

**Curriculum Vitae**  
**Paul Anthony Gulig**

**Current Position:**

Professor, Department Molecular Genetics and Microbiology, 2019-present  
Box 100266, University of Florida College of Medicine  
Gainesville, FL 32610-0266  
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**Previous positions:**

- Assistant Professor, Department Molecular Genetics and Microbiology, 1988-1993
- Associate Professor, Department Molecular Genetics and Microbiology, 1993-2001
- Professor, Department Molecular Genetics and Microbiology, 2001-present
- Associate Dean of Graduate Education, College of Medicine, 2011-2014

**Consulting and Contracting:**

- Advarra, Inc., Institutional Biosafety Committee member, 2017-present

**Research Interests:**

- Development of drugs to overcome  $\beta$ -lactam resistance in *Pseudomonas aeruginosa*

**Education:**

- B.S. (Microbiology), Texas A&M University, College Station, Texas, 1980.
- Ph.D. (Microbiology), University of Texas Southwestern Medical School, Dallas, Texas, 1981-1985. Studies of Outer Membrane Antigens of *Haemophilus influenzae* type b as Potential Vaccine Candidates. Dissertation advisor: Eric J. Hansen, Ph.D.
- Postdoctoral Training: Molecular genetic and pathogenic analysis of the *Salmonella typhimurium* virulence plasmid. Advisor: Roy Curtiss III, Ph.D., Washington University, St. Louis, Missouri, 1985-1988.

**Previous Funding:**

- N.I.H.-N.I.A.I.D. – 5 R33AI119043-05, Countering beta-lactam resistance, 7/17-6/21, \$429,125 (direct), Role - PI.
- University of Florida Opportunity Fund, Identification of Fecal Bacteria with Anti-Clostridium difficile Activities, 6/17-4/21, \$95,000 (total), Role - PI.
- FDA, Study for the Analysis of Vibrio Vulnificus, \$28,377, 7/14- 7/15, Role-PI.
- University of Florida Faculty Enhancement Opportunity award, spring 2013, \$39,219.
- Chambermaid, Inc., Testing of Chambermaid tabletop sterilizer, 12/14-1/15, \$3,071 (total), Role, contractor.
- University of Florida Emerging Pathogens Institute, Molecular Pathogenesis of *Acinetobacter baumannii*, 3/11-6/13, \$64,161 (total), Role - PI.
- Department of Defense subcontract W911SR-09-C-0005, Countermeasures to Biological Threats subcontract: Development and improvement of antigen-based detection of waterborne protozoan infectious agents in capture real time systems, 12/08-6/11, \$178,598 (total) , Role - PI.
- University of Florida Opportunity Fund, Differential laser-induced perturbation spectroscopy, 5/09-4/11, \$10,580 (total), Omenetto (PI), Role - Co-investigator.
- Eisai, Inc. Examining growth of microorganisms in propofol formulations. 6/10-5/11, \$47,598 (total), Role - PI.
- Department of Defense subcontract W911SR-07-C-0084, Rapid sample processing and biosensor detection of biothreat agents, 9/07 – 3/11, \$447,323 (total), Role - PI.

- USDA-CREES 2007-01955, Post harvest treatment of Live Oysters and Investigation of Therapeutic Potential of Biological Controls, 03/08-1/11, \$372,096 (direct), Anita Wright (PI), Role - Co-investigator.
- Intralytix, Inc. (Subcontract with Department of Defense STTR), Bacteriophage therapy for treating *A. baumannii* infected wounds. 2/10-12/10, \$50,000 (total), role - PI.
- USDA-CREES-AREA 2007-01979, Reduction of *Vibrio vulnificus* in oysters by treatment with viruses and Bdellovibrio and Like Organisms, 10/08-08/09, \$62,126 (total), Henry Williams (PI), role – Co- investigator.
- University of Florida Opportunity Fund, Genomic analysis of *Vibrio vulnificus*: Understanding and preventing human disease by understanding lifestyle in mammals, oysters, and biofilms, 5/08-6/09, \$85,000 (total), Role - PI.
- University of Florida Emerging Pathogens Institute, Genomic Sequencing of Environmental Strains of *Vibrio vulnificus*, 5/08-4/09, \$20,000 total costs.
- Department of Defense subcontract W911SR-05-C-0020, Real time/near real time detection of microbial pathogens/toxins associated with food, water, air, and human specimens, March 2006 - May 2009, \$517,316 (total).
- University of Florida College of Medicine, Web/graphics-based teaching of bacterial and parasitic disease in MMID, 5/08-6/09, \$1,774 (total).
- N.I.H.-N.I.A.I.D. - R01-AI056056-01, Molecular pathogenesis of *Vibrio vulnificus*, August 2003-Jan. 2009, \$912,500 (direct).
- Florida Sea Grant, Preliminary genomic sequencing of environmental *Vibrio vulnificus* strain 99-520 DP-B8, 05/01/08-05/31/08, \$5,000 total costs.
- NIH/SBIR Subcontract 5R44GM072142-03, NanoMedex Propofol Microemulsions: Preclinical Studies to FDA IND Application, August 2006-July 2007, \$40,695 (total).
- Department of Defense subcontract DAAD13-00-C-0037, Real Time/Near Real Time Detection of Microbial Pathogens/Toxins Associated with Food, Water, and Surfaces, Dec. 2001 - August 2007, \$1,546,896 (total).
- Department of Commerce, Strategies for decontamination of oysters infected with *Vibrio vulnificus*, March 2001 - November 2004, \$144,299 (Co-PI, PI - Donna H. Duckworth).
- N.I.H.-N.I.A.I.D. - R21 DE015069, Oral and vaginal gene expression by Candida during AIDS. Sept. 2003 - August 2005. Direct costs \$150,000 (Co-PI, PI-Conelius Clancy)
- Johnson and Johnson, Inc., Focused Giving Award, New Targets to Circumvent Emerging Antimicrobial Resistance: Replication of Bacterial Pathogens within Host Cells, July, 1997 - June, 2003, \$255,000.
- American Heart Association - Florida/Puerto Rico Affiliate, Virulence factors involved with vascular pathophysiology in necrotic perivascular infection caused by *Vibrio vulnificus*, July 2000-June 2003, \$118,800.
- U.S.D.A., 99-35201-8606, Are Virulent Strain-Specific DNA Sequences of *Vibrio vulnificus* Essential For Virulence?, Oct. 1999-Dec. 2002, \$129,000.
- American Heart Association - Florida/Puerto Rico Affiliate, (Graduate Fellowship to Angela Starks), Virulence factors contributing to perivascular infection and necrotizing fasciitis caused by *Vibrio vulnificus*, Sept. 2000-August 2002, \$33,500.
- Interstate Shellfish Sanitation Commission, Testing *Vibrio vulnificus* strains for virulence, Jan. 2001 - June 2001, \$10,000.
- Department of Commerce, Use of Bacteriophage for the Decontamination of Oysters Infected with *Vibrio vulnificus*, Oct. 1999-Mar. 2002, \$64,030 (Co-PI, PI - Donna H. Duckworth).
- U.S.D.A., 96-35201-3309, Defining Genomic Sequences Specific to Virulent *Vibrio vulnificus* Strains to Assess Risk, Oct. 1998-Sept. 2000, \$90,000 (Co-PI, PI-Mark L. Tamplin).
- Ross Products Division - Abbott Laboratories, Inhibition of Bacterial Translocation Employing Lactoferrin, Jan. 1998 - Jan. 1999, \$17,600.
- N.I.H. - N.I.A.I.D., R01AI28421, Analysis of the *Salmonella typhimurium* Virulence Plasmid, Oct. 1, 1996-Sept. 30, 1998, \$142,205.

- U.S.D.A., 95-37204-2144, Host defense against virulence plasmid-mediated growth of *Salmonella*, Sept. 1995-August 1998, \$120,000.
- NATO Collaborative Research Grant, Pathogenesis and Prevention of *Salmonella abortus ovis* Infection, July 1993 - June 1995, \$8,194.
- American Heart Association - Florida Affiliate, Graduate Fellowship to Julie A. Rogers, Genetics of Invasive Infection by *Salmonella typhimurium*, July 1992 - June 1995, \$39,000.
- American Heart Association - Florida Affiliate, Grant-In-Aid 92GIA/868, Mechanism of Invasive Infection by *Salmonella typhimurium*, July 1992 - June 1994, \$40,000.
- N.I.H. - N.I.A.I.D., R29 AI28421, Analysis of the *Salmonella typhimurium* Virulence Plasmid, April 1990-March 1996, \$350,000.
- Interdisciplinary Center for Biotechnology Research, University of Florida, Development of a *Salmonella* Vectored Influenza Vaccine, Jan. 1990-June 1990. \$15,000.
- American Heart Association - Florida Affiliate, Grant in Aid #89GIA81, Mechanism of Cardiovascular Infection by *Salmonella* spp., July 1989 - June 1991, \$60,000.
- Interdisciplinary Center for Biotechnology Research, University of Florida, New Initiatives in Biotechnology Research, 1988-1989, \$25,000.

#### **Previous Fellowships and Career Awards:**

- American Heart Association, Established Investigatorship, 93001221, Pathogenesis and Genetics of the *Salmonella typhimurium* Virulence Plasmid, July 1993 - June 1998.
- American Cancer Society, Junior Faculty Research Award, JFRA 280, Jan. 1990 - Dec. 1992.
- Nat. Res. Service Award, N.I.H.-N.I.A.I.D. Postdoctoral Fellowship #AI07168, 1985-1988.
- National Science Foundation Graduate Fellowship SPI-66383, 1981-1984.

#### **Professional Achievements and Service:**

- National Institutes of Health: Special study section ZRG1 IDM-Q (53) R, 2009; Special study section ZAI1 GPJ-M (Enhancement awards for underrepresented minority scientists) 2004; Bacteriology and Mycology Study Sections 1 and/or 2: Ad hoc reviewer 1990-1994, 1999; B&M-1 Temporary Member, 1996; Biological Sciences Study Section 1: Ad hoc reviewer 1992,1994; NIDDK Program Project Site Visit Member, 1997.
- U.S.D.A.: Sustaining Animal Health and Well Being, Ad hoc reviewer: 1994-2000, Panel Member: 1996; Ensuring Food Safety: Ad hoc reviewer 1994, 1997- 2002. Ensuring Food Safety: Panel member 2015.
- National Science Foundation: Ad hoc reviewer, 2006.
- Genome Canada: Ad hoc reviewer, 2005.
- U.S. Department of Commerce, Mississippi-Alabama Sea Grant Program, Reviewer, 2003.
- U.S. Civilian Research and Development Foundation for the Independent States of the Former Soviet Union, Science Center Program. Reviewer, 2004.
- Veterans Administration site visit team, 1988. Ad hoc reviewer, 1992.
- Editorial Board: Infection and Immunity, 1991-2017.
- Editorial Board: Bacteriophage, 2010-present.
- Ad hoc journal review: Antimicrob. Agents Chemotherapy 1998-2012; Applied and Environmental Microbiol. 2004-2015; AOAC, 2009; Cellular Microbiol. 1999-2012; Current Microbiol. 2012, Emerging Infect. Dis. 2008; Environ. Microbiol. 2012, FEBS-Letters 2009; FEMS-Microbiol. Ecol. 2008; FEMS-Microbiol. Letters, 2011; FEMS-Pathogens and Disease, 2013; Infection and Immunity, 1988-1990; J. AOAC Inter. 2009-2010; J. Applied Microbiol. 2007; J. Bacteriol. 1995-2012; J. Clin. Invest., 1991-1992; J. Clin. Microbiol. 2003 - 2009; J. Infect. Dis., 1992-2015; J. Vaccines, 2013; Microbial Pathog. 1993-1995; Microbes and Infect. 2007-2010; Microbiol. and Molec. Biol. Rev., 1998-1999; Mol. and Cellular Probes 1994; Mol. Gen. Genet., 1992; Mol. Microbiol. 1992-2010; Nature Reviews, 2003; Pediatric Res. 2004; P.L.o.S. ONE 2011-2013, P.L.o.S. Pathogens 2007-2015, P.N.A.S. 2008-2013; Science 1997.

**Invited Presentations:**

- SOLiD Pyrosequencing of Four *Vibrio vulnificus* Genomes Enables Comparative Genomic Analysis and Identification of Candidate Clade-Specific Virulence Genes, Jackson State University Medical Center, 2010.
- Phage therapy of local and systemic disease. Society for General Microbiology, Dublin, Ireland, 2004.
- Pathogenesis of *Vibrio vulnificus* disease and use of bacteriophage as therapy, Korean Society for Microbiology and Biotechnology, Muju, Korea, 2003.
- Pathogenesis of *Vibrio vulnificus* disease and use of bacteriophage as therapy. Southeast Branch American Society for Microbiology, 2002.
- What's eating you? Molecular pathogenesis of *Vibrio vulnificus*. Eastern Pennsylvania Branch American Society for Microbiology, 2002.
- What's eating you? Molecular pathogenesis of *Vibrio vulnificus* - a flesh eating bacterium. 102nd Annual Meeting of the American Society for Microbiology, 2002.
- Growth out of Control: Infection of Mice by *Vibrio vulnificus* as a Model for Extremely Rapid Replication of Bacterial Pathogens in Host Tissues; Johnson & Johnson Focused Giving Symposium; Fall 1999.
- Salmonellosis and *Vibrio vulnificus* - Lecture and Seminar; Univ. Kentucky Medical School; Spring 1999.
- Regulation of Virulence Gene Expression - Lecture and Seminar; University of Alabama - Birmingham; June 1998.
- Salmonella-Macrophage Interactions - Lecture and Seminar; Univ. of Georgia; Summer 1998.
- Spv-mediated pathogenesis of *Salmonella typhimurium*; Kansas State University, Division of Biology, Sept. 1997.
- Plasmid-mediated virulence of *Salmonella typhimurium*. R.W. Johnson Pharmaceutical Research Institute. Jan. 1995.
- Invited Speaker: Regulation of *spv* genes of the *Salmonella typhimurium* virulence plasmid. 1994 Gordon Research Conference on Microbial Toxins and Pathogenesis.
- Invited speaker: Seminar - Molecular and functional analysis of the *Salmonella* virulence plasmid. 93rd Annual Meeting of the American Society for Microbiology, 1993.
- Convener: New Developments in Vaccines: Vehicles for Effective Antigen Delivery. 92nd Annual Meeting of the American Society for Microbiology, 1992.
- Invited speaker: Symposium - "Salmonella: recent advances in epidemiology and strategies for control." Sassari, Italy, September, 1991.
- Invited speaker: Seminar - Organization and Regulation of the virulence Genes of the *Salmonella typhimurium* Virulence Plasmid. 91st Annual Meeting of the American Society for Microbiology, 1991.
- Convener: *Salmonella* and *Campylobacter*: Mechanisms of Pathogenesis. 89th Annual Meeting of the American Society for Microbiology, 1989.

**Academic Honors:**

Summa cum laude, B.S. degree, 1980.

**Scientific and Honorary Societies:**

American Society for Microbiology, 1981-present.

**Peer-reviewed Publications:**

1. Hansen, E.J., S.M. Robertson, P.A. Gulig, C.F. Frisch, and E.J. Haanes. 1982. Immunoprotection against *Haemophilus influenzae* type b disease mediated by monoclonal antibody directed against a *Haemophilus* outer membrane protein. *The Lancet* i:366-368.
2. Robertson, S.M., C.F. Frisch, P.A. Gulig, J.R. Kettman, K.H. Johnston, and E.J. Hansen. 1982. Monoclonal antibodies directed against a cell surface-exposed outer membrane protein of *Haemophilus influenzae* type b. *Infect. Immun.* 36:80-88.
3. Gulig, P.A., G.H. McCracken, Jr., C.F. Frisch, K.H. Johnston, and E.J. Hansen. 1982. Antibody response of human infants to cell surface-exposed outer membrane proteins of *Haemophilus influenzae* type b after systemic *Haemophilus* disease. *Infect. Immun.* 37:82-88.
4. Murphy, T.V., G.H. McCracken, Jr., B.S. Moore, P.A. Gulig, and E.J. Hansen. 1983. *Haemophilus influenzae* type b disease after rifampin prophylaxis in a day care center: possible reasons for its failure. *Ped. Infect. Dis.* 2:193-198.
5. Gulig, P.A., C.F. Frisch, and E.J. Hansen. 1983. A set of two monoclonal antibodies specific for the cell surface-exposed 39K major outer membrane protein of *Haemophilus influenzae* type b defines all strains of this pathogen. *Infect. Immun.* 42:516-524.
6. Gulig, P.A., G.H. McCracken, Jr., and E.J. Hansen. 1984. Immunogenic proteins in cell-free culture supernatants of *Haemophilus influenzae* type b. *Infect. Immun.* 44:41-48.
7. Kimura, A., P.A. Gulig, G.H. McCracken, Jr., T.A. Loftus, and E.J. Hansen. 1985. A minor high-molecular-weight outer membrane protein of *Haemophilus influenzae* type b is a protective antigen. *Infect. Immun.* 47:253-259.
8. Gulig, P.A., and E.J. Hansen. 1985. Co-precipitation of lipopolysaccharide and the 39K major outer membrane protein of *Haemophilus influenzae* type b by lipopolysaccharide-directed monoclonal antibody. *Infect. Immun.* 49:819-827.
9. Gulig, P.A., and R. Curtiss III. 1987. Plasmid-associated virulence of *Salmonella typhimurium*. *Infect. Immun.* 55:2891-2901.
10. Gulig, P.A., and R. Curtiss III. 1988. Cloning and transposon-insertion mutagenesis of virulence genes of the 100 kb plasmid of *Salmonella typhimurium*. *Infect. Immun.* 56:3262-3271.
11. Poppe, C., R. Curtiss III, P.A. Gulig, and C.L. Gyles. 1989. Hybridization studies with a DNA probe derived from the virulence region of the 60 Mdal plasmid of *Salmonella typhimurium*. *Can. J. Vet. Res.* 53:378-384.
12. Patrick, C.C., S.E. Pelzel, E.E. Miller, E. Haanes-Fritz, J.D. Radolf, P.A. Gulig, G.H. McCracken, Jr., and E.J. Hansen. 1989. Antigenic evidence for the synthesis of two different lipooligosaccharides by some strains of *Haemophilus influenzae* type b. *Infect. Immun.* 57:1971-1978.
13. Gulig, P.A., and V.A. Chiodo. 1990. Genetic and DNA sequence analysis of the 28,000 molecular weight protein encoded by the *Salmonella typhimurium* virulence plasmid. *Infect. Immun.* 58:2651-2658.
14. Caldwell, A.L., and P.A. Gulig. 1991. The *Salmonella typhimurium* virulence plasmid encodes a positive regulator of a plasmid-encoded virulence gene. *J. Bacteriol.* 173:7176-7183.
15. Gulig, P.A., A.L. Caldwell, and V.A. Chiodo. 1992. Identification, genetic analysis, and DNA sequence of a 7.8 kilobase virulence region of the *Salmonella typhimurium* virulence region. *Mol. Microbiol.* 6:1395-1411.
16. Gulig, P.A., and T.J. Doyle. 1993. The *Salmonella typhimurium* virulence plasmid increases the growth rate of salmonellae in mice. *Infect. Immun.* 61:504-511.
17. Ervin, S.E., Small, P.A., Jr., and Gulig, P.A. 1993. Use of incompatible plasmids to control expression of antigen by *Salmonella typhimurium* and analysis of immunogenicity in mice. *Microbial Pathog.* 15:93-101.

18. Langevin, P.B., N. Gravenstein, S.O. Langevin, and P.A. Gulig. 1996. Epidural catheter reconnection. Safe and unsafe practice. *Anesthesiology* 85:883-888.
19. Wilson, J.A., T.J. Doyle, and P.A. Gulig. 1997. Exponential phase expression of *spvA* of the *Salmonella typhimurium* virulence plasmid: induction intracellular salts medium and intracellularly in mice and cultured mammalian cells. *Microbiol.* 143:3827-3839.
20. Gulig, P.A., T.J. Doyle, M.J. Clare-Salzler, R.L. Maiese, and H. Matsui. 1997. Systemic infection of mice by wild-type but not Spv<sup>-</sup> *Salmonella typhimurium* is enhanced by neutralization of gamma interferon and tumor necrosis factor alpha. *Infect. Immun.* 65:5191-5197.
21. Gulig, P.A., T.J. Doyle, J.A. Hughes, and H. Matsui. 1998. Analysis of host cells associated with Spv-mediated increased intracellular growth rate of *Salmonella typhimurium* in mice. *Infect. Immun.* 66:2471-2485.
22. Wilson, J.A., and P.A. Gulig. 1998. Regulation of the *spvR* gene of the *Salmonella typhimurium* virulence plasmid during exponential phase growth in Intracellular Salts Medium and at stationary phase in L broth. *Microbiology* 144:1823-1833.
23. Langevin, P.B., N. Gravenstein, T.J. Doyle, S.A. Roberts, S. Skinner, S.O. Langevin, and P.A. Gulig. 1999. Growth of *Staphylococcus aureus* in Diprovan and Intralipid: Implications on the Pathogenesis of Infections. *Anesthesiology* 91:1394-1400.
24. Matsui, M., K. Takatoshi, S. Ishikawa, H. Danbara, and Paul A. Gulig. 2000. Constitutively expressed *phoP* inhibits mouse-virulence of *Salmonella typhimurium* in an Spv-dependent manner. *Microbiol. Immun.* 44:447-454. (PMID: 10941927)
25. Uzzau, S., P.A. Gulig, B. Paglietti, G. Leori, B.A. Stocker, S. Rubino. 2000. Role of *Salmonella abortusovis* virulence plasmid in the infection of BALB/c mice. *FEMS Microbiol. Lett.* 188:15-18. (PMID: 10867227)
26. Jeong, K.C., H.S. Jeong, J.H. Rhee, S.E. Lee, S.S. Chung, A.M. Starks, G.M. Escudero, P.A. Gulig, and S.H. Choi. 2000. Construction and phenotypic evaluation of a *Vibrio vulnificus* *vvPE* mutant for elastolytic protease. *Infect. Immun.* 68:5096-5106. (PMID:10948131)
27. Starks, A.M., T.R. Schoeb, M.L. Tamplin, S. Parveen, T.J. Doyle, P.E. Bomeisl, G.M. Escudero, and P.A. Gulig. 2000. Pathogenesis of infection by clinical and environmental strains of *Vibrio vulnificus* in iron dextran-treated mice. *Infect. Immun.* 68:5785-5793. (PMID: 10992486)
28. Matsui, H., C.M. Bacot, W.A. Garlington, S.C. Roberts, T.J. Doyle, and P.A. Gulig. 2001. The *spvB* and *spvC* genes of the 90-kb virulence plasmid can replace the entire plasmid to restore virulence of *Salmonella typhimurium* in BALB/c mice. *J. Bacteriol.* 183:4652-4658. (PMID: 11443102)
29. Cerveny, K.E., A. DePaola, D.H. Duckworth, and P.A. Gulig. 2002. Phage therapy of local and systemic disease caused by *Vibrio vulnificus* in iron-dextran-treated mice. *Infect. Immun.* 70:6251-6262. (PMID: 12379704)
30. DePaola, A., J.L. Nordstrom, A. Dalsgaard, A. Forslund, J. Oliver, T. Bates, K.L. Bourdage, and P.A. Gulig. 2003. Analysis of *Vibrio vulnificus* from market oysters and septicemia cases for virulence markers. *Appl. Environ. Microbiol.* 69:4006-4011. (PMID: 12839775)
31. Parikh, S.S., S.A. Litherland, M.J. Clare-Salzler, W. Li, P.A. Gulig, and F.S. Southwick. 2003. CapG(-/-) mice have specific host defense defects that render them more susceptible than CapG(+/+) mice to *Listeria monocytogenes* infection but not to *Salmonella enterica* serovar Typhimurium infection. *Infect. Immun.* 71:6582-90. (PMID: 14573680)
32. Lian, W., S.A. Litherland, H. Badrane, W. Tan, D. Wu, H.V. Baker, P.A. Gulig, D.V. Lim, and S. Jin. 2004. Ultrasensitive detection of biomolecules with fluorescent dye-doped nanoparticles. *Anal. Biochem.* 334:135-44. (PMID: 15464962)
33. Starks, A.M., K.L. Bourdage, P. C. Thiaville, and P.A. Gulig. 2006. Use of a marker plasmid to examine growth and death of *Vibrio vulnificus* in infected mice. *Mol. Microbiol.* 61:310-323. (PMID: 16856938)
34. Brown, R.N., and P.A. Gulig. 2008. FadR, a regulator of fatty acid metabolism, is essential for *Vibrio vulnificus* to cause infection of mice. *J. Bacteriol.* 190:7633-44. (PMID: 18835990)

35. Srivastava, M., M.S. Tucker, P.A. Gulig, and A.C. Wright. 2009. The role of phase variation, capsular polysaccharide, pilin, and flagella in survival of *Vibrio vulnificus* in the Eastern oyster (*Crassostrea virginica*). *Environ. Microbiol.* 11:1934-1944. (PMID: 19689704)
36. Gulig, P.A., P.C. Thiaville, M. Tucker, R.N. Brown, and J.L. Joseph. 2009. USER Friendly cloning coupled with chitin-based natural transformation enables rapid mutagenesis of *Vibrio vulnificus*. *Appl. Environ. Microbiol.* 75:4936-4949. (PMID: 19502446)
37. Brown, R.N., and P.A. Gulig. 2009. Roles of RseB, σE, and DegP in virulence and phase variation of colony morphotype of *Vibrio vulnificus*. *Infect. Immun.* 77:3768-3781. (PMID: 19564391)
38. Mahmud, Z.H., A.C. Wright, S.C. Mandal, J. Dai, M.K. Jones, M. Hasan, M.H. Rashid, M.S. Islam, J.A. Johnson, P.A. Gulig, J.G. Morris, Jr. and A. Ali. 2010. Genetic characterization of *Vibrio vulnificus* strains from tilapia aquaculture in Bangladesh. *Appl. Environ. Microbiol.* 76:4890-4895. (PMID: 20495047)
39. Gulig, P.A. V. de Crécy-Lagard, A.C. Wright, B. Walts, M. Telonis-Scott, and L.M. McIntyre. 2010. SOLiD pyrosequencing of four *Vibrio vulnificus* genomes enables comparative genomic analysis and identification of candidate clade-specific virulence genes. *BMS Genomics* 11:512. (PMID: 20863407)
40. Gauthier, J.D., M.K. Jones, P. Thiaville, J.L. Joseph, R.A. Swain, C.J. Krediet, P.A. Gulig, M.A. Teplitski, and A.C. Wright. 2010. Role of GacA in virulence of *Vibrio vulnificus*. *Microbiology* 156:3722-33. (PMID: 20817642)
41. Sims, J.N., R.D. Isokpehi, G.A. Cooper, M.P. Bass, S.D. Brown, A.L. St. John, P.A. Gulig, and H.H.P. Cohly. 2011. Visual analytics of surveillance data on foodborne vibriosis, United States, 1973–2010. *Environmental Health Insights* 5:71-85. (PMID: 22174586)
42. Thiaville, P.C., K.L. Bourdage, M. Evans, A.C. Wright, C. Garvan, and P.A. Gulig. 2011. Genotype is correlated with but does not predict virulence of *Vibrio vulnificus* biotype 1 in subcutaneously inoculated, iron dextran-treated mice. *Infect. Immun.* 79:1194-1207. (PMID: 21199909).
43. Arezes, J., G. Jung, V. Gabayan, E. Valore, P. Ruchala, P.A. Gulig, T. Ganz, E. Nemeth, Y. Bulut Y. 2015. Hepcidin-induced hypoferremia is a critical host defense mechanism against the siderophilic bacterium *Vibrio vulnificus*. *Cell Host Microbe*. 17:47-57 (PMID: 25590758).
44. Hampton, C.M., R.C. Guerrero-Ferreira, R.E. Storms, J.V. Taylor, H. Yi, P.A. Gulig, and E.R. Wright. 2017. The opportunistic pathogen *Vibrio vulnificus* produces outer membrane vesicles in a spatially distinct manner related to capsular polysaccharide. *Frontiers Microbiol.* 8: 8:2177 (PMID: 29163452).
45. Roig, F., F. Gonzalez-Candelas, E. Sanjuan, E. Feil, Belén Fouz, C. Lorens, C. Baker-Austin, J. Oliver, Y. Danin-Poleg, C. Gibas, Y. Kashi, P.A. Gulig, S.S. Morrison, and C. Amaro. 2017. Phylogeny of *Vibrio vulnificus* from the analysis of the core-genome: implications for intra-species taxonomy. *Front. in Microbiol.* 8:2613 (PMID: 29358930).
46. Chen, H., E. Laws, J.L. Martin, T.-K. Berhane, P.A. Gulig, and H.N. Williams. 2018. Relative contribution of Halobacteriovorax and Bacteriophage to bacterial cell death under various environmental conditions. *mBio* 9:4 (PMID: 30087166)
47. Tasmin, R, P.A. Gulig, and S. Parveen. 2019. Detection of a virulence plasmid in *Salmonella* Typhimurium and *Salmonella* Kentucky isolates recovered from commercially processed chicken carcasses. *International J Food Protection*. 82:1364-1368 (PMID: 31322922)
48. Roig, F.J., F. González-Candelas, E. Sanjuán, B. Fouz, E.J. Feil, C. Llorens, C. Baker-Austin, J.D. Oliver, Y. Danin-Poleg, C.J. Gibas, Y. Kashi, P.A. Gulig, S.S. Morrison, C. Amaro. 2019. Corrigendum: Phylogeny of *Vibrio vulnificus* from the analysis of the core-genome: Implications for intra-species taxonomy. *Front Microbiol* 10:1904 (PMID: 31481942)
49. Lydon, K.A., T.P. Kinsey, C. Le, P.A. Gulig, and J.L. Jones. 2021. Biochemical and virulence characterization of *Vibrio vulnificus* Isolates from clinical and environmental sources. *Front. Microbiol.* 11:637019. (PMID: 33718284)

## **Reviews and Chapters:**

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78. Kim, Y.S., T. Langaaee, S. Jin, T. Spicer, T. Bannister, L. Scampavia, and P. Gulig. A novel compound inhibiting *Pseudomonas aeruginosa* AmpG greatly reduces the transport of signaling molecules for inducible AmpC  $\beta$ -lactamase expression and resistance to  $\beta$ -lactam antibiotics. Microbe (2019)

**Service:**

<u>Committee</u>	<u>Unit</u>	<u>Role</u>	<u>Years</u>
State Course Numbering System	State	Discipline specialist	2014-present
Mol. Gen. & Micro. Online Education	Department	Coordinator	2014-present
Institutional Biosafety Committee	University	Chair	2008-present
		Member	2000-2005
		Member	1999-2000
		Member	2007-2008
Medical Curriculum Committee	College	Member	2018-2021
Graduate Curriculum Committee	University	Member	2013-2019
UF Opportunity Fund Review Panel	University	Member	2015, 2018
Emerging Pathogens Institute Burkholderia Cluster Hire Search Committee	University	Chair	2014-2015
Office of Graduate Education	College	Associate Dean	2011-2014
Interdisciplinary Program in Biomedical Sciences (IDP-BMS)	College	Director	2011-2014
Educational Technology Advisory Committee	Health Science Center	Member	2011-2015
MD-PhD Executive Committee	College	Member	2011-2014
Student Advocacy Council	College	Member	2011-2014
Academic Status Committee	College	Member	2006-2014
Emerging Pathogens Institute Internal Advisory Committee	University	Member	2007-2009
Promotion and Tenure Committee	College	Member	2007-2010
Emerging Pathogens Institute Bldg. Cmt.	University	Member	2006-2007
College of Med. Ph.D. program (IDP) Immunology/Microbiology Concentration	College	Co-Coord.	2003-2008
Medical Selection Committee	College	Member	2002-2008
Medical Curriculum Committee	College	Member	2002-2005
Mol. Gen. & Micro. Faculty Search Cmt.	Department	Chair	1998-1999
University of Florida Faculty Senate	University	Senator	1996-2003
Graduate Admissions Committee	College	Member	1996-2001
Advanced Program Focus Committee	College	Member	1996-1997
Mouse Facility Oversight Committee	Dept. (Pathol.)	Member	1996-1997
Admissions Committee	Department	Member	1994-1996
Medical Student Advisor	College	Advisor	1993-1994

**Teaching:** (Since promotion to professor)**A. Medical Students:****1. BMS 6300 Fundamentals of Microbiology and Immunology**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2021-2022	Course Director	Lecture	14
2020-2021	Course Director	Lecture	14
2019-2020	Course Director	Lecture	14
2018-2019	Course Director	Lecture	14
2017-2018	Course Director	Lecture	14
2016-2017	Course Director	Lecture	14
2015-2016	Course Director	Lecture	14
2014-2015	Course Director	Lecture	14
2013-2014	Course Director	Lecture	12
2012-2013	Course Director	Lecture	10

**2. BMS 6631 Hematology**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2021-2022	Lecturer	Lecture	1
2020-2021	Lecturer	Lecture	1
2019-2020	Lecturer	Lecture	1
2018-2019	Lecturer	Lecture	1
2017-2018	Lecturer	Lecture	1
2016-2017	Lecturer	Lecture	1
2015-2016	Lecturer	Lecture	1
2014-2015	Lecturer	Lecture	1
2013-2014	Lecturer	Lecture	1

**3. BMS 6642 Respiratory Systems**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2021-2022	Lecturer	Lecture	3
2020-2021	Lecturer	Lecture	3
2019-2020	Lecturer	Lecture	3
2018-2019	Lecturer	Lecture	3
2017-2018	Lecturer	Lecture	1
2016-2017	Lecturer	Lecture	1
2015-2016	Lecturer	Lecture	1
2014-2015	Lecturer	Lecture	1

**4. BMS 6020 Clinical Neuroscience**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2021-2022	Lecturer	Lecture	1
2020-2021	Lecturer	Lecture	1
2019-2020	Lecturer	Lecture	1
2018-2019	Lecturer	Lecture	1
2017-2018	Lecturer	Lecture	1
2016-2017	Lecturer	Lecture	1
2015-2016	Lecturer	Lecture	1
2014-2015	Lecturer	Lecture	1
2013-2014	Lecturer	Lecture	1

**5. BMS 6634 Gastroenterology and Hepatology**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2021-2022	Lecturer	Lecture	3
2020-2021	Lecturer	Lecture	3
2019-2020	Lecturer	Lecture	3
2018-2019	Lecturer	Lecture	3
2017-2018	Lecturer	Lecture	3
2016-2017	Lecturer	Lecture	3
2015-2016	Lecturer	Lecture	3
2014-2015	Lecturer	Lecture	3
2013-2014	Lecturer	Lecture	1

**6. BMS 6635 Dermatology and the Musculoskeletal System**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2021-2022	Lecturer	Lecture	2
2020-2021	Lecturer	Lecture	2
2019-2020	Lecturer	Lecture	2

2018-2019	Lecturer	Lecture	2
2017-2018	Lecturer	Lecture	2
2016-2017	Lecturer	Lecture	2
2015-2016	Lecturer	Lecture	2
2014-2015	Lecturer	Lecture	2
2013-2014	Lecturer	Lecture	2

### **7. BMS 6633 Cardiovascular System**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2013-2014	Lecturer	Lecture	1
2012-2013	Lecturer	Lecture	1

### **8. BMS 6814 Introduction to Clinical Medicine 4**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2014-2015	Lecturer	Lecture	1

### **9. BMS 6300C Medical Microbiology and Infectious Disease**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2012-2013	Course Director	Lecture	18
2011-2012	Course Director	Lecture	18
2010-2011	Course Director	Lecture	16
2009-2010	Course Director	Lecture	16
2008-2009	Course Director	Lecture	19
2007-2008	Course Director	Lecture	19
2006-2007	Section Leader	Lecture	19
2005-2006	Section Leader	Lecture	18
2004-2005	Section Leader	Lecture	17
2003-2004	Section Leader	Lecture	17
2002-2003	Section Leader	Lecture	17
		Small group	2
2001-2002	Section Leader	Lecture	17
	Ran Labs	Lab	5
		Small group	2

### **B. Dental Students:**

#### **1. DEN 5127 Infectious Diseases**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2015-2016	Lecturer	Lecture	1

### **C. Graduate Student Teaching - Biomedical Sciences Graduate Program**

#### **1. GMS 6038 Bacterial Genetics and Physiology (GMS 6108 Bacterial Physiology, Antibiotics, and Genetics)**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2021-2022	Course Director	Lecture	13
2020-2021	Course Director	Lecture	13
2010-2020	Course Director	Lecture	13
2018-2019	Course Director	Lecture	13
2017-2018	Course Director	Lecture	13
2016-2017	Course Director	Lecture	13
2015-2016	Course Director	Lecture	13
2013-2014	Course Director	Lecture	13
2012-2013	Course Director	Lecture	13
2011-2012	Course Director	Lecture	13

2010-2011	Course Director	Lecture	13
2009-2010	Course Director	Lecture	13
2008-2009	Course Director	Lecture	13
2007-2008	Course Director	Lecture	13
2006-2007	Course Director	Lecture	13
2005-2006	Course Director	Lecture	13
2004-2005	Course Director	Lecture	13
2003-2004	Course Director	Lecture	13
2002-2003	Course Director	Lecture	13
2001-2002	Course Director	Lecture	13

## **2. GMS 6153 Advanced Bacterial Genetics**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2021-2022	Lecturer	Lecture	7
2020-2021	Lecturer	Lecture	7
2019-2020	Course Director	Lecture	14
2018-2019	Course Director	Lecture	14

## **3. GMS 6121 Infectious Diseases**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2021-2022	Course Director	Lecture	15
2020-2021	Course Director	Lecture	15
2019-2020	Course Director	Lecture	15
2018-2019	Course Director	Lecture	15
2017-2018	Lecturer	Lecture	15
2016-2017	Lecturer	Lecture	15
2015-2016	Lecturer	Lecture	15
2014-2015	Lecturer	Lecture	15
2013-2014	Lecturer	Lecture	11
2012-2013	Lecturer	Lecture	11
2011-2012	Lecturer	Lecture	11
2010-2011	Lecturer	Lecture	10
2009-2010	Lecturer	Lecture	3
2008-2009	Lecturer	Lecture	3
2007-2008	Lecturer	Lecture	3
2005-2006	Lecturer	Lecture	17
2004-2005	Lecturer	Lecture	17
2003-2004	Lecturer	Lecture	17
2002-2003	Course Director	Lecture	17
2001-2002	Course Director	Lecture	15

## **4. Core Course GMS 6006 - Fundamentals of Immunology/Microbiology**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2012-2013	Lecturer	Lecture	3
2009-2010	Lecturer	Lecture	4
2008-2009	Lecturer	Lecture	4
2007-2008	Lecturer	Lecture	4
2006-2007	Lecturer	Lecture	5
2005-2006	Lecturer	Lecture	5
2004-2005	Lecturer	Lecture	5
2003-2004	Lecturer	Lecture	5
2002-2003	Lecturer	Lecture	5
		Lab-lecture	2

2001-2002	Lecturer	Lecture	5
		Small group	1
		Lab-lecture	2

##### **5. GMS 6140 Principles of Immunology**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2015-2016	Lecturer	Lecture	3
2014-2015	Lecturer	Lecture	3
2013-2014	Lecturer	Lecture	2
2012-2013	Lecturer	Lecture	2
2011-2012	Lecturer	Lecture	2
2010-2011	Lecturer	Lecture	4
2007-2008	Lecturer	Lecture	4
2002-2003	Lecturer	Lecture	4
2001-2002	Lecturer	Lecture	4

##### **6. GMS 6003 Essentials of Graduate Research**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2014-2015	Lecturer	Lecture	2
2013-2014	Lecturer	Lecture	3
2012-2013	Lecturer	Lecture	3

##### **7. GMS 6001 Fundamentals in Biomedical Science**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2011-2012	Course Director		
2003-2004	Lecturer	Small Group	1
2002-2003	Lecturer	Small Group	1
2001-2002	Lecturer	Small Group	1

##### **8. Molecular Pathogenesis**

<u>Year</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2001-2002	Lecturer	Lecture	1

#### **D. Online Distance Education with Microbiology and Cell Science M.S. Program**

##### **1. GMS 6121 Infectious Diseases**

<u>Year</u>	<u>Semester</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2021-2022	Fall, Spr., Sum.	Course director	Lecture	22
2020-2020	Fall, Spr., Sum.	Course director	Lecture	22
2019-2020	Fall, Spr., Sum.	Lecturer	Lecture	22
2018-2019	Fall, Spr., Sum.	Course director	Lecture	22
2017-2018	Fall, Spr., Sum.	Lecturer	Lecture	22
2016-2017	Fall, Spr., Sum.	Lecturer	Lecture	22
2015-2016	Fall, Summer	Lecturer	Lecture	22

##### **2. GMS 7192 Journal Colloquy (2 sections to 2020, 3 sections starting 2020)**

<u>Year</u>	<u>Semester</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2021-2022	Fall, Spr., Sum.	Course director	Lecture	15
2020-2021	Fall, Spr., Sum.	Course director	Lecture	15
2019-2020	Fall, Spr., Sum.	Course director	Lecture	15
2018-2019	Fall, Spr., Sum.	Course director	Lecture	15
2017-2018	Fall, Spr., Sum.	Course director	Lecture	15
2016-2017	Fall, Spr., Sum.	Course director	Lecture	15
2015-2016	Fall, Spr., Sum.	Course director	Lecture	15

### **3. GMS 6108 Bacterial Physiology, Antibiotics, and Genetics**

<u>Year</u>	<u>Semester</u>	<u>Role in Course</u>	<u>Description</u>	<u># Hours</u>
2021-2022	Fall, Spr., Sum.	Course director	Lecture	35
2020-2021	Fall, Spr., Sum.	Course director	Lecture	20
2019-2020	Fall, Spr., Sum.	Course director	Lecture	26
2018-2019	Fall, Spr., Sum.	Course director	Lecture	26
2017-2018	Fall, Spr., Sum.	Course director	Lecture	13
2016-2017	Fall, Spr., Sum.	Course director	Lecture	13
2015-2016	Spring	Course director	Lecture	13

### **E. Postdoctoral/Graduate Student Supervisory Activities (Complete list)**

<u>Name</u>	<u>Degree</u>	<u>Dates</u>	<u>Advisor</u>	<u>Project</u>
Jennifer Joseph	Ph.D.	2003-2009	Gulig	V. vulnificus pathogenesis
Crystal Harpley	M.S.	2006-2008	Gulig	Detection of agents of bioterrorism
Roslyn (Franks) Brown	Ph.D.	2003-2008	Gulig	V. vulnificus pathogenesis
Ann Griswold, Ph.D.	Postdoc	2006-2007	Gulig	V. vulnificus pathogenesis
Matthew Tucker	M.S.	2003-2006	Gulig	V. vulnificus pathogenesis
Rebecca Moose-Clemente	Postdoc	2004-2006	Gulig	Detection of bioterrorism agents
Harald Messer	M.S.	2003-2006	Gulig	Detection of bioterrorism agents
Julio Martin	M.S.	2001-2006	Gulig	Bacteriophage treatment of Oysters
Gopal Sapparapu	M.S.	2001-2003	Gulig	Detection of Salmonella
Yushi Qiu	M.S./ M.B.A	2000-2004	Gulig	V. vulnificus pathogenesis
Keri (Malcolmson) Bourdage	M.S.	2000-2002	Gulig	Molecular pathogenesis
Karen Cerveny	M.S.	1999-2001	Gulig	Phage therapy
Gloria Escudero	M.S.	1998-2001	Gulig	Vibrio vulnificus
Angela Starks	Ph.D.	1997-2003	Gulig	Vibrio vulnificus
Wendy Garlington	M.S.	1995-1996	Gulig	Salmonella pathogenesis
Fusun Erler, M.D.	Postdoc	1995-1996	Gulig	Salmonella pathogenesis
Hidenori Matsui, Ph.D.	Visiting Prof.	1994-1996	Gulig	Salmonella pathogenesis
Anuradha Menon	M.S.	1993-1995	Gulig	Salmonella pathogenesis
Christopher Bacot, Ph.D.	Postdoc	1993-1994	Gulig	Salmonella pathogenesis
Sean Ervin, Ph.D.	Postdoc	1991-1993	Gulig	Salmonella vaccines
Julie A. Wilson	Ph.D.	1991-1996	Gulig	Salmonella pathogenesis
Allison Caldwell	M.S.	1989-1993	Gulig	Salmonella pathogenesis
Pacharapong Khrongsee	Ph.D.	2021-present	Tuonyak	Burkholderia phages
Louise Ball	Ph.D.	2020-present	Maurelli	Chlamydia
Loc Huynh	Ph.D.	2020-present	Harris	Ribonuclease P
Siman Liu	M.S.	2019-2021	Montazeri	Vibrio phages
Matthew Hauserman	Ph.D.	2019-present	Rice	S. aureus Agr
Chanel Mosby-Haundrup	Ph.D.	2019-2022	Jones	Norovirus-bacteria
Brandon Murphy	Ph.D.	2019-present	Daaka	UPEC pathogenesis
Mark Gorelik	Ph.D.	2019-present	Romeo	CsrA regulation
Ashley Ross	M.S.	2019-2021	Mitchell	Phrenic nerve healing
Kathleen Miller	Ph.D.	2018-2022	Nicholson	Bacillus transcription

James Martin	Ph.D.	2018-present	Wang	Clostridium difficile
Pacharapong Khrongsee	M.S.	2018-2020	Tuonyak	Burkholderia
Treenate Jiranantasak	Ph.D.	2018-2021	Tuonyak	Burkholderia
Joshua Leehan	Ph.D.	2018-2022	Nicholson	Bacillus transcription
Shaheen Bibi	Ph.D.	2018-2020	Jones	Citrus microbiology
Ying-Jung Lai	Ph.D.	2018-2021	Romeo	CsrA regulation
Jessica Brandwein	Ph.D.	2018-present	Rice	Staphylococcus
Jeannie Klein-Gordon	Ph.D.	2018-2022	Jones	Xanthomonas
Michael Morrison	Ph.D.	2016-2019	Nicholson	Space microbiology
Aline de Oliveira	Ph.D.	2016-2018	Lorca	Citrus greening bacteria
Chelsea DeVaux	M.S.	2016-2017	McIntyre	Staphylococcal genomics
Alexandra Gerace	M.S.	2016-2018	Lauzardo	M. tuberculosis genetics
Mustafa Jibrin	Ph.D.	2016-2019	Jones	plant pathogen evolution
Allyson Shea	Ph.D.	2016-2018	Daaka	UPEC cellular invasion
Hoang Nguyen	Ph.D.	2015-2016	Romeo	CsrA
Yifeng Yuan	Ph.D.	2015-2019	de Crecy	DNA modification
Naixin Zhang	Ph.D.	2015-2017	Kima	host-parasite interaction
Felicia New	M.S.	2015-2015	McIntyre	Population genetics
Anastasia Potts	Ph.D.	2015-2017	Romeo	CsrA
Marco Moraes	Ph.D.	2013-2016	Teplitski	Salmonella plants soil
Elton Polvadore	M.S.	2012-2014	McIntyre	Bioinformatics
Tesfalem Zere	Ph.D.	2012-2015	Romeo	Salmonella virulence
Justin Kaspar	Ph.D.	2012-2016	Burne	Streptococcus genetics
Greg Stupp	Ph.D.	2010-2014	Edison	<i>C. elegans</i> -metabolomics
April (Sapp) Lewis	M.S.	2010-2014	Rice	Staphylococcal biofilms
Nicole Martino	M.S.	2010-2011	Burne	Streptococcal genetics
Rick Swain	M.S.	2010-2011	Wright	<i>V. vulnificus</i> GacA regulation
Yah-Wen Yeh	Ph.D.	2010-2013	Gower	Microchip phage display
Dana Blackburn	M.S.	2009-2010	Giron	<i>E. coli</i> virulence
Francy Liliana Crosby	Ph.D.	2009-2014	Barbet	Anaplasma virulence
Heather Brown	Ph.D.	2009-2013	Grieshaber	Chlamydia biology
Algevis Wrench	Ph.D.	2009-2011	Lorca	Francisella virulence
MD Nahid	Ph.D.	2008-2011	Chan	MicroRNA and LPS tolerance
Steve Garrett	M.S.	2009-2010	Burne	Streptococcal genetics
Amber Delmas	M.S.	2009-2010	Kladde	DNA methylation in cancer
Candace Bichsel	Ph.D.	2008-2012	Jin	Pseudomonas T3SS
Sarah (Guilmain) Szarowicz	Ph.D.	2007-2010	Southwick	Pathogens and actin
Kinda Seaton	Ph.D.	2007-2013	Burne	Streptococcal genetics
Mercedes Rivera	M.S.	2006-2010	Burne	Streptococcal genetics
Ekta Patel	Ph.D.	2006-2011	Chang	Lentivirus vectors
Sara Palmer	Ph.D.	2006-2011	Brady	Oral streptococci
Heather Wamsley	Ph.D.	2006-2009	Barbet	Anaplasma virulence
Jessica Smith	Ph.D.	2006-2008	Lyons	Lipids in bacterial virulence
Russell Durring	Ph.D.	2004-2006	Southwick	Anthrax pathogenesis
Botond Balogh	Ph.D.	2003-2006	Jones	Phage therapy for plants
Stephanie Jacks	Ph.D.	2002-2007	Gigeure	Rhodococcus equi
Ann Griswold	Ph.D.	2002-2006	Burne	Streptococcus
Xiaoling Wang	M.S.	2002-2004	Jin	Pseudomonas
Weihui Wu	Ph.D.	2002-2006	Jin	Pseudomonas
Yiqian Dong	Ph.D.	2001-2004	Burne	Streptococcus
Sheila Walters	Ph.D.	2001-2006	Progulske-Fox	IVIAT
Winston Brasor	M.S.	2001-2001	Baker	Yeast gene expression
Unhwan Ha	Ph.D.	2000-2002	Jin	Pseudomonas

Jinghua Jia	Ph.D.	2000-2004	Jin	Pseudomonas
Lin Zeng	Ph.D.	2000-2004	Jin	Pseudomonas
Talibah Metcalf	M.S.	2000-2002	West	Dictyostelium biology
Maria Chitzadaki	Ph.D.	1999-2004	Wright	V. vulnificus pathogenesis
Massoumeh Rajabi	Ph.D.	1999-2005	Wright	Salmonella identification
Trevor Seifert	Ph.D.	1999-2005	Progulske-Fox	in vivo expression of bacteria
Kyle Seifert	Ph.D.	1999-2004	Brady	Group B streptococci
Tamara Widenhouse, D.V.M.	Ph.D.	1999-2004	Lester	Equine Salmonellosis
Troy Scott	Ph.D.	1998-2002	Farrah	Molecular bacterial detection
Brian Dorn	Ph.D.	1998-2003	Progulske-Fox	Porphyromonas
Greg Havemann	Ph.D.	1998-2003	Bobik	Salmonella structural biology
Rajkumar Nathaniel	Ph.D.	1997-2003	R. Moyer	Pox virus
Chin (Vivian) Chen	M.S.	1996-1998	Schultz	Wound healing
Lori Wojciechowski	Ph.D.	1996-1997	Hillman	Oral Biology
James Kohler	Ph.D.	1994-1998	Brown	Salmonella vaccine delivery
Annette Khaled	Ph.D.	1993-1997	Schiffenbauer	NF- $\square$ B
Arthur Alleman, D.V.M.	Ph.D.	1993-1995	Barbet	Anaplasma antigens
Nicholas Grimaudo, D.M.D.	M.S.	1992-1995	Bleiweis	Candida
Richard Stern	Ph.D.	1991-1996	R. Moyer	Vaccinia pathogenesis
Martha Ewing	M.S.	1991-1993	Brown	Salmonella
Bigboy Simbi	M.S.	1991-1993	Allred	Cowdria
Scott Winram	Ph.D.	1990-1995	Lottenberg	Streptococcal virulence
Joyce Feller	Ph.D.	1989-1994	R. Moyer	Pox viruses
Robert Massung	Ph.D.	1988-1991	R. Moyer	Pox viruses

#### F. Undergraduate student research mentoring

Hannah Wolcott	2016-2018
Raphael Talabis	2017
Kathryn Heisel	2015-2017
Van Hoang	2014-2015
Panida Charnvitayapong	2014-2015
Chinh Le	2013-2014
Leon Chen	2013-2014
Colby Cohen	2013-2014
Kylie Sterling	2013-2013
Marcelo Farias	2013-2013
Holly Austin	2012-2013
Yordanis Diez	2012-2013
Brandon Duncanson	2011-2013
Jennifer Baker	2011-2012
Ashley Gregory	2011-2012
Robert Bowden	2011-2012
Jacob Comiskey	2010-2011
John Delano	2010-2011
Riva Raiker	2010-2011
Becky (Dung) Ho	2010-2011
Nima Rezaie	2009-2011
Luke Christakis	2009-2010
Rupam Sharma	2009-2010
Nicholas Huckaba	2009-2011
Christopher Little	2009-2010
Osvaldo Martinez	2009
Jessica Asencio	2008-2009

Vivian Reyes	2007-2008
Fernando Donoso	2006-2007
Kimberly Foster	2005-2006
Timothy Finnegan	2005-2006
Shih-Shan Lang	2001-2002
Eric Wilkening	2001-2002
Jazmin Zepeda	2000-2001
Andrew Jones	1999
Craig Speight	1999
Philip Bomeisl	1998
Charles Deibel	1996
Stephen Schreck	1994-1995

**F. Medical Student Research Program students**

Ashley Rawls	2011
Michael Montuno	2010