

Rosianna R. Gray

1410 Inverness Parkway
Tuscaloosa, Alabama 35405
Cell: 205-657-1253 Office: 205-934-9689
e-mail: gray047@uab.edu
rgry@stillman.edu



EDUCATION

Ph.D., Cellular and Molecular Biology, December 2008
The University of Alabama, Tuscaloosa AL

M.S., Biology, *magna cum laude*, May 2007
The University of Alabama, Tuscaloosa AL

B.S., Biology, *magna cum laude* May 2001
Stillman College, Tuscaloosa, AL

SKILLS

Gene cloning and primer design technologies
Bacterial protein extraction
Bacterial enzyme assays
Teaching and Communication
Metacognition and Learning Strategies

INTERESTS

Bacterial Molecular Biology
Bioremediation
Mentoring
Pedagogy/Metacognition

Special Research Interest: Metacognition: Successful First Semester transitioning of College Freshmen majoring in Biology

TECHNOLOGY EXPERIENCE

Blackboard
E-Learning
Mastering Biology /MyLabsPlus
Canvas
Degree Works (advising software)

Educreations
iPad Infusion Instruction
Microsoft Office
Zoom, Microsoft Teams, Google Hangouts, etc.

PROFESSIONAL EXPERIENCE:

Associate Provost for Instructional Development and Director of The Center for Teaching and Learning, Stillman College, Tuscaloosa, Alabama, 07/01/2022-Present

Overview Duties: Assist the provost in managing and leading the academic affairs of the university, including strategic planning, resource allocation, and day-to-day operations, and will have responsibility for transforming the experience and success of our faculty community through faculty development initiatives.

Other Duties:

- **Faculty Development**

- Develop/sponsor programs for faculty development, especially as they relate to being a successful faculty member at Stillman College
- Serving as the provost's representative at various committee meetings, council meetings, etc.
- Deliver research-driven professional development and training and other relevant programs to faculty and staff to further the mission of the college and to enhance the student experience in and out of the classroom and to inform policy development related to career advancement.
- Develop effective strategies to facilitate beneficial faculty-student engagement via instructional pedagogy.
- Lead the Center for Teaching and Learning (CTL) to design and deliver New Faculty Orientation to ensure a welcoming and inclusive event, and to support the instructional needs of all College faculty and instructors
- Co-chair the Paint and Polish Committee
- Co-chair the Space Management Committee
- Represent Academic Affairs on various committees as assigned

Committee Service

- Office of Sponsored Programs Steering Committee
- Stillman Institutional Review Board (IRB)
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Presentations as Director of Center for Teaching and Learning

- Colleague Self-Service and Canvas Gradebook Set-Up for Faculty Workshop: Reminders and Updates, August 10th, 2022.
- First Day and First Week Tips and Goodies for Faculty, August 15th, 2022.
- Metacognition (Introduction) and Your Syllabi Part 1- "A Match Made In Heaven", August 30th, 2022.
- Metacognition (Introduction) and Your Syllabi Part 2 and Grandma's Recipe for Accountable Learning and Time Management - "A Recipe for Success" September 26th, 2022.
- Beginning Semester Tips for Freshmen Students: Orientation Classes, August, 2022.

SACS COC Committee Review Assignments

- **Fifth-Year Interim Report: Academic Administrator, December 2nd-3rd, 2022**
- **Reaffirmation Committee: Committee Member, March 20th- 23rd, 2023.**

Assistant Professor of Biology, The University of Alabama at Birmingham, 01/01/2018-Present

Duties:

Teaching, Service, Research

Courses Taught: Microbiology (majors and non-majors), Biology I and II (majors and non-majors)

Other Duties:

- Introduce the concept of Metacognition to incoming Biology freshmen to increase success rates as well as retention of first semester biology student.
- Outreach in STEM and metacognition with local and beyond K-12 school students to increase diversity in STEM disciplines

Committees and Boards:

- Student Counseling Services Faculty Advisory Board The University of Alabama at Birmingham
- Our Firm Foundation: Board Member and Lead Science Professional, Birmingham, Alabama
- **Chair:** Committee for Diversity, Equity, and Inclusion (2019-2022)
- 2019-Fall-2020 Spring: Scholarship and Student Awards Committee
- 2019-Fall-2020 Spring: Library Affairs Committee
- 2019-Spring to Present: Student Counseling Services Faculty Advisory Board
- 2018- Fall to Present: GUTS (Gastrointestinal Upset Through Stress) Team: Collaboration between UAB Medical School and Biology Department
- Sep. 2020-Present: Grad Faculty Status Appointment
- 2020- Spring: Chair of Diversity and Equity Committee, Department of Biology

Assistant Professor of Biology, The University of Alabama, 08/16/13-12/31/2017

Duties:

Teaching, Research and Service

Courses Taught: Biology, Microbiology, Bacteriology

Advising (undergraduates)

Supervision of graduate teaching assistants: Manage and coordinate graduate teaching assistants for BSC 242 (Microbiology: Non-Majors), BSC 312 Microbiology (majors) and BSC 313 (Bacteriology)

Center for Academic Success: Consultant for Metacognition training to improve and enhance student learning.

Courses Designed:

- **BSC 114 Supplemental Sessions-** Non-Credit course designed to increase grade performance, metacognitive learning strategies, and over-all retention of first-time college freshmen majoring in biology.

Department Chair of Natural Sciences, Stillman College, 01/01/09-07/30/2013

Assistant Professor of Biology, Stillman College, 08/01/08-07/30/2013

Courses Taught:

General Biology (major and non-majors)

Microbiology (Majors)

Life Science (online and in-classroom)

Plant Biology (online and in-classroom)

Environmental Science (flipped-hybrid course)

Biology Seminar

Cell Biology

Other duties include but not limited to:

- Advising students: Degree works and in office
- Supervising senior thesis research projects
- Promoting undergraduate research and summer internships among upper classmen
- Course scheduling
- Conducting searches for faculty positions (full-time, adjunct and affiliate)

- Evaluating faculty
- Mentoring department faculty
- Monitoring the department budget
- Examining the departmental curriculum
- Managing paperwork for various committees and offices (course proposals, etc.)
- When appropriate, managing external grants, special programs, and development projects
- Managing specialized facilities (labs, technical equipment, instruments, etc.)
- Encouraging faculty professional development
- Respond to student petitions, degree applications, complaints, request, etc.
- Supervising new student recruitment and retention of majors
- Managing specialized facilities (labs, technical equipment, instruments, etc.)
- Actively participate in campus wide activities including various college appointed committees
- Community Engagement with local elementary, middle, and high schools
- Actively participate in faculty development activities
- Teaching Mentor for MERIT Program UAB (The University of Alabama at Birmingham): MERIT The Mentored Experiences in Research, Instruction, and Teaching: August 2008-May 2013
- Faculty Representative to the Board of Trustees
- Instructor/Mentor Upward Bound Program: courses taught- Biology, Scientific Technology and Act Prep.

Director of Community Education, The University of Alabama

08/01/15-08/15/2016

Developed and coordinated community education programs, evaluated effectiveness of programs, facilitated community partnerships, provided technical assistance to both internal and external community partners, generated funding support for identified projects and programs

Parent Teacher Leadership Academy (PTLA)::PTLA curriculum development and research – Teaching parents about recent advances in education and current practice in local schools with the purpose of improving parent engagement and student outcomes. ; Create curricula and materials for new PTLA academies; Update current curricula and materials as appropriate; Conduct PTLA assessment; Conduct and disseminate research; Monitor and ensure maximum academy participation; Develop and implement training materials for new and existing PTLA facilitators. PTLA program management: Assist with PTLA sessions, graduation, and events; Design PTLA correspondence; Develop marketing strategy and website content; Communicate with appropriate stakeholders; Ensure PTLA is meeting stated goals.

Managed new and existing community education programs; Evaluate and assessed new and existing community education programs; Communicated with appropriate stakeholders to ensure that programs are meeting expectations and to secure support; Provided technical support to both campus and community stakeholders relative to community education programs, grants and assessments; Secured funding support for existing and emerging **community education programs**.

Other Duties:

- Designed additional community education programs
- Evaluated effectiveness of additional programs: The Parent Teacher Leadership Academy, Swim to The Top and The STEM Entrepreneurship Academy (A program designed to engage students from the Alabama Black Belt area: a financially poor, culture rich region of Alabama where slaves once grew cotton and descendants of those slaves live there today).
- Facilitated community partnerships
- Provided technical assistance to both campus and community stakeholders
- Generated external funding support for identified projects and programs and establishes state and local networks that support the goals and objectives of the Center for Community-Based Partnerships.
- Gathered data on prospective program participants, grounding programs in current research and best practices

HONORS/AWARDS

- Selected by the U.S. Department of State's Bureau of Educational and Cultural Affairs (ECA) and the Institute of International Education's Council for International Exchange of Scholars (CIES) Fulbright Specialist Roster (selected by National Peer review); October 2016

FULBRIGHT APPOINTMENT IN NOVE' HRADY, CZECH REPUBLIC- June 24th, 2018-August 4th, 2018

<https://fulbright2018.wordpress.com/>

<http://www.uab.edu/news/people/item/9608-diversity-within-stem-programs-a-focus-for-uab-faculty-visiting-the-czech-republic>

Host Institution:

Center for Nanobiology and Structural Biology
Institute of Microbiology
Academy of Sciences of the Czech Republic
Zamek 136
CZ 37333 Nove Hradý, Czechia

Contact:

Prof. RNDr. Rudiger H. Etrich, PhD.

Director

C4SYS - Center for Systems Biology in the Czech Republic

National Research Infrastructure

&

Head

Center for Nanobiology and Structural Biology

Institute of Microbiology

Academy of Sciences of the Czech Republic

Zamek 136

CZ 37333 Nove Hradý, Czechia

P: +420 386 361 297

C: +420 608 522 558

E: ettrich@nh.cas.cz

<http://www.nh.cas.cz/index.php?node=691>

<http://www.c4sys.cz>

<http://publicationslist.org/ettrich>

&

Dean and Professor

College of Biomedical Sciences

Larkin University

18301 North Miami Avenue

Miami, FL 33169

United States

P: +1 305-760-7504

C: +1 954-682-8347

E: REtrich@ULarkin.org

• Presentations

1. Anglo Czech High School in České Budějovice, Czech Republic
 - a. Roundtable discussion on diversity in STEM and its importance
 - b. Roundtable discussion on being an African American female scientist in the southern parts

of the United States

2. The Center for Nanobiology and Structural Biology Institute of Microbiology in Nove' Hradý, Czech Republic
 - a. **“From Delftia acidovorans to Metacognition as an Academic Edge for STEM Majors”**
 - b. **Stories of Women of Color in STEM: “Emerging Through the Good, The Bad and The Ugly”**
 - c. Numerous roundtable discussions about the cultural differences in STEM freshmen transition in the Czech Republic vs. the United States
 - d. Roundtable discussions about possible collaborations and projects to increase diversity among institutions in the Czech Republic and neighboring countries in Europe
 3. Centrum ALGATECH Microbiology in Trebon', Czech Republic
 - a. **“Using Metacognition to Successfully Close the Gap of STEM Freshmen Transition from High School to College”**
 - b. Roundtable discussion about the cultural differences in STEM freshmen transition in the Czech Republic vs. the United States
 - c. Roundtable discussion about collaboration between Academia and the Community.
- **Project Managed and Mentored at the Center for Nanobiology and Structural Biology Institute of Microbiology Academy of Sciences of the Czech Republic**
 - **Annual Summer School in Molecular Biophysics and Systems Biology**
 - Research project title: **“The Wonderful World of Microbiology”**. The project was for high school students whom had never taken a microbiology course or been introduced to microbiology on any level. This was the first -time high school students had been involved in the summer school program. The intent of the project was to give high school students the opportunity to get engaged into science and math and gain a better understanding why they are important to their futures as well as provide an introduction to metacognition and strategies to improve learning not only in a classroom setting but in a laboratory as well.
 - During the project students became familiar with the use and function of a microscope via viewing of bacterial morphology, stained bacteria of different morphologies and composed drawings of what was seen under the microscope. Students also had the opportunity to learn various aseptic techniques, staining methods; including simple, negative and gram staining. They were also given the opportunity to learn about different types of bacterial media and their uses as well as preparation of each. Some included basic rich medium such as tryptic soy agar and broth, Luria-Bertani (LB) broth and Mannitol Salt agar. After being introduced to and learning a few basics of Microbiology, the students started a

project dealing with the importance and decline of antibiotics. Students prepared media containing eight different common spices to test for sensitivity of three designated bacterial organisms to local spices as a possible alternative to traditional antibiotics. The project gave students the opportunity to also be introduced and implement metacognition strategies in development of the protocol, hypothesis creation, project design and outcomes. Students were very successful and obtained positive results which can be used to extend the project is so desired.

COMMUNITY SERVICE:

2008-2013 Collaborated Toy Drive with The Daughters Court #199
Over 8000 toys donated by Stillman College students for underprivileged children in Tuscaloosa over the 2008-2013 terms.

2008-2013 Upward Bound Biology faculty for local high-school students: year-round student participation.

2013- 2014 Fall 2013 Over 6000 toys donated by UA Biology students for underprivileged kids in Tuscaloosa
Fall 2014 Over 7500 toys donated by UA Biology students for underprivileged kids in Tuscaloosa <http://www.as.ua.edu/home/biology-students-give-back-to-toy-drive/>

Spring 2015 Coordinated Easter Basket Project with The Al Muquit Shrine Temple # 221 of Tuscaloosa for local elderly living community and local churches. Over 18,000 items donated by students in the Biology department at The University of Alabama.

Fall 2019 Over 375 toys donated by UAB Biology students for Toys for Tots in Birmingham, Alabama.

https://scontent-atl3-1.xx.fbcdn.net/v/t1.0-9/79129945_2441377696084152_4698429681903337472_n.jpg?nc_cat=108&nc_ohc=ruAdBniLIZYAQnuorcnhRP_GN6Nk8jGcr9drP_X4unKxUVCYAsi_1-dqCQ&nc_ht=scontent-atl3-1.xx&oh=0361f5b45fc94a349fe00170fc63bafc&oe=5E83D6F8

Fall 2022 Habitat for Humanity: September 17th, 2022. 5 hours of volunteer service

PROFESSIONAL AFFILIATIONS

- American Association for the Advancement of Science
- American Society for Microbiology
- Our Firm Foundation Non-Profit, Co-Founder: <https://www.ourfirmfoundation.org>
- Alpha Kappa Alpha Sorority, Inc. Chapter: Eta Xi Omega, Tuscaloosa, Alabama
- Beautiful Zion A.M.E. Zion Church, Sanders Ferry Road Tuscaloosa, Alabama

COMMITTEE SERVICE

2015-2017 Steering Committee Member, National STEM Collaborative (an initiative promoted by the White House Council on Women and Girls; lead institution is Arizona State University; UA is a founding member; goal; to increase women of color in STEM fields, August 2015-present.

2015 Spring: Academic Honor Council- Faculty Liaison

2014-Fall: Diversity Committee: The University of Alabama

2008-Present: P.R.O.J.E.C.T Bethel Academic Consulting Council

2018- Spring: Sub-committee Chair for Revision of BY 123/124 (Introductory Biology I and II) labs and curriculum

2019-Fall-2020 Spring: Scholarship and Student Awards Committee

2019-Fall-2020 Spring: Library Affairs Committee

2019-Spring to Present: Student Counseling Services Faculty Advisory Board

2018- Fall to Present: GUTS (Gastrointestinal Upset Through Stress) Team: Collaboration between UAB Medical School and Biology Department

Sep. 2020-Present: Grad Faculty Status Appointment

2020- Spring-2022: Chair of Diversity and Equity Committee, Department of Biology

Recent Publications

Adkins-Jablonsky SJ, Arnold E, Rock R, Gray R, Morris JJ. 2021. Agar art: a CURE for the microbiology laboratory. J Microbiol Biol Educ 22:e00121-21. <https://doi.org/10.1128/jmbe.00121-21>

<https://doi.org/10.1128/jmbe.00121-21>

ORCID ID: 0000-0002-4662-2265: <https://orcid.org/0000-0002-4662-2265>

Lawson, C. A., McGuire, S., Hodges, R., Gray, R., McGuire, S. Y., Killingbeck, K. M., Segovia, J. (2021). Recipe for success: Teaching students metacognitive and self-regulatory learning strategies. The Learning Assistance Review, 26(2), 149–178.

Older Publications

Alebous, H., Hudeb, A., Sober, S., Gray, R., and M. Johnson. 2016. Assessing Effects of Equisetum ramosissimum Extract on hematological and serum biochemical parameters in pregnant Sprague-Dawley rats. (Accepted 29-Mar-2016) European Journal of Medicinal Plants.

Hana Dawood Alebous, Arwa Ali Hudeb, Suzanne Ali Sober, Rosianna Gray, Margaret Dean Johnson, 2016. Assessing effects of equisetum ramosissimum extract on hematological and serum biochemical parameters in pregnant sprague-dawley rats. Afr J Tradit Complement Altern Med. (2016) 13(3):16-21

Berryhill, M., *Riggins, M., & Gray, R. Elementary school university partnership: The Elementary Parent Leadership Academy. Journal of Community Engagement and Higher Education.

Berryhill, M., *Riggins, M., & Gray, R. Training Parent Leaders through Elementary School-University Partnerships: The Hispanic Parent Leadership Academy. Journal of Community Engagement and Scholarship.

Berryhill, M.B., Riggins, M., & Gray, R. Joining forces for school success: Elementary Parent and Teacher Leadership Academy joint training session. Promising partnership practices: An annual collection from the members of the National Network of Partnership Schools. Baltimore, Maryland: John Hopkins University.

Dissertation: The characterization of the hut genes from Delftia acidovorans and comparison to other betaproteobacteria, July, 2008.

Ongoing Research Projects

-Gastrointestinal Upset Through Stress (G.U.T.S)

-Metacognition: A tool to enhance student learning behavior

Recent Conferences

- **2nd Annual National STEM Collaborative Women of Color STEM Entrepreneurship Conference**, March 23-25, 2017, Arizona State University, Phoenix, Arizona: “Her Story Is Our Story: Creating a Legacy Through STEM Entrepreneurship
- **UA Systems Scholars Institute**, May 15-16, 2017, Bryant Conference Center, The University of Alabama: Lessons learned and Future Directions: Technology in Teaching, Research and Service.
- **Attendee:** 2014 Teaching Professor Technology Conference, October 10-12, 2014, Denver, Colorado.
- **Summit Attendee:** Pearson's Digital Learning Summit for Mastering, Orlando Florida, February, 2018.
- **Presenter:** The Rockets and Racecars 2018 **K-8 Teacher's** Follow-Up Summit. The University of Alabama, Tuscaloosa, Alabama. October 2018.

- **Keynote Speaker:** 96th Annual Meeting of the Alabama Academy of Science, February 20th – 22, 2019, Tuskegee, Alabama.
- **Co-Presenter:** ESC 2019 Meeting 20th Annual Conference of the Engagement Scholarship Consortium Deepening Our Roots: Advancing Community Engagement in Higher Education, Oct. 8th, 2019, Denver, Colorado.
- **Attendee:** The University of the District of Columbia College of Arts and Sciences 2nd Annual Conference Teaching Learning Roundtable. April 22, 2022.
- Reception and Networking with Pakistani faculty members participating in a USAID-funded Women’s Leadership learning program at Stillman College, July 27th, 2022
- Attendee: SREB Student Success Summit Sept. 7-9, Atlanta Georgia
- Site visit for Retention and TRIO Efforts Sept. 20th-23rd:

Morgan State UMBC, Coppin State	<ul style="list-style-type: none"> • September 21
UDC, Bowie State	<ul style="list-style-type: none"> • September 22

- **Judge:** Judge of abstracts and poster admissions. ABRCMS (**ANNUAL BIOMEDICAL RESEARCH CONFERENCE FOR MINORITIZED SCIENTISTS**) Fall 2022, Nov. 9th-12th, Anaheim, CA.
- Judge Travel Award **ANNUAL BIOMEDICAL RESEARCH CONFERENCE FOR MINORITIZED SCIENTISTS \$1500.00**
- **Attendee:** 47th Annual POD (The Professional and Organizational Development (POD) Network in Higher Education) Network Conference, Nov. 16th-20th, Seattle, Washington.

PROFESSIONAL PRESENTATIONS, PANELS, JUDGING, etc.

- **R. Gray.** “Transposon Mutagenesis using *Pseudomonas acidovorans*...”, Department of Biological Sciences, The University of Alabama, Tuscaloosa, AL, 2003, 2004
- **R. Gray.** “Characterization of the hut genes from *Pseudomonas acidovorans*”, Department of Biological Sciences. The University of Alabama, Tuscaloosa, AL, 2004, 2005, 2007.
- **“The Importance of a strong personal statement for admission to professional schools and graduate school”** The University of The Virgin Islands 2009
- **Presenter “How to prepare a competitive personal statement for college, graduate school and professional schools”** Stillman College 2010, 2011, 2012
- **Expanding Your Horizon: “Tasty Bacteria”** Workshop Presenter Stillman College 2011 and 2012
Expanding Your Horizon: A program that inspires middle school and high school girls to pursue careers in STEM.
- **Presenter “How to be successful in an online course”** (faculty and Students) Stillman College 2011 and 2012
- **Presenter “How to gain admission and be successful in graduate and professional schools”** Educational Advancement Alliance Summer Enrichment Program for first year graduate students, Workshop presenter, Atlantic City, New Jersey 2012.
- **Presenter “How to gain admission and be successful in graduate and professional schools”** Stillman College 2011 and 2012.
- **Presenter “Conduct and ethics for today’s college female”** Workshop presenter Stillman College Upward Bound program, 2012.
- **Presenter “How to identify and address bullying”** Workshop presenter Stillman College Upward Bound program 2012.
- **Main Speaker: The Alabama Department of Education GEMS-U (Girls Engaged in Math and Science) GEMS-U Expo speaker,** November 2011, Bibb County, Alabama.
- **Presenter “What happens after Middle School”** Presenter Westlawn Middle School 2013.
- **R. Gray.** Institute of Mentoring and Teaching (Southern Regional Education Board Conference) 2003 (GA), 2004 (VA), 2005 (FL) “Characterization of the *hut* genes from *Delftia acidovorans* and Comparison to other *Betaproteobacteria*.”

- **Presenter: Teaching STEM Students How to Learn: Metacognition”: Presentations- BIO 141 Introductory**, (faculty and Students).
- **Biology, BIO 349 Microbiology and BIO 448 Cell Physiology; Biology faculty 2013-2014**
- **Presenter: “Teaching STEM Students How to Learn: Metacognition”**: Presentations: BSC 114 Biology and BSC 242 Microbiology students 2015
- **Presenter “Teaching STEM Students How to Learn: Metacognition”** Presenter Center for Academic Success, (faculty and students) The University of Alabama January 2015 (video taped for use of new and incoming staff members in the Center for Academic Success)
- **Presenter “Why is education important and why should I care”** Presenter Lloyd Chapel Church, Forkland, Alabama 2009-2013
- **Guest Scientist and Presenter “Career Day”** Presenter Alberta Elementary School, December 2014. Experiments and discussion with 5th graders about science and math and why they are important to their futures. <http://www.tuscaloosanews.com/article/2014141129620>
- **Presenter “Reading, Math and Science...Who Cares!!!! Careers in STEM”** Presenter Westlawn Middle School (faculty and students) May 2015.
- **Presenter: Project BETHEL** “A Strong Educational Foundation Is Your Ticket To Success” Project BETHEL: An outreach program for students who have been expelled from school. 2008-2015
- **Global Café panelist** “How to communicate effectively with your child’s school and teacher”, October 13, 2015.
- **Kick Start College Program speaker** “Character, The Desire to Make Good Decisions and Outcomes”, September 25, 2015 and October 16, 2015.
- **Guest Lecturer** BCE 101 The University of Alabama, Tuscaloosa, Alabama “How to be a successful first semester freshman in STEM disciplines: Metacognition is the Key”, October 22, 2015.
- **In-Service Presenter** “Increase Student Learning: Teach Students HOW to Learn! Metacognition”, Livingston Jr. High School, (STEM faculty) Livingston, Alabama, January 5, 2016.
- **Presenter** Doing What Matters for Alabama Children: Session Topics- “Strategies for parents to partner effectively with schools and teachers” and “Metacognition Strategies: An Academic Edge”, (faculty, community education leaders, etc.) January 26th, 2016.
- **Panelist** “Call to Action” Panel for the Women in Science and Engineering Symposium hosted by the University of Alabama Graduate School, January 22, 2016.
- **Guest Presenter** “Increase Student Learning: Teach Students How to Learn”, Dr. Daryl Lam’s BSC 242 Microbiology course, The University of Alabama, February 9, 2016.
- **Interviewer for the UFE (University Fellows Experience) The University of Alabama**, Feb 26, 2016.
- **Judge** Stillman College 2016 Research Symposium, Judge for poster and oral STEM presentations.
- **Speaker** for NOBCCHE (National Organization for the Professional Advancement of Black Chemists and Chemical Engineers) Moving Forward Night, March 2016, Tuscaloosa, Alabama.
- **Presenter: “CV/Resume/Personal Statement/Job Letter Workshop”** for SCOPE (Scholars for Community Outreach, Partnership and Engagement) at The Center for Community-Based Partnerships at The University of Alabama, Tuscaloosa, Alabama, March 7th, 2016.
- **Judge** Division of Natural Sciences and Mathematics of the College of Arts and Sciences 9th Undergraduate Research and Creative Activity Conference (URCA), March 30, 2016, Tuscaloosa, Alabama
- **Keynote Speaker** for the Women and Gender Resource Center: Young Women’s Leadership and Young Men Leaders Program, April 28, 2016, Tuscaloosa, Alabama.
- **“What it means to be a scientist”** Career Day at Holt Elementary, May 6, 2016, Tuscaloosa, Alabama... Students were guided through the use and function of a microscope via viewing of bacterial morphology, stained bacteria of different morphologies and composed drawings of what was seen under the microscope.
- **Presenter: Workshop Presenter for Faculty Resource Center at The University Of Alabama: “Increase Student Learning: Teach Students How to Learn: Metacognition is the Key!”**, Tuscaloosa, Alabama, September 30, 2016.
- **Presenter: Workshop Presenter for The Center for Academic Success at The University of Alabama: “Increasing Student Learning via Metacognition and Implementing various strategies to motivate unprepared students”**, Tuscaloosa, Alabama, January 10, 2017.
- **Presenter: “Teaching STEM Students How to Learn: Metacognition”**: Presentations: BSC 114 Biology and BSC 242 Microbiology students 2017.
- **Presenter: “Options and Being Competitive after High-School in STEM Disciplines”** . African Methodist Episcopal Zion Church Alabama, Florida and Georgia District, February, 2017.

- **Presenter:** 2nd Annual National STEM Collaborative Women of Color STEM Entrepreneurship Conference “**Women of Color in STEM: Emerging Through The Good, The Bad and The Ugly**”. **Activity sessions: Build a Scientist” and “10 Minute Interactive Connect”**, March 23-25, 2017. Phoenix, Arizona.
- **Presenter:** “The Wonderful World of Microbiology”; Oakdale Elementary School Career Day Program, May 12, 2017.
- **Presenter: Metacognition: An Academic Edge at an Early Start”.** The Rockets and Racecars 2018 **K-8 Teacher’s Summit.** The University of Alabama, Tuscaloosa, Alabama. May 2017.
- **Presenter:** LSAMPS Summer Bridge Program “**How to successfully bridge the academic gap between being a high-school senior and becoming a successful first-time college freshman in STEM disciplines;** The University of Alabama, Tuscaloosa, Alabama. July 13th. 2017
- **Presenter: “Teaching STEM Students How to Learn: Metacognition”:** Presentations: BY 123/124, BY 271. The University of Alabama at Birmingham, Birmingham, Alabama, January 2018.
- **Presenter: STEM Day Stillman College 2018: “Tasty Bacteria”** Workshop Presenter and experiment. Stillman College 2018. A program that inspires middle school and high school minority students to pursue careers in STEM.
- **Presenter: “Teaching STEM Students How to Learn: Metacognition”:** Presentations: BY 123/124, BY 271 2018. The University of Alabama at Birmingham, Birmingham, Alabama, February 2018.
- **Judge:** 2018 Darwin Day Poster Presentations: graduate, undergraduate and high-school posters.
- **Presenter: "From Delftia acidovorans to Metacognition as an Academic Edge for STEM Majors",** The Center for Nanobiology and Structural Biology Institute of Microbiology in Nove' Hradý, Czech Republic.
- **Presenter: Stories of Women of Color in STEM: "Emerging Through the Good, The Bad and The Ugly",** The Center for Nanobiology and Structural Biology Institute of Microbiology in Nove' Hradý, Czech Republic.
- **Presenter: "Using Metacognition to Successfully Close the Gap of STEM Freshmen Transition from High School to College",** Centrum ALGATECH Microbiology in Trebon', Czech Republic
- **Co-Presenter: “Metabolism Booster Session for BY 123”.** The University of Alabama at Birmingham, Birmingham, Alabama, October 2, 2018.
- **Presenter: “Can Colors Run”.** Science experiment for 3rd Graders at Inglenook Elementary in Birmingham, Alabama via Firm Foundation Non-Profit organization. **Focus: Scientific Method** via Introduction to **Metacognition** (Asking Questions) September 2018.
- **Presenter: “Get Students to Focus on Learning Instead of Grades: Metacognition is the Key!”** Research on STEM Education (ROSE NETWORK). The University of Alabama at Birmingham, Birmingham, Alabama. October 3, 2018.
- **Presenter: “Can glue bounce?”.** Science experiment for 3rd Graders at Inglenook Elementary in Birmingham, Alabama via Firm Foundation Non-Profit organization. **Focus: Scientific Method** (Math-measurements, Reading and Science) and via Introduction to **Metacognition** (Thinking Critically) October 2018.
- **Presenter: Metacognition: Updates and Enhancements”** The Rockets and Racecars 2018 **K-8 Teacher’s Follow-Up Summit.** The University of Alabama, Tuscaloosa, Alabama. October 2018.
- **Guest Scientist and Presenter “Career Day”** Presenter Alberta Elementary School, October 26, 2018. Experiments and discussion with **3-6th graders** about science and math and why they are important to their futures. **Focus:** Introduction to **Microbiology and Metacognition.** Experiment Title: “**Tasty Bacteria**” Experiment with 3rd graders: Good Bacteria vs. Bad Bacteria...Students had the opportunity to make yogurt and use their reading, math, and science skills. In addition, students were introduced to thinking about what they think...asking questions and coming up with an individual strategy to do so.
- **Guest Scientist and Presenter “STEM Day”** Presenter: Oxmoor Valley Elementary School, December 14th, 2018. Experiments and discussion with **4-6th graders** about a career as a biologist and getting associated with science and STEM at an early age and learning the importance of learning correctly (**Metacognition**). Experiments: “What is DNA?”: DNA extraction, “What does bacteria look like and why do we need to study them?”: Scopes, prepared slides, and Live *Elodea* wet mounts. Students had the opportunity to use both math and reading skills while performing the experiments.
- **Presenter:** Science experiment for **3rd Graders** at Inglenook Elementary in Birmingham, Alabama via Firm Foundation Non-Profit organization. **Focus: Scientific Method** (Math-measurements, Reading and Science) and via **Metacognition** (Thinking Critically) February 6th, 2019. Experiment Title: “**Tasty Bacteria**” Experiment with 3rd graders: Good Bacteria vs. Bad Bacteria...Students had the opportunity to make yogurt and use their reading, math and science skills. In

addition, students were introduced to thinking about what they think...asking questions and coming up with an individual strategy to do so.

- **Guest STEM Speaker: African Americans In Science.** "Being an African American Woman in STEM: My Story". Erwin Intermediate School, CenterPoint, Alabama, 35215. February 8th, 2019.
- **Keynote Speaker:** 96th Annual Meeting of the Alabama Academy of Science, February 20th – 22, 2019. "Metacognition: Learning how to learn for success in college and beyond!"
- **Presenter:** University Academic Success Center Training Staff and Directors, May 14th, 2019. "Metacognition: "Learning how to learn for success in college and beyond!", The University of Alabama at Birmingham.
- **Presenter:** Upward Bound Academy-City, The University of Alabama at Birmingham, June 18th, 2019. Metacognition: "Learning how to learn for success in college and beyond!". (Student presentation)
- **Presenter:** College of Arts and Sciences Advising Office, The University of Alabama at Birmingham, June 24, 2019. "Teaching Students how to learn for success in college as a first-time college freshman: Metacognition". (Advisors, directors and staff presentation)
- **Presenter:** Upward Bound Academy-City, The University of Alabama at Birmingham, June 27th, 2019. Metacognition Follow-Up: Grandma's Recipe Implementation Activity (student presentation).
- **3-hour Workshop Presenter:** "Metacognition: Teaching students how to learn for success in college and beyond!", Paine College, Augusta, Georgia. June 29th, 2019. Audience: Faculty and College Administrators.
- **Segment on fun experiments you can do at home with your children Fox 6 News Focus at 4.** August 7, 2019. Link to press release: <https://www.uab.edu/news/youcanuse/item/10519> Key points: Studies have shown that summer learning loss is real and evident in our children. Many parents struggle with how to engage their kids while still making learning fun. Parents and caregivers should try a fun activity or science experiment with their children to open their minds to the world science.<https://www.uab.edu/news/youcanuse/item/10519-teaching-science-fundamentals-while-having-summer-fun> <https://www.wbrc.com/2019/08/07/having-fun-learning-this-school-year/>
- **Presenter:** "How to be successful as a first-year college student: Metacognition is the Key!", CAS Advising/Department of Biology UAB, Birmingham, Alabama. Audience: FYE (First Year Experience) Students. September 3, 2019.
- **Presenter:** "How to be successful as a first-year college student: Metacognition is the Key!", CAS Advising/Department of Biology UAB, Birmingham, Alabama. Audience: FYE (First Year Experience) Students. September 5, 2019.
- **Presenter:** "Metacognition: Learning how to learn for success in college and beyond!", Biology Learning Assistant (BLA) Teaching Experience, UAB, Birmingham, Alabama. Audience: BLA teaching assistants. September 8th, 2019.
- **Presenter:** "Metacognition: Learning how to learn for success in college and beyond!", Biology Learning Assistant (BLA) Teaching Experience, UAB, Birmingham, Alabama. Audience: BY 124 Transfer Students. September, 8th, 2019.
- **Presenter:** "How to be successful as a first-year college student: Metacognition is the Key!", Freshmen Success Collat School of Business UAB, Birmingham, Alabama. Audience: First-Year Business Students. September 10, 2019.
- **Presenter:** "How to be successful as a first-year college student: Metacognition is the Key!", Freshmen Success Collat School of Business UAB, Birmingham, Alabama. Audience: First-Year Business Students. September 12, 2019.
- **Presenter:** "Metacognition: Learning how learn for success in college and beyond!", The University of West Alabama, Livingston, Alabama, September 13, 2019. Audience: Faculty and Biology majors
- **Presenter:** "How to be successful as a first-year college student: Metacognition is the Key!", Retention and Student Success, UAB, Birmingham, Alabama. Audience: Students and Faculty. October 3, 2019.
- **Co-Presenter:** ESC 2019 Meeting 20th Annual Conference of the Engagement Scholarship Consortium Deepening Our Roots: Advancing Community Engagement in Higher Education, Oct. 8th, 2019, Denver, Colorado.
- **Presenter:** "Metacognition: Learning how learn for success in college and beyond!", Department of Psychology UAB, Birmingham, Alabama. Audience: Students and Faculty. October 9, 2019.
- **Presenter:** "Metacognition: Learning how learn for success in college and beyond!", Department of Psychology UAB, Birmingham, Alabama. Audience: Students and Faculty. October 10, 2019.
- **Presenter:** "How to be successful as a first-year college student: Metacognition is the Key!", Retention and Student Success, UAB, Birmingham, Alabama. Audience: Students and Faculty. October 28, 2019.

- **Keynote Speaker:** 10th anniversary of The Annual MERIT (Mentored Experiences in Research, Instruction, and Teaching) Program Retreat, UAB. Title: “Metacognition: An Academic Edge”. Nov. 1, 2019.
- **Seminar Speaker:** “Teaching Metacognitive Learning Strategies in the Classroom”. Nov. 20th, 2019. Oakwood University, Huntsville, Alabama. Audience: Faculty
- **Guest Scientist and Co-Presenter “STEAM Day”** Presenter: Oxmoor Valley Elementary School, December 6th, 2019. Experiments and discussion with **4-6th graders** about a career as a biologist and getting associated with science and STEM at an early age and learning the importance of learning correctly (**Metacognition**). Experiments: “What does bacteria look like and why do we need to study them?”: Scopes, prepared slides and Live *Elodea* wet mounts. Students had the opportunity to use both math and reading skills while performing the experiments. Dr. Mickie Powell presented live animals such as sea urchins, shrimp, and zebra fish to introduce the flow of cell division and growth. A connection between bacteria and aquarium life was also highlighted.
- **3-hour Workshop Presenter:** “Metacognition: Teaching students how to learn for success in college and beyond **PART 2: STRATEGIES To Implement IMMEDIATELY!**”, Paine College, Augusta, Georgia. January 2nd, 2020. Audience: Faculty and College Administrators.
- **2-Hour Workshop Presenter:** “Retention Strategies as a Pathway to Student Success”, Allen University, Columbia, South Carolina, January 3rd, 2020. Audience: Faculty and College Administrators.
- **Presenter:** “Metacognition: Learning how to learn for success in college and beyond!”, Biology Learning Assistant (BLA) Teaching Experience, UAB, Birmingham, Alabama. Audience: BLA teaching assistants. January 15th, 2020.
- **2-Hour Workshop Presenter:** “Metacognition and “Grandma’s Recipe for Accountable Learning and Time Management” Pedagogical Strategy: An effective Freshmen Learning Tool (1 hour: introduction to metacognition and 1 hour Implementation of the Pedagogical Strategy, Stillman College, Tuscaloosa, Alabama, January 23rd, 2020. Audience: First-Time Freshmen (Entire College).
- **Presenter:** “Metacognition: An Academic Edge”, The Graduate School’s Professional Development Program and CIRT@UAB, UAB, Birmingham, Alabama. Audience: Graduate Students, Faculty, February 28, 2020.
- **Co-Presenter (Dr. Sandra McGuire) (Virtual):** Faculty Metacognition Workshop May 28-29, 2020, held virtually and hosted by Virginia State University. Audience: University Faculty and Staff
- **Presenter (Virtual):** “Best Practices in Distance Learning Workshop Series -- How to Teach a Large Class Online, Challenges and Opportunities-- Grandma’s Recipe is the Key! What’s Metacognition Got To Do With It?”, hosted by The Center for Excellence in Teaching, Learning, and Assessment (CETLA) at Howard University, Washington, DC, This Thursday, June 25th. Audience: University Department Heads and Faculty... <http://www.cetla.howard.edu/workshops/summerinstitute.html>
- **Presenter (Virtual):** ALSAMP Summer Bridge Program, July, 16th 2020. “Metacognition and Time Management: “Grandma’s Recipe!””, The University of Alabama at Birmingham.
- **Presenter/Panelist (Virtual):** Faculty for Wellness-Connect, the online learning branch of [Campus Outreach Service](#), August, 21st 2020. “Metacognition as a tool for successful transition from High School to College”.
- **Presenter (Virtual):** “How to be successful as a first-year college student: Metacognition is the Key!”, Freshmen Success Collat School of Business UAB, Birmingham, Alabama. Audience: First-Year Business Students. August 24, 2020.
- **Keynote Speaker:** 11th Anniversary of The Annual MERIT (Mentored Experiences in Research, Instruction, and Teaching) Program Retreat, UAB. Title: “Metacognition Project”. Nov. 13th, 2020.
- **Seminar Speaker:** “Teaching Metacognitive Learning Strategies in the Classroom”. Nov. 20th, 2019.
- **Presenter (Pre-Conference 3-hour Workshop Virtual):** “Help Students Tune into Their Learning Potential: Metacognition is the Key!”, SACSCOC 2020 Virtual Annual Meeting, Dec. 2nd, 2020. Audience: Faculty, staff, and administrators who are either tasked with or interested in improving student learning, retention, and persistence to graduation.
- **Co-Presenter:** “Transitions to College: What to expect and What will be expected of you” Presented by Campus Outreach Services to various high schools (virtual). December 16th, https://www.youtube.com/watch?v=NpOBN_t1jio and <https://www.youtube.com/watch?v=M7ULsXVFKaw>
- **Presenter (Virtual):** Help Students Tune into Their Learning Potential: Metacognition and Grandma’s Recipe are the Key! Part 1 April 5th, 2021. Mississippi Valley State University
- **Presenter (Virtual):** “Metacognition and Grandma’s Recipe for Accountable Learning and Time Management: Game Changers”. Inspiring Minds NYC. Audience: High-School Juniors and Seniors. April 28, 2021.
- **Presenter (Virtual):**” Mixed, Baked and Ready to Serve! Grandma’s Recipe and Metacognition Part 2”

This interactive workshop focused on the implementation of metacognition tools planned for Fall 2021. The primary focus highlighted how MVSU faculty are going to utilize Grandma's Recipe for Accountable Learning and Time Management. Mississippi Valley State University, May 3, 2021.

- **Presenter (Virtual):** 3-Day Session "Tasty Bacteria: What does Math and Science Have to Do With it?!!!" Stillman College Upward Bound Program. Tuscaloosa, Alabama. Audience: 10th, 11th and 12 graders. June 8, 9th and 10th, 2021.
- **Presenter:** "Teach Students How to Learn: Grandma's Recipe and Metacognition Are the Keys". **The ALSDE (Alabama State Department of Education) MEGA Conference 2021:** Session #3013. {The MEGA Conference is a week-long conference that provides attendees with opportunities to engage in meaningful discussions, participate in in-depth training sessions, and learn from leading experts in fields across the education spectrum. MEGA is hosted by the Alabama State Department of Education.} This interactive session was focused on introduction of metacognition and the use of Grandma's Recipe for Accountable Learning and Time Management in grades K-12. Audience: Administrators, Faculty, Coordinators and School Counselors.
- **Presenter:** STEM activity with Twix an Tweens (10-12 years old) for The Tuscaloosa Chapter of Jack and Jill. Students participated in hands-on experiments involving microbiology, mathematics, and reading. Held at Stillman College, Tuscaloosa, AL 35405. October 9th, 2021.
- **Presenter:** Read-a-Book Day, Alberta School of Performing Arts, Tuscaloosa, Alabama. March 3rd, 2022.
- Judge: Alabama Junior Academy of Science 99th Paper Writing Contest, February 22nd, 2022
- **Co-Presenter:** "The Balancing Act: Managing Stress & Anxiety" Presented by Campus Outreach Services to Radnor High School (a public high school in Radnor, Pennsylvania) (virtual). March 10th, 2022.
- **Co-Presenter-**"Informed Choices" Smart College Considerations for Juniors. Campus Outreach Services to Radnor High School (a public high school in Radnor, Pennsylvania) (virtual)May 25th, 2022.
- **Presenter-**" You're Off to See the Wizard": Senior Transitions and Metacognition" Campus Outreach Services to Radnor High School (a public high school in Radnor, Pennsylvania) (virtual)May 26th, 2022.
- **Presenter:**" Why Should I Choose To Go to Class In College". Stillman College, Campus Leaders Bootcamp, Office of Vice President for Student Affairs. August 3, 2022.