

Dr. Eric V. Stabb

Professor and Associate Head, Department of Microbiology, University of Georgia
258-B Biological Sciences, Athens, GA 30602
(706)-542-2414, estabb@uga.edu

Education

- 1997 Ph.D. in Bacteriology
University of Wisconsin-Madison
- 1990 B.S. with distinction in Molecular Biology and Philosophy
University of Wisconsin-Madison

Professional Experience

- 2012-present Professor, Department of Microbiology, University of Georgia (UGA). Research Focus: The bioluminescent marine bacterium *Vibrio fischeri*. Research topics include symbiotic interactions of *V. fischeri* with *Euprymna scolopes*, inter- and intraspecies signaling, regulation and role of bioluminescence, *V. fischeri* plasmids and genomics, and application of genetic techniques in *V. fischeri* and other marine bacteria.
- 2014-2015 Visiting Professor, Handelsman Lab, Department of Molecular, Cellular, and Developmental Biology, Yale University. Mentored personnel during Dr. Handelsman's service at White House Office of Science and Technology Policy.
- 2007-2012 Associate Professor, Department of Microbiology, UGA
- 2001-2007 Assistant Professor, Department of Microbiology, UGA
- 1997-2001 Postdoctoral Fellow with Professor Edward G. Ruby, Kewalo Marine Laboratory, University of Hawai'i. Focus: *Vibrio fischeri*-*Euprymna scolopes* symbiotic interactions.
- 1991-1997 Graduate Research Assistant with Professor Jo Handelsman. Elucidated mechanisms of resistance to zwittermixin A in *Escherichia coli*, and described populations of genetically diverse zwittermixin A-producing *Bacillus* strains from soils and plant roots.
- 1988-1990 Undergraduate Researcher with Professor Timothy J. Donohue. Examined maturation of c-type cytochromes. Developed molecular genetic tools in *Rhodobacter sphaeroides*.

Awards and Honors

- 2015 (also 2006, 2012, 2013) Acknowledged by UGA alumni in "Thank a Teacher" Program
- 2014 Margaret Green Award for outstanding teaching of microbiology, Southeast Branch ASM
- 2011 UGA Master Award for Excellence in Undergraduate Research Mentoring
- 2009 Finalist, UGA Graduate School Outstanding Graduate Student Mentoring Award
- 2008 Accepted UGA Embracing Diversity Award on behalf of Microbiology Department
- 2004 National Science Foundation (NSF) CAREER early investigator award
- 1999-2001 National Institutes of Health, Postdoctoral National Research Service Award
- 1996 Gamma Sigma Delta inductee
- 1991-1996 Howard Hughes Medical Institute Predoctoral Fellow
- 1991 NSF Predoctoral Fellowship (awarded but declined)
- 1990-1991 National Institutes of Health Molecular and Cellular Biology Training Grant Fellow
- 1989 Phi Beta Kappa inductee
- 1988 NSF Research Experience For Undergraduates Award

Significant Elected and Administrative Positions

- Associate Head, Microbiology Department (2012-2014, 2015-present)
- Microbiology Graduate Program Coordinator (2011-2014)
- Councilor (2014), Chair (2013), Chair elect (2012), ASM General Microbiology Division (Div I)
- Co-Chair, 5th and 6th ASM Conference on Cell-Cell Communication in Bacteria (2014 & 2017)
- UGA University Council - Arts & Sciences Representative (2011-2014)
- President (2009-2010) and Senator (2007-2009), UGA College of Arts and Sciences Faculty Senate

Memberships

- American Society for Microbiology (ASM)
- International Symbiosis Society
- American Association for the Advancement of Science

Publications ([Google Scholar link](#))

Journals:

- Stulberg, E., G.L. Lozano, J.B. Morin, H. Park, E. G. Baraban, C. Mlot, C. Heffelfinger, G. M. Phillips, J.S. Rush, A.J. Phillips, N.A. Broderick, M.G. Thomas, **E. V. Stabb**, J. Handelsman. 2016. Genomic and secondary metabolite analyses of *Streptomyces* sp. 2AW provide insight into the evolution of the cycloheximide pathway. *Frontiers in Microbiology* (In Press)
- Kimbrough, J.H. and **E.V. Stabb**. 2015. Antisocial *luxO* mutants provide a stationary-phase survival advantage in *Vibrio fischeri* ES114. *Journal of Bacteriology*. 198:673-687
- Dunn, A.K., B.A. Rader, **E.V. Stabb**, and M.J. Mandel 2015. Regulation of bioluminescence in *Photobacterium leiognathi* strain KNH6. *Journal of Bacteriology* 197:3676-3685
- Colton, D.M., J.L. Stoudenmire and **E.V. Stabb**. 2015. Growth on glucose decreases cAMP-CRP activity while paradoxically increasing intracellular cAMP in the light-organ symbiont *Vibrio fischeri*. *Molecular Microbiology* 97:1114-1127
- Colton, D.M., **E.V. Stabb**, and S.J. Hagen. 2015. Modeling analysis of signal sensitivity and specificity by *Vibrio fischeri* LuxR variants. *PLoS One* 10:e0126474
- Septer, A.N., J.L. Bose, A. Lipzen, J. Martin, C. Whistler, and **E.V. Stabb**. 2015. Bright luminescence of *Vibrio fischeri* aconitase mutants reveals a connection between citrate and the Gac/Csr regulatory system. *Molecular Microbiology* 95: 283-296
- Kimbrough, J.H. and **E.V. Stabb**. 2013. Substrate specificity and function of the pheromone receptor AinR in *Vibrio fischeri* ES114. *Journal of Bacteriology* 195:5223-5232
- Lyell, N.L., D.M. Colton, J.L. Bose, M.P. Tumen-Velasquez, J.H. Kimbrough, and **E.V. Stabb**. 2013. Cyclic AMP-receptor protein regulates pheromone-mediated bioluminescence at multiple levels in *Vibrio fischeri* ES114. *Journal of Bacteriology* 195:5051-5063
- Lyell, N.L. and **E.V. Stabb**. 2013. Symbiotic characterization of *Vibrio fischeri* ES114 mutants that display enhanced luminescence in culture. *Applied and Environmental Microbiology* 79:2480-2483
- Septer, A.N., N.L. Lyell, and **E.V. Stabb**. 2013. The iron-dependent regulator Fur controls pheromone-signaling systems and luminescence in the squid symbiont *Vibrio fischeri* ES114. *Applied and Environmental Microbiology* 79:1826-1834
- Septer, A.N. and **E.V. Stabb**. 2012. Coordination of the Arc regulatory system and pheromone-mediated positive feedback in controlling the *Vibrio fischeri lux* operon. *PLoS One* 7:e49590
- Dailey, H.A., A.N. Septer, L. Daugherty, D. Thames, S. Gerdes, **E.V. Stabb**, A.K. Dunn, J.D. Phillips, and T.A. Dailey. 2011. The *Escherichia coli* protein YfeX functions as a peroxidase and is not a heme dechelataase. *MBio* 2:e00248-11
- Septer, A.N., Y. Wang, E.G. Ruby, **E.V. Stabb**, and A.K. Dunn. 2011. The haem-uptake gene cluster in *Vibrio fischeri* is regulated by Fur and contributes to symbiotic colonization. *Environmental Microbiology* 13:2855-2864
- Phillips, N.J., D.M. Adin, **E.V. Stabb**, M.J. McFall-Ngai, M.A. Apicella, and B.W. Gibson. 2011. The lipid A from *Vibrio fischeri* LPS: A unique structure bearing a phosphoglycerol moiety. *The Journal of Biological Chemistry* 286:21203-21219
- Bose, J.L., M.S. Wollenberg, D.M. Colton, M.J. Mandel, A.N. Septer, A.K. Dunn, and **E.V. Stabb**. 2011. Contribution of rapid evolution of the *luxR-luxI* intergenic region to the diverse bioluminescence output of *Vibrio fischeri* strains isolated from different environments. *Applied and Environmental Microbiology* 77:2445-2457
- Altura, M.A., **E. Stabb**, W. Goldman, M. Apicella, and M.J. McFall-Ngai. 2011. Attenuation of host NO production by MAMPs potentiates development of the host in the squid–vibrio symbiosis. *Cellular Microbiology* 13:527-537
- Lyell, N.L., A.K. Dunn, J.L. Bose, and **E.V. Stabb**. 2010. Bright mutants of *Vibrio fischeri* ES114 reveal conditions and regulators that control bioluminescence and expression of the *lux* operon. *Journal of Bacteriology* 192:5103-5114
- Dunn, A.K., A.K. Karr, Y. Wang, A.R. Batton, E.G. Ruby, **E.V. Stabb**. 2010. The alternative oxidase (AOX) gene in *Vibrio fischeri* is controlled by NsrR and upregulated in response to nitric oxide stress. *Molecular Microbiology* 77:44-55 (Featured in Commentary: Spiro, S., 2010 *Mol Microbiol.* 77:6-10)

- Septer, A.N., J.L. Bose, A.K. Dunn, and **E.V. Stabb**. 2010. FNR-mediated regulation of bioluminescence and anaerobic respiration in the light-organ symbiont *Vibrio fischeri*. *FEMS Microbiology Letters* 306: 72-81
- Mandel, M.J., M.S. Wollenberg, **E.V. Stabb**, K.L. Visick, and E.G. Ruby. 2009. A single regulatory gene is sufficient to alter bacterial host range. *Nature* 458: 215-218
- Troll, J.V., D.M. Adin, A.M. Wier, N. Paquette, N. Silverman, W.E. Goldman, F.J. Stadermann, **E.V. Stabb**, and M.J. McFall-Ngai. 2009. Peptidoglycan induces loss of a nuclear peptidoglycan recognition protein during host tissue development in a beneficial animal-bacterial symbiosis. *Cellular Microbiology* 11:1114-1127
- Adin, D.M., J.T. Engle, W.E. Goldman, M.J. McFall-Ngai, and **E.V. Stabb**. 2009. Mutations in *ampG* and lytic transglycosylase genes affect the net release of peptidoglycan monomers from *Vibrio fischeri*. *Journal of Bacteriology* 191:2012-2022 (Featured in Commentary: Nyholm S.V., 2009 *J. Bacteriol.* 191:1997-1999)
- Lyell, N.L., A.K. Dunn, J.L. Bose, S.L. Vescovi, and **E.V. Stabb**. 2008. Effective mutagenesis of *Vibrio fischeri* using hyperactive mini-Tn5 derivatives. *Applied and Environmental Microbiology* 74:7059-63
- Dunn, A.K. and **E.V. Stabb**. 2008. Genetic analysis of trimethylamine *N*-oxide reductases in the light-organ symbiont *Vibrio fischeri* ES114. *Journal of Bacteriology* 190:5814-5823
- Adin, D.M., K.L. Visick, and **E.V. Stabb**. 2008. Identification of a cellobiose utilization gene cluster with cryptic β -galactosidase activity in *Vibrio fischeri*. *Applied and Environmental Microbiol.* 74:4059-69.
- Bose, J.L., C.S. Rosenberg, and **E.V. Stabb**. 2008. Effects of *luxCDABEG* induction in *Vibrio fischeri*: Enhancement of symbiotic colonization and conditional attenuation of growth in culture. *Archives of Microbiology* 190:169-183
- Mandel, M.J., **E.V. Stabb**, and E.G. Ruby. 2008. Comparative genomics-based investigation of resequencing targets in *Vibrio fischeri*: focus on point miscalls and artefactual expansions. *BMC Genomics* 9:138
- Adin, D.M., N.J. Phillips, B.W. Gibson, M.A. Apicella, E.G. Ruby, M.J. McFall-Ngai, D.B. Hall, and **E.V. Stabb**. 2008. Characterization of *htrB* and *msbB* mutants of the light organ symbiont *Vibrio fischeri*. *Applied and Environmental Microbiology* 74:633-644
- Dunn, A.K. and **E.V. Stabb**. 2008. The twin arginine translocation system contributes to symbiotic colonization of *Euprymna scolopes* by *Vibrio fischeri*. *FEMS Microbiology Letters* 279:251-258.
- Bose, J.L., U. Kim, W. Bartkowski, R.P. Gunsalus, A.M. Overley, N.L. Lyell, K.L. Visick, and **E.V. Stabb**. 2007. Bioluminescence in *Vibrio fischeri* is controlled by the redox-responsive regulator ArcA. *Molecular Microbiology* 65:538-553
- Walker, E.L., J.L. Bose, and **E.V. Stabb**. 2006. Photolyase confers resistance to UV light but does not contribute to the symbiotic benefit of bioluminescence in *Vibrio fischeri* ES114. *Applied and Environmental Microbiology* 72:6600-6606
- Dunn, A.K., D.S. Millikan, D.M. Adin, J.L. Bose, and **E.V. Stabb**. 2006. New *rfp*- and pES213-derived tools for analyzing symbiotic *Vibrio fischeri* reveal patterns of infection and *lux* expression *in situ*. *Applied and Environmental Microbiology* 72:802-810
- Sawabe, T., Y. Fukui, and **E.V. Stabb**. 2006. Simple conjugation and outgrowth procedures for tagging vibrios with GFP, and factors affecting the stable expression of the *gfp* tag. *Letters in Applied Microbiology* 43:514-522
- Dunn, A.K. and **E.V. Stabb**. 2005. Culture-independent characterization of the microbiota of the antlion *Myrmeleon mobilis* (Neuroptera: Myrmeleontidae). *Applied and Environmental Microbiology* 71:8784-8794
- Dunn, A.K., M.O. Martin, and **E.V. Stabb**. 2005. Characterization of pES213, a small mobilizable plasmid from *Vibrio fischeri*. *Plasmid* 54:114-134
- Ruby, E.G., M. Urbanowski, J. Campbell, A. Dunn, M. Faini, R. Gunsalus, P. Lostroh, C. Lupp, J. McCann, D. Millikan, A. Schaefer, **E. Stabb**, A. Stevens, K. Visick, C. Whistler, and E.P. Greenberg. 2005. Complete genome sequence of *Vibrio fischeri*: a symbiotic bacterium with pathogenic congeners. *Proceedings of the National Academy of Sciences, USA* 102:3004-3009
- Burgents, J.E., L.E. Burnett, **E.V. Stabb**, and K.G. Burnett. 2005. Localization and bacteriostasis of *Vibrio* introduced into the Pacific white shrimp, *Litopenaeus vannamei*. *Developmental and Comparative Immunology* 29:681-691

- Koropatnick, T.A., J.T. Engle, M.A. Apicella, **E.V. Stabb**, W.E. Goldman, and M.J. McFall-Ngai. 2004. Microbial factor-mediated development in a host-bacterial mutualism. *Science* 306: 1186-1188
- Stabb, E.V.**, M.S. Butler, and D.M. Adin. 2004. Correlation between osmolarity and luminescence of symbiotic *Vibrio fischeri* strain ES114. *Journal of Bacteriology* 186:2906-2908
- McCann J., **E.V. Stabb**, D.S. Millikan, and E.G. Ruby. 2003. Population dynamics of *Vibrio fischeri* during infection of *Euprymna scolopes*. *Applied and Environmental Microbiology* 69:5928-5934
- Stabb, E.V.** and E.G. Ruby. 2003. Contribution of *pilA* to competitive colonization of *Euprymna scolopes* by *Vibrio fischeri*. *Applied and Environmental Microbiology* 69:820-826
- Stabb, E.V.** and E.G. Ruby. 2002. RP4-based plasmids for conjugation between *Escherichia coli* and members of the Vibrionaceae. *Methods in Enzymology* 358:413-426
- Stabb, E.V.**, K.A. Reich, and E.G. Ruby. 2001. *Vibrio fischeri* genes *hvnA* and *hvnB* encode secreted NAD⁺ glycohydrolases. *Journal of Bacteriology* 183:309-317
- Nyholm, S.V., **E.V. Stabb**, E.G. Ruby, and M.J. McFall-Ngai. 2000. Establishment of an animal-bacterial association: recruiting symbiotic vibrios from the environment. *Proceedings of the National Academy of Sciences, USA* 97:10231-10235
- Stabb, E.V.** and J. Handelsman. 1998. Genetic analysis of zwittermicin A resistance in *Escherichia coli*: Effects on membrane potential and RNA polymerase. *Molecular Microbiology* 27:311-322
- Silo-Suh, L., **E.V. Stabb**, S.J. Raffel, and J. Handelsman. 1998. Target range of zwittermicin A, an aminopolyol antibiotic from *Bacillus cereus*. *Current Microbiology* 37:6-11
- Raffel, S.J., **E.V. Stabb**, J.L. Milner, and J. Handelsman. 1996. Genotypic and phenotypic analysis of zwittermicin A-producing strains of *Bacillus cereus*. *Microbiology* 142:3425-3436
- Stabb, E.V.**, L.M. Jacobson, and J. Handelsman. 1994. Zwittermicin A-producing strains of *Bacillus cereus* from diverse soils. *Applied and Environmental Microbiology* 60:4404-4412
- Stabb, E.V.**, L.M. Jacobson, M. Janowiak, and J. Handelsman. 1994. Biological control with zwittermicin A-producing strains of *Bacillus cereus* from diverse soils. *Molecular Ecology* 3: 608-609
- Brandner, J.P., **E.V. Stabb**, R. Temme, and T.J. Donohue. 1991. Regions of *Rhodobacter sphaeroides* cytochrome *c*₂ required for export, heme attachment and function. *Journal of Bacteriology* 173:3958-3964

Reviews and Book Sections:

- Colton, D.M. and **E.V. Stabb**. 2016. Rethinking the roles of CRP, cAMP, and sugar-mediated global regulation in the *Vibrionaceae*. *Current Genetics* 62:39-45
- Stabb, E.V.** and Z. Flores-Cruz. 2013. Who turned on the lights? What the regulation of bacterial bioluminescence tells us about this and other bacterial group behaviors. *The Biochemist* 35:18-23
- Stabb, E.V.** and K.L. Visick. 2013. *Vibrio fischeri*: A Bioluminescent light-organ symbiont of the bobtail squid *Euprymna scolopes*. In E. Rosenberg, E.F. DeLong, E. Stackebrandt, S. Lory, and F. Thompson (eds.), *The Prokaryotes 4th edition*. Springer-Verlag Berlin Heidelberg, pp. 497-532
- Stabb, E.V.** and D.S. Millikan. 2009. Is the *Vibrio fischeri*-*Euprymna scolopes* symbiosis a defensive mutualism? In J.F. White, Jr. and M.S. Torres (eds.), *Defensive Mutualism in Microbial Symbiosis*. Taylor and Francis, Boca Raton, pp. 85-98
- Stabb, E.V.**, A. Schaefer, J.L. Bose, and E.G. Ruby. 2008. Quorum Signaling and Symbiosis in the Marine Luminous Bacterium *Vibrio fischeri*, In S.C. Winans and B.L. Bassler (eds.), *Chemical Communication Among Microbes*. ASM Press, Washington, D.C., pp. 233-250
- Dunn, A.K. and **E.V. Stabb**. 2007. Beyond quorum sensing: the complexities of prokaryotic parliamentary procedures. *Analytical and Bioanalytical Chemistry*. 387:391-398
- Cloud-Hansen, K.A., S.B. Peterson, **E.V. Stabb**, W.E. Goldman, M.J. McFall-Ngai, and J. Handelsman. 2006. Breaching the Great Wall: Peptidoglycan and Microbial Interactions. *Nature Reviews Microbiology* 4:710-716
- Stabb, E.V.** 2006. The *Vibrio fischeri*-*Euprymna scolopes* light organ symbiosis. In F. L. Thompson, B. Austin and J. Swings (eds.), *The biology of Vibrios*. ASM Press, Washington D.C., pp. 204-218
- Stabb, E.V.** 2005. Shedding light on the bioluminescence "paradox". *ASM News* 71:223-229
- Stabb, E.V.**, K.L. Visick, D.S. Millikan, A.A. Corcoran, L. Gilson, S.V. Nyholm, M. McFall-Ngai and E.G. Ruby. 2001. The *Vibrio fischeri*-*Euprymna scolopes* symbiosis: A model marine animal-bacteria interaction. In N.K. Saxena (ed.), *Recent Advances in Marine Science and Technology*, 2000. PACON International, Honolulu, Hawai'i. pp. 269-277

Handelsman, J. and **E.V. Stabb**. 1996. Biocontrol of soilborne plant pathogens. *Plant Cell* 8:1855-69
 Stohl, E.A., J. Handelsman, and **E.V. Stabb**. 1996. Zwittermicin A and biological control of oomycete pathogens. *In* G. Stacey, B. Mullen and P. Gresshoff (eds.), *Advances in molecular genetics of plant-microbe interactions*, Vol. 4. Kluwer Academic Publishers, Dordrecht, Netherlands. pp. 475-9

Patents:

Handelsman, J., S.J. Stewart, and **E.V. Stabb**. Issue date Mar. 7, 2000. *Bacillus cereus* strain W35. U.S. Patent Number 6,033,659.
 Handelsman, J., S.J. Stewart, and **E.V. Stabb**. Issue date Feb. 29, 2000. *Bacillus cereus* strain Z8. U.S. Patent Number 6,030,610.
 Handelsman, J., S.J. Stewart, and **E.V. Stabb**. Issue date Dec. 7, 1999 Disease suppression by novel *Bacillus cereus* strain SOY130. U.S. Patent Number 5,998,196.
 Handelsman, J., L.M. Jacobson, and **E.V. Stabb**. Issue date April 7, 1998. *Bacillus cereus* strain DGA34. U.S. Patent Number 5,736,382.
 Handelsman, J., **E.V. Stabb**, L.M. Jacobson, R.M. Goodman, D.W. Johnson, and K.P. Smith. Issue date Dec. 23, 1997. *Bacillus cereus* strain MS1-9. U.S. Patent Number 5,700,462.
 Handelsman, J., J.L. Milner, E.A. Stohl, S.J. Stewart, and **E. Stabb**. Issue date April 8, 1997. Zwittermicin resistance gene and biocontrol bacteria with the gene. U.S. Patent Number 5,618,692.
 Handelsman, J., L.M. Jacobson, D.W. Johnson, K.P. Smith, R.M. Goodman, and **E.V. Stabb**. Issue date Sept. 3, 1996. *Bacillus cereus* strain AS4-12. U.S. Patent Number 5,552,138.
 Handelsman, J., L. Halverson, **E.V. Stabb**, B. Lethbridge, and L. Silo. Issue date Aug. 6, 1996. Method of identifying *Bacillus cereus* having biocontrol activity. U.S. Patent Number 5,543,301.

Invited Workshop Speaker and/or Participant (host/organizer): ** -highlights national meeting
 UGA Academic Affairs Faculty Symposium: The Teaching/Research Nexus: Building Effective Bridges, Unicoi State Park, March 2012

- ** Biology Research Experience for Undergraduates Workshop, NSF, Arlington VA, Mar 2010
- ** NSF/AAAS Workshop on Transforming Undergraduate Biology Education: Mobilizing the Community for Change, Washington DC, July 2009
- ** NSF Workshop on Molecular Communication/Biological Communication Technology, Arlington VA, Feb 2008 (Dr. Michael Simpson)
- ** Marine Eco-Genomics Workshop, NSF/Centers Development Initiative and Medical University of South Carolina, (Rand Haley [CDI] and Dr. Eric Lacy [MUSC]), Charleston, Feb 2006

Invited Seminars (host): ** -highlights national meeting

- University of Tennessee, Dept. of Microbiology, 6/22/2015 (Dr. Alison Buchan)
- Dartmouth, Dept. of Microbiology and Immunology, 5/11/2015 (Mr. Kurt Dahlstrom, student)
- University of Connecticut, Dept. of Molecular and Cell Biology, 3/3/2015 (Dr. Spencer Nyholm)
- University of Tennessee, Dept. of Microbiology, 2/9/2015 (Dr. Liz Fozo)
- Northwestern University, Dept. of Microbiology-Immunology, 11/25/2014 (Dr. Mark Mandel)
- ** General Meeting, American Society for Microbiology, Boston, 5/18/2014 (session chair; substitute speaker)
 Emory University, Population Biology, Ecology, and Evolution, 10/14/2011 (Dr. Nicole Gerardo)
 Georgia Institute of Technology, Dept. of Biology, 10/6/2011 (Dr. Brian Hammer)
 Georgia State University, Dept. of Biology, 9/30/2011 (Dr. Nicole Lopanik)
 Georgia State University, Biology Honor Society (tri-Beta), 10/28/2010 (Ms. Vonee Hemans)
- ** eHormone 2010: Environmental Signaling: Exploring Multiple Dimensions, Tulane Univ. New Orleans, 10/21/2010
 Cal Polytechnic State Univ., San Luis Obispo, Dept. of Biology, 10/23/2009 (Dr. Pat Fidopiastis)
- ** General Meeting, American Society for Microbiology, Philadelphia, 5/19/2009
- ** ASM Beneficial Microbes Conference, San Diego, 10/15/2008
 University of Wisconsin-Madison, Dept. of Bacteriology, 4/3/2008 (Dr. Katrina Forest)
 Southeastern Branch American Society for Microbiology Meeting, Auburn University, 11/9/2007
 University of Florida, Dept. of Microbiology and Cell Science, 10/22/2007 (Dr. Jamie Foster)
 Oak Ridge Natl. Lab., Center for Nanophase Materials Sciences, 8/20/2007 (Dr. Michael Allen)
 Valdosta State Univ., Science Seminar Series, 1/18/2007 (Dr. Archana Bhasin, Biology Dept)

University of Tennessee, Dept. of Microbiology, 11/13/2006 (Drs Erik Zinser and Alison Buchan)
 University of Alabama-Birmingham, Dept of Biology, 11/3/2006 (Dr. Robert Thacker)
 University of Nevada-Las Vegas, Dept. of Biological Sci., 10/14/2005 (Dr. Eduardo Robleto)
 Loyola University Chicago, Dept. of Microbiology and Immunol., 9/22/2005 (Dr. Karen Visick)
 Georgia State University, Dept. of Biology, 1/28/2005 (Dr. Eric Gilbert)
 ** General Meeting, American Society for Microbiology, New Orleans, 5/26/2004
 Xavier University of Louisiana, Dept. of Biology, 1/28/2004 (Dr. Roldan Valverde)
 Auburn University, Dept. of Biological Sciences, 1/17/2003 (Dr. Laura Suh)
 Grice Marine Laboratories and College of Charleston, 10/4/2002 (Dr. Karen Burnett)
 Georgia Institute of Technology, Dept. of Biology, 8/30/2002 (Dr. Patty Sobecki)

Professional Service

- Editor, *Applied and Environmental Microbiology* (2016-present)
- Editorial board, *Journal of Bacteriology* (2016-present)
- Editorial board, *Applied and Environmental Microbiology* (2005-2016)
- Grant Review Panelist, National Science Foundation, 2006, 2009, and 2013
- Grant Review Panelist, National Institutes of Health SCORE program, 2008 and 2009
- Contributing Member, Faculty of 1000, Cellular Microbiology and Pathogenesis, 2005-2010
- *Ad hoc* reviewer for thirty-five journals (2001-2016)
- *Ad hoc* reviewer for fifteen NSF programs (2004-2016)
- *Ad hoc* reviewer promotion/tenure applications: ten candidates, eight research universities
- *Ad hoc* reviewer Graduate Women in Science fellowship program
- *Ad hoc* reviewer for international funding agencies: Research Foundation-Flanders 2011, INSERM (French Institute for Medical Research) 2009, the Singapore National Medical Research Council 2006, and the US-Israel Binational Science Foundation 2005

Teaching:

- Instructor, Yale University, MCDB 123, Genes and Environment, 2015
- Course designer & Instructor, UGA, Microbiol. 4500/6500 Bacterial Symbioses, 2003-2016
- Co-Instructor, UGA, Microbiol. 4090/6090, Prokaryotic Biology (7 lectures), 2011-2016
- Co-Instructor, UGA, Biol. 1108, Principles of Biology II (8 lectures), 2010
- Course designer & Instructor, UGA, Microbiol. 8700-Special Topics: Bacterial Symbioses, 2002
- Guest lecturer, seven additional courses, University of Georgia system, 2001-present
- Guest lecturer, U. Hawai'i, Prokaryotic Genetics (1997) and Microbial Physiology (1999)
- Tutor, U. Wisconsin Athletic Department, Prokaryotic Microbiology, 1993
- Teaching assistant, U. Wisc., Prokaryotic Micro. Lab and Physiology of Microorganisms Lab, 1992

Other Contributions to Mentoring and Education:

- Advisor for eight graduate students and two postdoctoral researchers since 2001
- Directed research of twelve additional rotating grad students and 35 undergrads since 2001
- Undergrad and grad students awarded competitive travel funds & research or presentation awards
- PI, co-coordinator, Summer REU site program 2008-2013
- Participating faculty, summer REU program, including instruction on poster prep, 2002-2013
- Initiated and taught "Entering Mentoring" program for graduate students and postdocs, 2008-2013
- Served on 43 graduate student committees 2001-present
- Graduate Affairs Committee, UGA Microbiology Dept., 2002-2004, 2006-2014
- Graduate Student Recruitment Committee, UGA Microbiology Dept. 2002-2005
- Graduate Program Coordinator, UGA Microbiology Dept. 2011-2014

Summary of Extramural Support:**Current Extramural Support:**

- PI, NSF (IOS), *Collaborative Research: Experimental Evolution of Peptidoglycan in the Bacterial Symbiont Vibrio fischeri*, 2016-2019, Budget for Stabb Lab \$419,838 total costs; [IOS-1557964]

Previous Extramural Support:

- PI, NSF (IOS), *Sensing more than a quorum: The role of pheromones in the light-organ symbiont Vibrio fischeri*, 2011-2015, \$503,257 total costs; [IOS-1121106]
- PI, NSF (MCB), *5th ASM Conference on Cell-Cell Communication in Bacteria, October 2014 in San Antonio, Texas*, 2014-2015, \$9,100 total costs; [MCB-1440104]
- Co-PI, NSF (DBI), *Research Experience for Undergraduates Site Program: Research in Prokaryotic biology*, 2011-2014, \$313,482 total costs
- Co-PI, NSF, *Collaborative Research: Use of genome-enabled tools to understand symbiosis*, 2009-2012, Budget for Stabb lab \$57,114 total costs [IOS-0841480]
- Co-PI, NSF, *Collaborative Research: Iron limitation, carbon metabolism and siderophore production in marine bacteria – a systems biology approach*, 2009-2012, Budget for Stabb lab \$134,382 total costs [OCE-0929081]
- PI, NSF, *Research Experience for Undergraduates Site Program: Research in Prokaryotic biology*, 2008-2011, \$278,148 total costs [DBI-0755182]
- PI, NSF, *CAREER: Symbiotic Role of Bacterial Bioluminescence*, 2004-2009, \$567,000 total costs (including supplements) [MCB-0347317]
- Co-investigator, National Institutes of Health, *Vibrio fischeri as a model of bacterial colonization*, R01 AI50661, (PI: Margaret McFall-Ngai, University of Wisconsin), 2001-2006 and 2007-2009, Budget for Stabb lab \$396,950 total costs [R01 AI 50661]
- Collaborator, NSF, *Mobilome Genomics: Large Plasmids of Diverse Prokaryotic Groups* (PI Anne Summers) 2007-2008, Budget for E. Stabb \$14,500 total costs [EF-06-26940]
- PI, Army Research Office, *Quorum-sensing inhibitors present in complex microbiological media*. 2006-2007, \$50,000 total costs [49549-LS-II]
- Collaborating researcher, NSF, *Hypercapnic hypoxia impacts shrimp immune defenses against bacterial pathogens* (Co-PI's Karen Burnett and Louis Burnett, College of Charleston). Budget for E. Stabb, 2002-2004, \$33,310 total costs [IBN-0212921]

Competitive External Support for DNA Sequencing Projects:

- PI, Department of Energy/Joint Genome Institute, Community Sequencing Program; *Identifying second-site suppressor mutations in Vibrio fischeri that restore aerobic growth in a mutant lacking the TCA cycle enzyme aconitase (AcnB)*, funded resequencing of wild-type *V. fischeri* genome as well as six mutant strains. 2009-2010. Value ~\$25,000 [CSP-65]
- Co-PI (with Edward Ruby), Gordon and Betty Moore Foundation; *Niche-specific characteristics revealed by genome sequencing of strains in the Vibrio fischeri/Vibrio logei group*, funded 8x sequencing coverage of one *V. fischeri* strain's genome. 2005-2006. Value ~\$100,000

Fellowship/Award Support for Advisees and Postdoctoral Mentees:

- Sponsor/PI, NSF; Dr. Zomary Flores-Cruz was awarded a Postdoctoral Research Fellowship, 2010-2013, \$189,000 total costs [DBI-0905813]
- Mentor/PI; Ms. Alecia Septer was awarded a Pre-doctoral National Defense Science and Engineering Graduate Fellowship through the Army Research Office, 2008-2011, (full stipend, tuition, and benefits)
- Advisor; Ms. Alecia Septer was awarded a competitive ARCS foundation Fellowship (\$7,500 per year)
- Advisor; Ms. Deanna Colton, Georgia Oceans and Health Initiative Fellowship, \$21,000 stipend, \$8000 supplies and travel support, 2010-2011
- Sponsor/PI, NSF; Dr. Anne Dunn was awarded a Postdoctoral Fellowship in Microbial Biology, 2003-2005, \$100,000 total costs [DBI-0301367]

Current laboratory personnel:

- R. M. (Mark) Jones; graduate student, PhD program (2010-present)
- Julie Stoudenmire; graduate student, PhD program (2011-present)
- Marisa Delgado; undergraduate hourly (2016-present)
- Alizah Garvin; undergraduate hourly/work study (2016-present)

Former Group Members (full-time personnel for >6 months):

- J. Henry (Hank) Kimbrough; 2011-2015, Ph.D. student; left as postdoc, Josie Chandler, Kansas U
- Deanna Colton; 2007-2014, Ph.D. student; left as adjunct lecturer York Technical College
- Dr. Zomary Flores-Cruz, 2010-2012, postdoc; left as Assistant Professor, U. Puerto Rico
- Dr. Alecia Septer, 2006-2012, Ph.D. student; left as postdoc with Karin Gibbs, Harvard U.; now Assistant Professor, U. North Carolina
- Dr. Noreen Lyell, 2005-2011, Ph.D. student; left as postdoc, Stuart Levy, Tufts U.; now lecturer, MIT
- Dr. Dawn Adin, 2001-2008, Ph.D. student; left as postdoc with Dr. Susan Golden, UCSD; now science writer, DOE
- Dr. Galina Vydryakova, 2008, visiting Fulbright Scholar from the Institute of Biophysics, Siberian Branch-Russian Academy of Science
- Dr. Anne Dunn, 2002-2007, postdoc; left as Assistant Professor, University of Oklahoma
- Dr. Jeffrey Bose, 2002-2007, Ph.D. student; left as postdoc with Dr. Ken Bayles, U. Nebraska, now Assistant Professor, U. Kansas
- Emma Walker, 2005, extended rotation student; Instructor of Biology at Albany State University
- Melissa