

# Steven E. Fiester, B.S., Ph.D.

[www.linkedin.com/in/SteveFiester](http://www.linkedin.com/in/SteveFiester)

---

---

## **Educational Background:**

Ph.D. 2011 Kent State University, Department of Biological Sciences (Physiology)  
B.S. 2005 Kent State University, Department of Biological Sciences (Zoology/Pre-medicine, summa cum laude)

## **Appointments:**

**Research Professor**, 2022 – Department of Chemistry, Furman University, Greenville, SC, Department Chair: Tim Hanks, Ph.D.  
**Clinical Associate Professor**, 2022 – School of Health Research, Clemson University, Clemson, SC, Associate Vice President for Health Research: Windsor Westbrook Sherrill, Ph.D.  
**Without Compensation (WOC) Research Investigator**, 2022 – Dorn Research Institute, Wm. Jennings Bryan Dorn VA Medical Center, Columbia, SC, Executive Director: Christopher Wood, Ph.D.  
**Affiliated Pathology Faculty**, 2018 – Department of Pathology, Prisma Health – Upstate, Greenville, SC, Department Chair: Dave Schammel, M.D.  
**Associate Professor**, 2021 – 2023 Department of Biomedical Sciences, University of South Carolina School of Medicine Greenville (USCSOMG), Greenville, SC, Department Chair: William Roudebush, Ph.D.  
**Director, Research Strategy & Operations**, 2020 - 2023 USCSOMG, Greenville, SC, Associate Dean for Research: Desmond Kelly, M.D.  
**Assistant Professor**, 2017 – 2021, Department of Biomedical Sciences, USCSOMG, Greenville, SC, Department Chair: Rick Hodinka, Ph.D.  
**Visiting Assistant Professor**, 2015 – 2017, Department of Biological Sciences, Miami University-Middletown, Middletown, OH, Department Chair: Paul Harding, Ph.D.  
**Postdoctoral Fellow**, 2011-2015, Department of Microbiology, Miami University, Oxford, OH, Department Chair/Mentor: Luis A. Actis, Ph.D.  
**Senior Lecturer**, 2011, University of Akron-Wayne College, Department of Biology, Orrville, OH 44667, Supervisor: Alan J. Snow, Ph.D.  
**Graduate Assistant**, 2007 – 2011, Department of Biological Sciences, Kent State University, Kent, OH, Program Chair: James L. Blank, Ph.D.  
**BSL-3 Facility Coordinator**, 2005 – 2011, College of Public Health, Kent State University, Kent, OH, Dean of College of Public Health: Sonia Alemagno, Ph.D.  
**Research Assistant**, 2005 – 2007, Department of Biological Sciences, Kent State University, Kent, OH, Advisor: Christopher J. Woolverton, Ph.D.

## **Certifications:**

2022 UofSC Pipeline for Academic Leaders (PAL) Program  
2020 Biosafety Level 2 for Labs: Principles and Practices  
2019 American Heart Association Heartsaver® CPR AED Program  
2019 Mental Health First Aid USA  
2019 Saf-T-Pak Shipping Biological Materials Certification  
2006 FEMA Train-the-Trainer workshop

**Professional Affiliations:**

South Carolina Branch of the American Society for Microbiology (SC ASM), 2018 –  
SouthEastern Association for Clinical Microbiology (SEACM), 2018 - 2021  
Microscopy Society of Northeastern Ohio (MSNO), 2009-2011  
American Association for the Advancement of Science (AAAS), 2009-2010  
Ohio Branch of the American Society for Microbiology (OBASM), 2008-2017  
Phi Beta Kappa (PBK), 2005 -  
American Society for Microbiology (ASM), 2005 -  
Golden Key International Honour Society, 2004 -

**Professional Service:**

**Immediate Past President**, SC ASM, 2023 – 2025  
**Chair**, SC ASM Nominating Committee, 2023 - 2025  
**Interim Regional Planning Coordinator**, ASM Region I, 2022 -  
**At-Large Member**, ASM Branch Organization Subcommittee, 2022 -  
**Review Editor**, Frontiers in Bacteriology Editorial Board, 2022 -  
**Chair, Extramural Funding Working Group**, CURE Drug Repurposing Collaboratory (CDRC), 2022 -  
**Guest Editor**, Pathogens, 2022-2023  
**Guest Editor**, Antibiotics, 2022-2023  
**Proposal Reviewer**, National Science Centre, Poland, 2022  
**Member**, AAMC Council of Faculty and Academic Societies (CFAS), 2022 – 2023  
**Reviewer**, Prisma Health Transformative Seed Grants, 2022 – 2023  
**Ad-hoc Reviewer**, Current Microbiology, 2021 -  
**Ad-hoc Reviewer**, Pathogens, 2021 -  
**Ad-hoc Reviewer**, Antimicrobial Agents and Chemotherapy, 2021 –  
**Reviewer Board**, Microorganisms, 2021 -  
**Ad-hoc Reviewer**, Vaccines, 2021 –  
**President**, SC ASM, 2021 - 2023  
**Chair**, SC ASM Executive Committee, 2021 – 2023  
**Chair**, SC ASM Program Committee, 2021 – 2023  
**Chair**, SC ASM Award Committee, 2021 - 2023  
**Member**, SC ASM Nominating Committee, 2021 – 2023  
**Member**, SC ASM Membership Committee, 2021 - 2023  
**Member**, Prisma Health Scientific Advisory Council, 2021 - 2023  
**Ad-hoc Reviewer**, Antibiotics, 2020-  
**Ad-hoc Reviewer**, Biomolecules, 2020-  
**Ad-hoc Reviewer**, Clinical Case Reports, 2020-  
**Ad-hoc Reviewer**, Future Microbiology, 2020-  
**Member**, SC ASM Executive Committee, 2020 - 2023  
**Conference Co-chair**, Fall Meeting of SCBASM, 2020  
**Member**, Prisma Health Rapid Innovation Task Force, 2020 - 2023  
**Guest Editor**, International Journal of Molecular Sciences, 2020  
**Vice-President**, SC ASM, 2020-2021  
**Ad-hoc Reviewer**, Scientific Reports, 2019 -  
**Ad-hoc Reviewer**, World Journal of Microbiology and Biotechnology, 2019 -

**Ad-hoc Reviewer**, PLoS ONE, 2019 -  
**Ad-hoc Reviewer**, Microbial Pathogenesis, 2019 -  
**Ad-hoc Reviewer**, Frontiers in Microbiology, 2019 –  
**Reviewer**, ASM Conference for Undergraduate Educators abstracts, 2019 -  
**Reviewer**, ASM Undergraduate Research Fellowship applications, 2019 -  
**Faculty Advisor**, USCSOMG Student Chapter of ASM, 2019 - 2023  
**Member**, SC ASM Communications Committee, 2019 - 2021  
**Member**, SC ASM Program Committee, 2019 - 2023  
**ASM Young Ambassador (SC)**, 2019 - 2021  
**Ad-hoc Reviewer**, BMC Microbiology, 2018 -  
**Ad-hoc Reviewer**, Journal of Biological Education, 2018 -  
**Editorial Board Member**, Journal of Microbiology and Biology Education, 2018 -  
**Reviewer**, Journal of Microbiology and Biology Education, 2018 -  
**Reviewer**, Annual Biomedical Research Conference for Minority Students, 2018  
**Proposal Reviewer**, American Evaluation Association, 2018  
**Microbial Biology Panelist**, National Science Foundation, 2016, 2019

### **University Service:**

**BSL-3 Representative**, UofSC Institutional Biosafety Committee, 2023 –  
**Member**, UofSCSOMG Appointment and Promotion Committee (Biomedical Professional Track), 2022 – 2023  
**Microbiology Longitudinal Thread Leader**, 2022 - 2023  
**Chair**, UofSCSOMG Research Program Manager Search Committee, 2022  
**Member**, UofSC Vice President for Research Faculty Advisory Council, 2022  
**Chair**, ASPIREinG Grant Review Committee, 2022  
**Member**, UofSC Institutional Biosafety Committee, 2021 –  
**Member**, Executive Expanded Leadership Team, 2021 – 2023  
**Co-Chair**, UofSCSOMG Research Strategic Planning Taskforce, 2021-2022  
**Member**, Honor and Professionalism Council/Student Evaluation and Promotion Committee Taskforce, 2021 – 2022  
**Member**, LCME Junior Faculty Site Visit Committee, 2021  
**Member**, LCME Assessment Self-Study Committee, 2021  
**Reviewer**, UofSC ASPIRE Track I grants, 2021  
**Vice-Chair**, USCSOMG Student Evaluation and Promotion Committee, 2020 – 2023  
**Member**, USCSOMG Space Committee, 2020 - 2023  
**Chair**, USCSOMG Research Space Allocation Subcommittee, 2020 - 2023  
**Member**, USCSOMG Admissions Committee, 2020 - 2023  
**Member**, USCSOMG Chair Search Committee, Department of Biomedical Sciences, 2020  
**Member**, USCSOMG Student Evaluation and Promotion Committee, 2019 - 2023  
**Member**, USCSOMG Admissions Evaluation Committee, 2019 - 2023  
**Member**, USCSOMG Faculty Search Committee, 2017 - 2022  
**Member**, USCSOMG Faculty Development Committee, 2017-2020  
**Member**, USCSOMG Student Affairs Committee, 2017-2019  
**Graduate Student Representative**, Assistant Professor Search Committee (Molecular Mechanisms of Health and Disease) Kent State University, Department of Biological Sciences, 2010

**Graduate Student Representative**, Assistant Professor Search Committee (Microbial Ecology) Kent State University, Department of Biological Sciences, 2007

**Community Service:**

**Member**, East Walnut Hills Assembly, Cincinnati, Ohio, 2015-2017

**Instructor**, Northeast Ohio Research Education Medicine Alliance, Kent State University College of Arts and Science, 2011

**Specialist**, Medical Reserve Corp Specialist, Portage County, Ohio, 2008-2011

**Appointed Judge**, Science Fair, Lippman Jewish Community Day, Akron, Ohio, 2007

**Teaching Experience:**

**Assistant Professor/Associate Professor**, University of South Carolina School of Medicine Greenville, Department of Biomedical Sciences, 2017 - 2023

- GMED-G810: Academic Medicine Research Elective. The Academic Medicine Research Elective provides an opportunity to last year medical students to participate in an ongoing project with a researcher from the Health Sciences Center at Prisma Health.
  - *Elective Director*
- GMED-G770/G870: Novel Coronavirus/Contemporary Pandemics Elective. Through readings, online modules, and virtual discussions with basic science and clinical faculty, students have the opportunity to gain a deeper understanding of SARS-CoV-2 and other contemporary pandemics, as well as its effects on patients and the healthcare system.
  - *Elective Director*
- GMED-G650: Defenses and Responses. A multidisciplinary course that integrates immunology, pathology and pharmacology to elucidate the mechanisms by which the body responds to a variety of stressors (e.g. infectious organisms) and the pathophysiological conditions that may result from these responses.
  - *Lecturer*
- GMED-G660: Biomedical Principles of Infectious Disease and Therapy. A course that focuses on human infectious diseases and their treatments for medical students.
  - *Module Director*

**Visiting Assistant Professor**, Miami University Middletown Campus, Department of Biological Sciences, 2015-2017

- BIO 171: Human Anatomy and Physiology. A course that focuses on the structure and function of the human body including basic cellular principles, embryology, the reproductive system, the endocrine system and the nervous system.
- MBI 111: Microorganisms and Human Disease. A lecture course that discusses microorganisms and the human diseases they cause, with particular emphasis on the impact of these relationships on the development of human societies - past, present, and future.
- MBI 161: Elementary Medical Microbiology. A lecture and laboratory course that is designed for students interested in characteristics and activities of microorganisms and their relation to health and disease.

- MBI 361: Epidemiology. A lecture course that focuses on the epidemic nature, etiology, and characteristics of infectious and organic diseases, and methods used to analyze their control within the framework of environmental and population variables.

**Senior Lecturer**, University of Akron-Wayne College, Department of Biology, 2011

- Biology 3100:103: Natural Science: Biology lecture and lab. A lecture and lab course that fulfilled part of the general education science requirement for non-science majors in which students were introduced to the major concepts governing living organisms using lectures and hands-on group laboratory exercises.

**Instructor**, Northeast Ohio Research Education Medicine Alliance (NEOREMA), 2011

- NEOREMA laboratory. A laboratory course that discussed basic microbiology concepts and techniques. This course was offered as part of the NEOREMA collaboration between the Cleveland Clinic, Cuyahoga Community College and Kent State University which was launched to increase the participation of under-represented groups within the biomedical sciences.

**Graduate Assistant**, Kent State University, Department of Biological Sciences, 2005-2011

- BSCI 30140: Cell Biology laboratory. A course for biology majors that investigated cellular physiology with an emphasis on the relationship between cellular structure and function. The laboratory section covered molecular biology techniques including electrophoresis, microscopy and PCR.
- BSL-2 and BSL-3 workshops. Workshops designed for biosafety professionals, researchers and laboratorians to enhance individual knowledge and meet the scientific, regulatory, biocontainment, biosafety, and engineering challenges associated with working in a biocontainment facility. Topics covered in these workshops included an introduction to microbiology and biosafety, principles of biosafety and biocontainment, the biological risk assessment process, laboratory sterilization and disinfection, emergency planning and response, laboratory regulations, standards and guidelines, biocontainment and laboratory security, agents of bioterrorism and hands-on sessions using laboratory equipment.
- BSCI 30171: General Microbiology laboratory. A biology majors' course that covered the fundamental principles of microbiology and of microorganisms, including their structure, physiology, genetics, pathogenicity, classification and mechanisms of cultivation and control. The laboratory discussed basic microbiological techniques.

**Lecture Aide**, Kent State University, Department of Biological Sciences, 2008

- BSCI 10002: Life on Planet Earth lecture. A course for non-science majors that surveyed the breadth of life on Earth and included discussions of the unique ecology and survival strategies of animals, plants and microbes in their natural habitats.

**Guest Lecturer**, Kent State University, Department of Biological Sciences, 2005-2011

- *BSCI 50143: Eukaryotic Cell Biology*. A biology graduate level course which surveyed the structure and function of eukaryotic cells, including recent advances in research technology.
- *BSCI 40174/50174/70174: Immunology*. A course for senior biology undergraduates and biology graduate students that surveyed mammalian host responses to self and non-self with emphasis on the cellular and molecular mechanisms by which innate and acquired immunity result.
- *BSCI 30171: General Microbiology*. A biology majors' course that covered the fundamental principles of microbiology and of microorganisms, including their structure, physiology, genetics, pathogenicity, classification and mechanisms of cultivation and control.
- *BSCI 20021: Basic Microbiology*. A course designed primarily for nursing majors that covered the basic principles of microbiology, specifically, the direct relationship on the health and well-being of man impacted by microorganisms.
- *BSCI 20020: Biological Structure and Function*. A course for nursing majors that emphasized the physiochemical and cellular basis of organ-system structure, function and development.
- *BSCI 10002: Life on Planet Earth*. A course for non-science majors that surveyed the breadth of life on Earth and included discussions of the unique ecology and survival strategies of animals, plants and microbes in their natural habitats.
- *BSCI 10001: Human Biology*. A course for non-science majors which focused on studying the scientific method, genetics, reproduction, development, disease, nutrition and physical fitness in humans.

**ACT Testing Center Staff**, Northeastern Ohio Universities College of Medicine

- Served as a test center assistant responsible for the proctoring of ACT examinations.

**Fellow Research Supervision** (\*denotes publication coauthor, †denotes presentation coauthor):

*Prisma Health Upstate Department of Medicine/University of South Carolina School of Medicine Greenville (2021-present)*

Patrick Kent<sup>†</sup>

**Medical Student Research Supervision** (\*denotes publication coauthor, †denotes presentation coauthor, §denotes Summer Research Scholars Fellowship recipient):

*University of South Carolina School of Medicine Greenville (2017-present)*

Janet Basinger*	Kristan Abernathy*	Ben Wagner* <sup>†</sup>
Jessica Bigner* <sup>†</sup>	Daniel Lee*	Samuel Lee
Connor Evins*	Campbell Hathaway <sup>†</sup>	Connor Horne <sup>§</sup>
Noah Schammel*	Kyleigh Connolly	Elias Wheibe <sup>†</sup>
Elena Roberts*	Brionna Bennett <sup>§</sup>	Ryan Ellis*

**Graduate Student Research Supervision** (\*denotes publication coauthor, †denotes presentation coauthor):*University of South Carolina Arnold School of Public Health (2019 - 2023)*

Brianna Tennie

**Medical Student Academic Coaching***University of South Carolina School of Medicine Greenville (Class of 2021)*

Andrew Larson	Brent Sinopoli	Lindsey Ina	Margaret Huggins
Arielle Houston	Matt Churitch	Billy Weibley	Tyler Seckel

*University of South Carolina School of Medicine Greenville (Class of 2020)*

Mary Caldwell	Tyler Fleming	John Hanna	Abbey Stoker
Kiersten Rule	Zach Waldman	Ben Bailes	Drew Myers
Erika Richardson			

**Undergraduate Supervision** (\*denotes publication coauthor, †denotes presentation coauthor):*University of South Carolina (2020 - 2023)*

Katherine McCain (Magellan Mini Grant - \$800)

*Furman University (2019-)*

Elizabeth Hogue (Furman Internship Scholarship - \$2500)  
 Lauren Bracken (Furman Internship Scholarship - \$2500)

*Miami University Middletown Campus (2015-2017)*

Regina Crane      William Dugger      Robert White

*Miami University (2011-2015)*

Amber Beckett*†	Mary Carrier*†	Robert Schmidt*†	Kyle Bobey
Sarah Geiger*†	Nathaniel Buzenski		

Maeva Metz\*† (Awarded Goldwater and Astronaut Scholarships)

*University of Akron-Wayne College (2011)*

Tony Miller

*Kent State University (2005-2011)*

Nolan Brown	Simon Evangelista*	Ben Millard	Alvin Das
Elizabeth Carlisle	Maria Benoy	Sahil Pandya	Andrea Teodosiu
Salvatore Coppola	Jonathon Wilson		

**Publications** (36 to date including one book chapter, Google Scholar h-index = 12):  
**Refereed Scientific Publications** (#denotes medical student, \*denotes undergraduate student, §denotes graduate student, †denotes authors contributed equally)

GM Traglia\*, S Montaña\*, A Baraka\*, JE Reddic, JF Meredith, **SE Fiester** and MS Ramirez (2021). Genomic diversity of *Acinetobacter* clinical isolates from a large southeastern United States hospital system. *Microbiology Resource Announcements*, In preparation.

BK Tennie§, JA Bigner#, **SE Fiester**, JW Kelly, DC Lee#, SD Lee#, JR Meredith, JE Reddic, SE Williams and MS Nolan (2021). Evaluating the clinical epidemiology of *Klebsiella* infections in the Upstate region of South Carolina. *In preparation*.

RC Ellis#, EK Roberts#, JT Grier and **SE Fiester** (2022). *Acinetobacter baumannii* infections resistant to treatment: warning signs from the COVID-19 pandemic. *Future Microbiology*, 17(17) 1345-1347.

MH Hyche\*, P Kent, CMG Schammel, M Devane, **SE Fiester**, M Call and J Knight (2022). Closing the brief case: *Tropheryma whippelii* infection resulting in neurological symptoms. *Journal of Clinical Microbiology*, 60(8) 1-2.

MH Hyche\*, P Kent, CMG Schammel, M Devane, **SE Fiester**, M Call and J Knight (2022). The brief case: *Tropheryma whippelii* infection resulting in neurological symptoms. *Journal of Clinical Microbiology*, 60(8) 1-5.

MA Knapp#, TA Johnson#, MK Ritter#, RO Rainer, **SE Fiester**, JT Grier, TD Connell and S Arce (2021). Immunomodulatory regulation by heat-labile enterotoxins and potential therapeutic applications. *Expert Review of Vaccines*, 20(8) 975-987.

ZC Overton-Hennessy\*, AM Devane, **SE Fiester**, N Schammel#, CMG Schammel and JW Fulcher (2021). Ruptured splenic artery pseudoaneurysm causing hemorrhage into a pancreatic pseudocyst. *The American Journal of Forensic Medicine and Pathology*, 43(1) 76-80.

CW Evins#, C Sutton§, ST Withers, JT Grier, CMG Schammel, and **SE Fiester** (2021). Community-acquired extended-spectrum  $\beta$ -lactamase producing and extensively drug resistant *Escherichia coli* in a 28-year-old pyelonephritis patient lacking risk factors. *Antibiotics*, 10(5) 533.

JT Grier†, BA Arivett§†, MS Ramírez, RJ Chosed, JA Bigner#, EJ Ohneck§, ML Metz§, CR Wood§, S Arce, A Tartaro, RF Relich, LA Actis and **SE Fiester** (2021). Two *Acinetobacter baumannii* isolates obtained from a fatal necrotizing fasciitis infection display distinct genomic and phenotypic characteristics in comparison to type strains. *Frontiers in Cellular and Infection Microbiology*, 11(2021) 249.



GW Birsic<sup>#</sup>, BE Hentschel\*, ZC Overton-Hennessy\*, ME Ward, **SE Fiester** and JW Fulcher (2021). Fatal coronary artery vasculitis with mixed features. *The American Journal of Forensic Medicine and Pathology*, 42(3) 307-310.

JA Bigner<sup>#</sup>, **SE Fiester**, JW Fulcher, CMG Schammel, ME Ward, HE Burney\*, JF Wheeler, SK Wheeler and JM Teuber (2021). Glyphosate and polyoxyethyleneamine ingestion leading to renal, hepatic and pulmonary failure. *The American Journal of Forensic Medicine and Pathology*, 42(3) 282-285.

BA Arivett, A Charnot-Katsikas, C Bethel<sup>§</sup>, **SE Fiester** and LA Actis (2020). Draft genome sequences of two *Acinetobacter baumannii* isolates from a fatal case of necrotizing fasciitis. *Microbiology Resource Announcements*, 9(13).

AB Kennedy and **SE Fiester** (2020). Reduced performance on examinations following untimed short assessments, *Studies in Educational Evaluation*, 65(2020) 100835.

DC Lee<sup>#</sup>, **SE Fiester**, LA Madeline, JW Fulcher, ME Ward, CMG Schammel and RK Hakimi (2019). *Acanthamoeba spp.* and *Balamuthia mandrillaris* leading to fatal granulomatous amebic encephalitis, *Forensic Science, Medicine and Pathology*, 1-6.

JW Basinger<sup>#</sup>, **SE Fiester** and JW Fulcher (2019). Mortality from neonatal herpes simplex viremia causing severe hepatitis, *Forensic Science, Medicine and Pathology*, 1-4.

GW Birsic<sup>#</sup>, JW Fulcher and **SE Fiester** (2019). Embolization of endocardial vegetation with stroke presentation, *The American Journal of Forensic Medicine and Pathology*, 40(1) 72-76.

K. Abernathy<sup>#</sup>, **S Fiester** and JW Fulcher (2019). Miliary pattern MRSA sepsis following clandestine intravenous infusion, *Forensic Science, Medicine and Pathology*, 15(2) 267-271.

**SE Fiester**, BA Arivett<sup>§</sup>, AC Beckett<sup>§</sup>, BR Wagner<sup>#</sup>, EJ Ohneck<sup>§</sup>, R Schmidt\*, JT Grier and LA Actis (2019). Miltefosine reduces the cytolytic activity and virulence of *Acinetobacter baumannii*, *Antimicrobial Agents and Chemotherapy*, 63(1) e01409-18.

J Basinger<sup>#</sup>, **SE Fiester** and JW Fulcher (2018). Methicillin-resistant *Staphylococcus aureus* parotitis leading to mortality in an adolescent male, *The American Journal of Forensic Medicine and Pathology*, 39(3) 257-260.

EJ Ohneck<sup>§</sup>, BA Arivett<sup>§</sup>, **SE Fiester**, CR Wood<sup>§</sup>, ML Metz\*, GM Simeone\* and LA Actis (2018). Mucin acts as a nutrient source and a signal for the differential expression of genes coding for cellular processes and virulence factors in *Acinetobacter baumannii*, *PLoS ONE*, 13(1) e0190599.

S Rumbo-Feal<sup>§†</sup>, A Pérez<sup>†</sup>, TA Ramelot<sup>†</sup>, BA Arivett<sup>§</sup>, A Beceiro, JA Vallejo, L Álvarez-Fraga, M Merino, EJ Ohneck<sup>§</sup>, **SE Fiester**, MA Kennedy, LA Actis<sup>†</sup>, G Bou<sup>†</sup> and M Poza<sup>†</sup> (2017). Contribution of *A. baumannii* A1S\_0114 gene to the interaction with eukaryotic cells and virulence, *Frontiers in Cellular and Infection Microbiology*, 7(108).

**SE Fiester**, BA Arivett<sup>§</sup>, RE Schmidt\*, AC Beckett\*, T Ticak<sup>§</sup>, MV Carrier\*, R Ghosh<sup>§</sup>, EJ Ohneck<sup>§</sup>, ML Metz\*, MK Sellin-Jeffries and LA Actis (2016). Iron-regulated phospholipase C activity contributes to the cytolytic activity and virulence of *Acinetobacter baumannii*, *PLoS ONE*, 11(11) e0167068.

BA Arivett<sup>§</sup>, DC Ream<sup>§</sup>, **SE Fiester**, D Kidane, and LA Actis (2016). Draft genome sequences of *Acinetobacter baumannii* isolates from wounded military personnel, *Genome Announcements*, 4(4) e00773-16.

BA Arivett<sup>§</sup>, DC Ream<sup>§</sup>, **SE Fiester**, D Kidane and LA Actis (2016). Draft genome sequences of *Escherichia coli* isolates from wounded military personnel, *Genome Announcements*, 4(4) e00828-16.

BA Arivett<sup>§</sup>, DC Ream<sup>§</sup>, **SE Fiester**, D Kidane and LA Actis (2016). Draft genome sequences of *Pseudomonas aeruginosa* isolates from wounded military personnel, *Genome Announcements*, 4(4) e00829-16.

BA Arivett<sup>§</sup>, **SE Fiester**, EJ Ohneck<sup>§</sup>, WF Penwell<sup>§</sup>, C Kaufman, RF Relich and LA Actis (2015). Antimicrobial activity of gallium protoporphyrin IX against *Acinetobacter baumannii* strains displaying different antibiotic resistance phenotypes, *Antimicrobial Agents and Chemotherapy*, 59(12) 7657-7665.

CM Harding<sup>§</sup>, MA Nasr, RL Kinsella, NE Scott, LJ Foster, BS Weber, **SE Fiester**, LA Actis, EN Tracy, RS Munson Jr. and MF Feldman (2015). *Acinetobacter* strains carry two functional oligosaccharyltransferases, one dedicated exclusively to type IV pilin, and the other one dedicated to O-glycosylation of multiple proteins, *Molecular Microbiology*, 96(5) 1023-1041.

BA Arivett<sup>§</sup>, **SE Fiester**, DC Ream<sup>§</sup>, D. Centron, M. Soledad Ramirez, M. Tolmasky and LA Actis (2015). Draft genome of the multidrug-resistant *Acinetobacter baumannii* A155 clinical isolate, *Genome Announcements*, 3(2) e00212-15.

**SE Fiester**, CC Nwugo, WF Penwell<sup>§</sup>, JM Neary, AC Beckett\*, BA Arivett<sup>§</sup>, SC Geiger\*, RE Schmidt\*, PL Connerly, SM Menke, AP Tomaras and LA Actis (2015). Role of the carboxyl terminus of SecA in iron acquisition, protein translocation and virulence of the bacterial pathogen *Acinetobacter baumannii*, *Infection and Immunity*, 83(4) 1354-1365.

BA Arivett<sup>§</sup>, DC Ream<sup>§</sup>, **SE Fiester**, K Mende, CK Murray, MG Thompson, S Kanduru, AM Summers, AL Roth, DV Zurawski and LA Actis (2015). Draft genomes of the *Klebsiella pneumoniae* ATCC 13883<sup>T</sup> clinical type strain and three multidrug resistant clinical isolates, *Genome Announcements*, 3(1) e01385-14.

T Ticak<sup>§</sup>, D Hariraju<sup>§</sup>, M Bayron Arcelay\*, B Arivett<sup>§</sup>, **S Fiester** and DJ Ferguson (2014). Isolation and characterization of a tetramethylammonium degrading *Methanococcoides* strain and a novel glycine betaine utilizing *Methanlobus* strain, *Archives of Microbiology*, 197(2) 197-209.

**SE Fiester**, SF Evangelista\*, BA Arivett<sup>§</sup>, DJ Adams<sup>§</sup>, RE Redfern and CJ Woolverton (2014). The role of the liquid crystalline state in the bundling of *Salmonella enterica* serovar Typhimurium flagella, *Liquid Crystals*, 41(9) 1277-1285.

**SE Fiester** and LA Actis (2013). Stress responses in the human opportunistic pathogen *Acinetobacter baumannii*, *Future Microbiology*, 8(3) 353-365.

**SE Fiester**, SL Helfinstine<sup>§</sup>, TT Meilander<sup>§</sup> and CJ Woolverton (2012). Administering needs-assessed bioterrorism curricula to public health professionals using active-learning strategies, *Applied Biosafety: Journal of the American Biological Safety Association*, 17(4) 181-187.

**S Fiester**, S Helfinstine<sup>§</sup>, J Redfean<sup>§</sup>, R Uribe and C Woolverton (2012). Electron beam irradiation dose dependently damages the Bacillus spore coat and spore membrane, *International Journal of Microbiology*, 2012(2012) 579593.

**S Fiester**, A Jákli and C Woolverton (2011). Liquid crystal properties of a self-assembling viral coat protein. *Liquid Crystals*, 38(9) 1153-1157.  
-Featured as cover article.

**S Fiester**, J Redfean<sup>§</sup>, S Helfinstine<sup>§</sup>, T Meilander<sup>§</sup> and CJ Woolverton (2010). Lab safety and bioterrorism readiness curricula using active learning and hands-on strategies as continuing education for medical technologists, *Journal of Microbiology & Biology Education*, 11(1) 14-20.

**Book Chapters** (<sup>†</sup>denotes authors contributed equally)

S Rumbo-Feal<sup>†</sup>, A Pérez<sup>†</sup>, TA Ramelot<sup>†</sup>, BA Arivett<sup>§</sup>, A Beceiro, JA Vallejo, L Álvarez-Fraga, M Merino, EJ Ohneck<sup>§</sup>, **SE Fiester**, MA Kennedy, LA Actis<sup>†</sup>, G Bou<sup>†</sup> and M Poza<sup>†</sup> (2018). Contribution of *A. baumannii* A1S\_0114 gene to the interaction with eukaryotic cells and virulence. In *Pseudomonas and Acinetobacter: From Drug Resistance to Pathogenesis* (pp. 103-116). Lausanne, Switzerland: Frontiers.

**Presentations** (80 to date, #denotes medical student, \*undergraduates, §graduate students, †indicates invited presentations):

AT Sadek<sup>#</sup>, EM Wheibe<sup>#</sup>, K Connolly<sup>#</sup>, C Liu\*, CR Gutiérrez\*, BA Arivett, RF Relich, LA Actis, **S Fiester**, MS Ramírez and JT Grier. Resistance properties and host immune cell entry of necrotizing fasciitis *Acinetobacter baumannii* isolates, ASM Microbe 2023, June 2023.

MR Ryan<sup>#</sup>, MC Stroud\*, ZM Buchanan\*, AR Rojas\*, MP Knapp<sup>#</sup>, A Okinaga\*, TO Connell, **SE Fiester**, S Arce and JT Grier. The immunomodulatory effects of *E. coli* heat-labile enterotoxins on the respiratory immune response, Immunology 2023 The American Association of Immunologists Annual Meeting, May 2023.

E Wheibe<sup>#</sup>, K Connolly<sup>#</sup>, RF Relich, **SE Fiester** and JT Grier. Investigation of drug resistant *Acinetobacter baumannii* virulence factors implicated in intracellular survival within differentiated THP-1 cells, American Society for Clinical Pathology, September 2022.

MC Stroud\*, AR Rojas\*, MP Knapp<sup>#</sup>, A Okinaga\*, TD Connell, **SE Fiester**, S Arce and JT Grier. The effects of type II heat-labile enterotoxins on human respiratory-specific immune responses, ASM Microbe, June 2022.

M Muqri\*, K McCoy\*, A Okinaga<sup>#</sup>, **SE Fiester** and JT Grier. Investigating the Antiviral and Antibacterial Response in CRISPR Cas9-Mediated Knockdown of Interferon Induced Protein 35 (IFI35) in a Human Lung Epithelial Cell Line, 2022 Spring Meeting of the South Carolina Branch of the American Society for Microbiology, April 2022.

*-First Place in Undergraduate Category.*

E Wheibe<sup>#</sup>, K Connolly<sup>#</sup>, R Relich, **S Fiester** and JT Grier. Investigation of drug resistant *Acinetobacter baumannii* virulence factors implicated in intracellular survival within differentiated THP-1 cells, Mid-Atlantic Microbial Pathogenesis Meeting, February 2022.

MC Stroud\*, AR Rojas\*, MP Knapp<sup>#</sup>, A Okinaga\*, TD Connell, **SE Fiester**, S Arce and JT Grier. The effects of type II heat-labile enterotoxins on human respiratory-specific immune responses, Mid-Atlantic Microbial Pathogenesis Meeting, February 2022.

E Wheibe, K Connolly, RF Relich, SE Fiester and JT Grier. Investigation of drug resistant *Acinetobacter baumannii* virulence factors implicated in intracellular survival within differentiated THP-1 Cells, Eastern-Atlantic Student Research Forum, January 2022.

K McCoy\*, A Okinaga\*, M Muqri\*, **SE Fiester** and JT Grier. Investigating the antiviral and antibacterial response in CRISPR-Cas9 mediated knockdown of interferon induced protein 35 (IFI35) in a human lung epithelial cell line, Southeast Regional IDeA Meeting, November 2021.

MH Hyche\*, CMG Schammel, M Devane, **S Fiester**, M Call, P Kent and J Knight. *Tropheryma whippelii* manifesting in the CNS: case report and comprehensive literature review, 2021 Fall Meeting of the South Carolina Branch of the American Society for Microbiology, October 2021.

AR Rojas\*, MC Stroud\*, MP Knapp<sup>#</sup>, A Okinaga\*, TD Connell, **SE Fiester**, S Arce and JT Grier. Investigating the effects of type II heat-labile enterotoxins on human respiratory immune responses, 2021 Fall Meeting of the South Carolina Branch of the American Society for Microbiology, October 2021.

E Wheibe<sup>#</sup>, K Connolly<sup>#</sup>, **SE Fiester** and JT Grier. Examination of drug-resistant *Acinetobacter baumannii* response to phagocytosis by monocyte-derived macrophages, 2021 Fall Meeting of the South Carolina Branch of the American Society for Microbiology, October 2021.

-*Second Place in Medical Student Category*

AR Rojas\*, MC Stroud\*, MP Knapp<sup>#</sup>, A Okinaga\*, TD Connell, **SE Fiester**, S Arce and JT Grier. Investigating the effects of type II heat-labile enterotoxins on human respiratory immune responses, 2021 Prisma Health Research Showcase, October 2021.

E Wheibe, K Connolly, SE Fiester and JT Grier. Examination of drug resistant *Acinetobacter baumannii* response to phagocytosis by monocyte-derived macrophages, 2021 Prisma Health Research Showcase, October 2021.

K McCoy\*, A Okinaga\*, M Muqri\*, **SE Fiester** and JT Grier. Investigating the antiviral and antibacterial response in CRISPR-Cas9 mediated knockdown of interferon induced protein 35 (IFI35) in a human lung epithelial cell line, Biomedical Sciences Student Research Symposium, July 2021.

M Stroud\*, A Rojas\*, MP Knapp<sup>#</sup>, A Okinaga\*, **SE Fiester**, S Arce, and JT Grier. Investigating the effects of heat-labile enterotoxins in a respiratory immunization model, Biomedical Sciences Student Research Symposium, July 2021.

A Rojas\*, M Stroud\*, MP Knapp<sup>#</sup>, A Okinaga\*, **SE Fiester**, S Arce and JT Grier. Investigating the effects of heat-labile enterotoxins on cytokine secretion by human respiratory epithelial cells, Biomedical Sciences Student Research Symposium, July 2021.

C Liu\*, CR Gutiérrez\*, BA Arivett, RF Relich, JT Grier, LA Actis, **SE Fiester** and M Ramírez. Changes in resistance properties of extensively drug resistant *Acinetobacter baumannii* over the course of a lethal infection, World Microbe Forum, June 2021.

<sup>†</sup>**SE Fiester**. Conotton Valley Union Local Schools High School Graduation Commencement Address, Bowerston, OH, May 2021.

C Hathaway<sup>#</sup>, CMG Schammel and **SE Fiester**. *Aspergillus* otomycosis leading to tympanic membrane rupture in a young immunocompetent woman, Discover USC, Columbia, SC, April 2021.

MH Hyche\*, CMG Schammel, M Devane, **S Fiester**, M Call, P Kent, J Knight. *Tropheryma whipplei* manifesting in the CNS: case report and comprehensive literature review, Discover USC, Columbia, SC, April 2021.

-*First Place in Case Reports/Small Series/Learning Innovation Category*

K McCain\*, JT Grier and **SE Fiester**. Elucidation of heme-*b* utilization mechanisms by the human nosocomial pathogen *Acinetobacter baumannii*, Discover USC, Columbia, SC, April 2021.

C Hathaway<sup>#</sup>, CMG Schammel and **SE Fiester**. *Aspergillus* otomycosis in a young immunocompetent woman, SC Upstate Research Symposium (SCURS), Spartanburg, SC, April 2021.

-Presented as a conference proceeding

<sup>†</sup>E Hogue\*, L Bracken\*, **SE Fiester** and JT Grier. Development of Models for Study of Host-Pathogen Interactions During Human *Acinetobacter baumannii* infection via Novel Dual RNA-sequencing Technology, 2021 SC-INBRE Science Symposium, Columbia, SC, January 2021.

L Bracken\*, E Hogue\*, **SE Fiester** and JT Grier. Exploration of the host-pathogen interactions of *Acinetobacter baumannii* and human lung epithelial cells with novel dual RNA-sequencing technology, 2020 Fall Meeting of the South Carolina Branch of the American Society for Microbiology, Greenville, SC, October 2020.

JA Kohrt\*, M Young\*, N Nawar\*, DO Boldt\*, J Valbuena\*, **SE Fiester**, A Tartaro and JT Grier. Applications of R and Shiny for interactive visualizations of host-pathogen interactions in dual RNA-seq data, 2020 Fall Meeting of the South Carolina Branch of the American Society for Microbiology, Greenville, SC, October 2020.

-This presentation won "Second Place Undergraduate Category."

MA Knapp<sup>#</sup>, TA Johnson<sup>#</sup>, MK Ritter<sup>#</sup>, RO Rainer, **SE Fiester**, JT Grier, TD Connell and S Arce. Differential binding of *E. coli* enterotoxins LT-IIa, LT-IIb and LT-IIc to human B and T cell subsets identifies a potential use as adjuvants in cancer immunotherapy, American Association for Cancer Research Virtual Special Conference on Tumor Immunology and Immunotherapy, Philadelphia, PA, October 2020.

-Featured as "MA Knapp, TA Johnson, MK Ritter, RO Rainer, **SE Fiester**, JT Grier, TD Connell and S Arce (2021). Differential binding of *E. coli* enterotoxins LT-IIa, LT-IIb and LT-IIc to human B and T cell subsets identifies a potential use as adjuvants in cancer immunotherapy, *Cancer Immunology Research*, 9(2 Suppl): Abstract nr PO024.

DC Lee<sup>#</sup>, **SE Fiester**, LA Madeline, G Dukes, JW Fulcher, ME Ward, CMG Schammel and RK Hakimi. Fatal granulomatous amebic encephalitis in Upstate South Carolina, 2020 Fall Meeting of the South Carolina Branch of the American Society for Microbiology, Greenville, SC, October 2020.

K McCain\*, JT Grier and **SE Fiester**. Elucidation of heme-*b* utilization mechanisms by the human nosocomial pathogen *Acinetobacter baumannii*, 2<sup>nd</sup> Annual Biomedical Sciences Student Research Virtual Symposium, Greenville, SC, July 2020.

L Bracken, E Hogue, S Fiester and JT Grier. Dual RNA-Seq of *A. baumannii* with human host, 2<sup>nd</sup> Annual Biomedical Sciences Student Research Virtual Symposium, Greenville, SC, July 2020.

C Liu\*, CR Gutiérrez\*, BA Arivett, RF Relich, JT Grier, LA Actis, **SE Fiester** and MS Ramírez. Changes in antimicrobial resistance properties of extensively drug-resistant *Acinetobacter* over the course of a lethal infection, American Society for Microbiology Microbe 2020, Chicago, IL, June 2020.

*-Abstract accepted, conference cancelled due to SARS-CoV-2 pandemic*

GM Traglia\*, J Fernandez\*, JE Reddic, JF Meredith, **SE Fiester** and M Ramirez. Genomic diversity of *Acinetobacter* clinical isolates from a large southeastern United States hospital system, American Society for Microbiology Microbe 2020, Chicago, IL, June 2020.

*-Abstract accepted, conference cancelled due to SARS-CoV-2 pandemic*

B. Tennie<sup>§</sup>, **SE Fiester**, JR Meredith, JW Kelly, SE Williams, JE Reddic, SD Lee<sup>#</sup>, DC Lee<sup>#</sup>, JA Bigner<sup>#</sup> and MS Nolan. Evaluating the clinical epidemiology of *Klebsiella* infections in the Upstate region of South Carolina, Prisma Health, Health Sciences Center Research Showcase, Greenville, SC, April 2020.

*-Abstract accepted, conference cancelled due to SARS-CoV-2 pandemic*

†DC Lee<sup>#</sup>, **SE Fiester**, LA Madeline, JW Fulcher, ME Ward, CMG Schammel and RK Hakimi. *Acanthamoeba spp.* and *Balamuthia mandrillaris* leading to fatal granulomatous amebic encephalitis, 4<sup>th</sup> Annual Harriet and Jerry Dempsey Research Conference, Greenville, SC, March 2020.

*-Abstract accepted, conference cancelled due to SARS-CoV-2 pandemic*

†DC Lee<sup>#</sup>, **SE Fiester**, LA Madeline, JW Fulcher, ME Ward, CMG Schammel and RK Hakimi. *Acanthamoeba spp.* and *Balamuthia mandrillaris* leading to fatal granulomatous amebic encephalitis, 43rd Annual Meeting of the American Society of Neuroimaging (ASN), Atlanta, GA, March 2020.

*-DC Lee awarded \$1000 from Prisma Health Department of Internal Medicine for travel*

†JT Grier. Dual RNA-seq for the analysis of host-pathogen interactions in a model of *A. baumannii* infection, National Big Data Health Science Conference 2020, Columbia, SC, February 2020.

*-Presentation of 2019 BIPP grant awarded to JT Grier and SE Fiester as Co-PIs.*

L Bracken, E Hogue, S Fiester and JT Grier. Dual RNA-Seq of *A. baumannii* with human host, USCSOMG Biomedical Sciences Summer Research Symposium, Greenville, SC, July 2019.

BA Arivett<sup>§</sup>, JT Grier, JA Bigner<sup>#</sup>, EJ Ohneck<sup>§</sup>, ML Metz\*, CR Wood<sup>§</sup>, RF Relich, LA Actis and **SE Fiester**. Increased twitching motility, biofilm formation and virulence of *Acinetobacter baumannii* associated with necrotizing fasciitis, ASM Microbe 2019, San Francisco, CA, June 2019.

<sup>†</sup>**SE Fiester**, BA Arivett<sup>§</sup>, AC Beckett<sup>§</sup>, BR Wagner<sup>#</sup>, EJ Ohneck<sup>§</sup>, RE Schmidt\* and LA Actis. Rapid Fire Talk (Outside the Box Therapeutics): Hexadecylphosphocholine reduces *Acinetobacter baumannii* virulence, ASM Microbe 2018, Atlanta, GA, June 2018.

**SE Fiester**, BA Arivett<sup>§</sup>, AC Beckett<sup>§</sup>, BR Wagner<sup>#</sup>, EJ Ohneck<sup>§</sup>, RE Schmidt\* and LA Actis. Hexadecylphosphocholine reduces *Acinetobacter baumannii* virulence, ASM Microbe 2018, Atlanta, GA, June 2018.

<sup>†</sup>S Arce, A Blenda, R Chosed, **S Fiester** and W Roudebush. Introduction to the Biomedical Researchers at USCSOM-Greenville, Greenville Health System Research Division Advisory Group quarterly meeting, Greenville, SC, February 2018.

BA Arivett<sup>§</sup>, T Gerke, **SE Fiester** and A Farone. Use of synchrotron radiation to investigate heme-like gallium protoporphyrin IX in *Acinetobacter baumannii*, Kentucky-Tennessee Branch ASM Fall 2017 Meeting, Cookeville, TN, November 2017.

*-This presentation won "Best Graduate Poster."*

EJ Ohneck<sup>§</sup>, BA Arivett<sup>§</sup>, **SE Fiester**, CR Wood<sup>§</sup>, ML Metz\*, GM Simeone\* and LA Actis. Mucin acts as a signal for the differential expression of cellular processes and virulence factors in *Acinetobacter baumannii*, 14<sup>th</sup> Annual Cell, Molecular and Structural Biology (CMSB) Symposium, Miami University, Oxford, OH, June 2016.

EJ Ohneck<sup>§</sup>, BA Arivett<sup>§</sup>, **SE Fiester**, GM Simeone\*, MM Metz\* and LA Actis. Investigating the role of the *Acinetobacter baumannii* two-component system BfmRS in sensing and responding to mucin, 22<sup>nd</sup> Annual Midwest Microbial Pathogenesis Conference, Indianapolis, IN, August 2015.

CM Harding<sup>§</sup>, MA Nasr, RL Kinsella, BS Weber, **SE Fiester**, LA Actis, EN Tracy, RS Munson and MF Feldman. *Acinetobacter* strains carry two functional oligosaccharyltransferases, one devoted exclusively to type IV pili and one devoted to O-glycosylation of multiple proteins, *Acinetobacter* 2015 10<sup>th</sup> International Symposium on the Biology of *Acinetobacter*, Athens, Greece, June 2015.

CR Wood<sup>§</sup>, BA Arivett<sup>§</sup>, **SE Fiester** and LA Actis. Role of a novel type I pilus in *Acinetobacter baumannii* ATCC 17978, Ohio Branch of the American Society for Microbiology Annual Meeting, Lorain, OH, April 2015.

A Tomaras, J Crandon, C McPherson, WF Penwell<sup>§</sup>, **SE Fiester**, BA Arivett<sup>§</sup>, LA Actis and D Nicolau. Lack of correlation between *in vitro* activity and *in vivo* efficacy of MB-1, a siderophore- $\beta$ -lactam conjugate, against multiple strains of *Acinetobacter baumannii*, ICAAC 2014, Washington, DC, September 2014.

SC Geiger\*, BA Arivett<sup>§</sup>, **SE Fiester** and LA Actis. Determining the antimicrobial mode of action of GaPPIX on *Acinetobacter baumannii*, 12<sup>th</sup> Annual Cell, Molecular and Structural Biology (CMSB) Symposium, Miami University, Oxford, OH, May 2014.



BA Arivett<sup>§</sup>, WF Penwell<sup>§</sup>, CM Kaufman, RF Relich, **SE Fiester** and LA Actis. Gallium protoporphyrin IX inhibits growth of multidrug-resistant *Acinetobacter baumannii*, 114<sup>th</sup> General Meeting of the American Society for Microbiology, Boston, MA, May 2014.

EJ Ohneck<sup>§</sup>, **SE Fiester**, DL Zimble<sup>§</sup>, PN Rather and LA Actis. Characterization of the BfmRS two-component regulatory system in *Acinetobacter* clinical strains, 114<sup>th</sup> General Meeting of the American Society for Microbiology, Boston, MA, May 2014.

**SE Fiester**, CC Nwugo, WF Penwell<sup>§</sup>, J Neary, AC Beckett\*, BA Arivett<sup>§</sup>, PL Connerly, SM Menke, AP Tomaras and LA Actis. Role of the carboxyl terminus of SecA in iron acquisition, protein translocation and virulence in the bacterial pathogen *Acinetobacter baumannii*, 114<sup>th</sup> General Meeting of the American Society for Microbiology, Boston, MA, May 2014.

**SE Fiester**, CC Nwugo, WF Penwell<sup>§</sup>, JM Neary, AC Beckett\*, ML Metz\*, BA Arivett<sup>§</sup>, PM Connerly, SM Menke, AP Tomaras and LA Actis. Role of the carboxyl terminus of SecA in iron acquisition, protein translocation and virulence of the bacterial pathogen *Acinetobacter baumannii*, Ohio Branch of the American Society for Microbiology Annual Meeting, Columbus, OH, April 2014.

**SE Fiester**, BA Arivett<sup>§</sup>, AC Beckett\*, RE Schmidt\*, ML Metz\*, MV Carrier\* and LA Actis. Iron-regulated cytolytic activity plays a role in the virulence of the human pathogen *Acinetobacter baumannii*, Ohio Branch of the American Society for Microbiology Annual Meeting, Columbus, OH, April 2014.

GM Simeone\*, EJ Ohneck<sup>§</sup>, BA Arivett<sup>§</sup>, **SE Fiester** and LA Actis. *Acinetobacter baumannii* sensor kinase BfmS is involved in sensing pulmonary surfactant components, Ohio Branch of the American Society for Microbiology Annual Meeting, Columbus, OH, April 2014.

D Hariraju<sup>§</sup>, T Ticak<sup>§</sup>, M Bayron Arcelay\*, **SE Fiester** and DJ Ferguson Jr. Isolation and characterization of novel strains of quaternary amine utilizing archaea from estuarine sediment, Ohio Branch of the American Society for Microbiology Annual Meeting, Columbus, OH, April 2014.

SC Geiger\*, BA Arivett<sup>§</sup>, **SE Fiester** and LA Actis. Determining the antimicrobial mode of action of GaPPIX on *Acinetobacter baumannii*, Ohio Branch of the American Society for Microbiology Annual Meeting, Columbus, OH, April 2014.

**SE Fiester**, CC Nwugo, J Neary, WF Penwell<sup>§</sup>, BA Arivett<sup>§</sup>, AC Beckett\*, S Menke, AP Tomaras and LA Actis. Role of the C-terminus of SecA in iron acquisition and protein translocation by *Acinetobacter baumannii* ATCC 19606<sup>T</sup>, Cell, Molecular and Structural Biology (CMSB) Symposium, Miami University, Oxford, OH, May 2013.

ML Metz\*, BA Arivett<sup>§</sup>, AC Beckett\*, MV Carrier\*, WF Penwell<sup>§</sup>, **SE Fiester** and LA Actis. Phosphatidylcholine-specific phospholipase C activity is responsible for the hemolytic activity of *A. baumannii*, Cell, Molecular and Structural Biology (CMSB) Symposium, Miami University, Oxford, OH, May 2013.

EJ Ohneck<sup>§</sup>, DL Zimble<sup>§</sup>, **SE Fiester**, WF Penwell<sup>§</sup> and LA Actis. Characterization of the sensor kinase BfmS in multiple *Acinetobacter baumannii* strains, Cell, Molecular and Structural Biology (CMSB) Symposium, Miami University, Oxford, OH, May 2013.

**SE Fiester**, CC Nwugo, J Neary, WF Penwell<sup>§</sup>, BA Arivett<sup>§</sup>, AC Beckett\*, S Menke, AP Tomaras and LA Actis. Role of the C-terminus of SecA in iron acquisition and protein translocation by *Acinetobacter baumannii* ATCC 19606<sup>T</sup>, Ohio Branch of the American Society for Microbiology Annual Meeting, Ashland, OH, April 2013.

ML Metz\*, BA Arivett<sup>§</sup>, AC Beckett\*, MV Carrier\*, WF Penwell<sup>§</sup>, **SE Fiester** and LA Actis. Phosphatidylcholine-specific phospholipase C activity is responsible for the hemolytic activity of *A. baumannii*, Ohio Branch of the American Society for Microbiology Annual Meeting, Ashland, OH April 2013.

EJ Ohneck<sup>§</sup>, DL Zimble<sup>§</sup>, **SE Fiester**, WF Penwell<sup>§</sup> and LA Actis. Characterization of the sensor kinase BfmS in multiple *Acinetobacter baumannii* strains, Ohio Branch of the American Society for Microbiology Annual Meeting, Ashland, OH, April 2013.

ML Metz\*, BA Arivett<sup>§</sup>, AC Beckett\*, MV Carrier\*, WF Penwell<sup>§</sup>, **SE Fiester** and LA Actis. Examining hemolytic activity in *Acinetobacter baumannii*, Undergraduate Research Forum, Miami University, Oxford, OH, April 2013.

MK Sellin-Jeffries, BA Arivett<sup>§</sup>, **SE Fiester**, DD Coffey\*, LM Thornton\*, AW Smith\*, LA Actis, JT Oris. Development of two small fish species, *Pimephales promelas* and *Cyprinodon variegates*, as model organisms for immunotoxicity, Society of Toxicology and Environmental Chemistry North America 33<sup>rd</sup> Annual Meeting, Long Beach, CA, November 2012.

**SE Fiester**, BA Arivett<sup>§</sup>, MV Carrier\*, AC Beckett\* and LA Actis. Hemolytic activity of *Acinetobacter baumannii*, 19<sup>th</sup> Annual Midwest Microbial Pathogenesis Conference, Milwaukee, WI, September 2012.

BA Arivett<sup>§</sup>, **SE Fiester**, WF Penwell<sup>§</sup>, DL Zimble<sup>§</sup> and LA Actis. Exploiting an iron vein: *Acinetobacter baumannii*'s acquisition of iron from erythrocytes, 19<sup>th</sup> Annual Midwest Microbial Pathogenesis Conference, Milwaukee, WI, September 2012.

EJ Ohneck<sup>§</sup>, DL Zimble<sup>§</sup>, **SE Fiester**, BA Arivett<sup>§</sup> and LA Actis. *Acinetobacter baumannii* two-component regulatory system *bfmRS* is involved in biofilm formation on both biotic and abiotic surfaces, 19<sup>th</sup> Annual Midwest Microbial Pathogenesis Conference, Milwaukee, WI, September 2012.

EJ Ohneck<sup>§</sup>, **SE Fiester**, DL Zimbler<sup>§</sup> and LA Actis. *Acinetobacter baumannii* sensor kinase BfmS is involved in the regulation of motility and biofilm formation, 20<sup>th</sup> Annual Midwest Microbial Pathogenesis Conference, Columbus, OH, August 2012.

WF Penwell<sup>§</sup>, DL Zimbler<sup>§</sup>, AC Beckett\*, AM Richards\*, BA Arivett<sup>§</sup>, EJ Ohneck<sup>§</sup>, **SE Fiester**, DV Zurawski and LA Actis. Variability of virulence factors among *Acinetobacter baumannii* isolates obtained from wounded military personnel, 20<sup>th</sup> Annual Midwest Microbial Pathogenesis Conference, Columbus, OH, August 2012.

CM Harding<sup>§</sup>, EN Tracy, MD Carruthers, **SE Fiester**, LA Actis and RS Munson, Jr. Demonstration of type IV pili production in *Acinetobacter baumannii* and their role in natural transformation, twitching motility and biofilm formation, 20<sup>th</sup> Annual Midwest Microbial Pathogenesis Conference, Columbus, OH, August 2012.

AC Beckett\*, MV Carrier\*, BA Arivett<sup>§</sup>, **SE Fiester** and LA Actis. Hemolytic activity of *Acinetobacter baumannii*, Cell, Molecular and Structural Biology (CMSB) Symposium, Miami University, Oxford, OH, June 2012.

MV Carrier\*, BA Arivett<sup>§</sup>, **SE Fiester** and LA Actis. Analysis of uncharacterized hemolytic activity expressed by *Acinetobacter baumannii*, Ohio Branch of the American Society for Microbiology Annual Meeting, Mason, OH, April 2012.

<sup>†</sup>**SE Fiester**. Characterization of optically active biopolymers, Kent State University Department of Biological Sciences' Seminar Series, Kent, OH, April 2011.

<sup>†</sup>**SE Fiester**. Characterization of optically active bacterial and viral proteins, Ohio Branch American Society for Microbiology, Ohio University, Athens, OH, April 2011.

**SE Fiester**. Detection of immune complexes using chiral nematic chitin fibrils, 26th Annual Graduate Research Symposium, Kent, OH, April 2011.

<sup>†</sup>**SE Fiester**. Optical properties of a viral protein, Kent State Liquid Crystal Institute Liquid Crystal Day, Kent, OH, October 2010.

**SE Fiester**, A Jáklí and CJ Woolverton. Liquid crystalline properties of g8p, the major coat protein of *fd* bacteriophage, 84<sup>th</sup> Colloid on Surface Science Symposium, Akron, OH, June 2010.

**SE Fiester** and CJ Woolverton. Formulation of chitin as a liquid crystal biosensor, Ohio Branch of the American Society for Microbiology Annual Meeting, Mason, OH, April 2010.

TT Meilander<sup>§</sup>, SL Helfinstine<sup>§</sup>, **SE Fiester** and CJ Woolverton. Hands-on biosafety level 3 workshop improves knowledge and skill in laboratory personnel, American Society for Microbiology 107<sup>th</sup> General Meeting, Toronto, Canada, May 2007.

†**SE Fiester**. American Society for Clinical Laboratory Science (OH), Toledo, OH, 2006.

### **Patents**

Patent title: Alteration of albomycin for the treatment of bacterial infections

U.S. patent application number: 63/159,542

Filed: March 1, 2022

Role: **Sole inventor**

### **Funded Grants and Contracts (\$406,603.26 to date)**

Proposal title: Transcriptomics of *Acinetobacter baumannii* and its human host by dual RNA-seq

Grantor: New Mexico IDeA Networks of Biomedical Research Excellence (NM INBRE) Sequencing and Bioinformatics Core Pilot Award funded through National Institute of General Medical Sciences

Date: 2022-2023

Role: **Co-PI**

Award amount: **\$10,000**

Proposal title: Emergency Medical Services (EMS) Cleaning Protocols: Efficacy of Decontamination Methods Against Bacterial Pathogens

Grantor: Prisma Health (Transformative Seed Grant)

Date: 2022-2023

Role: **Co-I**

Award amount: **\$20,000**

Proposal title: Intracellular survival and immune evasion of necrotizing fasciitis *Acinetobacter baumannii* isolates

Grantor: Infectious Diseases Society of America Foundation (G.E.R.M. Award)

Date: 2021-2022

Role: **Significant Personnel**

Award amount: **\$4,000**

Proposal title: Interferon-independent immune contributions of IFI44 and IFIT3 to SARS-CoV-2 clinical complications

Grantor: Prisma Health (Transformative Seed Grant)

Date: 2021

Role: **Co-I**

Award amount: **\$20,000**

Proposal title: Enhancement of flow cytometry capabilities at UofSC campuses in the Upstate

Grantor: University of South Carolina (ASPIRE III grant)

Date: 2020-2022

Role: **Co-PI**

Award amount: **\$100,000**

Proposal title: Simultaneous transcriptomics of host-pathogen interactions during *Acinetobacter baumannii* infection

Grantor: University of South Carolina (ASPIRE I, track IIA grant)

Date: 2020-2022

Role: **Co-PI**

Award amount: **\$9,998**

Proposal title: Implications of enterotoxin modulation on the immune response to bacteria  
Grantor: Prisma Health (Transformative Seed Grant)  
Date: 2020-2022  
Role: **PI** Award amount: **\$20,000**

Proposal title: Innate Immune Gene Contributions to SARS-CoV-2 Clinical Complications  
Grantor: University of South Carolina (COVID-19 Research Initiative)  
Date: 2020-2021  
Role: **Co-I** Award amount: **\$15,000**

Proposal title: Analyzing and visualizing dual RNA-sequencing data  
Grantor: Institute for the Advancement of Community Health (Faculty Fellowship)  
Date: 2020-2021  
Role: **Senior Personnel** Award amount: **\$14,500**

Proposal title: Alteration of albomycin for the treatment of bacterial infections  
Grantor: Pathology Associates  
Date: 2020  
Role: **PI** Award amount: **\$1,000**

Proposal title: Iron scavenging mechanisms during sepsis caused by the human nosocomial pathogen *Acinetobacter baumannii*  
Grantor: University of South Carolina (Magellan Mini-Grant)  
Date: 2020  
Role: **Primary mentor** Award amount: **\$800**

Proposal title: Elucidation of hemoglobin degradation and subsequent heme-*b* utilization by the multidrug-resistant human pathogen *Acinetobacter baumannii*  
Grantor: University of South Carolina (ASPIRE I, track IIA grant)  
Date: 2019-2021  
Role: **PI** Award amount: **\$10,000**

Proposal title: Transcriptomics of *Acinetobacter baumannii* and its human host by dual RNA-seq  
Grantor: South Carolina IDeA Networks of Biomedical Research Excellence (SC INBRE) Bioinformatics Pilot Project Program (BIPP) funded through National Institute of General Medical Sciences  
Date: 2019-2021  
Role: **Co-PI** Award amount: **\$10,000**

Proposal title: Evaluating the Clinical and Molecular Epidemiology of *Klebsiella* Infections in the Upstate Region of South Carolina  
Grantor: Greenville Health System (Transformative Seed Grant)  
Date: 2019-2021  
Role: **Co-PI** Award amount: **\$20,000**

Proposal title: MENTOR: Medical Enrichment Through Opportunities in Research  
Grantor: National Institute of Allergy and Infectious Diseases (T35)  
Date: 2018-2023  
Role: **Senior personnel** Approximate amount of medical student stipends: **\$72,000**

Proposal title: Internal budget justification for procurement of a flow cytometer  
Grantor: University of South Carolina School of Medicine Greenville  
Date: 2018  
Role: **Author** Award amount: **\$45,005.26**

Proposal title: Novel approach to inactivating Iraqibacter, a relevant human pathogen: How gallium protoporphyrin IX can disrupt iron homeostasis in *Acinetobacter baumannii*  
Grantor: Department of Energy (Advanced Photon Source General User Proposal 48369)  
Date: 2017  
Role: **Co-PI** Award amount: **~\$30,000**

Proposal title: Elucidation of Hemoglobin Degradation by *Acinetobacter baumannii*  
Grantor: Miami University Middletown (Miami University Middletown Research Grant)  
Date: 2016-2017  
Role: **PI** Award amount: **\$2,500**

Proposal title: Kent State Graduate Student Senate Research Grant  
Grantor: Kent State University  
Date: 2010-2011  
Role: **PI** Award amount: **\$1,800**

**Monetary Honors & Travel Awards (\$8,287.92 to date)**

Award: Peggy Cotter Travel Award  
Grantor: American Society for Microbiology  
Date: 2020 Award Amount: **\$1,650**  
*-This award was delayed until 2021 due to the cancellation of ASM Microbe 2020.*

Award: Travel Award for Young Ambassadors  
Grantor: American Society for Microbiology  
Date: 2020 Award Amount: **\$1,125**  
*-This award was delayed until 2021 due to the cancellation of ASM Microbe 2020.*

Award: Travel Award for Young Ambassadors  
Grantor: American Society for Microbiology  
Date: 2019 Award Amount: **\$1,105**

Award: Judge Travel Award  
Grantor: Annual Biomedical Research Conference for Minority Students  
Date: 2018 Award Amount: **\$907.92**

Award: Kent State Graduate Student Senate Travel Grant  
Grantor: Kent State University  
Date: 2010 Award Amount: **\$500**

Award: Kent State Graduate Student Senate Travel Grant  
Grantor: Kent State University  
Date: 2008 Award Amount: **\$500**

Award: Gordon Research Conference on Liquid Crystals Travel Grant  
Grantor: National Science Foundation (DMR0645461)  
Date: 2007 Award Amount: **\$1,500**

Award: Kent State Graduate Student Senate Travel Grant  
Grantor: Kent State University  
Date: 2007 Award Amount: **\$500**

Award: Kent State Graduate Student Senate Travel Grant  
Grantor: Kent State University  
Date: 2006 Award Amount: **\$500**

### **Other Honors & Awards**

Award: Peggy Cotter Travel Award for Early Career Branch Members  
Grantor: American Society for Microbiology  
Date: March 2020

Award: Young Ambassador of Science  
Grantor: American Society for Microbiology  
Date: February 2019

Award: The Allan A. Ichida Award for Research Excellence for “Phosphatidylcholine-specific phospholipase C activity is responsible for the hemolytic activity of *A. baumannii*”  
Grantor: Ohio Branch American Society for Microbiology Annual Meeting  
Date: April 2013

Award: 2<sup>nd</sup> place graduate physical poster for “Detection of pathogens using a liquid crystalline phase of chitin”  
Grantor: Microscopy Society of Northeastern Ohio Fall Meeting and Student Poster Competition  
Date: November 2009

Award: Pre-medicine award  
Grantor: Kent State University, Department of Biological Sciences  
Date: May 2005

Award: Invited member  
Grantor: The Phi Beta Kappa Society  
Date: April 2005

Award: Invited member  
Grantor: Golden Key International Honour Society  
Date: April 2004

### **Internal Press**

“New and Notable,” *University of South Carolina School of Medicine Greenville Faculty and Staff News*, February 19, 2021.

“New and Notable” and “In the News,” *University of South Carolina School of Medicine Greenville Faculty and Staff News*, October 23, 2020.

“Student, faculty, and staff promotions, accolades and recognitions,” *University of South Carolina School of Medicine Greenville Faculty and Staff News*, September 11, 2020.

“Student, faculty, and staff promotions, accolades and recognitions,” *University of South Carolina School of Medicine Greenville Faculty and Staff Weekly News*, July 10, 2020.

“UofSC School of Medicine Greenville Faculty Awarded ASPIRE Grant Funding,” *University of South Carolina School of Medicine Greenville Faculty and Staff Weekly News*, May 18, 2020.

“Miami Middletown offers area high school students forensic science lab exposure,” *Miami University Campus News*, Oxford, OH, October 28, 2015.

### **External Press**

“How Luggage Brands Are Rethinking Suitcase Design Amid the Pandemic,” *Condé Nast Traveler*, October 1, 2020.

“Ambassador Spotlight,” *American Society for Microbiology Young Leaders Circle Newsletter*, July 29, 2020.

“Heading out to SC’s reopened parks? Here’s how to protect yourself against COVID-19,” *The State*, May 2, 2020.

“11 Germ-Spreading Items You’re Probably Carrying Right Now,” *Reader’s Digest*, August 20, 2019.

“More possible H1N1 cases,” *WBNS-10TV*, Columbus, OH, June 2, 2010.

“Facility picked for national biocontainment training KSU lab joins elite company,” *Akron Beacon Journal*, Akron, OH, October 26, 2009.



**Personal**

Born in Canton, Ohio (south of Cleveland) on April 28, 1983. Married to Dr. Julie Teuber on December 11, 2015.