

# UNDERGRADUATE RESEARCH PROPOSAL SYMPOSIUM

OCTOBER 25, 2024

KEYNOTE  
SPEAKER

DR. JOANN  
MCCRARY, PH.D.,  
PROFESSOR OF  
BIOLOGY



## THEME

UNDERGRADUATE RESEARCH: PAST,  
PRESENT, AND FUTURE.

## VENUE

BILLY C. BLACK  
AUDITORIUM, ASU  
EAST CAMPUS

SPONSORED BY

THE OFFICE OF TITLE III

## KEYNOTE SPEAKER

## UNDERGRADUATE RESEARCH PROPOSAL SYMPOSIUM

### DR. JoAnn McCrary, Ph.D., Professor of Biology ASU-Research Faculty and Mentor



Dr. JoAnn McCrary is a Professor of Biology here at Albany State University. She joined the University in 1995, and since then, she has taught a litany of courses ranging from Senior Research to Botany to Parasitology. Additionally, she conducts research in the areas of nutraceutical development, cancer pathways, and yeast genetics. A consummate researcher and educator, Dr. McCrary has impacted the lives of literally thousands of students here at Albany State University through her teaching, mentorship, and continued support even beyond their undergraduate matriculation.

Dr. McCrary received her Bachelor of Science in Biology with concentration in Medical Technology from Bennett College, and she received her PhD in Biology from Clark Atlanta University with a focus on carcinogenesis. She has utilized her expertise in education and laboratory technology at multiple institutions, including her Alma mater Bennet College, Ft. Valley State University, and in the healthcare/hospital sector prior to joining the Albany State University (ASU) family.

Dr. McCrary's length of service at ASU and years of experience teaching, working with students, and mentoring them to success have bestowed her the wisdom to be the Keynote Speaker today, reflecting on the theme: Undergraduate Research: Past, Present, and Future.

For several decades, Dr. McCrary has chaired the Undergraduate Research review committee. She has been assisting in organizing faculty reviewers, supervising data collation, and working with committee teams and the various directors to announce symposium results. Her distinguished service from the past to the present is immeasurable and innumerable.

She also has so many scholarly, mentoring, and personal achievements that cannot be listed in the time frame we have today; however, it suffices to say that Professor McCrary has worked with lots of love and has changed thousands of young peoples' lives through her scholarly and motherly advisement, teaching, scholarship, mentoring, and service. We are truly grateful to Dr. McCrary for her contributions to ASU Undergraduate Research Program. Being an astute scholar of ASU Undergraduate Research Depository, we appreciate her acceptance to be the Keynote Speaker today.

Please join The Division of Academic Affairs, The Center for Transformational Students Experiences (CTSE) that is over Undergraduate Research Program, and the entire University Family in welcoming Dr. JoAnn McCrary, the Keynote Speaker for the 2024 Fall Undergraduate Research Proposal Symposium.



CENTER FOR TRANSFORMATIONAL STUDENT EXPERIENCES (CTSE)

**FALL 2024 UNDERGRADUATE RESEARCH PROPOSAL SYMPOSIUM**

**Friday, October 25, 2024**

**Venue: BCB Auditorium -Opening**

**Presentations: BCB- Auditorium**

**PROGRAM AGENDA**

Time		
9:00-9:05	Welcome, Opening Remarks, and Acknowledgements	Dr. Nneka Nora Osakwe, Director-Center for Transformational Student Experiences (CTSE) Professor of English
9:05-9:10	Provost's Welcome and Opening Remarks	Dr. Rhonda Porter, The Interim Provost & Vice President of Academic Affairs Professor of Mathematics Education
9:10 -9:15	Introduction of Keynote Speaker	Malaysia Burt, Student Researcher
9:15-9:45	<b>KEYNOTE SPEAKER</b> <b>Theme: Undergraduate Research: Past, Present and Future</b> Question and Answer	Dr. JoAnn McCrary, Professor of Biology- Department of Natural Sciences.
<b>9:45- 9:50</b>	<b>INTERMISSION</b>	<b>STAND, STRETCH &amp; REFRESH</b>
<b>9:50-12:00</b>	<b>ORAL PRESENTATION BCB AUDITORIUM</b> <b>Student Presenters with Faculty- Mentors</b>	<b>RESEARCH TITLES</b>
	<b>Romona Mcleod.</b> Mentor: Dr. Md Niamul Kabir. College of Arts and Sciences	Decontamination efficacy of Listeria monocytogenes by the synergistic effect of five different antimicrobials and high-pressure processing at 25°C and 37°C.
	<b>Mahogany Manning,</b> Mentor: Dr. Patrick M Whitehead College of Arts and Sciences	The Long-Term Psychological Effects of Childhood Bullying on College Students
	<b>Tomaj Halley, Jordan Boyd, Jeniya Lawrence</b> Mentor: Dr. Alex Alochukwu College of Arts and Sciences	Comparative Analysis of Fraud Rates Across Banking Institutions in the US, UK, and Canada
	<b>Cameron Brown, Ty Grover, Summer Rivers, Bakao Soumah</b> Mentor: Dr. Alex Alochukwu College of Arts and Sciences	Time Series Analysis of Vehicle Production Trends in the US and Japan
	<b>Natyanna Pratt, Tionni Mcdaniels</b> Mentor: Dr. Annalease Gibson College of Business, Education, & Professional Studies	Mental Health and It's Connections to Fentanyl and Pill Addiction



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	<p><b>Britney Washington</b> Mentor: Edwin Nyamwala College of Business, Education, &amp; Professional Studies</p>	Transforming Aviation Customer Experience and Loyalty Programs through Artificial Intelligence
	<p><b>Sharif Muhammad, Jada Rodgers, Jasmine Hickson</b> Faculty Mentor: Professor Amiralca Johnson College of Arts and Sciences</p>	Preventing Software Failure: Causes, Consequences, and Cybersecurity Implications
	<p><b>Jakobe A. Williams</b> Mentor: Dr. Edgars Patani College of Business, Education, &amp; Professional Studies</p>	The effects of tax policy changes on business decisions and economic activity
	<p><b>Clifford Oliver</b> Mentor: Dr. Ashok Jain College of Arts and Sciences</p>	Developing an Automated Feedstock Delivery Device for Shake Flask Bacterial Cultures
	<p><b>Breyanna A. Collier</b> Mentor: Professor Jasmine Smith College of Business, Education, &amp; Professional Studies</p>	Caffeine Use Disorder
	<b>QUESTIONS AND ANSWERS</b>	<b>REVIEWERS, AUDIENCE, PRESENTERS</b>
	<b>ORAL PRESENTATION BCB AUDITORIUM Student Presenters with Faculty, Mentors</b>	<b>RESEARCH TITLES</b>
	<p><b>Malaysia Burt</b> Mentor: Dr. Patrick Whitehead College of Arts and Sciences</p>	Gang Involvement in Adolescents and Identifying Possibilities of Diminishing Gang Activity in Black Communities
	<p><b>SaNiya Hunter</b> Mentor: Ihuoma Ohamadike College of Business, Education, &amp; Professional Studies</p>	Exploring the impact of social media on students' well-being at Albany State University
	<p><b>Mar'kaya T. Artist and Arlexis Farmer</b> Mentor: Dr. Jim Mayua College of Business, Education, &amp; Professional Studies</p>	The Challenges of Prosecuting and Preventing Cybercrime: the case of United States v. Ogoshi
	<p><b>Joshua Mapson</b> Mentor: Dr. Victor Williams College of Business, Education, &amp; Professional Studies</p>	The Use of Cybersecurity for Credit Card Fraud
	<p><b>Ella B Okoro</b> Mentor - Jayanti R Saha</p>	The Shooting Method: An Effective Tool for Boundary Value Problems in ODEs.



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	College of Arts and Sciences	
	<b>Bryan Vicente, Elyias A. Rivera</b> Mentor: Dr. Arun Saha College of Arts and Sciences	Operation of a Solar Panel with Maximum Efficiency
	<b>Za'kya Stokes</b> Mentor: Jackie Entz Shores College of Arts and Sciences	Behavioral Study of Lemurs
	<b>Unique Pierce</b> Mentor: Dr. Md Niamul Kabir College of Arts and Sciences	Comprehensive study to compare traditional heat-based pasteurization to the high-pressure process decontamination process off. <i>coli</i> O157:H7 under mild temperature conditions.
	<b>QUESTIONS AND ANSWERS</b>	<b>REVIEWERS, AUDIENCE, PRESENTERS</b>
	<b>ORAL PRESENTATION BCB AUDITORIUM Student Presenters with Faculty, Mentors</b>	<b>RESEARCH TITLES</b>
	<b>Robert Bryant, Tiara Dixon</b> Mentor: Dr. Balasubramani S Paranthaman Darton College of Health Professions	Preparation and Characterization of Resveratrol Encapsulated Nanoparticles
	<b>Aaliyah Dargan</b> Mentor: Dr. Md Niamul Kabir College of Arts and Sciences	Persistence and Proliferation of Wild-Type and Pressure-Stressed Non-typhoidal Salmonella Serovars of Public Health Concern in Surface Water.
	<b>Kyla S. Porter</b> Mentor: Jackie Entz College of Arts and Sciences	Geospatial Analysis of Toxic Chemical Releases and Social Determinants of Health in Georgia
	<b>Laila Dowdy</b> Mentor: Dr. Md Niamul Kabir College of Arts and Sciences	Investigating the Synergistic Effect of Citrospect, Citricidal, Caprylic acid, Carvacrol, Lactic Acid and Mild Heat against <i>Staphylococcus aureus</i> Inoculated in Orange Juice.
	<b>Romona Mcleod</b> Mentor: Dr. Md Niamul Kabir College of Arts and Sciences	Decontamination efficacy of <i>Listeria monocytogenes</i> by the synergistic effect of five different antimicrobials and high-pressure processing at 25°C and 37°C.
	<b>Ruth Yussuff</b> Mentor: Liqui Zheng College of Arts and Sciences	A Facile Approach to Single-Crystal CsPbBr <sub>3</sub> for Solar Applications



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	<b>Bryce Street II</b> Mentor: Dr. Amaechi Nwaokoro College of Business, Education, & Professional Studies (i.e. Criminal Justice, Counseling, Education, <u>Business, Social Work, etc.</u> )	Financial Market Foresight for Linking Asset's Risk to Asset's Return
	<b>Mawonde Bangoura</b> Mentor: Robert Bennet College of Arts and Sciences	Exploring the Social Impact of Cross-Cultural Barriers on College Students & Faculty.
	<b>Wayneisha Wright</b> Mentor: Jasmine Smith College of Business, Education, & Professional Studies	Survey of Risky Sexual Behaviors Amongst Albany State University Students and Surrounding Factors
	<b>QUESTIONS AND ANSWERS</b>	<b>REVIEWERS, AUDIENCE, PRESENTERS</b>
	Vote of Thanks, Announcements, & Adjournment	Dr. Nneka Nora Osakwe, Executive Director Center for Transformational Student Experiences (CTSE)

**SAVE THE DATE!**  
**ASU-REGIONAL UNDERGRADUATE  
RESEARCH SYMPOSIUM**  
**APRIL 18, 2025**

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# Acknowledgements

The Center for Transformational Student Experiences would like to express its appreciation to all the colleges, departments, and individuals who provided support for the Fall 2024 Undergraduate Research Proposal Symposium.

## Thank You Moderators, Committee Members, Judges, Student Researchers, and Faculty Mentors

### Judges

Dr. Balasubramani Subramani Paranthaman,  
Dr. Arnn Saha  
Professor Jayanti Saha  
Dr. Richard Foreman  
Dr. MD Niamul Kabir  
Dr. Shohana Hug  
Dr. Anta'Sha Jones  
Professor Jerome Myricks  
Dr. Liqui Zheng  
Dr. Kathaleena Monds

### Moderators

Professor Jayanti Saha  
Mr. Robert Bryant  
Ms. Markaya Artist  
Ms. NaTyana Pratt  
Ms. Malaysia Burt

### CTSE Staff

Dr. Nneka Nora Osakwe,  
Executive Director

Ms. Monica Reed, Admin  
& Data Specialist

Mr. Israel Peters, Graduate Assistant.

### Committee Members

Dr. Patrick Whitehead  
Dr. Kizzie Donaldson-Richard  
MD Niamul Kabir  
Dr. Veela Hughes  
Dr. Vijay Kunwar  
Dr. Michele Monaco  
Dr. Elizabeth Sheffield-Hayes  
Dr. Nneka Nora Osakwe  
Ms. Monica Reed  
Israel Peters

Dr. JoAnn P. Mccrary  
Dr. Edgars Patani  
Dr. Jim Mayua  
Dr. Alex Alochukwu  
Mr. Phillip Davis  
Dr. Samuels Ifedayo  
Dr. Alisha Cromwell  
Dr. Arnn Saha  
Professor Jayanti Saha