

**PATRICIA J. BAYNHAM, Ph.D.**

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Department of Biological Sciences  
St. Edward's University  
3001 South Congress Avenue  
Austin, TX 78704  
512-233-1675 (Ofc)

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**EDUCATION:**

Ph.D. in Microbiology and Immunology, Wake Forest School of Medicine,  
Winston-Salem, NC. 1999

California High School Teaching Certificate, Chapman University, Orange, CA. 1992  
B.S. in Biology, Presbyterian College, Clinton, SC. 1986

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**PROFESSIONAL EXPERIENCE:**

**Lucian Chair of Science 2019-Present**  
St. Edward's University, Austin, TX

**Professor of Biology, 2017**  
St. Edward's University, Austin, TX

**Associate Professor of Biology, 2008-2017**  
St. Edward's University, Austin, TX

**Interim Dean, School of Natural Sciences 2013-2014**  
St. Edward's University, Austin, TX

**Department Chair, Biological Sciences, 2006-2007, 2010-2011, 2012-2013,  
2014-2016, St. Edward's University, Austin, TX**

**Visiting Scholar, Center for Food Safety, 2011-2012**  
Texas A&M University, College Station, TX

**Assistant Professor of Biology 2004-2008**  
St. Edward's University, Austin, TX

**Assistant Professor of Biology, 2000-2004**  
Thomas More University, Crestview Hills, KY

**Postdoctoral Fellow, Microbiology and Immunology, 1999-2000**  
Wake Forest School of Medicine, Winston-Salem, NC

**Research Assistant, Committee on Vascular Biology, 1990-1991**  
Scripps Research Foundation, La Jolla, CA.

**Research Assistant, Department of Immunology, 1989-90**  
University of Texas Southwestern Medical Center, Dallas, TX

**Public Health Associate, Centers for Disease Control, 1987-89**  
Based at Dallas Health Department, Dallas, TX.

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**ADMINISTRATIVE EXPERIENCE:**

***Chair, Department of Biological Sciences*** (2006-2007, 2010-2011, 2012-13,2014-2016)

St. Edward's University, Austin, TX:

Primary duties: Oversee all academic programs in the department and promote curricular rigor and creativity. Manage the budget and supervise the lab coordinator. Scheduling and staffing of departmental classes, evaluation of faculty, review and recommendation of curricular changes and leading the review of academic programs.

Accomplishments:

- *Pedagogical Innovation* – Course-based undergraduate research experiences (CUREs) introduced into the freshman biology sequence and upper-level classes.
- *Curriculum Development* – Worked with the School of Behavioral and Social Sciences to develop a Global Health Track for the Global Studies major. Introduced a Medical Laboratory Science 3+1 BS (Austin State Hospital) and a 3+2 Biology BA/Clinical Laboratory Science MS (UT Medical Branch at Galveston).
- *Faculty Development* – Departmental promotion and tenure guidelines developed.
- *Global Initiatives* – Introduced embedded study abroad opportunities into six courses increasing study abroad by majors.
- *Cross-disciplinary Activities* – Developed a faculty affiliation agreement to allow more transparent and effective interactions with non-biology faculty to advance the research and teaching in the department. Partnered with Global Studies to add a Global Public Health thematic track.
- *Program Review* – Led self-study and external review of the department which included all faculty and staff.

***Interim Dean, School of Natural Sciences*** (2013-2014)

St. Edward's University, Austin, TX:

Primary duties: Financial oversight of the School of Natural Sciences budget, faculty and student travel fund allocation, office and space allocation, collaboration with other deans to meet institutional goals, working with our advisory board on school initiatives, negotiating faculty hiring, and being the face of the School to the external community.

Accomplishments:

- *Summer Research* – Worked with the Advisory Board and Development Office to fund summer research for Natural Sciences students.
- *Advisory Board Expansion* – Worked to add more recent graduates to the Board on the advice of more established members and kept the Board updated on activities.
- *Faculty Development* – Implemented inclusive faculty recruitment process to attract a broad and diverse faculty. Promoted the development of department specific promotion and tenure criteria. Started to develop promotion and tenure guidelines.
- *Curriculum Development* – Articulated the first 3+2 Math and Engineering dual degree program. Moved MCAT preparation course on campus.
- *Program Review* – Oversaw an updated Academic Program Review process for the Department of Math and Physics.
- *Facilities* – Fostered the best use of resources and maximized student access as the new science building was opened.

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**TEACHING EXPERIENCE:**

**St. Edward's University**

BIOL 1305: Contemporary Biology  
BIOL 1307: Cells, Genetics and Organ Systems  
BIOL 1107: Cells, Genetics and Organ Systems Laboratory  
BIOL 2330: Epidemiology (once with study abroad in Chile)  
BIOL 3145: Medical Terminology  
BIOL 3339: Microbiology  
BIOL 3139: Microbiology Laboratory  
BIOL 3445: Food Microbiology  
BIOL 3335: Agricultural Microbiology and Developmental Entomology  
BIOL 4147: Research Methods  
BIOL 4148: Research  
BIOL 4149: Senior Seminar  
BIOL 4157: Research  
CAPS 4360: Capstone (including study abroad in Australia)  
HONS 2360: Making Sense of the World in Words: Writing about Science  
HONS: 2160: Seeking Life Balance Through Yoga, Meditation, and Chocolate  
HONS 4399: Honors Thesis  
FYSM 1120: Staying Well in a Global Pandemic (team-taught/online su 2020)  
SCIE 4345: History and Philosophy of Science (including study abroad in UK)

**Thomas More University (formerly Thomas More College):**

BIOL 205: Biological Literature  
BIOL 207: Medical Terminology  
BIOL 216: Medical Microbiology with Laboratory (nursing)  
BIOL 305: Microbiology with Laboratory (majors)  
BIO 355 and NSC 255: Fighting Disease Overseas: British Medicine Past  
and Present (taught in England, Scotland, and Wales)  
First Year Seminar: Sex, Drugs and Genetics: Biotech Rocks the World  
NSC 256: Microbes in Health and Disease (non-majors)

**Other Teaching Experience:**

-Instructor (1994-5) and Coordinator (1996), Medical Microbiology  
Laboratory at Wake Forest School of Medicine (WFSM)  
-Invited Lecturer in Microbiology and Freshman Biology courses in 1998-1999 at  
Salem College, Winston-Salem, NC.  
-*ad hoc* Lecturer, Fundamentals of Bacteriology in 1997 at WFSM.  
-Lecturer, Advanced Topics in Microbiology and Immunology: 1994-96, WFSM.  
-High School Teacher, taught physical science, general science, algebra and  
biology in Southern California public schools (1991-3).

## **REGIONAL AND NATIONAL LEADERSHIP AND SERVICE**

**Annual Biomedical Research Conference for Minority Students (ABRCMS).** The largest biomedical research conference for undergraduates in the US. Abstract reviewer, travel grant reviewer, judge (2007-2020). Microbiology Section Chair (2009-2013) Microbiology Section Vice-Chair (2018).

**Co-Organizer, ASM Texas Branch Spring Meeting,** a two-day meeting focused on undergraduate students with approximately 150 attendees. New Braunfels, TX (2019).

**American Society for Microbiology, Committee on Minority Education.** This national committee provides professional support for undergraduates and graduate students from groups underrepresented in science. I chaired the Microbiology Undergraduate Research Fellowship Subcommittee that evolved into the Undergraduate Research Capstone Subcommittee. We provided national development opportunities, in spite of funding challenges, with the long-term goal of retention in ASM. (2006-2017).

**Member, Health Working Group Recommendations for The City of Austin Taskforce on Eliminating Institutional Racism and System Inequities.** Collaborated with members of the Austin community to make recommendations for increasing equity. We recommended establishing a City of Austin equity office, an equity tool for decision making and support for lay community health workers called Promotores, and others. Met with of the SEU Board of Trustees and President Martin to debrief. (2016-17).

**Facilitator,** National Academies Summer Institute on CUREs, University of Texas, Austin (2016).

**Facilitator for Science Teaching Fellows (STF) Program:** American Society for Microbiology (ASM) six-month program that familiarized participants with teaching career options and techniques including course design, assessment and active learning. We mentored more than 80 participants each year (2013-2014).

Cellular and Molecular Biology Section, Texas Academy of Science  
**Section Chair** (2011-12) Alpine, TX. **Section Vice-Chair** (2010-11) Austin, TX.

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## **PROFESSIONAL ORGANIZATIONS:**

American Society for Microbiology  
Council on Undergraduate Research  
Texas Academy of Science  
Society for the Advancement of Biology Education Research  
Sigma Xi  
Beta Beta Beta Biological Honor Society

## **REVIEWER:**

Molecular Microbiology, Environmental Microbiology Reports  
ASM Undergraduate Research Fellowship

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## **UNIVERSITY SERVICE**

Faculty Senate (2017-present) Senate Documentarian (2017-2019)  
Faculty Evaluation Committee (2014-2016, 2020-present)  
LiveWell SEU Workgroup, COVID-19 Campus Planning (Su2019-2020)  
Global Committee (2020-2021)  
Organizer, Global Health Challenges Symposium: Climate Change (2020)  
Co-facilitator for the University Critical Thinking SLO Committee (2019)  
Organizer, Global Health Challenges Symposium: Antimicrobial Resistance (2019)  
Quality Enhancement Plan: Vocation: Attended workshop, wrote and executed mini-Grant, “Mentoring Research Students in Their Quest for a Career” (2016-2017)  
Faculty Compensation Committee Co-Chair (2016-2018)  
Global Perspectives Requirement Development Committee (2017-2018)  
Health Professions Advisory Committee (2005-2016)  
Interview Committee for Director of Global Engagement Office (2015)  
Global Initiatives Faculty Advisory Board (2014-2018)  
Co-chair, Investing for Our Future Faculty Development Committee (2014-2015)  
Co-chair, Global Initiatives Academic Planning Group (2013-2014)  
Teaching Symposium Committee Member (2010-2011)  
Curriculum Committee/Academic Council (2010-2011)  
Symposium on Undergraduate Research and Creative Expression (SOURCE), campus-wide, multi-disciplinary campus conference,  
Committee Co-Chair (2007-2008), Committee Member (2005-2014)  
Natural Sciences Career Symposium Committee Member (2005-2009)  
Search Committee, Director of Office of Sponsored Programs (2007-2008)  
Faculty Representative to JBWN Grand Opening Committee (2005-2006)  
Faculty Governance, Thomas More University,  
Faculty Coordinating Committee (2002-2003), Faculty Vice Chair (2003-2004)  
Sigma Xi, Northern Kentucky Chapter (VP 2002-2003, President 2003-2004)

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## **ACADEMIC and PROFESSIONAL HONORS:**

AAC&U Sherman-Fairchild Grant, Participant, Assignment redesign (2020).  
Lucian Chair, School of Natural Sciences, SEU (2019-present).  
SEU Global Innovation Fellow (2015-2016)  
School of Natural Sciences Distinguished Teaching Award (2015)  
National Academies Summer Institute Fellow (2015)  
Fellow, Texas Academy of Science (2012)  
School of Natural Sciences Outstanding Faculty Advisor (2010-2011)  
Cystic Fibrosis Foundation Award for Outstanding Graduate Student (1996)  
Predoctoral Fellowship, NIH Training Grant (1993-1998)  
Who’s Who Among American College Students (1986)  
Omicron Delta Kappa Honor Society  
Dillard Elliott Academic Scholarship

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**TRAINING:**

**AACU Value Institute Rubric Calibration Training**, Certified Scorer (2019)

**32<sup>nd</sup> Academic Chairpersons Conference**, Austin, TX (2015).

**NSF Advance Program Workshop**, Alexandria, VA (2014).

**American Council on Education's National Women's Leadership Forum**, Arlington, VA (2013).

**Biology Scholars Program:** ASM year-long research residency to train faculty in scholarship of teaching and learning (SoTL). This included a SoTL Institute, development of a project, online activities, and meeting presentations (2008-2009).

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**EXTERNAL FUNDING:**

- 2018 Senior Personnel, "MRI: Acquisition of a versatile, user-friendly, automated fluorescence microscope to promote research performed by faculty and undergraduates at a Hispanic-serving institution." Co-PIs: Andrea Holgado and Dan Gold. National Science Foundation \$207,310.
- 2011 ASM General Meeting Minority Travel Grant awarded for travel and presentation at the General Meeting in New Orleans, LA (\$1800).
- 2010 Project Director, "Strengthening Food Safety Research and Education Capacity at St. Edward's University Through a Faculty Sabbatical Including Research and Course Development", USDA, 1-year, \$150,000.
- 2009 Project Director, "Undergraduate Research Experiences in Microbiology and Developmental Entomology", USDA. 5 years. Funded research experiences for over 24 students and a two-year graduate scholarship for one student. \$295,000.
- 2007 Research Opportunity Award with UT collaborator – Marvin Whiteley, NSF funded summer 2007 research and travel to the International *Pseudomonas* Meeting in August 2007. Mentored two SEU students who were funded separately by NSF, \$25,000.
- 2006 ASM General Meeting Minority Travel Grant awarded for travel and presentation at the General Meeting in Orlando, FL, \$1500.
- 2004 Principal Investigator, *RUI: The Role of AlgZ in the Twitching Motility of Pseudomonas Aeruginosa*, NSF, 1 year, \$45,000.
- 2003 Undergraduate Research Fellowship (in support of undergraduate student), American Society for Microbiology, 8 weeks, presentation at ASM, \$2000.
- 2001 Principal Investigator, *RUI: The Role of AlgZ in the Twitching Motility of Pseudomonas aeruginosa*, NSF, 3 years, \$240,000.

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**ST. EDWARD'S UNIVERSITY FUNDING:**

- 2020 PI, "Enabling high resolution analysis using bacterial cytological profiling to develop new antimicrobials" Institute for Interdisciplinary Science (i4), Research Opportunity Award, \$9443.
- 2019 Co-PI, "Support a CURE: Acquisition of Nanodrop Spectrophotometer" PI: Charles Hauser. Co-PI: Daniel Gold. Institute for Interdisciplinary Science (i4), Research opportunity Award, \$3802.
- 2019 Co-PI, "Building Capacity for Research and Teaching in Statistics and Data Science"; PI, Lisa Goering, Co-PIs: Chuck Hauser, Matt Steffenson. Institute for Interdisciplinary Science (i4), Professional Development Grant, \$5700.
- 2016 Presidential Excellence Grant: Determining the mechanism of action of antibacterial substances, for summer research, \$5000.
- 2015 SPICE award, A Course-Based Undergraduate Research Experience (CURE) in Microbiology: Identification and Analysis of Antimicrobial and Quorum Sensing Inhibitors. One course reassignment each year for three years to develop, introduce, assess, and disseminate this project.
- 2011 Curriculum Improvement Grant, to update the freshman biology lab curriculum, co-awardees: Lisa Goering, William Quinn, Osvaldo Hernandez, Al Hook, \$1500.
- 2009 Presidential Excellence Grant: Comparison of clinical *Pseudomonas aeruginosa* cystic fibrosis isolates with laboratory strains using DNA fingerprinting, for summer research, \$5000.
- 2006 Presidential Excellence Grant: What genes does the DNA-binding protein AmrZ control in *Pseudomonas aeruginosa*? Summer research, \$5000.

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**PUBLICATIONS (\* undergraduate co-author):**

Hartman, E.A.H., Bilinski, T.M., and **Baynham, P.J.** (2018). Implementing a course-based undergraduate research experience on water quality into an introductory biology laboratory course. In N. Hensel (Ed), *Course-based Research: Educational Equity and High-Impact Practice*. Stylus Publishing, Sterling, VA.

**Patricia J. Baynham** (2016). Fostering Students' Scientific Identities as They Search for New Antimicrobial Drugs. *CUR Quarterly* 38 (2): 25-29.  
(<http://www.cur.org/download.aspx?id=3368>).

**Patricia J. Baynham** (2010). Want to Inspire Science Students to Consider a Research Career? Host a Scientist in Your Classroom. *J. Microbiology and Biology Education*, May 2010, 11: 62-63.

Megan L. Boulette, **Patricia J. Baynham**, Peter A. Jorth, Irena Kukavica-Ibrulj, Aissa Longoria\*, Karla Barrera\*, Roger C. Levesque and Marvin Whiteley (2009). Characterization of Alanine Catabolism in *Pseudomonas aeruginosa* and Its Importance for Proliferation *In Vivo*. *J. Bacteriol.*, Oct 2009; 191: 6329 - 6334.

**Patricia J. Baynham**, Deborah M. Ramsey, Borys V. Gvozdyev\*, Ellen M. Cordonnier\*, and Daniel J. Wozniak (2006). The *Pseudomonas aeruginosa* Ribbon-Helix-Helix DNA-Binding Protein AlgZ (AmrZ) Controls Twitching Motility and Biogenesis of Type IV Pili. *J. Bacteriol.* 2006 188: 132-140.

Ramsey, Deborah M., **Patricia J. Baynham**, and Daniel J. Wozniak (2005) Binding of *Pseudomonas aeruginosa* AlgZ to Sites Upstream of the *algZ* Promoter Leads to Repression of Transcription. *J. Bacteriol.* 187: 4430-4443.

Wozniak, Daniel J., April B. Sprinkle, and **Patricia J. Baynham** (2003). Control of *Pseudomonas aeruginosa algZ* expression by the alternative sigma factor AlgT. *J. Bacteriol.*, 185: 7297-7300.

**Baynham, Patricia J.**, April L. Brown, Lisa L. Hall \*, and Daniel J. Wozniak (1999). *Pseudomonas aeruginosa* AlgZ, a ribbon-helix-helix DNA binding protein, is essential for alginate synthesis and *algD* transcriptional activation. *Molecular Microbiology* 33: 1069-1080.

**Baynham, Patricia J.**, and Daniel J. Wozniak (1996). Identification and characterization of AlgZ, an AlgT-dependent DNA-binding protein required for *Pseudomonas aeruginosa algD* transcription. *Molecular Microbiology* 22: 97-108.

Miles, Lindsey. A., Gordon M. Fless, Angelo M. Scanu, **Patricia Baynham**, Matthew T. Sebald, Pamela Skocir, Linda K. Curtiss, Eugene G. Levin, Jane L. Hoover-Plow, and Edward F. Plow (1995). Interaction of Lp(a) with plasminogen binding sites on cells. *Thrombosis & Haemostasis.* 73: 458-65.

Levin, Eugene G., Lindsey A. Miles, Gordon M. Fless, Angelo M. Scanu, **Patricia Baynham**, Linda K. Curtiss, and Edward F. Plow (1994). Lipoproteins inhibit the secretion of tissue plasminogen activator from human endothelial cells. *Arteriosclerosis & Thrombosis.* 14: 438-42.

Santell, Lydia, Kendra Marotti, Neal S. Bartfeld, **Patricia Baynham**, and Eugene G. Levin (1992). Disruption of microtubules inhibits the stimulation of tissue plasminogen activator expression and promotes plasminogen activator inhibitor type 1 expression in human endothelial cells. *Experimental Cell Research* 201: 358-65.



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**INVITED PRESENTATION OR PANELIST:**

“Global Health During COVID-19” (2020). Council on Foreign Relations, Kozmetsky Center of Excellence, Discussion Leader, Virtual.

“Networking with Your National Society” (2018). Annual Biomedical Research Conference for Minority Students (ABRCMS), Indianapolis, IN.

ASM Microbe Academy for Professional Development (2017), Panelist and Facilitator, meeting for undergraduate and graduate microbiologists before the ASM national meeting. New Orleans, LA.

“The Best Advice You Ever Got.” (2015). Faculty development session at the Texas Academy of Science Annual Meeting, San Antonio, TX.

“Gateway to the Future: Career Paths in the Biomedical Sciences, STEM Disciplines, and Behavioral Sciences- Conversations with Scientists” (2014). ABRCMS, San Antonio, TX.

“Round Table Discussion of the Ebola Outbreak” (2014). St. Edward’s University.

“Undergraduate Research Capstone Institute” Facilitator, Presenter (2012) meeting for undergraduate microbiologists before the ASM national meeting. San Francisco, CA.

“The Role of AmrZ in the Twitching Motility of *Pseudomonas aeruginosa*.” Southwestern University, Georgetown, TX, 2006.

“The Role of Alginate Regulator *algZ* in *Pseudomonas aeruginosa* Twitching Motility.” Department of Microbiology, University of Georgia, Athens, GA (2004).

“Dr. Jekyll and Mr. Hyde: The Gene regulation of *Pseudomonas aeruginosa*”, Northern Kentucky/Southern Ohio Chapter of Sigma Xi, 2001.

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**SEU PUBLICATIONS AUTHORED BY STUDENT MENTEES:**

Jana Soares (2014) Five-Star Slum. Pangaea (<http://sites.stedwards.edu/pangaea/five-star-slum/>).

Goldie DaCosta\* (2012) Examination of Antagonistic Effects of Coriander, Garlic, and Ginger in *Escherichia coli* O157:H7 Contaminated Beef. jSOURCE pp16-28.

Taylor Gabriel\* (2012) Organic Acids in Barbecue Marinade Inhibit the Growth of *Salmonella enterica* in Chicken. jSOURCE pp52-61.

Sunil Rathore\* and Meredith Cohen\* (2010) Toilet Water Bioaerosol Formation Generated Upon Flushing: A Comparison of Retrofit and New Toilets Seeded with *Serratia marcescens*. jSOURCE pp49-57.

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**SEU HONORS THESES MENTORED:**

Sam Kenyon (2020) Manuka Honey Works Synergistically With Gentamicin Against *Pseudomonas aeruginosa*.

Angel Phan (2020) Determining the Distribution of Class I Integrons in Multiple Drug Resistant *Salmonella enterica* serovar Infantis.

Maddie Silva (2017) Does *Carica papaya* Demonstrate Antimicrobial Properties that Would be Effective in the Treatment of Tuberculosis?

Devin Hayes (2017) Barriers for HPV Vaccination in the United States.

Larisa Maddux (2017) Fighting the Resistance: Using Natural Products from Malaysia to Find New Treatment for Bacterial Infections.

Jana Soares (2014) How Poverty Affects Health in the United States and India.

Natalia Sanchez (2014) Focusing on Vision.

Kelly Hurless (2010) Analysis of  $\beta$ -Lactam resistance mediated by the AmpC/AmpR region in a set of *Pseudomonas aeruginosa* clinical isolates

Sunil Rathore (2009) Shedding Light on Cystic Fibrosis.

Lilah Sotoodeh (2005) New Methods for the Identification of *Staphylococcus aureus* in a Hospital Setting.

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**SELECTED PEER REVIEWED MEETING PRESENTATIONS**

(\*undergraduate co-author):

Francia Ramirez\* and Patricia J. Baynham (2021). Determining Effective and Comfortable Face Coverings to Decrease SARS-CoV-2 Transmission. American Society for Microbiology (ASM) Texas Branch Meeting, virtual.

Silvia Sanchez\* and Patricia J. Baynham (2021). Testing plant extracts from Asia and South America for antimicrobial properties. ASM Texas Branch Meeting, virtual.

Caroline Podvin\* and Patricia J. Baynham (2021). Evaluating Face Masks for Comfort and Effectiveness to Protect the Public. Award for Best Poster Presentation. ASM Texas Branch Meeting, virtual.

Zoe K. Lichtenberg\* and Patricia J. Baynham (2020). *Punica granatum* L. and *Psidium guajava* L. as antimicrobial agents against vancomycin intermediate *Staphylococcus aureus* (VISA) strains. Annual Biomedical Research Conference for Minority Students (ABRCMS), Virtual.

Cristobal Garcia and Patricia J. Baynham (2019). Analyzing the Antimicrobial Effects of *Terminallia calophylla* and *Terminallia leandriana* Extracts on *Staphylococcus aureus* Using Bacterial Cytological Profiling. ABRCMS, Anaheim, CA. (Awarded a travel grant)

Selina Lusero Hernandez Gonzalez\* and Patricia J. Baynham (2019). Analyzing Plant Extracts for Bacterial Inhibition of *Staphylococcus aureus*. American Society for Microbiology (ASM) Branch, New Braunfels, TX.

Blanca A. Garcia\*, Patricia J. Baynham (2018,2019) Does *Lactobacillus gallinarum* protect *Caenorhabditis elegans* from the effects of infection with *Salmonella enterica* serovar Montevideo? ABRCMS, Indianapolis, IN and ASM Branch, New Braunfels, TX.

Kaylee Delgado and Patricia Baynham (2018, 2019) Fighting drug resistance: Plant extracts from Malaysia and Madagascar as potential antimicrobial agents. ABRCMS, Indianapolis, IN and Symposium on Undergraduate Research and Creative Expression (SOURCE) on SEU campus.

Selina Hernandez\*, Angel Phan\* and Patricia Baynham (2018). Analyzing Plant Extracts for Bacterial Inhibition of *Staphylococcus aureus*. ASM Branch, New Braunfels, TX.

Isaiah Lange\* and Patricia Baynham (2018). Antimicrobial Activities of Globally Sourced Plant Extracts. ASM Branch, New Braunfels, TX.

Korey Nuchia\* and Patricia Baynham (2018). Antibacterial Activity of Promising Plant Extracts. ASM Branch, New Braunfels, TX.

Hong Ly\* and Patricia Baynham (2016,2017). The Identification and Characterization of Antimicrobial Plant Extracts. ABRCMS, Tampa, FL, Award for Outstanding Microbiology Poster, and ASM Branch, New Braunfels, TX.

Emily Miller\* and Patricia Baynham (2016,2017). Identification of Plant Extracts with Antimicrobial Activity. ABRCMS, Tampa, FL, Award for Outstanding Microbiology Poster, and ASM Branch, New Braunfels, TX.

Patricia J. Baynham (2016) Introducing a Mini-Course-Based Undergraduate Research Experience into a Microbiology Laboratory in Order to Identify Plants with Antimicrobial Properties and Help Students Identify as Scientists. ASM Microbe Meeting, Boston, MA.

Maddie Silva\* and Patricia Baynham (2016) Screening Costa Rican and Vietnamese Plant Extracts for Antibacterial Properties. ASM Branch Meeting, New Braunfels, TX.

Christophe Chahine\* and Patricia Baynham (2016) Antibacterial Activity of Plant Extracts on *Pseudomonas aeruginosa*. ASM Branch Meeting, New Braunfels, TX and Senior Seminar on campus.

Malaysone ChongFoung\* and Patricia Baynham (2016) Anti-quorum sensing activity of plant extracts. ASM Branch Meeting, New Braunfels, TX.

Kenya Su\* and Patricia Baynham (2016) Analyzing the Antimicrobial Properties of Plant Extracts Against *Staphylococcus aureus*. ASM Branch Meeting, New Braunfels, TX.

Emily Truong\* and Patricia Baynham (2016) Antibacterial activity of Guatemalan and Vietnamese plant extracts against *Staphylococcus aureus*. ASM Branch Meeting, New Braunfels, TX.

Hong Ly\* and Patricia Baynham (2015). Examining Antimicrobial Activity of Plant Extracts toward *Escherichia coli*. ABRCMS, Seattle, WA.

Korey Nuchia\* and Patricia J. Baynham (2015) Analysis of the Antibacterial Activity of Costa Rican and Gabonese Plant Extracts. STEM Conference, Beaumont, TX, Speaking Award, UTSA College of Sciences Research Conference.

Samantha Smith\* and Patricia Baynham (2015). Effects of Colombian and Tanzanian Plant Extracts on *Staphylococcus aureus*. STEM Conference, October, Beaumont, TX.

Luisa Mayorga\* and Patricia J. Baynham (2015) Testing Plant Extracts from Gabon, Panama, and Thailand for Antimicrobial Properties Against *Staphylococcus aureus*. STEM Conference, October, Beaumont, TX and ABRCMS in Seattle, WA.

Lisa M. Goering and Patricia J. Baynham (2015) Building a Community of Microbiology and Developmental Entomology Undergraduate Researchers to Increase Scientific Expertise and Confidence. Texas Academy of Science (TAS) Annual Meeting, San Antonio, TX.

Maria Zamora\* and Patricia J. Baynham (2014) Can kombucha tea inhibit the growth of *Salmonella enterica*? ABRCMS, San Antonio, TX.

Ashley Lopez\* and Patricia J. Baynham (2014) Can citrus juice decontaminate *Salmonella* tainted strawberries? ABRCMS, San Antonio, TX.

Jana Soares and Patricia Baynham. (2014) Can probiotic bacteria control *Salmonella enterica* St. Paul in the model organism *Caenorhabditis elegans*? TAS Annual Meeting, Galveston, TX.

Lawrence Edwards\* and Patricia Baynham. (2013) Will exposure to sub-lethal concentrations of Triclosan lead to the development of microbial tetracycline resistance? ABRCMS, Nashville, TN.

Anabel Rodriguez\*, Patricia Baynham, Aaron Conrado, and Marvin Whiteley (2013) Eavesdropping on bacterial communication: Can normal flora increase the resistance of *Pseudomonas aeruginosa* PA14 to Tobramycin, Ciprofloxin, or Tetracycline? TAS Annual Meeting, Kerrville, TX.

Erika Guin\*, Patricia J. Baynham, Aaron Conrado, and Marvin Whiteley (2012) Detecting potential quorum sensing inhibitors produced by skin and oral isolates using a *Chromobacterium violaceum* indicator strain. ABRCMS, San Jose, CA.

Madison Shaft \* and Patricia Baynham. (2012) Quantification and identification of bacteria present on tomatoes collected from markets in the Austin, Texas area. Oral Presentation Award, Honorable Mention. TAS Annual Meeting, Alpine, TX.

Jessica Svoboda\* and Patricia Baynham. (2012) What is the microbial content of drinks obtained from soda fountain dispensers? Poster Award, Honorable Mention. TAS Annual Meeting, Alpine, TX.

Tiffany La\* and Patricia Baynham. (2012) How well do antibacterial contact lens solutions inhibit the growth of *Pseudomonas aeruginosa*? Poster Award, Honorable Mention. TAS Annual Meeting, Alpine, TX.

Erika Guin\* and Patricia Baynham. (2011,2012) The effects of pesticides on the growth of *Escherichia coli* O157:H7 and *Azotobacter vinelandii* in soil samples. Award for Outstanding Microbiology Poster. ABRCMS, St. Louis, MO. Poster Presentation Award, Honorable Mention, TAS Annual Meeting, Alpine, TX.

Goldie DaCosta\* and Patricia J. Baynham (2011) Antagonistic effects of coriander, garlic and ginger against *Escherichia coli* O157:H7 in ground beef. TAS Annual Meeting, Austin, TX.

John Taylor Gabriel\* and Patricia J. Baynham (2011) Organic acids in barbeque marinade inhibit the growth of *Salmonella enterica* in chicken. Award for Best Oral Presentation. TAS Annual Meeting, Austin, TX.

Carlos Mendoza\* and Patricia J. Baynham (2010) Antimicrobial Properties of Cinnamon and Chili Seed Essential oils against *Salmonella enterica* on Whole Minimally Processed Strawberries. Award for Outstanding Poster Presentation. ABRCMS, Charlotte, NC.

Patricia J. Baynham and Lisa M. Goering (2010) Undergraduate Research Experiences In Microbiology and Developmental Entomology. North American Colleges and Teachers of Agriculture Conference, State College, PA.

Patricia J. Baynham (2010) Introducing Epidemiology: The Field, Primary Literature, and Global Impact. TAS Annual Meeting, Stephenville, TX.

Sunil Rathore\* and Patricia J. Baynham (2010) Phenotypic Characterization of *Pseudomonas aeruginosa* Isolates from Cystic Fibrosis Patients. TAS Annual Meeting, Stephenville, TX.

Patricia J. Baynham (2009) Can Classroom Interaction with Scientists Positively Influence Science Majors to Consider a Research Career? American Society for Microbiology Conference for Undergraduate Educators (ASM CUE), Fort Collins, CO.

Maria Anna Taylor\*, Patricia J. Baynham, Erika Saenz\*, Lauren M. Mashburn, and Marvin Whiteley (2008) The role of Lipid A phosphates and the cell wall associated lipoproteins OprF, OpfI, and OprL on membrane vesicle formation in *Pseudomonas aeruginosa*. ABRCMS, Orlando, FL.

Patricia J. Baynham (2008) Can Popular Science Literature Convince Biology Majors to Consider a Research Career? ASM CUE, Beverly, MA.

Aissa Longoria\*, Patricia Baynham and Karla Barrera\*, St. Edward's University, Austin, TX and Lindsay Aye, Kelli L. Palmer and Marvin Whiteley (2008) Analysis of Carbon Preference Indicates Alanine as a Preferred Energy Source for *Pseudomonas aeruginosa*. TAS Annual Meeting, Corpus Christi, TX.

Patricia J. Baynham, Aissa Longoria\*, Karla Barrera\*, Lindsay Aye, Kelli L. Palmer, Marvin Whiteley (2007) Carbon preference analysis implicates alanine as a preferred energy source for *P. aeruginosa* in cystic fibrosis sputum. International *Pseudomonas* Meeting, Seattle, WA.

Karla Barrera\*, Patricia J. Baynham, Aissa Longoria\*, Lindsay Aye, Kelli L. Palmer, and Marvin Whiteley (2007) The Leucine Responsive Regulatory Protein Regulates Alanine Catabolism in *Pseudomonas aeruginosa*. ABRCMS, Austin, TX.

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