

## *Curriculum Vitae*

WILLIAM J. KENYON, Ph.D.

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### ***Professor***

#### ***Biology Program***

***Department of Natural Sciences***

***University of West Georgia***

***Carrollton, GA 30118***

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### **Academic Degrees**

- 1991-1996 Ph.D. in Microbiology  
The University of Kansas, Lawrence, KS
- 1987-1991 B.S. in Life Sciences (magna cum laude & honors)  
University of Missouri-Rolla (now Missouri University of Science and Technology), Rolla, MO

### **Faculty Positions**

- 2018-Present Professor & Co-Director of Microbiology Certificate Program, Biology Program,  
Department of Natural Sciences, University of West Georgia, Carrollton, GA
- 2012-2018 Associate Professor, Department of Biology, University of West Georgia, Carrollton, GA
- 2006-2012 Assistant Professor, Department of Biology, University of West Georgia, Carrollton, GA
- 2005-2006 Lecturer, Department of Biomedical Sciences, University of South Alabama, Mobile, AL
- 2005 Adjunct Lecturer, Department of Biology, Spring Hill College, Mobile, AL

### **Postdoctoral Fellowships and Teaching Assistantships**

- 2003-2006 Co-PI on NIH-AREA grant, Department of Biomedical Sciences, University of South Alabama, Mobile, AL
- 2000-2003 Postdoctoral Fellow, Department of Biomedical Sciences, University of South Alabama, Mobile, AL
- 1996-2000 Postdoctoral Fellow, School of Biological Sciences, Division of Molecular Biology and Biochemistry,  
University of Missouri-Kansas City, Kansas City, MO
- 1991-1996 Graduate Teaching Assistant, Department of Microbiology, The University of Kansas, Lawrence, KS

### **Teaching History and Interests**

- 2006-Present ***Department of Biology, University of West Georgia, Carrollton, GA***  
**(An asterisk indicates courses which are dual-listed at the graduate level.)**

#### ***Upper-Level Courses for Biology Majors***

Microbiology (BIOL 3310)  
Cell and Molecular Biology (BIOL 3134)  
Bacterial Genetics (BIOL 4315/5315)\*  
Applied and Environmental Microbiology (BIOL 4321/5321)\*  
Advanced Medical Microbiology (BIOL 4325)\*  
Bacterial Pathogenesis (BIOL 4728/5728)\*  
Emerging Pathogens (BIOL 4730/5730)\*  
Senior Biology Seminar (BIOL 4984)

***Lower-Level Courses for Biology Majors***

Principles of Biology I (BIOL 1107)

Principles of Biology I Laboratory (BIOL 2107L)

***Lower-Level Courses for Pre-Nursing Majors***

Foundations of Microbiology and Foundations of Microbiology Laboratory (BIOL 2260 & 2260L)

Medical Microbiology and Medical Microbiology Laboratory (BIOL 2030 & 2030L)

***Lower-Level Courses for Non-Science Majors***

The Unseen World of Microbes (BIOL 1015)

***Research and Master's-Level Courses for Biology Majors***

Independent Study (BIOL 4981)

Advanced Undergraduate Biology Research (BIOL 4983)

Biological Internship (BIOL 4986)

Prokaryotic Biology (BIOL 6325)

Graduate Independent Study (BIOL 6981)

Directed Readings (BIOL 6982)

Graduate Research (BIOL 6983)

Graduate Seminar (BIOL 6984)

Comprehensive Exam (BIOL 6995)

Thesis (BIOL 6999)

2005-2006 ***Department of Biomedical Sciences, University of South Alabama, Mobile, AL***  
Medical Microbiology Laboratory

2005 ***Department of Biology, Spring Hill College, Mobile, AL***  
Microbiology and Microbiology Laboratory

1991-1996 ***Department of Microbiology, The University of Kansas, Lawrence, KS***  
Introductory Microbiology Laboratory and Fundamentals of Microbiology Laboratory

**Research History and Interests**

2018-Present Bacterial Stress Responses and Survival Strategies  
Department of Biology (now Biology Program, Department of Natural Sciences),  
University of West Georgia, Carrollton, GA

2006-2018 The Starvation-Stress Responses of Salmonellae and other Enterobacteria &  
Cellulose Degradation Strategies in the Genus *Cellulomonas*  
Department of Biology, University of West Georgia, Carrollton, GA

2000-2006 The Starvation-Stress Response of *Salmonella enterica* Serovar Typhimurium  
Advisor: Dr. Michael Spector  
Department of Biomedical Sciences, University of South Alabama, Mobile, AL

1996-2000 The Role of Epstein-Barr Virus Glycoproteins in Membrane Fusion and Viral Entry into Host  
Epithelial Cells and B Lymphocytes  
Advisor: Dr. Lindsey Hutt-Fletcher  
School of Biological Sciences, Division of Molecular Biology and Biochemistry,  
University of Missouri-Kansas City, Kansas City, MO

- 1993-1994 Bioremediation of Petroleum Hydrocarbons (State of Kansas DOE/EPSCoR Trainee)  
 Advisor: Dr. Clarence S. Buller  
 Department of Microbiology, The University of Kansas, Lawrence, KS
- 1991-1996 Structure and Function of a Capsular Polysaccharide from *Cellulomonas flavigena* strain KU  
 Advisor: Dr. Clarence S. Buller  
 Department of Microbiology, The University of Kansas, Lawrence, KS
- 1990-1991 Purification and Analysis of Cyclic  $\beta$ -(1,2)-Glucans from *Rhizobium trifolii* TA-1  
 Advisor: Dr. Donald Siehr  
 Department of Chemistry, University of Missouri-Rolla, Rolla, MO
- 1989-1991 Aquaculture of *Tilapia*: Monitoring of pH, Dissolved Oxygen, and Ammonia Levels  
 Advisor: Dr. Nord Gale  
 Department of Life Sciences, University of Missouri-Rolla, Rolla, MO

### **Peer-Reviewed Publications**

(Underlined names indicate student co-authors whom I have mentored, and asterisks (\*) indicate articles in preparation.)

### **Research Articles**

- \*Butler JD, Young ES, Rhodes D, Kenyon WJ (in preparation for 2024) Selective isolation of glycocalyx-producing, biofilm-forming, cellulolytic bacteria. *Applied Microbiology and Biotechnology*
- Young ES, Kenyon WJ (2023) Interaction of the dye aniline blue with the curdlan-type exopolysaccharide from *Cellulomonas flavigena* KU (ATCC 53703). *Industrial Biotechnology* 19(4):204-207
- Young ES, Butler JD, Molesworth-Kenyon SJ, Kenyon WJ (2023) Biofilm-mediated fragmentation and degradation of microcrystalline cellulose by *Cellulomonas flavigena* KU (ATCC 53703). *Current Microbiology* 80, 200. <https://doi.org/10.1007/s00284-023-03309-w>
- Pittman JR, Kline LC, Kenyon WJ (2015) Carbon-starvation induces cross-resistance to thermal, acid, and oxidative stress in *Serratia marcescens*. *Microorganisms* 3:746-758
- Siriwardana LS, Gall AR, Buller CS, Esch SW, Kenyon WJ (2011) Factors affecting the accumulation and degradation of curdlan, trehalose and glycogen in cultures of *Cellulomonas flavigena* strain KU (ATCC 53703). *Antonie van Leeuwenhoek* 99:681-695
- Kenyon WJ, Humphreys S, Roberts M, Spector MP (2010) Periplasmic peptidyl-prolyl isomerases SurA and FkpA play an important role in the starvation-stress response (SSR) of *Salmonella enterica* serovar Typhimurium. *Antonie van Leeuwenhoek* 98:51-63
- Kenyon WJ, Nicholson KL, Guillaume E, Pallen MJ, Spector MP (2007)  $\sigma^S$ -Dependent carbon-starvation induction of pbpG (PBP 7) is required for the starvation-stress response in *Salmonella enterica* serovar Typhimurium. *Microbiology* 153:2148-2158
- Kenyon WJ, Thomas SM, Johnson E, Pallen MJ, Spector MP (2005) Shifts from glucose to certain secondary carbon-sources result in activation of the extracytoplasmic sigma factor  $\sigma^E$  in *Salmonella enterica* serovar Typhimurium. *Microbiology* 151:2373-2383

- Kenyon WJ, Esch SW, Buller CS (2005) The curdlan-type exopolysaccharide produced by *Cellulomonas flavigena* KU forms part of an extracellular glycocalyx involved in cellulose degradation. *Antonie van Leeuwenhoek* 87:143-148
- Humphreys S, Rowley G, Stevenson A, Kenyon WJ, Spector MP, Roberts M (2003) Role of periplasmic peptidylprolyl isomerases in *Salmonella enterica* serovar Typhimurium virulence. *Infection and Immunity* 71:5386-5388
- Kenyon WJ, Buller CS (2002) Structural analysis of the curdlan-like exopolysaccharide produced by *Cellulomonas flavigena* KU. *Journal of Industrial Microbiology and Biotechnology* 29:200-203
- Kenyon WJ, Sayers DG, Humphreys S, Roberts M, Spector MP (2002) The starvation-stress response of *Salmonella enterica* serovar Typhimurium requires  $\sigma^E$ , but not CpxR-regulated extracytoplasmic functions. *Microbiology* 148:113-122
- Wang X, Kenyon WJ, Li QX, Mullberg J, Hutt-Fletcher LM (1998) Epstein-barr virus uses different complexes of glycoproteins gH and gL to infect B lymphocytes and epithelial cells. *Journal of Virology* 72:5552-5558

### ***Review Articles and Book Chapters***

- \*Kenyon WJ (in preparation for 2024) *Cellulomonas* curdlan: biology and biotechnological applications. *Applied Microbiology and Biotechnology*
- Kenyon WJ (2017) The cellulomonads as an alternative source of the bacterial exopolysaccharide curdlan. In: Beta-glucans: applications, effects and research. (ed). Nova Science Publishing, Hauppauge, NY
- Spector MP, Kenyon WJ (2012) Resistance and survival strategies of *Salmonella enterica* to environmental stresses. *Food Research International* 45:455-481
- Kenyon WJ, Spector MP (2012) Response of *Salmonella enterica* serovars to environmental stresses. In: Stress response of foodborne microorganisms; Advances in Food Safety and Food Microbiology. Wong HC (ed). Nova Science Publishing, Hauppauge, NY

### **Research and Teaching Conferences Attended**

- 2023 UWG Scholar's Day Undergraduate Research Conference, Carrollton, GA
- 2022 Southeastern Branch of the American Society for Microbiology (SEB-ASM) annual meeting, Savannah, GA
- 2022 Annual UWG Biology Expo and Fall Festival, Biology Program, University of West Georgia, Carrollton, GA
- 2021 Annual UWG Biology Expo and Fall Festival, Biology Program, University of West Georgia, Carrollton, GA
- 2018 Annual UWG Biology Expo and Fall Festival, Biology Program, University of West Georgia, Carrollton, GA
- 2016 Annual UWG Research Day/Big Night Research Forum, Carrollton, GA
- 2015 101<sup>st</sup> American Society for Microbiology Southeastern Branch Meeting, Kennesaw, GA
- 2015 Annual UWG Research Day/Big Night Research Forum, Carrollton, GA
- 2014 Georgia-Alabama Louis Stokes Alliance for Minority Participation (LSAMP) Scholars Symposium, Atlanta, GA
- 2012 98<sup>th</sup> American Society for Microbiology Southeastern Branch Meeting, Athens, GA
- 2012 112<sup>th</sup> General Meeting of the American Society for Microbiology, San Francisco, CA
- 2010 96<sup>th</sup> American Society for Microbiology Southeastern Branch Meeting, Montgomery, AL
- 2010 Science Technology Engineering & Mathematics (STEM) Institute, Carrollton, GA
- 2007 93<sup>th</sup> American Society for Microbiology Southeastern Branch Meeting, Auburn, AL
- 2007 Annual UWG Research Day/Big Night Research Forum, Carrollton, GA
- 2006 106<sup>th</sup> General Meeting of the American Society for Microbiology, Orlando, FL

2004 104<sup>th</sup> General Meeting of the American Society for Microbiology, New Orleans, LA  
2003 89<sup>th</sup> American Society for Microbiology Southeastern Branch Meeting, Athens, GA  
2003 103<sup>rd</sup> General Meeting of the American Society for Microbiology, Washington, DC  
2002 88<sup>th</sup> American Society for Microbiology Southeastern Branch Meeting, Gainesville, FL  
2002 Gordon Research Conference on Microbial Stress Responses, Salve Regina, RI  
2001 101<sup>st</sup> General Meeting of the American Society for Microbiology, Orlando, FL  
1999 24<sup>th</sup> International Herpesvirus Workshop, Cambridge, MA  
1998 9<sup>th</sup> Annual Intercampus Virology Meeting, Platte River State Park, NE  
1997 22<sup>nd</sup> International Herpesvirus Workshop, San Diego, CA  
1996 96<sup>th</sup> General Meeting of the American Society for Microbiology, New Orleans, LA  
1992 American Society for Microbiology Missouri Valley Branch Meeting, Lawrence, KS

### Selected Poster Presentations at Research Conferences

(Underlined names indicate student co-authors whom I have mentored and asterisks (\*) indicate competitive awards.)

Butler JD, Young ES, Escate JP, Flores PA, Kenyon WJ (2023) Degradation of microcrystalline cellulose by new isolates of adherent, biofilm-forming bacteria. Biology Program, Department of Natural Sciences, University of West Georgia. **World Congress on Undergraduate Research and British Conference of Undergraduate Research (WorldCUR-BCUR 2023)**, University of Warwick, Coventry, England, UK

Butler JD, Young ES, Escate JP, Flores PA, Kenyon WJ (2023) Degradation of microcrystalline cellulose by new isolates of adherent, biofilm-forming bacteria. Biology Program, Department of Natural Sciences, University of West Georgia. **UWG Scholar's Day Undergraduate Research Conference**, University of West Georgia, Carrollton, GA

Butler JD, Young ES, Escate JP, Flores PA, Kenyon WJ (2023) Degradation of microcrystalline cellulose by new isolates of adherent, biofilm-forming bacteria. Biology Program, Department of Natural Sciences, University of West Georgia. Annual meeting of the **Georgia Academy of Science (GAS)**, Georgia College and State University, Milledgeville, GA

\*Young ES, Butler JD, Molesworth-Kenyon SJ, Kenyon WJ (2022) Degradation of microcrystalline cellulose by the curdian biofilm of *Cellulomonas flavigena*. Biology Program, Department of Natural Sciences, University of West Georgia. 2022 meeting of **Southeastern Branch of the American Society for Microbiology (SEB-ASM)**, Georgia Southern University, Savannah, GA. **\*ASM Graduate Student Travel Grant awarded to E. S. Young**

Butler JD, Young ES, Escate JP, Flores PA, Kenyon WJ (2022) Degradation of microcrystalline cellulose by new isolates of adherent, biofilm-forming bacteria. Biology Program, Department of Natural Sciences, University of West Georgia. 2022 meeting of **Southeastern Branch of the American Society for Microbiology (SEB-ASM)**, Georgia Southern University, Savannah, GA

Young ES, Butler JD, Molesworth-Kenyon SJ, Kenyon WJ (2022) Degradation of microcrystalline cellulose by the curdian biofilm of *Cellulomonas flavigena*. Annual **Biology Expo and Fall Festival**, Biology Program, Department of Natural Sciences, University of West Georgia, Carrollton, GA

Butler JD, Young ES, Escate JP, Flores PA, Kenyon WJ (2022) Degradation of microcrystalline cellulose by new isolates of adherent, biofilm-forming bacteria. Annual **Biology Expo and Fall Festival**, Biology Program, Department of Natural Sciences, University of West Georgia, Carrollton, GA

Young ES, Escate JP, Flores PA, Kenyon WJ (2021) Degradation of cellulose by the curdian biofilm of *Cellulomonas flavigena*. Annual **Biology Expo and Fall Festival**, Biology Program, Department of Natural Sciences, University of West Georgia, Carrollton, GA

Kenyon WJ, Raglin M, Okafor J, Swint J, Wolf T (2018) Get to know the Biology faculty and research students: the *Cellulomonas* biofilm-planktonic growth cycle. 1<sup>st</sup> Annual **Biology Expo and Fall Festival**, Department of Biology, University of West Georgia, Carrollton, GA

King JR, Jackson DA, Fielder BL, Stewart BK, Williams SN, Kenyon WJ (2016) Resistance of *Serratia marcescens* to the antiseptic chlorhexidine. Department of Biology, University of West Georgia. **Research Day/Big Night** research forum, University of West Georgia, Carrollton, GA

Siriwardana LS, Kenyon WJ (2015) Disaggregation of curd-lan-encapsulated *Cellulomonas flavigena* (ATCC 53703) during carbon-starvation in minimal media. Department of Biology, University of West Georgia. 101<sup>st</sup> Annual Meeting of the **Southeastern Branch of the American Society for Microbiology (SEB-ASM)**, Kennesaw State University, Kennesaw, GA

King JR, Marshall AA, Kenyon WJ (2015) Characterization of *Escherichia coli* lipoprotein genes *slp* and *yeaY* as potential members of the starvation-stress response. Department of Biology, University of West Georgia. **Research Day/Big Night** research forum, University of West Georgia, Carrollton, GA

Schermer SR, King JR, Kenyon WJ (2014) Carbon-source transitions resulting in activation of the extracytoplasmic-function sigma-factor RpoE in *Salmonella enterica* serovar Typhimurium. Department of Biology, University of West Georgia. **Georgia-Alabama Louis Stokes Alliance for Minority Participation (LSAMP) Scholars Symposium**, Clark Atlanta University, Atlanta, GA

Pittman JR, Oliver JB, Angriani K, Kenyon WJ (2012) *Salmonella enterica* serovar Typhimurium and *Serratia marcescens* display phenotypic differences in responding to starvation stress. Department of Biology, University of West Georgia. 98<sup>th</sup> Annual Meeting of the **Southeastern Branch of the American Society for Microbiology (SEB-ASM)**, University of Georgia, Athens, GA

\*Angriani K, Kenyon WJ (2012) Utilization of alternative carbon sources by clinical and environmental strains of *Serratia marcescens*. Department of Biology, University of West Georgia. 112<sup>th</sup> General Meeting of the **American Society for Microbiology (ASM)**, San Francisco, CA. **\*Student Travel Grant awarded to K. Angriani through the American Society for Microbiology Undergraduate Research Fellowship (ASM-URF)**

\*Siriwardana LS, Weaver AR, Gall AR, Hargrove BD, Kenyon WJ (2010) The glucose-storage carbohydrates trehalose, curd-lan and glycogen function as reserve compounds for *Cellulomonas flavigena* ATCC 53703. Department of Biology, University of West Georgia. 96<sup>th</sup> Annual Meeting of the **Southeastern Branch of the American Society for Microbiology (SEB-ASM)**, Montgomery, AL. **\*ASM Graduate Student Travel Grant awarded to L. S. Siriwardana**

Siriwardana LS, Weaver AR, Gall AR, Hargrove BD, Kenyon WJ (2010) The glucose-storage carbohydrates trehalose, curd-lan and glycogen function as reserve compounds for *Cellulomonas flavigena* ATCC 53703. Department of Biology, University of West Georgia. 2010 **Celebration of Graduate Student Research and Research Day/Big Night**, University of West Georgia, Carrollton, GA

Pittman JR, Kenyon WJ (2008) The starvation-stress response of pigmented and non-pigmented *Serratia marcescens* strains. Department of Biology, University of West Georgia. 69<sup>th</sup> Annual Meeting of the **Association of Southeastern Biologists**, Spartanburg, SC

Pittman JR, Adebisi L, Spector MP, Kenyon WJ (2007) Starvation-stress response (SSR) phenotypes of pigmented and non-pigmented *Serratia marcescens* strains. Department of Biology, University of West Georgia and Department of Biomedical Sciences, University of South Alabama. 93<sup>rd</sup> Annual Meeting of the **Southeastern Branch of the American Society for Microbiology (SEB-ASM)**, Auburn University, Auburn, AL

Pittman JR, Kenyon WJ (2007) Starvation-induced resistance of *Serratia marcescens* to heat and acid stress. Department of Biology, University of West Georgia. Annual **Celebration of Graduate Student Research**, University of West Georgia, Carrollton, GA

Adebisi L, Waters R, Burns K, Kenyon WJ (2007) Starvation-induced heat-tolerance in several species of enterobacteria isolated from soil. Department of Biology, University of West Georgia. **Research Day/Big Night**, University of West Georgia, Carrollton, GA

Kenyon WJ, Ravendran K, Pejatovic I, Rieck S, Spector MP (2006) Mechanism of LamB-mediated  $\sigma^E$  activation in *Salmonella enterica* serovar Typhimurium. Department of Biomedical Sciences, University of South Alabama. 106<sup>th</sup> General Meeting of the **American Society for Microbiology (ASM)**, Orlando, FL

Nicholson KL, Kenyon WJ, Spector MP (2006) Characterization of the carbon-starvation-inducible two gene operon *stiC-pbpG* in the starvation-stress response of *Salmonella enterica* serovar Typhimurium. Department of Biomedical Sciences, University of South Alabama and Department of Biology, University of West Georgia. Annual Meeting of the **Southeastern Branch of the American Society for Microbiology (SEB-ASM)**, Kennesaw State University, Kennesaw, GA

Kenyon WJ, Thomas S, Johnson E, Spector MP (2004) The extracytoplasmic function sigma factor  $\sigma^E$  of *Salmonella enterica* serovar Typhimurium is activated in response to carbon-source shifts that induce specific transport proteins associated with the outer-membrane. Department of Biomedical Sciences, University of South Alabama. 104<sup>th</sup> General Meeting of the **American Society for Microbiology (ASM)**, New Orleans, LA

Kenyon WJ, Spector MP (2003) Molecular characterization of the *stiC/pbpG* region and its role in the starvation-stress response of *Salmonella enterica* serovar Typhimurium. Department of Biomedical Sciences, University of South Alabama. 103<sup>rd</sup> General Meeting of the **American Society for Microbiology (ASM)**, Washington, DC

\*Nicholson KL, Kenyon WJ, Spector MP (2002) Molecular cloning and characterization of the *stiC/pbpG* region of the *Salmonella* chromosome. Department of Biomedical Sciences, University of South Alabama. 88<sup>th</sup> Annual Meeting of the **Southeastern Branch of the American Society for Microbiology (SEB-ASM)**, University of Florida, Gainesville, FL. **\*ASM President's Award to K. L. Nicholson**

Khan R, Kenyon WJ, Spector MP (2002) The role of the *aidB* gene in the starvation-stress response (SSR) of *Salmonella enterica* serovar Typhimurium. Department of Biomedical Sciences, University of South Alabama. 88<sup>th</sup> Annual Meeting of the **Southeastern Branch of the American Society for Microbiology (SEB-ASM)**, University of Florida, Gainesville, FL

Johnson EL, Kenyon WJ, Spector MP (2002) The effect of carbon-source shifts on  $\sigma^E$  activation in *Salmonella enterica* serovar Typhimurium. Department of Biomedical Sciences, University of South Alabama. 88<sup>th</sup> Annual Meeting of the **Southeastern Branch of the American Society for Microbiology (SEB-ASM)**, University of Florida, Gainesville, FL

Kenyon WJ, Spector MP (2002) Differential roles and regulation of *htrA*, *surA*, and *fkpA* in the starvation-stress response (SSR) of *Salmonella enterica* serovar Typhimurium. Department of Biomedical Sciences, University of South Alabama. 2002 **Gordon Research Conference on Microbial Stress Responses**, Salve Regina University, Newport, RI

Kenyon WJ, Spector MP (2001) Extracytoplasmic stress response pathways and the starvation-stress response of *Salmonella enterica* serovar Typhimurium: comparison of the  $\sigma^E$  and Cpx pathways. Department of Biomedical Sciences, University of South Alabama. 101<sup>st</sup> General Meeting of the **American Society for Microbiology (ASM)**, Orlando, FL

\*Kenyon WJ, Buller CS (1996) The effects of nutrient supply and osmotic stress on the levels of trehalose, curdlan, and glycogen in *Cellulomonas flavigena* KU. Department of Microbiology, University of Kansas. 96<sup>th</sup> General Meeting of the **American Society for Microbiology (ASM)**, New Orleans, LA. **\*ASM Graduate Student Travel Grant awarded to W. J. Kenyon**

## Selected Seminar Presentations

- 2017 "The curdlan glycolyx of *Cellulomonas*: a potential role in the digestion of cellulose"  
Departmental Seminar  
Department of Biology, University of West Georgia, Carrollton, GA
- 2015 "Mechanistic studies of DNA repair"  
Popular Lectures on 2015 Nobel Prizes  
College of Science and Mathematics, University of West Georgia, Carrollton, GA
- 2014 "Regulation of transcription in bacteria: the *lac* operon of *Escherichia coli*"  
Department of Biology  
Benedictine College, Atchison, KS
- 2011 "*Salmonella* superpowers unleashed by starvation stress"  
Molecular and Cellular Biology Research Club Seminar  
Department of Biology, University of West Georgia, Carrollton, GA
- 2007 "How bacteria cope with a low carbohydrate diet"  
Graduate School Luncheon  
University of West Georgia, Carrollton, GA
- 2006 "The extracytoplasmic starvation-stress response of *Salmonella enterica* serovar Typhimurium"  
Department of Biology  
University of West Georgia, Carrollton, GA
- 2005 "Mechanism of  $\sigma^E$  activation in response to starvation-stress in *Salmonella*"  
Interdepartmental Research Forum  
College of Medicine, University of South Alabama, Mobile, AL
- 2004 "Regulation of the starvation-stress response of *Salmonella enterica* serovar Typhimurium by the alternative sigma factors  $\sigma^S$  and  $\sigma^E$ "  
USDA Agricultural Research Station  
Cornell University, Ithaca, NY
- 2003 " $\sigma^E$ -Regulated starvation-stress response genes of *Salmonella enterica* serovar Typhimurium"  
Annual Meeting of the Southeastern Branch of the American Society for Microbiology  
University of Georgia, Athens, GA
- 2003 "The extracytoplasmic,  $\sigma^E$ -regulated starvation-stress response of *Salmonella*"  
Interdepartmental Research Forum  
College of Medicine, University of South Alabama, Mobile, AL
- 2002 "Starvation-stress response loci of *Salmonella enterica* serovar Typhimurium"  
Interdepartmental Research Forum, College of Medicine  
University of South Alabama, Mobile, AL
- 2001 "Role of the alternative sigma factor  $\sigma^E$  in the starvation-stress response of *Salmonella*"  
Interdepartmental Research Forum  
College of Medicine, University of South Alabama, Mobile, AL
- 1996 "Structure and function of a capsular polysaccharide from *Cellulomonas flavigena* strain KU"  
Ph.D. Dissertation Defense  
Department of Microbiology, The University of Kansas, Lawrence, KS
- 1995 "Structural analysis of a capsular polysaccharide from *Cellulomonas flavigena* strain KU"  
Graduate Seminar  
Department of Microbiology, The University of Kansas, Lawrence, KS

### **State and National-Level Grants**

- 2022-2023      Principal Investigator and Co-Author  
Affordable Learning Georgia  
Affordable Materials Grant: Textbook Transformation Grant  
"Microbiology Affordable Materials Grant"  
Biology Program, Department of Natural Sciences, University of West Georgia  
Funds Awarded: \$10,339.45
- 2013            Author and Principal Investigator  
NIH – Academic Research Enhancement Award for Undergraduate Research (R15 AREA Grant)  
National Institute of General Medical Sciences  
"Activation of the RpoE-regulated envelope-stress response (RpoE-ESR) by specific carbon-source transitions in *Salmonella enterica* serovar Typhimurium"  
Department of Biology, University of West Georgia  
Funds Requested: \$250,000 over a 3-year period  
Not Funded
- 2004-2007      Co-Author and Co-Investigator  
NIH – Academic Research Enhancement Award for Undergraduate Research (R15 AREA Grant)  
National Institute of Allergy and Infectious Diseases  
"*Salmonella's* RpoE( $\sigma^E$ )-regulated starvation-stress response"  
Department of Biomedical Sciences, University of South Alabama  
Funds Awarded: \$150,000 over a 3-year period

### **College and University-Level Grants**

- 2016-2017      Principal Investigator  
Departmental Matching Funds  
"The biofilm matrix of *Cellulomonas*: an unexplored resource for biotechnology"  
Department of Biology, University of West Georgia  
Funds Awarded: \$1,000
- 2016-2017      Author and Principal Investigator  
Faculty Research Grant (College of Science and Mathematics)  
"Protein Composition of the Curdlan Glycocalyx Produced by the Cellulose-Degrading Bacterium *Cellulomonas flavigena*"  
Department of Biology, University of West Georgia  
Funds Awarded: \$1,200
- 2016-2017      Author and Principal Investigator  
Faculty Research Grant (Office of the Provost and Vice President for Academic Affairs)  
"The biofilm matrix of *Cellulomonas*: an unexplored resource for biotechnology"  
Department of Biology, University of West Georgia  
Funds Awarded: \$1,000

- 2013-2014 Author and Principal Investigator  
Faculty Research Grant (College of Science and Mathematics)  
“Carbon source transitions resulting in activation of the extracytoplasmic function sigma factor RpoE in *Salmonella*”  
Department of Biology, University of West Georgia  
Funds Awarded: \$1,250
- 2011-2012 Author and Principal Investigator  
Faculty Research Grant (Learning Resources Committee)  
“Differing strategies for cellulose degradation within the genus *Cellulomonas*”  
Department of Biology, University of West Georgia  
Funds Awarded: \$2,600
- 2010-2011 Author and Principal Investigator  
Faculty Research Grant (Learning Resources Committee)  
“Diversity in RpoS-controlled phenotypes of clinical and environmental *Serratia marcescens* strains”  
Department of Biology, University of West Georgia  
Funds Awarded: \$1,500
- 2009-2010 Author and Principal Investigator  
Faculty Research Grant (Learning Resources Committee)  
“Strain variation in the *Serratia marcescens* starvation-stress response”  
Department of Biology, University of West Georgia  
Funds Awarded: \$1,000
- 2007-2008 Author and Principal Investigator  
Faculty Research Enhancement Award (Office of Sponsored Operations)  
“The starvation-stress response of *Serratia marcescens*”  
Department of Biology, University of West Georgia  
Funds Awarded: \$3,000
- 2007-2008 Author and Principal Investigator  
Faculty Research Grant (Learning Resources Committee)  
“Starvation-induced resistance of *Serratia marcescens* to environmental stresses”  
Department of Biology, University of West Georgia  
Funds Awarded: \$1,500

**Student Research Assistantship Program (SRAP) Awards**

- 2022-2023 Principal Investigator and Co-Author  
Student Research Assistantship Program (Office of Undergraduate Research)  
“Degradation of cellulose by adherent, biofilm-forming bacteria”  
Biology Program, Department of Natural Sciences, University of West Georgia  
Funds Awarded: \$1,720
- 2016-2017 Author and Principal Investigator  
Student Research Assistantship Program (Office of Undergraduate Research)  
“Protein composition of the extracellular matrix produced by the cellulose-degrading bacterium *Cellulomonas flavigena*”  
Department of Biology, University of West Georgia  
Funds Awarded: \$1,475

- 2015-2016 Co-Author and Research Mentor  
 American Society for Microbiology Undergraduate Research Fellowship (ASM-URF)  
 Jessica R. King and William J. Kenyon  
 "The RpoE-regulated outer-membrane lipoprotein genes *slp*, *yeaY*, and *yabl* as potential members of the starvation-stress response in *Escherichia coli*"  
 Department of Biology, University of West Georgia  
 Funds Requested: \$3,000 student stipend for summer + \$800 for conference travel expenses  
 Not funded
- 2014-2015 Co-Author and Research Mentor  
 American Society for Microbiology Undergraduate Research Fellowship (ASM-URF)  
 Jessica R. King and William J. Kenyon  
 "Identification of secondary carbon-sources which activate the RpoE-regulated envelope-stress response in *Salmonella enterica* serovar Typhimurium"  
 Department of Biology, University of West Georgia  
 Funds Requested: \$4,000 student stipend for summer + \$1,000 for conference travel expenses  
 Not funded
- 2014 Research Mentor  
 NSF Georgia-Alabama Louis Stokes Alliance for Minority Participation (LSAMP Program)  
 Schernett R. Schermer and William J. Kenyon  
 "Identification of RpoE-activating carbon-sources in *Salmonella enterica* serovar Typhimurium"  
 Department of Biology, University of West Georgia  
 Funds Awarded: \$1,000 student stipend
- 2011-2012 Author and Principal Investigator  
 Student Research Assistantship Program (Office of Student Employment)  
 "Starvation-inducible genes involved in DNA protection and repair in *Salmonella*"  
 Department of Biology, University of West Georgia  
 Funds Awarded: \$2,000
- 2011-2012 Co-Author and Research Mentor  
 American Society for Microbiology Undergraduate Research Fellowship (ASM-URF)  
 Kartika Angriani and William J. Kenyon  
 "Utilization of alternative carbon sources by clinical and environmental *Serratia marcescens* strains"  
 Department of Biology, University of West Georgia  
 Funds Awarded: \$4,000 student stipend for summer + \$800 for conference travel expenses
- 2009-2010 Author and Principal Investigator  
 Student Research Assistantship Program (Office of Student Employment)  
 "Two strategies for cellulose degradation within the genus *Cellulomonas*"  
 Department of Biology, University of West Georgia  
 Funds Awarded: \$2,100
- 2008-2009 Author and Principal Investigator  
 Student Research Assistantship Program (Office of Student Employment)  
 "Role of the red pigment prodigiosin in the starvation-stress response of *Serratia marcescens*"  
 Department of Biology, University of West Georgia  
 Funds Awarded: \$2,100

- 2007-2008 Author and Principal Investigator  
Student Research Assistantship Program (Office of Student Employment)  
“Starvation-induced resistance of *Serratia marcescens* to environmental stresses”  
Department of Biology, University of West Georgia  
Funds Awarded: \$2,100
- 2006-2007 Author and Principal Investigator  
Student Research Assistantship Program (Office of Student Employment)  
“Role of the starvation-stress response (SSR) of *Salmonella* in cross-resistance to disinfectants and antiseptics”  
Department of Biology, University of West Georgia  
Funds Awarded: \$1,200

**Activity as a Manuscript Reviewer for Journals**

- 2022 *Polymers*  
*International Journal of Molecular Sciences*
- 2021 *PLoS One*
- 2020 *PLoS One*
- 2019 *Molecules*  
*Biochemie*
- 2018 *Folia Microbiologica*
- 2017 *Molecules*  
*Microorganisms*
- 2016 *Foods*  
*Polymers*
- 2015 *Canadian Journal of Microbiology*  
*Journal of Dairy Science*  
*International Journal of Molecular Sciences*
- 2014 *Molecules*  
*Polymers*  
*FEMS Microbiology Letters*
- 2013 *Archives of Microbiology*  
*Materials*
- 2012 *PLoS One*

**Invited Reviews of Textbooks and Textbook Proposals**

- 2017 Textbook Title: Cell and Molecular Biology: an Integrative Approach  
Publisher: Wiley
- 2014 Textbook Title: Microbial Pathogenesis  
Publisher: Garland Science
- 2011 Textbook Title: Microbiology, a clinical approach  
Publisher: Garland Science

## **Memberships in Professional Organizations and Societies**

### **Current Professional Memberships**

- American Society for Microbiology (ASM)
  - one of the oldest and largest life science organizations in the world
  - member since 1992
- Southeastern Branch of the American Society for Microbiology (SEB-ASM)
- Society for Industrial Microbiology and Biotechnology (SIMB)
- Sigma Xi, The Scientific Research Honors Society ( $\Sigma\Xi$ )
- Georgia Academy of Science (GAS)

### **Former Memberships**

- Biomedical Sciences Society at the University of South Alabama
- Lavoisier Society at the University of Missouri-Kansas City
- Missouri Valley Branch of the American Society for Microbiology
- The University of Kansas Microbiology Society
- Helix Life Science Organization at the University of Missouri-Rolla

## **Academic and Professional Service**

### **Department and Program-Level Service**

2007-Present

- Academic Advisor and mentor for UWG Biology majors

2023-2024

- Co-director of Microbiology Certificate Program
- Graduate Curriculum and Instruction Committee
- Facilities and Technology Committee
- M.S. Thesis Committees: J. Anderson

2022-2023

- Co-director of Microbiology Certificate Program
- Graduate Curriculum and Instruction Committee
- Facilities and Technology Committee
- M.S. Thesis Committees: E. Young (Thesis Advisor), J. Anderson
- Honors Thesis: J.D. Butler (Thesis Advisor)

2021-2022

- Co-director of Microbiology Certificate Program
- Graduate Curriculum and Instruction Committee
- M.S. Thesis Committees: J. Anderson, E. Young (Chair)

2020-2021

- Co-director of Microbiology Certificate Program
- Finance Committee
- M.S. Thesis Committees: J. Anderson (King)

#### 2019-2020

- Co-director of Microbiology Certificate Program
- Space Allocation Committee
- M.S. Non-Thesis Committees: D. Barnes (Chair)

#### 2018-2019

- Co-developer and co-founder of the Microbiology Certificate Program
- Space Allocation Committee
- M.S. Non-Thesis Committees: M. Manders, A. Acree

#### 2017-2018

- Personnel Committee (Chair)
- M.S. Non-Thesis Committees: A. Gavora (Chair), M. Stilley (Chair), C. Cocchiere

#### 2016-2017

- Personnel Committee
- Teaching Laboratories "Sherpa" for the Biology Building Renovation Project
- M.S. Non-Thesis Committees: B. Conner, A. Gavora (Chair), M. Stilley (Chair)

#### 2015-2016

- Finance Committee (Chair)
- Personnel Committee
- Teaching Laboratories "Sherpa" for the Biology Building Renovation Project
- M.S. Thesis Committees: K. Decker-Pulice
- M.S. Non-Thesis Committees: B. Conner, D. Brooks

#### 2014-2015

- Space Allocation Committee (Chair)
- Finance Committee
- M.S. Non-Thesis Committees: C. Creamer, E. Rowe

#### 2013-2014

- Finance Committee
- Space Allocation Committee
- M.S. Thesis Committees: M. Arroyo, K. Andrews
- M.S. Non-Thesis Committees: M. Hill (Chair), M. Smith

#### 2012-2013

- Biology Lecturer Search Committee (Chair)
- Graduate Curriculum and Instruction Committee (Chair)
- M.S. Thesis Committees: A. Milam, P. Grovenstein, K. Andrews, M. Arroyo, H. Abbey
- M.S. Non-Thesis Committees: A. Weaver (Chair), B. Moore

#### 2011-2012

- Finance Committee (Chair)
- Graduate Curriculum and Instruction Committee
- M.S. Thesis Committees: M. Purcell, A. Weaver (Chair), P. Gosu (Chair), A. Milam, and P. Grovenstein
- M.S. Non-Thesis Committees: B. Hargrove

#### 2010-2011

- Finance Committee
- M.S. Thesis Committees: A. Weaver (Chair) and P. Gosu (Chair)
- M.S. Non-Thesis Committees: E. Harvey

#### 2009-2010

- Finance Committee
- M.S. Thesis Committees: L. Siriwardana (Chair) and T. Hines
- M.S. Non-Thesis Committees: K. Cancro and Erin Harper (Chair)

#### 2008-2009

- Undergraduate Curriculum and Instruction Committee (Chair)
- Faculty Search Committee for Molecular/Cellular Biologist
- M.S. Thesis Committees: A. Effiong, T. Hines, and P. Heard
- M.S. Non-Thesis Committees: D. Forest

#### 2007-2008

- Undergraduate Curriculum and Instruction Committee
- Graduate Curriculum and Instruction Committee
- Faculty Search Committee for Microbiologist (microbiology advisor)
- Ad-Hoc Cellular and Molecular Biology Curriculum Committee
- M.S. Thesis Committees: J. Pittman (Chair), P. Heard, A. Effiong, and T. Hines

#### 2006-2007

- Graduate Curriculum and Instruction Committee

### College and University-Level Service

2022	Fall 2022 UWG Academic Showcase (Biology representative)
2021	College of Art, Culture, and Scientific Inquiry (CACSI) Preview Day (Biology representative)
2016-2017	Honors Programs Committee of the Faculty Senate, COSM Representative
2016	Preview Day (Biology representative)
2012-2014	College of Science and Mathematics (COSM) Curriculum Committee, Biology Representative
2011-2012	Undergraduate Programs Committee of the Faculty Senate, COSM Representative
2010	UWG Annual Fund Campaign (A-Day) Fund Raising Captain for the Department of Biology
2009	UWG Annual Fund Campaign (A-Day) Fund Raising Captain for the Department of Biology

### Community Service and Outreach Activities

2022	Co-organizer of Biology major internships (Biological Internship, BIOL 4986) with Asymmetry, Inc. in Villa Rica
2022	External tenure and promotion reviewer for Missouri State University
2022	Interviewed for article in <i>The West Georgian</i> University of West Georgia newspaper entitled "The future of the superbug: antimicrobial resistance"
2022	Guest speaker for Carrollton Junior High School Science Club (7th & 8th grades), Carrollton, GA: "What is Virology?" student workshop
2022	Georgia Science and Engineering Fair (GSEF) sponsor/mentor for students from Carrollton Junior High School (CJHS) and Carrollton High School (CHS); accompanied students who presented posters at the state-wide GSEF
2022	West Georgia Regional Science and Engineering Fair (WGRSEF) sponsor/mentor for junior high school and high school science fair participants (Carrollton Junior High School and Carrollton High School in GA); Mentored winners of the Junior Division and Senior Division of the WGRSEF

- 2021 West Georgia Regional Science and Engineering Fair (WGRSEF) sponsor/mentor for student from Carrollton High School (CHS)
- 2021 Guest speaker for Carrollton Junior High School Science Club (7th & 8th grades), Carrollton, GA: "What is Virology?" student workshop
- 2020 Guest speaker for Carrollton Junior High School Science Club (7th & 8th grades), Carrollton, GA: "What is Virology?" student workshop
- 2019 West Georgia Regional Science and Engineering Fair (WGRSEF) sponsor/mentor for junior high school science fair participants (Carrollton Junior High School in GA); Mentored winner of the Junior Division of the WGRSEF
- 2019 Guest speaker at Carrollton Middle School (5th grade), Carrollton, GA: "What Microbiologists Do!"
- 2017 Abstract reviewer for the 6th Annual Southeast Regional GURC conference at Georgia College & State University, Milledgeville, GA
- 2016 Presenter for Science Saturdays at the West Georgia Youth Science and Technology Center (GYSTC): "The Unseen World of Microbes and Molecules"
- 2016 Sponsor/mentor for High School Science Fair participant (Carrollton High School in GA)
- 2016 Science Advisor and Presenter for Lego Robotics team at Carrollton Middle School, Carrollton, GA
- 2015 Judge for the West Georgia Regional Science and Engineering Fair in Carrollton, GA
- 2015 Organizer for presentation by *My Reptile Guys* at Oak Grove Montessori School in Carrollton, GA
- 2014 Biology advisor for Oak Grove Montessori School in Carrollton, GA
- 2013 Guest presenter at Oak Grove Montessori School in Carrollton, GA: "Microbes and Molecules"
- 2013 Biology advisor for Oak Grove Montessori School in Carrollton, GA
- 2012 Guest presenter at Oak Grove Montessori School in Carrollton, GA: "The Five Kingdoms of Life"
- 2012 Biology advisor for Oak Grove Montessori School in Carrollton, GA
- 2012 Science fair co-organizer and advisor for Oak Grove Montessori School in Carrollton, GA
- 2011 Sponsor/mentor for High School Science Fair participants (Carrollton and Fayette County High Schools in GA)
- 2010 Sponsor/mentor for High School Science Fair participants (Carrollton and Fayette County High Schools in GA)
- 2010 Judge for the West Georgia Regional Science Fair in Carrollton, GA
- 2008 Sponsor/mentor for High School Science Fair participants (Fayette County High School in GA)
- 2007 Judge for the West Georgia Regional Science Fair in Carrollton, GA
- 2006 Judge for *Science Olympiad* "Disease Detectives", University of South Alabama, Mobile, AL

**Additional Honors and Awards**

- 2022 Recognized by Biology student as someone who has made an impact on them at the "25 Days Until Graduation" ceremony, Office of Career and Graduate School Connections, University of West Georgia
- 2020 Nominated for "Teaching Excellence Award", College of Science and Mathematics, University of West Georgia
- 2018 "Above and Beyond Award", Office of Risk Management and Environmental Health & Safety, University of West Georgia
- 2015 Presenter for Chemistry: Popular Lectures on 2015 Nobel Prizes, 2015, College of Science and Mathematics, University of West Georgia
- 1991 Graduated *magna cum laude*, Department of Life Sciences, University of Missouri-Rolla

## **Graduate and Undergraduate Research and Teaching Mentorships at the University of West Georgia**

### **Graduate Students (Thesis-Track M.S. in Biology)**

<b><i>Name of Student</i></b>	<b><i>Time in Lab</i></b>	<b><i>Title of Research Project</i></b>
Emma Young	2021-2023	Degradation of cellulose by the curdian biofilm of <i>Cellulomonas flavigena</i> KU
Kristina Andrews	2012	Starvation stress increases resistance to chlorhexidine in <i>Serratia marcescens</i>
Anabelle Weaver	2009-2012	Culture conditions affecting curdian production by <i>Cellulomonas flavigena</i> strain KU
Philip Gosu	2010-2012	Variations in hydrogen peroxide resistance among strains of <i>Serratia marcescens</i>
Lakmal Siriwardana	2009-2010	The glucose-storage carbohydrates curdian, trehalose and glycogen function as reserve compounds for <i>Cellulomonas flavigena</i>
Joseph Pittman	2006-2008	The starvation-stress response (SSR) of <i>Serratia marcescens</i>

### **American Society for Microbiology Undergraduate Research Fellows (ASM-URF)**

<b><i>Name of Student</i></b>	<b><i>Time in Lab</i></b>	<b><i>Title of Research Project</i></b>
Kartika Angriani	2011-2012	Utilization of alternative carbon sources by clinical and environmental strains of <i>Serratia marcescens</i>

### **NSF Georgia-Alabama Louis Stokes Alliance for Minority Participation (LSAMP Program)**

<b><i>Name of Student</i></b>	<b><i>Time in Lab</i></b>	<b><i>Title of Research Project</i></b>
Shernett Schermer	2014	Identification of RpoE-activating carbon-sources in <i>Salmonella enterica</i> serovar Typhimurium

### **UTeach – NSF Robert Nocyte Teacher Scholarship Program**

<b><i>Name of Student</i></b>	<b><i>Time in Lab</i></b>	<b><i>Title of Research Project</i></b>
Taylor Pappas	2015-2016	Preparation of bacteriological growth media for Microbiology (BIOL 3310) laboratory
Keisha Boyle	2015	Preparation of bacteriological growth media for Microbiology (BIOL 3310) laboratory

### **Undergraduate Student Research Assistants (UWG Student Research Assistantship Program – SRAP)**

<b><i>Name of Student</i></b>	<b><i>Time in Lab</i></b>	<b><i>Title of Research Project</i></b>
John-David Butler	2022-2023	Degradation of cellulose by adherent, biofilm-forming bacteria
Shakara Williams	2016-2017	Protein composition of the extracellular matrix produced by the cellulose-degrading bacterium <i>Cellulomonas flavigena</i>
Erica Bennett	2011-2012	Starvation-inducible genes involved in DNA protection and repair in <i>Salmonella</i>
Brittany Hargrove	2008-2010	Role of the pigment prodigiosin in the starvation-stress response of <i>Serratia marcescens</i>
Kayley Couch	2007-2008	Starvation-induced resistance of <i>Serratia marcescens</i> strains to heat and acid stress
Jonathan Oliver	2007-2008	Starvation-induced resistance of <i>Serratia marcescens</i> strains to heat and acid stress
Rebecca Waters	2006	Starvation-induced resistance of <i>Salmonella enterica</i> serovar Typhimurium to different classes of disinfectants

### **Undergraduate Students Enrolled in Advanced Undergraduate Biology Research (BIOL 4983)**

<b><i>Name of Student</i></b>	<b><i>Time in Lab</i></b>	<b><i>Title of Research Project</i></b>
Gracie Ganyon	2022	Gram stain and bacterial cultures
John-David Butler	2022-2023	Degradation of cellulose by adherent, biofilm-forming bacteria (Honors Thesis Project)
Pedro Flores	2021	Biofilm-mediated degradation of cellulose by <i>Cellulomonas flavigena</i> and Isolation of new cellulose-degrading bacteria from cellulose-enrichment cultures
John Escate	2021	Biofilm-mediated degradation of cellulose by <i>Cellulomonas flavigena</i> and Isolation of new cellulose-degrading bacteria from cellulose-enrichment cultures
Alexandra Chastain	2020	<i>Cellulomonas</i> and the degradation of cellulose
Gabriel Hutcheson	2020	Methods in bacteriology
Samantha Williams	2020	Methods in bacteriology
Javon Swint	2019	Formation of Curdian-Based Biofilms by <i>Cellulomonas flavigena</i>
Makala Raglin	2018	The biofilm-planktonic growth cycle of <i>Cellulomonas flavigena</i>
Joseph Okafor	2018	The biofilm-planktonic growth cycle of <i>Cellulomonas flavigena</i>

Jessica King	2016	Starvation-induced resistance to the commonly-used disinfectant/antiseptic chlorhexidine in environmental and clinical isolates of <i>Serratia marcescens</i>
Berkley Stewart	2016	Starvation-induced resistance to the commonly-used disinfectant/antiseptic chlorhexidine in environmental and clinical isolates of <i>Serratia marcescens</i>
Brittany Fielder	2016	Starvation-induced resistance to the commonly-used disinfectant/antiseptic chlorhexidine in environmental and clinical isolates of <i>Serratia marcescens</i>
Shakara Williams	2016	Starvation-induced resistance to the commonly-used disinfectant/antiseptic chlorhexidine in environmental and clinical isolates of <i>Serratia marcescens</i>
Autumn Marshall	2014-2015	Role of the RpoE-regulated genes <i>slp</i> and <i>yeaY</i> in the starvation-stress response of <i>Salmonella enterica</i>
Sarah Brady	2014	Role of the RpoE-regulated genes <i>slp</i> and <i>yeaY</i> in the starvation-stress response of <i>Salmonella enterica</i>
Amelia Apperson	2014	A comparison of the cellulolytic activity of <i>Cellulomonas</i> species on carboxymethylcellulose agar
Abraham Martinez	2014-2015	Role of the RpoE-regulated genes <i>slp</i> and <i>yeaY</i> in the starvation-stress response of <i>Salmonella enterica</i> ; A comparison of the cellulolytic activity of <i>Cellulomonas</i> species on carboxymethylcellulose agar
Jessica King	2013-2015	Role of the RpoE-regulated genes <i>slp</i> and <i>yeaY</i> in the starvation-stress response of <i>Salmonella enterica</i> ; Identification of RpoE-activating carbon-sources in <i>Salmonella enterica</i> serovar Typhimurium
Shernett Schermer	2013-2014	Identification of RpoE-activating carbon-sources in <i>Salmonella enterica</i> serovar Typhimurium
Kadiatou Diallo	2013	Variations in the catalase activity of clinical and environmental <i>Serratia marcescens</i> strains
Tenesha Strong	2013	Variations in the catalase activity of clinical and environmental <i>Serratia marcescens</i> strains
Zachariah Bell	2013	Differing strategies for cellulose degradation in the genus <i>Cellulomonas</i>
Lakesha Johnson	2012-2013	Variations in hydrogen peroxide resistance among different <i>Serratia marcescens</i> isolates
Ashley Anthony	2011-2012	Starvation-inducible genes involved in DNA protection and repair in <i>Salmonella</i>
Diana Kissman	2011-2012	Starvation-inducible genes involved in DNA protection and repair in <i>Salmonella</i>
Nicole Alam	2011	Isolation of enterobacteria from environmental samples
Tsedey Mekbib	2011	Isolation of enterobacteria from environmental samples
Katrika Agriani	2010-2012	Growth of <i>Serratia marcescens</i> strains on alternative carbon sources
Taylor Pike	2010	Production of curdlan from various carbon sources by <i>Cellulomonas flavigena</i> KU
Jamaal Adamson	2010	RpoS-regulated phenotypes of clinical and environmental <i>Serratia marcescens</i> strains
Aaron Gall	2009	Determination of trehalose, curdlan, and glycogen in culture samples of <i>Cellulomonas flavigena</i> KU
LaVarris Byse	2008	Extracellular enzymes produced by <i>Serratia marcescens</i> in response to starvation stress
Sheila Adjekuko	2008	Starvation-induced resistance of <i>Serratia marcescens</i> to heat and acid stress
Jennine LaCroix	2008	Starvation-induced resistance of <i>Serratia marcescens</i> to heat and acid stress
Ramlat Idris	2008	Optimal growth temperature of the opportunistic pathogen <i>Kluyvera cryocrescens</i>
Amanda Gould	2008	Biochemical identification of a non-pigmented <i>Serratia marcescens</i> soil isolate
Aisha Linge	2007	Starvation-induced resistance of <i>Serratia marcescens</i> strains to heat and acid stress
Linda Adebisi	2006-2007	Starvation-induced resistance of <i>Serratia marcescens</i> strains to heat and acid stress; Environmental-stress tolerances of a <i>Citrobacter freundii</i> soil isolate
Rebecca Waters	2007	Environmental-stress tolerances of a <i>Pantoea agglomerans</i> soil isolate
Kishaun Burns	2007	Identification and growth characteristics of an <i>Hafnia alvei</i> strain isolated from soil

### Advanced Academy of Georgia Students

<i>Name of Student</i>	<i>Time in Lab</i>	<i>Title of Research Project</i>
Cameron Kee	2013	Isolation of cellulose degrading bacteria using a new cellulose enrichment culture method

### Research Volunteers and "Post-Bac" Students

<i>Name of Student</i>	<i>Time in Lab</i>	<i>Title of Research Project</i>
Angelica Carroll	2020	Methods in bacteriology
Taylor Wolf	2018	The biofilm-planktonic growth cycle of <i>Cellulomonas flavigena</i>
Javon Swint	2018	The biofilm-planktonic growth cycle of <i>Cellulomonas flavigena</i>
Daniel Jackson	2016	Starvation-induced resistance to the commonly-used disinfectant/antiseptic chlorhexidine in environmental and clinical isolates of <i>Serratia marcescens</i>
Clark Taylor	2006	Starvation-induced resistance of <i>Salmonella enterica</i> serovar Typhimurium to phenolic compounds

## Undergraduate Research Mentorships at the University of South Alabama

### Department of Biomedical Sciences Honors Students

<i>Name of Student</i>	<i>Time in Lab</i>	<i>Title of Research Project</i>
Gowri Srinivas	2003-2005	Role of the RpoS-dependent carbon-starvation-inducible <i>narU</i> gene, encoding a nitrite extruder protein, in the starvation-stress response (SSR) of <i>Salmonella</i>
Jessa McCarthy	2003-2005	Regulation and role of small heat-shock proteins (sHSP) in the starvation-stress response (SSR) of <i>Salmonella enterica</i> serovar Typhimurium
Dao Pham	2004	Role of the cold-shock-inducible <i>lpxP</i> -encoded palmitoleoyl transferase, involved in fatty acylation of Lipid A, in the starvation-stress response (SSR) of <i>Salmonella</i>
Sheena Thomas	2003-2004	The effects of shifts in carbon-sources on the activity of the alternative sigma factor RpoE in <i>Salmonella enterica</i> serovar Typhimurium
Rubina Khan	2001-2003	Characterization of the <i>aidB</i> gene in alkylation repair during the starvation-stress response (SSR) of <i>Salmonella enterica</i> serovar Typhimurium
Mary Patrick	2001-2003	Molecular characterization of the <i>narU-narZYWV</i> locus of the <i>Salmonella</i> chromosome
Susie Wimpee	2000-2001	The inorganic polyphosphate kinase ( <i>ppk</i> ) gene is not required for <i>Salmonella's</i> starvation-stress response (SSR)

### National Science Foundation Research Experiences for Undergraduates (NSF-REU) Students

<i>Name of Student</i>	<i>Time in Lab</i>	<i>Title of Research Project</i>
Kristina Ravendran	2005	DegS-independent activation of the extracytoplasmic function sigma factor RpoE during shifts from growth on glucose to certain secondary C-sources
Jessa McCarthy	2003-2004	Identification and characterization of RpoE-dependent C-starvation inducible genes in <i>Salmonella enterica</i> serovar Typhimurium
Kimberly Crabtree	2002-2004	Role of the alternative sigma factor RpoN in the regulation of the starvation-stress response (SSR) of <i>Salmonella enterica</i> serovar Typhimurium
Erin Johnson	2001-2003	Effects of carbon-source on RpoE activation in <i>Salmonella</i>

### University Council on Undergraduate Research (UCUR) Students and NIH-AREA Grant (R15) Students

<i>Name of Student</i>	<i>Time in Lab</i>	<i>Title of Research Project</i>
Ivana Pejatovic	2005	Investigation of a DegS-independent pathway of RpoE activation during the starvation-stress response (SSR) of <i>Salmonella enterica</i> serovar Typhimurium
Jumin Sundae	2005	Role of the phosphohistidine phosphatase SixA, a modulator of the ArcBA signal transduction pathway, in the RpoE-regulated starvation-stress response (SSR) of <i>Salmonella</i>
Lam Pham	2005	Role of the <i>ddg</i> ( <i>lpxP</i> )-encoded palmitoleoyl transferase, involved in fatty acylation of Lipid A, in the starvation-stress response (SSR) of <i>Salmonella enterica</i> serovar Typhimurium
Kristy Nicholson	2001-2005	Molecular cloning and characterization of the <i>stiC-pbpG</i> region of the <i>Salmonella enterica</i> chromosome
Reshonda Lilly	2004	Cloning and mutagenesis of the <i>sixA</i> gene encoding the SixA phosphohistidine phosphatase of <i>Salmonella enterica</i> serovar Typhimurium
Vinh Nguyen	2000-2001	The development of a MudJ ( <i>lac-Kan<sup>r</sup></i> ) chromosomal insertion strain library for the identification and characterization of mutants defective in C-starvation generated polymyxin resistance
Karronno Battle	2000-2001	The role of the OmpR regulatory protein in the starvation-stress response (SSR) of <i>Salmonella enterica</i> serovar Typhimurium

### Visiting Researchers

<i>Name of Student</i>	<i>Time in Lab</i>	<i>Title of Research Project</i>
Sebastian Rieck	2005	The role of outer-membrane protein OmpC in the activation of the extracytoplasmic function sigma factor RpoE during the starvation-stress response (SSR) of <i>Salmonella</i>
Camille Macé	2004	Role of the EAL-domain of YdiV in the starvation-stress response (SSR) of <i>Salmonella enterica</i> serovar Typhimurium and its regulation by the alternative sigma factor RpoE

## Referees

- 1. Dr. Gregory Payne**  
Professor and Biology Program Coordinator  
Department of Natural Sciences  
University of West Georgia  
Carrollton, GA 30118  
(678) 839-4040  
gpayne@westga.edu
- 2. Dr. Christopher Tabit**  
Professor and Former Chair of Department of Biology  
Department of Natural Sciences  
University of West Georgia  
Carrollton, GA 30118  
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- 3. Dr. Michael P. Spector**  
Former Professor & Research Mentor (retired)  
Department of Biomedical Sciences  
University of South Alabama  
Mobile, AL 36688  
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- 4. Dr. John W. Foster**  
Former Professor & Research Mentor (retired)  
Department of Microbiology and Immunology  
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