
Indiana University, Department of Biology, Bloomington, IN
- 1996 Texas A & M University, Department of Biochemistry and Biophysics
- 1992 AAUW - Northern Philadelphia Region: Women in Science Day
Franklin Institute: Women in Science Day

Informal presentations/podcasts

- 2020 Swat Talk Shorts: The Pandemic and the Liberal Arts

<https://www.swarthmore.edu/minding-the-light/swattalk-shorts>

New Castle County podcast with County Executive, Matthew Meyer

Audio: <https://www.nccde.org/1854/Podcounty> - episode 9

Video: <https://www.youtube.com/watch?v=8J58Ba1T9bU&feature=youtu.be>

Swat Talk (alumni virtual lecture) on the Gut Microbiome

<https://www.swarthmore.edu/alumni-resources-events/gut-microbiome-how-host-and-microbial-communities-influence-each-other>

2018 *Interviewed for and featured in Kazoo Magazine: The Magnificent Mistakes Issue*

2018 *Podcast interview for Key Conversations with Phi Beta Kappa: Amy Cheng Vollmer Unofficial*

Ambassador for Good Bacteria. <https://www.pbk.org/key-conversations-archive>; transcript at

https://www.pbk.org/Files/Visiting-Scholar/Key-Conversations-with-Phi-Beta-Kappa_-Amy-Cheng-V.pdf

2015 *Interviewed on People Behind the Science*

<http://www.peoplebehindthescience.com/dr-amy-vollmer/>

Activities supporting the advancement of Inclusive Diversity, Equity and Access

2019 -present American Society for Microbiology, Board of Directors' Shepherd for a Board-level task force on the ASM's role in promoting Diversity, Equity and Inclusion in the microbial sciences

2019 Invited speaker at upcoming ABRCMS (Anaheim, CA, Nov 13-16) to speak about the role of professional societies in the communication, training, and advancement in improving Diversity, Equity and Inclusion in the societies and workplaces of our members (declined due to schedule conflict)

Presentation about Swarthmore Summer Scholars Program: University of Southern California Dornsife College of Arts and Sciences (invited by Steven Finkel, Graduate Dean)

Presentation to LA area alumni, Swarthmore Summer Scholars Program

2018 Presentations (2) to SF area alumni, Swarthmore Summer Scholars Program

Presentation to Philadelphia area alumni, Swarthmore Summer Scholars Program (Parrish Salon)

2017 Presentation to Boston area alumni, Swarthmore Summer Scholars Program

2017 - present Director, Swarthmore Summer Scholars Program

2015 Inaugural faculty member, teaching laboratory science, Swarthmore Summer Scholars Program

2014 - 2015 Steering committee of faculty that researched and launched the Swarthmore Summer Scholars Program

2013 - 2014 Working groups discussion regarding diversity and summer bridge programs

2012 Faculty Diversity Panel (invited by Dean of Students)

1998 NSF, graduate research (pre-doctoral) fellowship GRFP panelist: microbiology, graduate minority fellowships

1998 - 1999 Cultural Diversity Task Force (appointed by Provost)

Equal Opportunity Committee (appointed by Provost)

1990 - 1993 Panelist, Minority Recruiting Day, Admissions Committee (Admissions)

1992 - 1995 Adviser, Pew Foundation Minority Fellows (appointed by Provost)

1990 Invited participant, American Society for Cell Biology: Conference in Careers in Biological Sciences - Advancement for Women and Minorities

1989- present 48% of the 100+ students mentored in my research lab are members of URM, LGBTQ+, first-generation college or immigrants

Other informal teaching (courses):

- 2019 Swarthmore Life Long Studies on Swarthmore campus – LLS 186: Do You Have a Gut Feeling?
4 weeks, one evening per week
- 2008 Swarthmore Life Long Studies in NYC - LLS 122: Why We Stay Well; 8 weeks, one evening per week
- 2006 Swarthmore Life Long Studies on Swarthmore campus - LLS 122: Why We Stay Well, 8 weeks, one evening per week

Service to the Scientific/Academic Community outside of Swarthmore

Reviewer of manuscripts and other editorial activities:

Applied and Environmental Microbiology, Archives of Microbiology, Water Research, Journal of Biological Chemistry, Chemosphere, Food Microbiology, Journal of Biological Physics, International Journal of Biological Sciences, Journal of Basic Microbiology, Proceedings of the National Academy of Sciences (USA), BioQuest, Applied Microbiology and Biotechnology, Journal of Bacteriology, mBio (ASM), Anaerobe, Journal of Bacteriology, FEMS, Microbial Cell, Current Microbiology

Compiled index for the commemorative volume on the *Biology of the Myxobacteria* (ASM Press, 1993; Dworkin, M. and Kaiser, D., eds.)

Textbook: *Microbiology* (McGraw Hill 2002, Prescott et al.)

Textbook: *Microbes* (ASM Press 2005, Schaechter, et al.)

Textbook: *Microbe, second edition* (ASM Press 2015, Schaechter, et al.)

Electronic textbook: Explorer's Guide to Biology (in preparation by Ron Vale, et al.)

Reviewer of grant proposals:

- 2013 - 2014 HHMI University grant competition (Round I, II)
- 2009 HHMI University grant competition (Round I)
- 2006 Kentucky Science and Engineering Foundation
- 2006 Panelist for the HHMI University grant competition
- 2006 US Civilian Research/Development Foundation (Cooperative Grants Program)
- 2004 - 2012 Murdock Charitable Trust Foundation
- 2002 - 2003 Beckman Scholars Program, Beckman Foundation (Advisory Panelist)
- 2001 - 2002 NSF, GRFP fellowship panel: biochemistry, biophysics and structural biology, Panel Chair
- 1999 - 2001 NSF, GRFP fellowship panel: biochemistry, biophysics, and molecular biology, Panelist
- 1998 NSF, graduate research (pre-doctoral) fellowship GRFP panelist: microbiology, graduate minority fellowships
- 1998 - ad hoc, NIH microbiology research
- 1996 - ad hoc, NSF bioengineering, microbial genetics research
- 1995 – 2000 University of Hawaii Sea Grant

Thesis committee:

- 2007 Master's degree thesis: Lori Cory (mentor, J Tudor), St. Joseph's Univ

Program reviewer/consultant:

- 2016 Biology Department, Lewis University, sole external reviewer
- 2015 Biology Department, Lafayette College, external review, committee chair
- 2014 Fairfield University, Biology Department, external review, committee chair
- 2014 College of the Holy Cross, Biology Department
- 2010 The College of William and Mary, Biology Department/Cluster review
- 2010 Reed College, Department of Biology, external review
- 2009 - 2010 Willamette University, Department of Biology, Microbiology search, sole consultant
- 2009 Butler University, Department of Biology, external reviewer
- 2009 Colgate University, Department of Biology, chair, external review comm.

2007 - 2010 University of Arizona: AZ-START program, external consultant
2005 - 2014 University of Arizona: HHMI program, chair, external review committee
2006 Ursinus College, Biology Department, external reviewer
2006 Brigham Young University, Microbiology program, external reviewer
2001 Dickinson College, Biology department, sole external reviewer
2003 NSF graduate fellowship program (Committee of visitors)
1997 Haverford College, HHMI, external reviewer
1997 Georgian Court College, Biology department (review team chair)
1995 Westmont College, Re-Accreditation*, external reviewer
1994 UC Santa Cruz, Re-Accreditation*, external reviewer

*Western Association of Schools and Colleges Site Visit Team

Meeting organizer/convener

2017 for Microbe 2018 Plenary: "The 100th Anniversary of the 1918 Influenza Pandemic"
2016 for Microbe 2017 Plenary: "Climate Change and Microbial Feedbacks"
2013 Session convener: "Extraordinary and Extreme Microbial Lifestyles at the
113th General Meeting of the American Society for Microbiology
2008 Session chair, ASM's 2nd Annual Conference on Beneficial Microbes
2007 Advisory committee member, BioMicroWorld2007 Conference
2007 – 2010 Division I Chair-elect, chair, advisor ASM General meeting planning
2004 – 2013 Convener, Regional Microbiology Educators Network
2001 Chair, Session on Mentoring, General Meeting of the ASM
2000 Vice chair (elected), Gordon Conference on Microbial Stress Response
1993 Convener, the First Tri-College Symposium on Research in the Life Sciences
1992 Co-convener, the International Meeting on the Biology of the *Myxobacteria*,
celebrating the centennial of the discovery of the *Myxobacteria*

American Society for Microbiology – Service

2019 - 2020 Board of Directors' Shepherd for seating and launching a Board-level task force on the
ASM's role in promoting Diversity, Equity and Inclusion in the microbial sciences
2018 Nominating Committee for ASM Governance
2017 Co-Chair, Profession of Microbiology track, Microbe 2018 Meeting Planning Committee
2017 - 2020 American Society for Microbiology, inaugural Board of Directors
2017 - 2019 American Society for Microbiology, Council on Microbial Sciences
2015 - 2018 ASM's Meeting Planning Committee for Microbe, annual meeting
2011 - 2014 ASM's General Meeting Planning Committee
2011 - 2013 ASM's Center for the History of Microbiology/ASM Archives Committee
2011 - 2013 ASM's Career Development Grants for Postdoctoral Women Committee
2010 - 2013 ASM Carski Undergraduate Teaching Award nominating committee
2007 - 2010 Chair Elect, Chair, Advisor - Division I (General Microbiology)
2004 - 2009 Chair, Student Membership Committee
2003 - 2006 ASM Founders Distinguished Service Award Nominating Committee
2003 Judge, Delaware Valley Science Fair, presented ASM Eastern Branch award
2001, 2002, 2006, 2012 Presenter - Undergraduate Education Conference
1999 – 2003 Editor-in-chief, *Microbiology Education*, ASM Education Board
1998 - 2002 Member, ASM Committee on Undergraduate Education
1999 - 2017 Member, Eastern PA Branch, education Committee

Other service

- 2015 - 2019 External mentor, for assistant professor in biology at Amherst College
2007 - 2017 President, Waksman Foundation for Microbiology
2005 - 2014 Consultant, University of Arizona's HHMI grant proposal
2001 - 2017 Trustee, Waksman Foundation for Microbiology
2000, 2001, 2006 Judge, Concord High School (Wilmington, DE) Science Fair
2000 Presenter, Brandywine School District (DE) In-service for Science Teachers
1990 Invited participant, American Society for Cell Biology: Conference in Careers in Biological Sciences - Advancement for Women and Minorities
1993 - 1996 Rice University Alumni Association Board (nationally elected position)
1988 Council on Undergraduate Research: Committee for Scholarships and Grants

Swarthmore College Service - Tri-College and College-wide

Invited presentations (host)

- 2020 Zoom panel discussion about Coronavirus and anti-Asian attitudes (ORAA)
2019 Presentation about S³P at New Faculty Orientation (Associate Provost)
Presentations to students on Studying STEM at Swarthmore (Dean)
Annual Bathtub Debate, representing the Natural Sciences and winning! (Peaslee Debate Society)
Panelist – Honors program presentation to sophomore class (Honors Coordinator)
2018 Presentations to alumni in NYC, DC, SF about Swarthmore Summer Scholars (S³P) (Advancement)
Faculty lunch presentation about Swarthmore Summer Scholars (S³P) (David Harrison)
Presentation about S³P at New Faculty Orientation (Associate Provost)
Presentations to students on Studying Science at Swarthmore (Dean)
Swarthmore Faculty Lecture: A Tale of Two Projects: Breathing life back into microbiology research!
MULTI Interracial Relationships Panel, presenter
2017 Astrobiology lecture (with Eric Jensen) for Biology Club
Facilitator, Science Communication Workshop
Faculty lunch presentation about Swarthmore Summer Scholars (S³P) (David Harrison)
Faculty mentor, talk about health, nutrition and vaccines to Women's Varsity Basketball Team (Coach Renee Varney)
Presentation about S³P at New Faculty Orientation (Associate Provost)
Presentations to students on Studying Science at Swarthmore (Dean)
Special presentation to Student Academic Mentors: Studying Science at Swarthmore (Dean)
2016 Importance of professional societies, conferences, meetings (Global Health Forum)
Swatstruck Faculty Panel for Parents (Admissions)
Presentations to students on Studying Science at Swarthmore (Dean)
Female Identity in Academia: (Swarthmore Asian Association and Women's Resource Center)
Special presentation to Student Academic Mentors: Studying Science at Swarthmore
HHMI mentoring mini-grant: Workshop on how (and why) to attend a professional society meeting
2015 Presentations about Summer Scholars Program:
Faculty lunch (Associate Provost)
Parents' Council (VP Alumni/Development)
Multi on Campus: A Panel for the Exploration of Multiple Identities (Intercultural Center)
Science and Society faculty panelist (Students)
Co-emcee: Concert celebration President Smith's inauguration (inaugural committee)
Presentations to students on Studying Science at Swarthmore (Dean)
Panelist – Honors program presentation to sophomore class (Dean)
Special presentation to Student Academic Mentors: Studying Science at Swarthmore (Dean)
Presentation to Admissions Deans about Biology at Swarthmore

- 2014 Panelist for Sesquicentennial Book Tour, San Francisco, CA (Alumni)
Special presentation to Student Academic Mentors: Studying Science at Swarthmore
Panelist – Alumni Weekend presentation: Second Tuesday Science Café, funded by the Aydelotte Foundation
Panelist – faculty Lunch presentation: Second Tuesday Science Café, funded by the Aydelotte Foundation
Panelist for Ride the Tide Weekend (Admissions)
Panelist for Sesquicentennial Book Tour, Washington DC (Alumni)
WSRN radio interview: science literacy (Student broadcasters)
Center for Innovation and Leadership (Dean and Alumni Council)
- 2013 Special presentation to Student Academic Mentors: Studying Science at Swarthmore
Women in Academia Panel – Natural Sciences and Engineering (Swarthmore students)
Philadelphia Alumni Event: Microbiology of Chocolate
Center for Innovation and Leadership – Drop In workshop on how (and why) to attend a professional society meeting
Womyn of Color: Workshop on self-silencing
Discovery Weekend faculty panelist (Dean of Admissions)
Philadelphia Alumni Faculty Panel on Pedagogy (invited by President Chopp)
Coordinating second year of Second Tuesday Science Café at Swarthmore
- 2012 Special presentation to Student Academic Mentors: Studying Science at Swarthmore
Invited to Womyn of Color viewing and discussion of *Voices of Color*
Initiated Second Tuesday Science Café at Swarthmore – gave first talk: “Bacteria, Viruses, Antibiotics and Vaccines”
Invited speaker at Swarthmore’s TEDx event: “What Makes a Good Society?”
Faculty Diversity Panel (invited by Dean of Students)
Divisional faculty representative at the Bathtub Debates (sponsored by the debate society)
Panelist at Faculty lunch on serving as a review on grant panels (invited by Associate Provost and Corporate, Foundation and Government Relations)
- 2011 2 presentations: Studying Science at Swarthmore (sponsored by Dean’s office)
- 2010 Consultant to Scott Arboretum on bacterial contamination in water sources for greenhouse
Admissions staff: Call to Serve grant for federal jobs
Asian and Pacific Islander Women: speaking out against self-silencing faculty panel
- 2009 Alumni connection at Swarthmore, presentation (with Eric Jensen) on Astrobiology
Alumni weekend presentation
Asian and Pacific Islanders: Career panelist
Asian and Pacific Islanders: Women in academia presentation
- 2008 Alumni Council, after dinner presentation (with Eric Jensen) on Astrobiology
Development Staff meeting: Microbiology and science literacy
Alumni Connections event: Washington, DC, San Francisco, CA
- 2007 Panel and workshop: Asian Women and Speaking in Public (SAO women)
Alumni Connections event in NYC
Co-convener (with Peter Collings): Mellon Tri-co Faculty workshop:
Introductory Physics for the Life Sciences: Designing a new curriculum
Panelist and moderator (Admissions): Discovery Weekend
Expanding Your Horizons (student coordinators): Microscopy
Faculty Lunch presentation (Associate Provost): Science literacy
Faculty Panel - Upward Bound (Aubrielle Houston): communicating with professors
- 2006 After Dinner Talk (Provost) Board of Managers

- Faculty panelist (Admissions) Discovery Weekend
Faculty speaker (Development): Parents weekend
Faculty speaker (Admissions): Ride the Tide
Faculty speaker (Career services/ Human resources): Leadership workshop
- 2005 Panelist (Admissions) Admitted Students weekend - Capstone Panel: The Meaning of Swarthmore and Other Simple Questions
- 2004 Faculty lunch presentation (Assoc. Provost), Hosting the Diverse Careers on Biology Panel and working with Career Services
Faculty speaker (College President) First Collection
Panelist (Admissions) NAFSA visiting foreign educational consultants
- 2003 Speaker on Science at Swarthmore, London Area Alumni (Alumni Relations)
Presenter (Development) "Student-Faculty Research Collaborations in the Sciences"
- 2002 Moderator (Alumni) LAX Panel on Biotechnology
- 2001 Panelist (Admissions) Admitted Students weekend on the "Meaning of Swarthmore and Life"
- 2000 Panelist, (SAO) Asian faculty in the sciences/liberal arts colleges
Hosted and introduced Laurie Garrett, Media Fellow (College President)
Panelist (Alumni Council) Women in Science at Swarthmore
- 2000 - 2004 Presenter, Student Study Skills Workshop (Dean of Students)
- 2000 - 2003 Panelist, Freshman orientation on "How to DO Swarthmore" (Dean of Students)
- 1999 - 2004 Panelist, Discovery Weekend: Science in the Liberal Arts (Admissions)
- 1999 Panelist, Student-faculty collaborations (Admissions Tri-College Counselors)
- 1997 Hosted and introduced Dr. David Ho, AIDS Researcher
- 1995 Panelist, Student-Faculty Research (Admissions)
Lecture on Research, Alumni Weekend (Alumni Relations)
- 1990 - 1993 Panelist, Minority Recruiting Day, Admissions Committee (Admissions)
- 1990 Group Co-leader, Freshman Orientation (Dean of Students)

College-wide Committees/programs

- 2019 Panelist at Honors information session for sophomores (invited by Honors Coordinator)
- 2018 - Mentor for assistant professor in Computer Science
- 2018 Panelist at Honors information session for sophomores (invited by Honors Coordinator)
- 2017 - Director, Swarthmore Summer Scholars Program and steering committee
- 2017 Panelist at Honors information session for sophomores (invited by Honors Coordinator)
- 2017 - 2019 Elected member of Council on Educational Policy (advisory to the Provost)
- 2015- 2016 Advisory committee, Swarthmore Summer Scholars Program
- 2015 - 2016 Advisory committee, College Honors Program
- 2014 - 2015 One of four faculty for inaugural year of Swarthmore Summer Scholars Program
- 2013 - 2014 Working groups discussion regarding diversity and summer bridge programs
- 2010 - 2014 Honorary Degrees Committee (appointed by Provost)
- 2010 - 2012 HHMI Steering Committee (appointed by Provost)
- 2010 - 2012 Co-chair, Call to Serve (Federal jobs) steering committee
- 2009 - 2012 Co-chair, Call to Serve: Federal Job Grant through the Partnership for Public Service
- 2008 - 2009 Acting Program Director, HHMI-funded program at Swarthmore
- 2007 - 2008 Planning Committee on recruitment and Composition of Class and Financial Aid (appointed by Provost)
- 2006 - 2008 Dean's Advisory Committee (appointed by Provost)
Academic Adviser for pre-majors (Dean of Students)
HHMI Steering Committee (appointed by Provost)

2006	Grievance Panelist (selected by Human Resources)
2004 - 2005	Honorary Degree Committee (appointed by Provost)
2002 - 2003	Honorary Degree Committee (appointed by Provost)
1999 - 2001	Council on Educational Policy (elected by faculty)
1998 - 2003	HHMI Steering Committee (appointed by Provost)
1998 - 1999	Cultural Diversity Task Force (appointed by Provost)
	Equal Opportunity Committee (appointed by Provost)
1996 - 1997	Academic adviser for students with special needs (appointed by Provost)
	Acting Director, HHMI program
1995 - 1997	Council on Educational Policy (elected by faculty)
1994 - 1995	Committee on Research Ethics (appointed by Provost)
	Task Force on Academic Support (appointed by Provost)
1992 - 1995	HHMI Steering Committee (appointed by Provost)
	COFP Faculty Task Force on Faculty workload (appointed by Provost)
1992 - 1995	Adviser, Pew Foundation Minority Fellows (appointed by Provost)
1991 - 1992	Steering Committee for ALANA, Tri-College faculty of color professional alliance (appointed by Provost)
1990 - 2003	Academic Adviser for pre-majors (Dean of Students)
1990 - 1992	Black and Minority Concerns Committee (appointed by Provost)
1990 - 1992	Member, ALANA (Tri-College faculty of color) (appointed by Provost)
1990 - 1991	AAUP, Executive Committee 1990-91 (elected by faculty)

Interdepartmental service/participation

2019 - 2020	Thesis committee, Biochemistry research student
2018	Interviewer (faculty panel), Interim Dean of Students search
2016	Career Services External Committee interviewee
1995, 2003, 2006, 2014, 2016	Interviewer for tenure track positions (Chemistry/Biochemistry)
2003 - 2014	Health and medicine working group (convened by Ellen Magenheim, Economics)
2001 - 2012	Bioethics working group (convened by Amy Vollmer)
1999 - 2002	Biochemistry working group (convened by Amy Vollmer)
1996 - 1997	Biochemistry curriculum review committee (Chemistry Dept.)
1993	Interviewer for tenure track Asian-American literature position (English Dept.)
1990 - 1996	Comprehensive examiner, thesis reader for biochemistry (Chemistry Dept.)

Biology Department

2020	Coordinator, Biology 199: Senior Honors Study
2019	Course director, Biology 001: Cellular and Molecular Biology
2017	Course director, Biology 001: Cellular and Molecular Biology
2017	Coordinator, Themes in Biology lecture series (senior comprehensive)
2013 - 2016	Chair (appointed by Provost)
2013	Coordinator, Themes in Biology lecture series (senior comprehensive)
2012	Co-coordinator, Themes in Biology lecture series (senior comprehensive)
2011	Chair, Developmental Biology Search Committee
1992 - 2011	HHMI committee member (unless on leave)
2010 - 2011	Mentor, Sarah Hews, Bio-Math post doc (HHMI-funded)
2008	Bio Math search committee (HHMI supported)
2007	Course director: Biology 001: Cellular and Molecular Biology
2006	Coordinator, Themes in Biology lecture series (senior comprehensive)

2003 - 2005 Chair (appointed by Provost)
2003, 2004 Convener, Alumni Panels on Careers in Biology
1999 - 2005 Honors adviser and convener of Senior Honors Study in Biology
1999 Course director: Biology 001: Cellular and Molecular Biology
1996 - 1997; 1999 - 2000; 2002 - 2003 Budget Committee
1998 - 1999; 2001 - 2002 Bios club adviser
2000 - 2003 Science Center Construction - Building users group Biology representative
1995 Course director: Biology 001: Cellular and Molecular Biology
1993; 1997; 2002; 2005; 2009; 2016 Microbiology leave replacement, Search chair
1994; 1996 Laboratory technician, search committee
1995 Tenure track cell biologist, search committee
1993 Tenure track vertebrate physiologist, search committee
1995 - 1996 Social committee
1991 Course director: Biology 001: Cellular and Molecular Biology
1991 - 1993; 1994 - 1995 Curriculum committee
1992 Coordinator for Senior Evolution Seminar
1990 - 1991 Handbook committee
1990 - present (unless on leave) Academic advisor

Updated 22 May 2020