

RESEARCH SYMPOSIUM

April 1-30, 2025

PROGRAM BOOK

RESEARCH MONTH 2025 ACTIVITIES

TUESDAY, APRIL 1

12:00 PM – 5:00PM Research Month Opening Ceremony and Luncheon

Join us as we kick off Howard University Research Month 2025 with an engaging and inspiring Welcome Reception! This special gathering will bring together faculty, researchers, and students, to celebrate innovation, collaboration, and discovery across all disciplines. Start Research Month 2025 with inspiration and connection—where innovation meets excellence!

Location: Interdisciplinary Research Building, Multipurpose Room

THURSDAY, APRIL 3

7:00 AM – 7:00 PM HBCU CHIPS Network Conference

7:00 AM – 8:30AM Event Registration and Breakfast

Location: The Ballroom

8:30 AM – 8:50AM Welcome and Opening remarks

Pamela A.G, Clarke, Sr. Director of Research Development,

Howard University

Bruce Jones, Ph.D., Sr. Vice President for Research, Howard University

Anthony K. Wutoh, Ph.D., Provost & Chief Academic Officer,

Howard University

Ben Vinson III, Ph.D. President, Howard University

Location: The Ballroom

8:50 AM – 9:00 AM Keynote Speaker Introduction

George White, Ph.D., Director Strategic Partnerships, Georgia Institute

of Technology

Location: The Ballroom

9:00 AM - 9:50 AM Keynote Address

Thomas Caulfield, Ph.D. President, and CEO Global Foundries

Location: The Ballroom

RESEARCH MONTH 2025 ACTIVITIES

9:50 AM – 10:05 AM Apple New Silicon Initiative

Ramesh Abhari PhD, Michael A. Smith* PhD, Jared Zerbe

* Presenter

Location: The Ballroom

10:05 AM - 10:30 AM Coffee Break

Location: The Ballroom

10:30 AM – 11:30 AM Panel: Academic-Industry Partnerships in Semiconductor Research & Development

Moderator: Donnell Walton, Ph.D., Deputy Director, RITA UARC

Panelists:

Danielle Ferguson-Macklin, Global DEI Program Manager, Teradyne Michelle Williams, Executive Director, Semi Foundation Denise Evans, Manager Systems Engineer, Northrop -Grumman Jeremy Muldavin, Ph.D., Director, Sales Development A 7D, Cadence

Location: The Ballroom

11:30 AM – 12:30 PM Panel: Role of Artificial Intelligence (AI) in Semiconductor Development: How AI is Revolutionizing CHIP Design and Verification

Moderator: Sonya Smith, Ph.D., Professor & Executive Director, RITA

UARC

Panelists:

Ron Duncan, Head of Innovation Programs, Chief Innovation Office, Synopsys

Hassan Salmani, Ph.D., Associate Professor, Electrical Engineering & Computer Science, Howard University

Dinadayalane Tandbany, Ph.D., Professor, Chemistry, Clark Atlanta University

William Chapman, Ph.D., Postdoctoral Research Fellow, Sandia National Laboratories

Location: The Ballroom

RESEARCH MONTH 2025 ACTIVITIES

12:30 PM - 2:00 PM Lunch

Student Achievement in Microelectronics Awards Ceremony

HBCU CHIPS Network Conference Committee

Micron Education Hub Presentation,

Ariela Gruszka, TPG University Project Manager, Micron

Location: The Ballroom

2:00 PM - 3:00 PM Tabling & Networking

Location: The First & Second Floor Lobby

3:00 PM – 4:30 PM Breakout Room 1: Technology& Design

Session Chairs:

Dinadayalane Tandabany, Clark Atlanta Universi Kevin Kornegay, Morgan State University

Oral Research Presentations:

Eniola Ajegbemikka, North Carolina A & T State University Malcolm Bogroff, Howard University Mahdi Hasanzadeh, North Carolina A & T University Theodore Johnson, Intel Kevin Kornegay, Morgan State University

Location: The Reading Lounge

Breakout Room 2: Materials & Fabrication

Session Chairs:

Vanessa Smet, Georgia Institute of Technology Eric Seabron, Howard University

Oral Research Presentations:

Joshua Burrow, Morgan State University Baraka Chimba, Alabama A &M University Sugata Chowdhury, Howard University Ningxin Li, Clark Atlanta University Monte Hendrix, Morgan State University Zhiping Luo, Fayetteville State University Indika Senevirathna, Clark Atlanta University Michael Spencer, Morgan State University

Location: The Gallery Lounge

RESEARCH MONTH 2025 ACTIVITIES

Breakout Room 3: Quantum & Photonics

Session Chairs:

Shyam Aravamudhan, North Carolina A&T State University Demetris Geddis, Hampton University

Oral Research Presentations:

Jose Azucena, North Carolina A&T State University Robert Coleman, Howard University Vineet Kumar Sharma, Howard University Cameron Lewis, Howard University Sheikh Mahtab, Morgan State University Daniel Vrinceanu, Texas Southern University Indika Senevirathna, Clark Atlanta University Michael Spencer, Morgan State University

Location: The Digital Auditorium

Breakout Room 4: Applications & Sustainability (Industry Tutorials)

Session Chairs:

Hassan Salmani, Howard University

Oral Research Presentations:

David Lockett, Meharry Medical College Michelle Williams, SEMI Foundation

Industry Presentations:

Ron Duncan, Head of Innovation Programs, Chief Innovation Office , Synopsys

Location: The Forum

4:30 PM - 4:45 PM

Announcements

The HBCU CHIPS Network Initiating Committee

Location: The Ballroom

RESEARCH MONTH 2025 ACTIVITIES

4: 45 PM - 5:00 PM **TAPE-OUT Discussion – Global Foundries**

"Invitation Only"

Location: The Reading Lounge

5:00 PM - 7:00 PM Reception

Location: The Ballroom

FRIDAY, APRIL 4

HBCU CHIPS Network Conference 7:00 AM - 4:00 PM

7:00 AM - 8:00AM **Event Registration and Breakfast**

Location: The Ballroom

8:00 AM - 8:15 AM Welcome and Introduction of CEO Fireside Chat Speaker

& Moderator

George White, Ph.D., Director Strategic Partnerships, Georgia Institute of Technology

Location: The Ballroom

8:15 AM - 9:00 AM **CEO Fireside Chat**

Moderator: Erin Lynch, Ph.D., President, Quality Education for

Minorities (OEM) Network

Speaker: Todd Younkin, Ph.D., CEO and President, Semiconductor

Research Corporation

Location: The Ballroom

9:00 AM - 10:00 AM Panel: Workforce Development for the Semiconductor

Industry

Moderator: Talitha Washington, Ph.D., Center for Applied Data Science

& Analytics

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Panelists:

Brian Best, IT Director, Micron

Carl McCants, Ph.D. Special Assistant to the DARPA Director,

Defense Advanced Research Projects Agency

Patricia Mead, Ph.D., Professor & Department Chair, Norfolk State

University

Location: The Ballroom

10:00 AM - 10:30 AM Break: Tabling & Networking

Location: Location: The First & Second Floor Lobby

10:30 AM – 11:30 AM Panel: The Future of Semiconductor Design and

Manufacturing

Moderator: Kevin Kornegay, Ph.D., Deputy Director, Eugene Deloatch

Endowed Professor, Morgan State University

Panelists:

Ron Duncan, Head of Innovation Programs. Chief Innovation Office,

Synopsys

Greg Pickrell, Ph.D. Domain Chief Engineer – Microfabrication,

Sandia National Laboratories

Antonio de la Serma, Principal Director, Strategic Technologies,

Siemens EDA

Robert Sarkkissian, Director of Aerospace and Defense Sector,

Cadence Design Systems

Location: The Ballroom

11:30 AM -1:00 PM Lunch

CollabNext Presentation

Lew Lofton, Ph.D., Georgia Institute of Technology

Firdous Kausar, Fisk University

Beverly Robinson, Fisk University

Hina Raja, Fisk University

Location: The Ballroom

1:00 PM - 2:00 PM Tabling & Networking

Location: The First & Second Floor Lobby

RESEARCH MONTH 2025 ACTIVITIES

2:00 PM – 3:45PM Breakout Room 1: Technology & Design

Session Chairs:

Daniel Vrinceanu, Texas Southern University
Shyam Aravamudhan, North Carolina A&T State University

Oral Research Presentations:

Shyam Aravamudhan, North Carolina A&T State University
Xuemin Chen, Texas Southern University
Kishak Cinfawtm Morgan State University
Mehdi Elahi, North Carolina A & T State University
Mahsa Tahghigh, Howard University
Anu Upadhyaya, Howard University

Location: The Reading Lounge

Breakout Room 2: Materials & Fabrication

Session Chairs:

Patricia Mead, Norfolk State University Frances Williams, Clark Atlanta University

Oral Research Presentations:

Ashwaq Bahkali, Texas Southern University
Daemar Casey, Delaware State University
Anirban Goswami, Howard University
Kristen Harris, Alabama A &M University
Daniel Harrison, Morgan State University
Malachi Moody, Delaware State University
Miles Phifer, North Carolina A&T State University

Location: The Gallery Lounge

Breakout Room 3: Quantum & Photonics

Session Chairs:

Darwish Abdalla , Dillard University Mohammadreza Hadizadeh, Central State University

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Oral Research Presentations:

Darwish Abdalla , Dillard University
Ashutosh, Howard University
Mohammadreza Hadizadeh, Central State University
Muubbashar Khan, Central State University
Joao Prioli, North Carolina A&T University
Eric Seabron, Howard University

Location: The Digital Auditorium

Breakout Room 4: Applications & Sustainability (Industry Tutorials)

Session Chairs:

Michael Curry, North Carolina A&T State University Niya King, North Carolina A&T State University

Oral Research Presentations:

Suxia Cui, Prairie View A&M University Kinnis Gosha, Morehouse College Thong Le, Norfolk State University

Industry Presentations:

Joanna Pritchard, Ph.D. Global Academic Strategy & Engagement, Siemens

Location: The Forum

Breakout Room 5: Micron DRAM Array Virtual Reality Experience

"Invitation Only"

Location: Truth & Service

3:45 PM - 4:00 PM

Closeout Session

The HBCU CHIPS Network Initiating Committee

Location: The Ballroom

RESEARCH MONTH 2025 ACTIVITIES

MONDAY, APRIL 7

12:00 PM - 5:00 PM

Extreme Weather Symposium

The Extreme Weather Symposium will focus on innovative solutions, Interdisciplinary approaches and pressing global challenges.

Presenters

Dr. Osinachi Ajoku, Assistant Professor, College of Arts & Sciences Dr. Janelle Burke, Professor, College of Arts & Sciences Dr. Joseph Wilkins, Assistant Professor, of Arts & Sciences

Location: Interdisciplinary Research Building, Multipurpose Room

WEDNESDAY, APRIL 9

3:00 PM - 7:00 PM

Pharmacotherapy for Minors: Pediatric Drug Development from Good Intentions to Global Abuse

The concept of "therapeutic orphans" arose in 1968 when children were excluded from drug approvals, leading to the development of pediatric pharmaceutical laws in the U.S. and EU. While intended to protect minors, these regulations have led to excessive and often unnecessary pediatric studies, as most clinical breakthroughs historically occurred off-label. This panel aims to critically assess the origins of pediatric drug development, interrogate excessive regulatory requirements, and suggest new policy approaches to ensure advancement in the science.

Panelists:

Dr. Earl Ettienne, Associate Professor, College of Pharmacy
Dr. Roger Mitchell, President of the Howard University Hospital
Dr. Andrea Hayes-Dixon, Professor & Dean, College of Medicine
Dr. Evaristus Nwulia, Professor, College of Medicine
Dr. Klaus Rose, M.D., M.S, Klaus Consulting,

Location: Interdisciplinary Research Building, Multipurpose Room

RESEARCH MONTH 2025 ACTIVITIES

THURSDAY, APRIL 10

12:00 PM - 5:00 PM

Empowering Voices: The Significance of Research in the Black Community

This panel will explore the vital role of research in addressing the unique experiences, needs, and aspirations of the Black community. Panelists will discuss the importance of inclusive methodologies, community-based approaches, and the need for accurate representation in data and analysis. The conversation will delve into the challenges researchers face, including systemic barriers, underfunding, and trust deficits, while highlighting the transformative opportunities that arise when research centers Black voices and lived experiences. Attendees will gain insights into how collaborative, equity-driven research can empower communities, influence policy, and create pathways for lasting change.

Moderator:

Beylui Russon, Ph.D. Candidate, Cathy Hughes School of Communications

Panelists:

Dr. Jennifer Thomas, Associate Professor, Cathy Hughes School of Communication

Dr. Marcus Boyd, Jr. Associate Professor, College of Arts & Sciences Dr. Keneshia Grant, Associate Professor, College of Arts & Sciences Ms. Trinity Webster - Bass, Senior Annenberg Honors Scholar, Cathy Hughes School of Communications

Location: Interdisciplinary Research Building, Multipurpose Room

RESEARCH MONTH 2025 ACTIVITIES

THU	RSD	AY.	AP	RIL	10

9:30 AM - 4:00 PM

HBCU Center (HCRN) Research Network Virtual Conference

The Center for HBCU Research, Leadership and Policy cordially invites you to attend the upcoming HBCU Center Research Network Virtual Conference on April 10 and 11, 2025

Conference Theme: Empirical Perspectives: HBCU Research, Agency, and Impact

This two-day virtual convening will explore timely and critical issues shaping the future of HBCU scholarship, including the implications of research designations and their role in advancing institutional capacity, policy influence, and scholarly impact.

Join leading scholars, researchers, and practitioners in dynamic discussions that aim to foster meaningful collaboration and chart pathways for future inquiry.

Session Topics

- HBCU Research Universities: Capacity, Culture, and Institutional Capital
- Understanding HBCU Research Designations and Their Impact on Institutional Growth
- HBCU Research Partnerships: Leveraging Our Collective Capacity for Greater Impact and Reach
- HBCU Policy Positions & Perspectives: 2025 and Beyond
- Lucy Diggs Slowe Institute Panel Discussion: An Exploration of Contemporary HBCU Leadership Frameworks
- HBCUs and Social Justice Research & Policy
- HBCU Student Roundtable: Horizon HBCU Research Topics

Location: Virtual

RESEARCH MONTH 2025 ACTIVITIES

FRIDAY, APRIL 11

9:30 AM - 4:00 PM

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- HBCU Student Roundtable: Horizon HBCU Research Topics

Location: Virtual

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MONDAY, APRIL 14

11:00 AM - 3:00 PM

IBM HBCU Quantum Center: Women in Quantum Seminar Series

As part of Howard University's Research Month celebrations, the IBM HBCU Quantum Center will host its *Women in Quantum Seminar Series* **for World Quantum Day**. This distinguished series, highlights, and celebrates the contributions of women in quantum computing, networking, sensing, and related fields, including quantum materials, Al/data science, and photonics. The *Women in Quantum Seminar Series* is designed to empower women scholars by fostering belonging, strengthening their physics identity, and connecting them with the broader quantum information science and engineering (QISE) community. This year's final event offers an excellent platform to highlight the achievements of esteemed speakers and engage with an audience of emerging scholars and researchers.

Keynote Speaker:

Dr. Serena Eley, Assistant Professor of Electrical and Computer Engineering, specializing in quantum materials and devices.

Location: Interdisciplinary Research Building, Multipurpose Room

TUESDAY, APRIL 15

12:00 PM - 5:00 PM

Artificial Intelligence/Machine Learning Symposium - Al Frontiers: Innovations, Challenges and Future Directions in Applying Technologies to Interdisciplinary Artificial Intelligence Research

The Artificial Intelligence & Machine Learning Symposium is a premier gathering of researchers, exploring the latest advancements in artificial intelligence (AI) and machine learning (ML). This symposium serves as a platform for thought leaders to share innovative research, innovative applications, and emerging trends shaping the future of AI-driven technologies. Attendees will engage in panel discussions and technical sessions covering topics such as Natural Language Processing, Deep Learning, AI and National Security, Machine Learning Fundamentals and Advances, Robotics and Autonomous Systems, AI in Health, AI in Environmental Sciences, Generative AI & Creative Applications, Human Computer Interaction, AI Ethics, AI for Cultural and Historical Preservation, and real-world AI applications in healthcare, finance, cybersecurity, and beyond. A central theme of the symposium is AI

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for Social Good and Interdisciplinary approaches to emphasizing the role of artificial intelligence in addressing challenges in healthcare, cybersecurity, environmental sustainability, and equity. The symposium fosters collaboration between academia, industry, and government, promoting interdisciplinary dialogue on Al's societal impact, challenges in responsible Al development, and future research directions. With interactive discussions, and networking opportunities, this event is an invaluable experience for Al professionals, researchers, students, and technology enthusiasts looking to stay ahead in the rapidly evolving Al landscape. Join us for an exciting exchange of ideas and innovations that will shape the next generation of intelligent systems!

Presenters:

Dr. Anietie Andy, Assistant Professor, College of Engineering & Architecture

Dr. Imtiaz Ahmed, Assistant Professor, College of Engineering & Architecture

Dr. Saurav Aryal, Senior Research Scientist, Office of Research, HCAI Institute

Dr. Jeremy Blackstone, Assistant Professor, College of Engineering & Architecture

Dr. Legand Burge III, Professor, College of Engineering & Architecture

Dr. Kofi Deh, Assistant Professor, College of Arts & Sciences

Dr. Alex Evans, Assistant Professor, College of Medicine

Dr. Harry Keeling, Associate Professor, College of Engineering & Architecture

Dr. Mirza Galib, Assistant Professor, College of Arts & Sciences

Dr. Jaye Nias, Senior Research Scientist, Office of Research, HCAI Institute

Dr. Bashir Qolomany, Assistant Professor, College of Medicine

Dr. Dominique Pritchett, Assistant Professor, College of Arts & Sciences

Dr, Shaolei Teng, Associate Professor, College of Arts & Sciences

Dr. Tsang-Wei Tu, Associate Professor, College of Medicine

Dr. Lucretia Williams, Senior Research Scientist, Office, HCAI Institute

Location: Interdisciplinary Research Building, Multipurpose Room

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WEDNESDAY, APRIL 16

4:00 PM - 7:00 PM

The Immortal Life of Henrietta Lacks

A Film Screening of *The Immortal Life of Henrietta Lacks*). The film screening will be followed by a panel discussion with a Bioethics Expert.

Location: Interdisciplinary Research Building, Multipurpose Room

THURSDAY, APRIL 17

12:00 PM - 5:00 PM

The Graduate School Publishing Workshop

This workshop will provide strategies, best practices and an overview of the journal publishing process.

Presenters:

Dr. Terri Adams, Professor, Sociology & Criminology, College of Arts & Sciences & Deputy Director, NCAS-M

Location: Interdisciplinary Research Building, Multipurpose Room

MONDAY, APRIL 21

12:00 PM - 5:00 PM

The Center for Applied Data Science & Analytics Symposium (CADSA) Symposium

The CADSA Symposium highlights innovative research in data science, analytics, and AI to drive impactful discoveries. It provides a platform for all attendees to share insights, explore emerging trends, and connect with researchers and experts. Through presentations, discussions, and networking, the symposium accelerates discovery, strengthens interdisciplinary collaborations, and welcomes participation from students, faculty, staff, and the broader community.

Presenters:

Dr. Anthony K. Wutoh, Provost & Chief Academic Officer
Dr. Talitha Washington, Executive Director, CADSA, Howard University
Dr. Amy Yeboah Quarkume, Graduate Director of CADSA and Associate
Professor of Earth, Environment & Equity

RESEARCH MONTH 2025 ACTIVITIES

TUESDAY, APRIL 22

10:00 AM - 12:00 PM

The Diversity in Cancer Research Guppy Talk

The Diversity in Cancer Research Guppy Tank is an innovative and dynamic session designed to support the development of cancer research at Howard University. Inspired by the well-known "Shark Tank" model, which fosters product commercialization, we have tailored this approach to empower our Diversity in Cancer Research early career faculty and student researchers. During this session, researchers will present their research proposals to an audience, receiving valuable constructive feedback and strategic guidance. This interactive platform aims to refine research ideas, strengthen methodologies, and enhance the overall impact of each project.

Presenters:

Dr. Carla Williams, Interim Director, The Howard University Cancer Center

Dr. Ramin Abolfath, PhD, Assistant Professor, College of Arts & Sciences, Tissues differential sparing of FLASH ultra-high dose rate Radiotherapy: an in-silico radiotherapy study

Dr. Kholood Ahmad, Instructor, College of Medicine, An Al-Driven Deep Learning Framework for Early Breast Cancer Detection Using Radiomic Data

Chieh-Hisung Chang, Machine Learning Algorithms for Predicting Cancer Associated with Diabetes and Hypertension: NHANES 2021 to 2023

Kennedy Jester, MPH Student. Enhancing Cancer Immunotherapy in HNSCC: A Literature Review on Epigenetic Modulation

Brian McFarland, Partners in Survival: A Revolutionary Model for Empowering Male Caregivers in Oncology

Dr. Shaolei Teng, PhD, Associate Professor, College of Arts & Science, Bioinformatics Analysis of Peroxidase Mutations Associated with Cancers

Location: Interdisciplinary Research Building, Multipurpose Room

12:00 PM - 3:30 PM

Speak Clearly, Lead Boldly: A Town Hall on Science Communication and Mentorship

Hosted by: Howard University Research Centers in Minority Institutions (RCMI) Program

Join us for an interactive town hall focused on the intersection of effective mentorship and the power of plain language in science

RESEARCH MONTH 2025 ACTIVITIES

communication. In today's climate and fast-paced, information-rich world, the ability to clearly communicate complex ideas is essential, not only for engaging the public, but also for strengthening mentormentee relationships across disciplines and career stages. This event will bring together faculty and students to understand the importance and benefit of the mentor-mentee relationship. Participants will also build skills for communicating science in plain language to successfully engage key audiences in conversations about critical issues. Through discussion, shared experiences, and practical examples, we will examine how faculty and students alike can become better mentors, communicators, and collaborators by embracing clarity and accessibility in scientific communication.

Location: Interdisciplinary Research Building, Multipurpose Room

THURSDAY, APRIL 24

8:00 AM - 5:00 PM The Research Symposium

7:30 AM Registration & Continental Breakfast

9:00 AM Oral & Poster Presentations

12:00 PM Lunch

1:05 PM Oral & Poster Presentations

5:00 PM Closing

Location: Armour J. Blackburn University Center

8:30 AM - 5:00 PM

Interprofessional Education (IPE) Case Challenge: Blended Theories for Health Outcomes

The Howard University Interprofessional Education Committee (IPEC) was created by the Office of the Provost in 2015 to leverage our strengths and break down silos to offer interprofessional education opportunities. The members, representing all 14 schools/colleges across campus, charge is to lead the efforts to ensure the preparedness of faculty and students to learn and work along with professionals from other disciplines in a patient-centered, collaborative manner. IPEC's aim is to establish a university-wide culture of collaboration that will produce culturally responsive, collaborative, and practice-ready professionals across the spectrum of health and behavioral science disciplines. In celebration of the IPEC's 10th anniversary, a case challenge is being held to engage students in an interdisciplinary research activity. The students will present their approach and

RESEARCH MONTH 2025 ACTIVITIES

recommendations through brief oral presentations and oral poster snapshots.

Workshop Goal: For students to actively practice the competencies of interprofessional education, which include roles/responsibilities, values/ethics, teams/teamwork, and interprofessional communication.

Location: The Forum

12:00 PM - 1:00 PM

Dow Scholars Undergraduate Research (SURE) Seminar

This symposium will feature research technical talks and networking opportunities with Dow Scientists. The Dow SURE Scholars will also present their research presentations at the Research Symposium.

Location: The Gallery Lounge

2:00 PM - 3:00 PM

Argonne National Laboratory Seminar

Argonne National Laboratory will host a seminar to discuss an overview of its current multidisciplinary science and engineering research portfolio that seeks to address the biggest questions facing humanity. Faculty and students will learn how to get involved in research partnerships and opportunities such as user facility programs, faculty exchange programs, undergraduate and graduate internships, and grant collaboration opportunities.

Presenters:

Robert Schuch, University Partnership Program Manager

Location: The Gallery Lounge

FRIDAY, APRIL 25

8:00 AM - 5:00 PM

The Research Symposium

7:30 AM Registration & Continental Breakfast

9:00 AM Oral & Poster Presentations

12:00 PM Lunch

1:05 PM Oral & Poster Presentations

5:00 PM Closing

Location: Armour J. Blackburn Center

RESEARCH MONTH 2025 ACTIVITIES

FRIDAY, APRIL 25

10:00 AM -12:00 PM

Elevating the Needs and Voices of Underserved Populations in the United States: Research Findings from the Howard University Center of Excellence in Housing and Urban Research and Policy (CHURP)

This panel highlights recent CHURP research findings by students serving as research associates. These projects reflect CHURP's mandate to address the needs and concerns of underserved populations. CHURP seeks to achieve an equitable and inclusionary society in which currently underserved populations come to be properly served and inequities in housing, health, education, economic wellbeing, and community development, are overcome through policy implementation. Blocking this goal are the mutually reinforcing historic and current processes that led and continued to lead to disparate outcomes for underserved populations.

Presenters:

Gaurav Adhikari Undergraduate Student, Computer Science, CEA Beza Afework, Student Research Associate, CHURP and Graduate Student Economics, COAS

Angela Bodley, Research Associate, CHURP

Jasmine Fuller ,Ph.D. Research Associate CHURP, Researcher Department of Housing and Urban Development (HUD)

Ajeune Lynch, Student Research Associate CHURP, Graduate Student, Data Science, The Graduate School

Digna Mosquera, Student Research Associate, CHURP and Graduate Student Economics, COAS

Taylor Ross, Student Research Associate CHURP, Graduate Student, Nursing & Allied Health

Bezil Taylor Student Research Associate CHURP, Graduate Student School of Social Work

Jalissa Worthy Student Research Associate CHURP, Graduate Student, School of Social Work

Location: The Gallery Lounge

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FRIDAY, APRIL 25

1:00 PM -1:45 PM

Quantum Adaptive Optics for Biomedical Applications

Presenter:

Dr. Moussa N'gom, Ph.D., IBM Quantum Center, Scholar in Residence

Location: The Gallery Lounge

2:00 PM - 4:00 PM

Brookhaven National Laboratory (BNL) Seminar

Brookhaven National Lab will host a seminar on research partnership opportunities for faculty and students. Attendees will learn about the lab's user facilities, faculty exchange programs, student internships and grant collaboration opportunities. The laboratory leads and supports diverse research teams including other National Laboratories, academia, and industry, by designing, building, and operating major scientific user facilities in support of its DOE mission.

Presenters:

Dr. John Hill, Deputy Director for Science & Technology, Brookhaven National Laboratory

Dr. Aleida Perez Manager (Interim), Office of Workforce Development & Science Education

Manager, University Relations, and DOE Programs

Location: The Gallery Lounge

8:00 AM - 5:00 PM

American Society for Microbiology (ASM), D.C. Branch Spring Meeting

Join DC area microbial scientists (professionals and students) for an exciting meeting of science and networking. This year's Spring meeting is a one-day symposium highlighting innovative research as well as providing opportunities for networking and outreach.

Presenters:

Dr. Karl Thompson, Associate Professor, Microbiology, College of Medicine and President, DC Branch of ASM

Location: Interdisciplinary Research Building, Multipurpose Room

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MONDAY, APRIL 28

3:00 PM - 5:00 PM

From Research to Revenue: Bridging Innovation & Entrepreneurship

This workshop will feature insightful discussions on the following topics:

Tech Transfer 101: Turning Ideas into Impactful Ventures **Moving from Lab to Launch:** Tech Transfer as Your Innovation Partner **Business Innovation:** How Tech Transfer Fuels Entrepreneurship

Presenters:

Adia Coleman, Intellectual Property Manager, Office of Research

Location: Interdisciplinary Research Building, Multipurpose Room

TUESDAY, APRIL 29

5:00 PM - 7:00 PM

Inspiring Academic Excellence & Innovation Awards

Location: Armour J. Blackburn University Center

7:00 PM - 9:00 PM

Research One (R-1) Celebration

As Howard University Research Month ends, we invite you to join us for a special evening of reflection, appreciation, and celebration of the incredible research and innovation highlighted throughout the past month. This event is an opportunity to recognize the dedication and hard work of our students, faculty, and researchers who have contributed to groundbreaking discoveries, interdisciplinary collaborations, and academic excellence.

Location: Armour J. Blackburn University Center

WEDNESDAY, APRIL 30

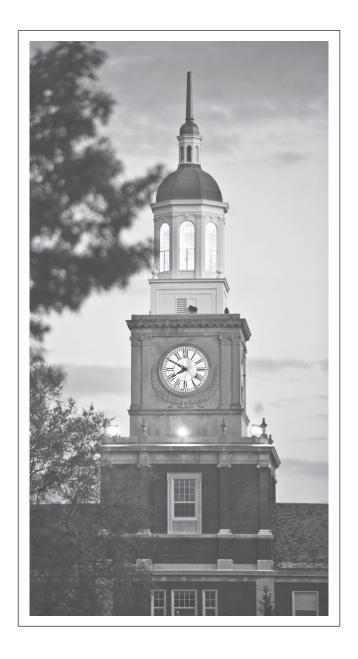
5:00 PM - 9:00 PM

Howard University Undergraduate Research Journal Awards Ceremony: Voices from The Margins

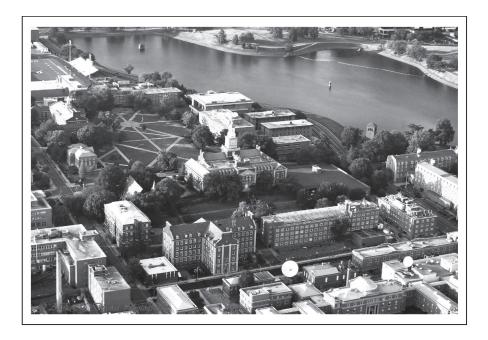
As part of Howard University Research Month, the Undergraduate Research Journal Awards celebrate the outstanding scholarship and contributions of undergraduate researchers whose work has been published in the Howard University Undergraduate Research Journal (HUURJ). This event recognizes excellence in research, critical thinking, and academic writing, highlighting the impactful work of students across various disciplines.

Location: Interdisciplinary Research Building, Multipurpose Room

RESEARCH SYMPOSIUM



RESEARCH SYMPOSIUM



THE ARMOUR J. BLACKBURN UNIVERSITY CENTER APRIL 24-25, 2025

PROGRAM

7:30 – 8:30 AM Registration & Continental Breakfast

The Ballroom

8:30 – 8:50 AM Greetings

Ben Vinson III, Ph.D., President Anthony K. Wutoh, Ph.D., R.Ph., Provost & Chief Academic Officer

Opening Remarks

Bruce Jones, Ph.D. Senior Vice President for Research Pamela A.G. Clarke, Senior Director for Research Development

RESEARCH SYMPOSIUM

PRESENTATIONS

APRIL 24, 2025

9:00 AM – 12:00 PM Poster Presentations

Physical Sciences & Engineering Translational & Clinical Sciences Biological & Biomedical Sciences

Environmental Sciences

Humanities

Oral Presentations
Humanities
Social Sciences

Business

Creative Arts & Design Ethics, Law & Religion Education & Outreach

Translational & Clinical Sciences

12:00 - 1:00 PM Lunch

1:00 PM - 5:00 PM Poster Presentations

Humanities Social Sciences Business

Creative Arts & Design Ethics, Law & Religion Education & Outreach **Oral Presentations**

Physical Sciences & Engineering Translational & Clinical Sciences Biological & Biomedical Sciences

Humanities Social Sciences Business

Environmental Sciences & Studies

RESEARCH SYMPOSIUM

PRESENTATIONS

APRIL 25, 2025

9:00 AM – 12:00 PM Poster Presentations

Biological & Biomedical Sciences Environmental Sciences

Physical Sciences & Engineering

Translational & Clinical Sciences

Oral Presentations

Biological & Biomedical Sciences Environmental Sciences & Studies

Humanities

Physical Sciences & Engineering

Social Sciences

Translational & Clinical Sciences

12:00 - 1:00 PM Lunch

1:00 PM - 5:00 PM Poster Presentations

Education & Outreach

Environmental Sciences & Studies

Social Sciences

Oral Presentations

Biological & Biomedical Sciences Environmental Sciences & Studies Physical Sciences & Engineering

ORAL PRESENTATIONS

APRIL 24, 2025

SESSION I

9:00 AM - 10:00 AM | THE READING LOUNGE | PHYSICAL SCIENCES & ENGINEERING

Azaria Johnson Undergraduate Student, Physical Sciences & Engineering New Occurrences of the Central Delannoy Numbers in Z2[x] and Related Generalized Second Order Lattice Path Set Moments,

Dayna Jackosn Undergraduate Student, Physical Sciences & Engineering Visualizing Flow Effects on a Quadcopter to Optimized Atmospheric Sensor Placement

Myles Mackie Undergraduate Student, Physical Sciences & Engineering *Evaluating the Acoustic Impact of OPC-N3 PM 2.5 Accuracy Aboard sUAS*

Angelica Stewart Undergraduate Student, Physical Sciences & Engineering *Enhancing Drone-Based PM2.5 Monitoring: A Machine Learning Approach to Improve OPC-N3 Sensor Accuracy*

Tochukwu Uyanne Graduate Student, Physical Sciences & Engineering *Bioremediation* of Iodate Contamination via Planktonic Shewanella Oniedensis MR-1 Cells – Kinetics and Reactor Design

9:00 AM - 10:00 AM | THE DIGITAL AUDITORUM | HUMANITIES

William Kenlon Junior Faculty/ Lecturer/ Instructor, Humanities "From Be-Bop To Hip-Hop": Vocality and Embodiment in the 1960-1990 Music of Quincy Jones

Brie Littlefield Undergraduate Student, Humanities *The Privilege of Choice: Racial Identity and the Limits of Self-Identification in Jesmyn Ward's Cracking the Code, Oral Presentation*

Jennifer Mckenzie Undergraduate Student, Humanities : Rethinking Informed Consent for Equitable Healthcare Access

Milan Smalls Undergraduate Student, Humanities The Silent Power of Silence

Alexandra Zeppeiro Undergraduate Student, Humanities *The Limits of Race in the Work of Haslanger*

Amber Williams Graduate Student, Social Sciences Learned Helplessness in Black Americans

SESSION II

10:00 AM - 11:00 AM | THE READING LOUNGE | PHYSICAL SCIENCES & ENGINEERING

Olusegun Alaba Graduate Student, Physical Sciences & Engineering Synthesis of Polymer Grafted Nanoparticles for use in Dielectric Application

Malcolm Bogroff Undergraduate Student, Physical Sciences & Engineering *Instinctual Neural Networks for Time Limited Edge Environments, Oral Presentation*

Robert Coleman Graduate Student, Physical Sciences & Engineering Optothermal Metrology of Phase Change Chalcogenide Thin Films

Sama Ghadiri Gargari, Graduate Student, Physical Sciences & Engineering *Advancing Yellow Pea Ingredients for 3D Food Printing: Tribo-electrostatic Separation and Rheological Insights*

Meenakshi Nerolu Junio,r Faculty/Lecturer/Instructor, Physical Sciences & Engineering Nanofluids in Modern Engineering: Fundamentals, Applications, and Challenges

10:00 AM - 11:00 AM | THE DIGITAL AUDITORIUM | HUMANITIES

Andrew Anderson Graduate Student, Humanities *The Aestheticization of Racial History in Deus Ex: Mankind Divided and Detroit: Become Human*

Bria Charlton Undergraduate Student, Humanities *Black Thought: African American Perceptions and Depictions of Whiteness and White Sexuality*

Anjali Robinson-leary Undergraduate Student, Humanities *Maroon Mothers and Maternal Moors*

Tiffany Wheatland-Disu Graduate Student, Humanities *The Founding of the All-African People's Revolutionary Party (A-APRP) 1968-1998: A Pivotal Moment in Black Internationalism*

Paola Yuli Graduate Student, Humanities *Tracking the Water: Mapping Transitioning Dominican Waterbodies in Rita Indiana's Tentacle and Elizabeth Acevedo's Family Lore*

10:00 AM - 11:00 AM | TRUTH & SERVICE | SOCIAL SCIENCES

Brian Mcfarland Graduate Student, Social Sciences *Partners in Survival: A Revolutionary Model for Empowering Male Caregivers in Oncology*

Miranda Rivers Graduate Student, Social Sciences Leading Revolution from the Left: An Exploration of Marxist-Leninist Thought and Praxis in Sudan

Justin Zaire Smith Undergraduate Student, Social Sciences *Media Sentiment Analysis* for Social Event Prediction

Lacoya Swann Graduate Student, Social Sciences *Beyond Hidden Figures: The Presence of Black Workers in Computing Before Silicon Valley*

Seriane Thiam Undergraduate Student, Social Sciences *Double Headed War: An Examination of African American Participation in the Vietnam War*

SESSION III

11:00 AM - 12:00 PM | THE READING LOUNGE | PHYSICAL SCIENCES & ENGINEERING

Moses Bility Junior Faculty/ Lecturer/ Instructor, Physical Sciences & Engineering *The serpentinization-driven magnetic catalysis hypothesis for the emergence and modulation of homochiral life*

Laray m. Hare Graduate Student, Physical Sciences & Engineering *Lunar Regolith Exploration Via Standoff Raman Spectroscopy Using the Cube Rover Platform*

David Mugisha Undergraduate Student, Physical Sciences & Engineering *Optimization* of Standoff Raman Spectroscopy for Lunar Mineral Characterization: A Proof-of-Concept Demonstration

Nikolai Priezjev Junior Faculty/ Lecturer/ Instructor, Physical Sciences & Engineering Fatigue Behavior of Cu-Zr Metallic Glasses under Cyclic Loading

11:00 AM - 12:00 PM | THE DIGITAL AUDITORIUM | HUMANITIES

Lori Danley Undergraduate Student, Humanities *Binti by Nnedi Okorafor: The Connection Between African Spiritual Systems, Quantum Physics and Africanfuturisim*

11:00 AM - 12:00 PM | THE DIGITAL AUDITORIUM | CREATIVE ARTS & DESIGN

Nea Maloo Junior Faculty/ Lecturer/ Instructor, Creative Arts & Design *Teaching Creative Resilience Through Doing: Sunshading*

Timothy Myers Staff, Creative Arts & Design *The Importance of Commemorating Disco as an African-American Genra*

Ama Russell Undergraduate Student, Creative Arts & Design *The Fabric of Resistance:* Drag, Black Queer Textile Culture, and the Erasure in Black Studies

11:00 AM - 12:00 PM | THE DIGITAL AUDITORIUM | ETHICS, LAW & RELIGION

Abhijit Roy Senior Faculty, Ethics, Law & Religion *Spirituality, Religiosity and their Relative Impacts on Quality of Life*

11:00 AM - 12:00 PM | TRUTH & SERVICE | SOCIAL SCIENCES

Kathlyn Archibald-Drew Undergraduate Student, Social Sciences *A framework for sustainable development without falling into a debt trap.*

Nkechi Enwerem Senior Faculty, Social Sciences *Title: Using The Collective Impact (CI) Model for the Creation of Interventions to improve the health and wellness of Expectant and Parenting Teenagers (EPTS) in Washington DC*

Lydia Gebru Undergraduate Student, Social Sciences *Global Governance or Global Domination? The United Nations and the Legacy of Post-Colonial Power Structures*

Trinity Webster-Bass Undergraduate Student, Social Sciences *What Black Female Hip-Hop and R&B Artists Can Teach Us About Womanism*

SESSION IV

1:00 PM -2:00 PM | THE READING LOUNGE | BIOLOGICAL & BIOMEDICAL SCIENCES

Weldejeworgis Gebrehiwot Staff, Biological & Biomedical Sciences *Development and Optimization of an HPLC Method for Analyzing N2'- Dithiocarbamate Derivatives of Emetine Alkaloid in Anticancer Research.*

Toluwanimi Oladapo Professional Student, Biological & Biomedical Sciences Disordered Streets, Disordered Sleep: Investigating Neighborhood-Related Social Determinants of Sleep in All of Us

Abdul Nafay Saleem Undergraduate Student, Biological & Biomedical Sciences Leveraging Machine Learning and Python Libraries to Model Adhesion of Staphylococcus aureus in a Microfluidic System

Sarees Shaikh Graduate Student, Biological & Biomedical Sciences *Modeling* Staphylococcus aureus Adhesion Under Shear Stress: A Computational and Experimental Analysis

Gabrielle Walker Undergraduate Student, Biological & Biomedical Sciences *Exploring Cell Density and Cortical Dyslamination in Focal Cortical Dysplasia Type 1*

1:00 PM -2:00 PM | TRUTH & SERVICE | SOCIAL SCIENCES

Tatiana Allen Undergraduate Student, Social Sciences Black Love on Screen: Exploring the Impact on Black Women and Intimate Partner Violence

Marena Moorer Undergraduate Student, Social Sciences An Exploration of the Inconsistencies Surrounding Government Support for Afro-Colombians

Bahiyyah Muhammad Senior Faculty, Social Sciences *Black Tutors Matter: Centering Undergradutate Student Tutors for Education in Prison at Howard University Through the Petey Greene Program*

Subodh Raj Pandey Graduate Student, Social Sciences *Implications of Involuntary Commitments Laws on Admissions by Race, Ethnicity & Job types*

Hannah Stevenson Graduate Student, Social Sciences *Understanding Predominant Emotion Regulation (ER) Strategies in Black People*

SESSION V

2:00 PM -3:00 PM | TRUTH & SERVICE | SOCIAL SCIENCES

Tewodros Gutema Graduate Student, Social Sciences *The Importance of Correct Classification of the Prescription Drug Monitoring Programs Effectiveness*

Ayiana Newcombe Undergraduate Student, Social Sciences *Not an Isolated Incident The Ongoing Violations of Prison Experiments*

Ellison Richardson Undergraduate Student, Social Sciences *Efforts of our Forefathers:* A Comparative Analysis of Calls for Reparations between the 19th, 20th, and 21st Centuries

2:00 PM -3:00 PM | THE READING LOUNGE | BIOLOGICAL & BIOMEDICAL SCIENCES

Gleice kelli Cardoso Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *Calcium-activated chloride channels: A potential new molecular target for reducing alcohol consumption*

Akhay Maharaj Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *Effect of Ivabradine on Heart Failure: A 2024 Meta-Analysis*

Cayla Moore Graduate Student, Biological & Biomedical Sciences *The Role of Scaffold Protein RACK1 Inhibitor Compounds in Targeting Cancer Cell Migration*

Jordan Newsome Undergraduate Student, Biological & Biomedical Sciences *Weathering* the Ticks: How Snowfall Affects Winter Tick Infestations and Hair Loss in Western Wyoming Moose

Makenna Rodriguez Undergraduate Student, Biological & Biomedical Sciences *CSF Biomarker Discovery for CLN3*

2:00 PM -3:00 PM | THE DIGITAL AUDITORIUM | BIOLOGICAL & BIOMEDICAL SCIENCES

Frankie Bethea Junior Faculty/ Lecturer/ Instructor, Education & Outreach *The History of Final Generation of Scarification* | *Reference Article ART & TRIBAL MAKEUP 7 Elements of Art Lecture and Lab*

A'jah Chandler Post Doc/Resident/Fellow/Research Associate, Education & Outreach *What Is The Social Media Presence Of Minimally Invasive Gynecologic Surgery (MIGS) Fellowship Programs?*

Harold Mcdougall Senior Faculty, Education & Outreach *Prepare, Repair, Defend: A Toolkit for Reparations 2.0*

Danica White Staff, Education & Outreach *The Impact of Librarian Research in Higher Education*

SESSION VI

3:00 PM - 4:00 PM | THE READING LOUNGE | BIOLOGICAL & BIOMEDICAL SCIENCES

Nora Auma Undergraduate Student, Biological & Biomedical Sciences *HIV-1 Nef* protein activates Src kinase and alters pulmonary macrophages distribution in *HIV Tg* mice

Chanae Davis Undergraduate Student, Biological & Biomedical Sciences *Laponite Nanocarrier for Sustained Release of Chloroquine*

Paul Sheriff Professional Student, Biological & Biomedical Sciences *Sleep Duration* and Pulse Wave Velocity

3:00 PM - 4:00 PM | THE READING LOUNGE | BIOLOGICAL & BIOMEDICAL SCIENCES

Jamilah Alkhashi Graduate Student, Biological & Biomedical Sciences *Dithiocarbamate Derivatives of 6,7-Dimethoxy-1,2,3,4-Tetrahydroisoquinoline: Synthesis And Cancer Therapeutic Potential, Oral Presentation*

Nora Auma Undergraduate Student, Biological & Biomedical Sciences *HIV-1 Nef* protein activates Src kinase and alters pulmonary macrophages distribution in *HIV Tg* mice

Chanae Davis Undergraduate Student, Biological & Biomedical Sciences *Laponite Nanocarrier for Sustained Release of Chloroquine*

Paul Sheriff Professional Student, Biological & Biomedical Sciences *Sleep Duration* and Pulse Wave Velocity

3:00 PM - 4:00 PM | TRUTH & SERVICE | SOCIAL SCIENCES

Tyler Blue Undergraduate Student, Social Sciences *Hustle and Flow: The Intersection of Hip-Hop, Black Sex Work, and Crime in Black Communities*

Zoe Cummings Undergraduate Student, Social Sciences *I'm Just a Girl: The Effect of Pop Culture's Adaptation of Anti-Feminist Rhetoric on Gen-Z and Millennial Women in the Digital Age*

Whitney Hollins Post Doc/Resident/Fellow/Research Associate, Social Sciences *Uncaged Voices: Women's Narratives of Incarceration, Relationships, Reproductive Health and Reentry*

David Ndolo Graduate Student, Social Sciences *Precarious Work and Mental Health in US Post-COVID-19: Self-Employment and Health Insurance*

Kimathi Talton Undergraduate Student, Social Sciences *The Political Economy of Self Determination*

SESSION VII

4:00 PM - 5:00 PM | TRUTH & SERVICE | SOCIAL SCIENCES

Maya Berthoud Undergraduate Student, Social Sciences *Bottled Up or Spoken Out?* How Gender and Socialization Shape Stress Responses in Black Communities

Mwela Lufumpa Graduate Student, Social Sciences *Breaking Barriers: A Gamified Intervention Supporting First-Generation College Students at HBCUs*

Louis-léopold Muderhwa Undergraduate Student, Social Sciences *Striking the Curse:* The Global Energy Transition as an Opportunity for Sustainable Development in the Democratic Republic of Congo

ssata (ari) Starks Professional Student, Social Sciences *Identities at the intersection: Identity formation among African American queer late adolescents*

SESSION VII

4:00 PM - 5:00 PM | THE READING LOUNGE | BIOLOGICALL SCIENCES

Gantumur Battogtokh Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *Development of Multifunctional Targeted Dual-Loaded Polymeric Nanoparticles for Triple Negative Breast Cancer Treatment*

Essiet-adidiong Ette Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *Enhancng Ground Truth Accuracy in Deep Learning-Based Microglia Classification through Elo-Rating*

Oluwaseun Faborode Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *Mechanistic Insights into Inflammation-Mediated Neuroprotection Following Ischemic Stroke: A Role for Microglia*

Chinwe Kamma Graduate Student, Biological & Biomedical Sciences *The Role of Glycosylation on Biologics Transport through Mucus*

APRIL 25, 2025

SESSION I

9:00 AM - 10:00 AM | THE READING LOUNGE | BIOLOGICAL & BIOMEDICAL SCIENCES

Ramin Abolfath Senior Faculty, Biological & Biomedical Sciences *Tissues differential* sparing of FLASH ultra-high dose rate Radiotherapy: an in-silico radiotherapy study

Sayeeda Habib Graduate Student, Biological & Biomedical Sciences *Investigating The Role of Vitamin D and COVID-19 Outcome*

Miriam Hagan Graduate Student, Biological & Biomedical Sciences *Investigating the Effect of Seaweed Bioactive Compounds on Gut Microbiota Composition and Dysbiosis: A Systematic Review*

Thomas Heinbockel Senior Faculty, Biological & Biomedical Sciences *Central olfactory neurons are modulated through dopaminergic synaptic transmission*

Advith Suresh Post Doc/Resident/Fellow/Research Associate, Translational & Clinical Sciences *Ghost in the Machine: A Rare Case of Factor 9 Hyperactivity that Indicates Unmet Need for Genetic Testing*

9:00 AM - 10:00 AM | THE DIGITAL AUDITORUM | SOCIAL SCIENCES

Kymberly Bell Undergraduate Student, Social Sciences Where Are We in Creativity Research: Trends and Relationships in Black Creativity

Amaria Clark Undergraduate Student, Social Sciences *More than a Statistic: Analysis of the Black Mind Post-Incarceration*

Ayanna Jones Graduate Student, Environmental Sciences & Studies *Investigating Atmospheric Effects on Lithium-Ion Battery Thermal Management in Electrified Transportation Systems*

Kadisha Mitchell Undergraduate Student, Environmental Sciences & Studies *Unplugged: Policy, Poverty and Energy in Ghana*

Lauryn Smith Graduate Student, Environmental Sciences & Studies *An Observational* and Hysplit Modeling Study On The Impacts of Summer 2023 Canadian Wildfire Smoke On Air Quality Across The United States

Mila Thomas Undergraduate Student, Environmental Sciences & Studies *Climate Change's Impact On The Marginalized Mind*

9:00 AM - 10:00 AM | THE FORUM | PHYSICAL SCIENCES & ENGINEERING

Oluwaseun Adeyeye Undergraduate Student, Physical Sciences & Engineering *Raman* spectroscopy of lunar analog minerals using machine learning modeling and simulation

Sahil Pradhan Graduate Student, Physical Sciences & Engineering Evaluating Methods for Identifying the Spin Glass Transition Temperature: A Comparative Study

Doron Reid Graduate Student, Physical Sciences & Engineering Language Features and Emotional Intensity in Black Lives Matter Posts: An Eight-Year Analysis Using Large Language Models

Endalkachew Tadesse Post Doc/Resident/Fellow/Research Associate, Physical Sciences & Engineering Synthesis and Characterization of Emetine-Podocarpic acid Hybrid for Studies in Prostate Cancer

Zakiya Williams Undergraduate Student, Physical Sciences & Engineering Modeling and Simulation of Piezoelectric Zinc Sulfide Quantum Dots and Its Potential Applications

9:00 AM - 10:00 AM | TRUTH & SERVICE | PHYSICAL SCIENCES & ENGINEERING

Chase Adams iv Undergraduate Student, Physical Sciences & Engineering Electronic Modeling and Simulation of Zinc Sulfide (ZnS) Piezoelectric Quantum Dots for Application in Quantum Computing and Sensing

Eke Agbai Graduate Student, Physical Sciences & Engineering FinEmpower.AI: Fair And Accessible Credit Score Enhancement Through AI

Basanta Baral Undergraduate Student, Physical Sciences & Engineering Computational Study of ZnS for Quantum Dots

Anirban Goswami Graduate Student, Physical Sciences & Engineering *Anisotropic Magnetic Entropy Changes in Single Crystal CrSBr*

Praise-el Michaels Graduate Student, Physical Sciences & Engineering *Anxiety Support in Academic Faculty*

SESSION II

10:00 AM - 11:00 AM | THE READING LOUNGE | PHYSICAL SCIENCES & ENGINEERING

Ramin Abolfath Senior Faculty, Biological & Biomedical Sciences *Tissues differential sparing of FLASH ultra-high dose rate Radiotherapy: an in-silico radiotherapy study*

Ananya Hota Undergraduate Student, Biological & Biomedical Sciences *SroA Modulates The Levels of Staphyloxanthin Pigment in Staphylococcus Aureus*

Sayeeda Habib Graduate Student, Biological & Biomedical Sciences *Investigating The Role of Vitamin D and COVID-19 Outcome*

Miriam Hagan Graduate Student, Biological & Biomedical Sciences *Investigating the Effect of Seaweed Bioactive Compounds on Gut Microbiota Composition and Dysbiosis: A Systematic Review*

Thomas Heinbockel Senior Faculty, Biological & Biomedical Sciences *Central olfactory neurons are modulated through dopaminergic synaptic transmission*

Sunniya Iftikhar Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *Mucin Glycosylation and Its Role in HIV-1 Virus Transmission*

Advith Suresh Post Doc/Resident/Fellow/Research Associate, Translational & Clinical Sciences *Ghost in the Machine: A Rare Case of Factor 9 Hyperactivity that Indicates Unmet Need for Genetic Testing*

10:00 AM - 11:00 AM | TRUTH & SERVICE | PHYSICAL SCIENCES & ENGINEERING

Saumika Bandopadhyay Graduate Student, Physical Sciences & Engineering Optoelectronic Characterization of MoS□: Bandgap Analysis & Layer Determination via UV-Vis and Raman Spectroscopy

Aniyah Brunson Undergraduate Student, Physical Sciences & Engineering Frequency Shift Keying Transmission of an Image File Using GNU Radio, HackRF One, and the GR-Control Module

Measho Gebreyohans Graduate Student, Physical Sciences & Engineering *Structure-Property relationship of laponite/polyacrylate terpolymer nanocomposite*

Jefferson Ogbuka Undergraduate Student, Physical Sciences & Engineering *Modeling Nanosensor Devices with Piezoelectric Materials Using COMSOL Multiphysics, Oral Presentationallo*

10:00 AM - 11:00 AM | THE FORUM | PHYSICAL SCIENCES & ENGINEERING

Jeff Mofor Allo Undergraduate Student, Physical Sciences & Engineering *Health Monitoring by Radial Pulse*

Yogesh Bhattarai Graduate Student, Physical Sciences & Engineering *Integrating open-source geospatial data and machine learning for enhanced disaster resilience*

Timothy tizhe Fidelis Graduate Student, Physical Sciences & Engineering *Insight into* the influence of nanoparticles stabilizing agents on modulated metal organic frameworks crystallinity

Cameron Lewis Graduate Student, Physical Sciences & Engineering *Quantum Corners:* Improving Emergency Response with Smart Traffic Management and Quantum Sensors

Monica Maya Undergraduate Student, Physical Sciences & Engineering Computing the Heat of Vaporization (ΔHvap) of Concentrated Commercial Lysol All Purpose Cleaner

SESSION III

11:00 AM - 12:00 PM | THE READING LOUNGE | TRANSLATIONAL & CLINICAL SCIENCES

Sumaiya Ahmed Professional Student, Translational & Clinical Sciences *Time to clozapine initiation in treatment-resistant schizophrenia (TRS): A retrospective analysis of disparities in access to clozapine and medication trial factors*

Terinney Haley Professional Student, Translational & Clinical Sciences *Addressing Breastfeeding Disparities Among African American Women: A Systematic Review*

Davon Lee Professional Student, Translational & Clinical Sciences *Ketamine as Prophylaxis for Depression and Post-Traumatic Stress Disorder Post-Burn Injury*

Ava-gaye Simms Staff, Translational & Clinical Sciences *Demographic Variability* Across Sites in the Beta-Agonist versus onabotulinumtoxinA Trial for Urgency Urinary Incontinence (BEST Trial)

11:00 AM - 12:00 PM | THE DIGITAL AUDITORIUM | SOCIAL SCIENCES

Erinn Carter Graduate Student, Social Sciences *Understanding HBCU Undergraduates Students' Basic Needs: A Capacity Building Study*

Leila Diallo Undergraduate Student, Social Sciences Tweeting Trust: The Influence of Social Media Consumption On Public Confidence in Elections

Payton Garcia Undergraduate Student, Social Sciences *They Didn't Give a Damn: The Robert Taylor Homes v.s. Chicago*

Mikayla Harris Professional Student, Social Sciences *Exploring How Exposure to Violence Impacts Depressive Symptoms, Drug Use, and Risk-Taking Behaviors in African American Youth*

Jose Perez chavez Graduate Student, Environmental Sciences & Studies Enhancing Aerosol Classification through Semi-Supervised Learning: A Novel Approach Using Single-Particle Mass Spectrometry Data

Adeline(haining) Yuan Graduate Student, Environmental Sciences & Studies Exploring the Socioeconomic Impact of Water Pollution: Unemployment Trends in Flint, Michigan Post-Water Crisis

11:00 AM - 12:00 PM | THE FORUM | PHYSICAL SCIENCES & & ENGINEERING

Aayush Acharya Undergraduate Student, Physical Sciences & Engineering *AI Assitant Device For Coginitive Decline*

Wisdom Benson Graduate Student, Physical Sciences & Engineering A Novel Approach to Quantum Decoherence in Spin Qubits Using ZnO Piezoelectric Quantum Dots

Ashlyn Lee Undergraduate Student, Physical Sciences & Engineering (r,k)-Zebra Tree and Schroder Paths

Sai krishna Narayanan Graduate Student, Physical Sciences & Engineering Understanding the prevalence of the pseudo Jahn-Teller distortion in defects in hexagonal boron nitride

Sijan Shrestha Undergraduate Student, Physical Sciences & Engineering *Using Maclaurin Series to Simplify Mathematical Transformations*

11:00 AM - 12:00 PM | TRUTH & SERVICE | PHYSICAL SCIENCES & ENGINEERING

Bipul Gyawali Undergraduate Student, Physical Sciences & Engineering *Investigation* of the Electronic and Piezoelectric Properties of ZnS Quantum Dots

Jordan Sexton Undergraduate Student, Physical Sciences & Engineering *Raman Spectroscopy of Lunar Analogs*

Nuha Thaha Undergraduate Student, Physical Sciences & Engineering A Solution to Rising Asthma Rates due to High-Traffic Areas in Washington D.C. - Green Buffer Zones

POSTER EXHIBITION

April 24, 2025

Jasmine Christina Michel Undergraduate Student, Biological & Biomedical Sciences Decoding the Secrets of Ablatia through Isolation and Characterization, Poster Presentation

Najah Abduh Professional Student, Education & Outreach The Impact of HBCU Dental School Education in Shaping Dental Care Across the United States, Poster Presentation

Nicholas Abram Undergraduate Student, Physical Sciences & Engineering Navigating the High Seas: Evaluating Zero-Shot Vision Language Models for Maritime Object Identification, Poster Presentation

Sameer Acharya Undergraduate Student, Physical Sciences & Engineering CrossViewMatcher: Fusing GNSS, Visual Cues, and Focal-Stack Depth for Robust AR Localization, Poster Presentation

Tayo alex Adekiya Junior Faculty / Lecturer / Instructor, Biological & Biomedical Sciences *PDX1 Knockdown Modulates Breast Cancer Proliferation and Drug Sensitivity: Insights into Paclitaxel and Doxorubicin Response Mechanisms, Poster Presentation*

Josephine Adelegan Graduate Student, Physical Sciences & Engineering *Predictive Modeling and Experimental Analysis of Membrane Fouling in Nuclear Wastewater Treatment, Poster Presentation*

Folake Adeleye Post Doc/Resident/Fellow/Research Associate, Translational & Clinical Sciences Cold Clots: A Case of Cold Agglutinin Associated Pulmonary Embolism Following Caesarean Section, Poster Presentation

Tiwa Adeyeri Undergraduate Student, Social Sciences *Empowering Psychology Undergraduates at HBCUs: Establishing a Comprehensive Professional Development Network, Poster Presentation*

Noble Adike Undergraduate Student, Creative Arts & Design Exploration and Evaluation of OpenVoice V2 in Multi-Accent and Multi-Lingual Voice Synthesis, Poster Presentation

Kafilat Agbaje Graduate Student, Biological & Biomedical Sciences Formulation of a Niosomal Drug Delivery System for the Treatment of Colorectal Cancer, Poster Presentation

Esther Ahaneku Graduate Student, Translational & Clinical Sciences *Electronic Health Records: Alert Optimization, Poster Presentation*

Asrar Ahmad Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *The Q248H mutation in Ferroportin leads to a moderate iron overload in SLC40A1Q248H/Q248H Mice, Poster Presentation*

Sumaiya Ahmed Professional Student, Translational & Clinical Sciences *The Unexpected Role of Stimulant Medications in Heat-Related Illnesses for ADHD, Poster Presentation*

Morayo Akintonde Undergraduate Student, Social Sciences *Cultural and Demographic Drivers of Maternal Mortality in Ghana, Poster Presentation*

Kristal Alston Undergraduate Student, Social Sciences Black Hair on Howard's Campus, Poster Presentation

Chloe Alston Undergraduate Student, Biological & Biomedical Sciences *Structure* Characterization of a Cadmium Dimer Complex with a Thiosemicarbazone-Based Chelator, Poster Presentation

Chloe Alston Undergraduate Student, Biological & Biomedical Sciences *Structure* determination and metal coordination chemistry of a set of closely related small organic molecule iron chelating agents, Poster Presentation

Haifa Alzahri Graduate Student, Biological & Biomedical Sciences "Designing of Focused Libraries for Glucagon-like peptide-1 with Generative AI Models: Fine-Tuning a GPT-3.5 Turbo for Rule of Five Compliant SMILES Notations". Haifa Alzahri and Xiang Simon Wang* Artificial Intelligence and Drug Discovery Core Laborator, Poster Presentation

Najla Alzaid Graduate Student, Biological & Biomedical Sciences Exploring Large Language Models for Text-Based Molecular Design Using In-Context Learning, Poster Presentation

Nzube Amaeze Graduate Student, Physical Sciences & Engineering Exploring the Supercapacitor Potential of Folic Acid-Conjugated Dipeptide-Melamine Architectures, Poster Presentation

Rachel Amedume Undergraduate Student, Translational & Clinical Sciences Evaluating Therapeutic Efficacy of Ivosidenib in Ameliorating Macrocystic Lymphatic Malformations Arising from Pathogenic IDH1 Variants, Poster Presentation

Gelysia Anderson Undergraduate Student, Social Sciences *Looking Beyond the Monolith: A Mixed Design Study Exploring Identity, Community, and Support for HBCU STEM Students, Poster Presentation*

Nicholas Angelo Undergraduate Student, Education & Outreach A Systematic Review of the Literature on Educational Interventions in Juvenile Justice, Poster Presentation

Jasmine Arnold Undergraduate Student, Social Sciences *Exploring the Prevalence of Exercise Addiction Among Female Collegiate Basketball Players.*, Poster Presentation

Susan Ashu-tabe Graduate Student, Education & Outreach *E-learning in healthcare settings: advantages and disadvantages, Poster Presentation*

Kamille Atkins Undergraduate Student, Biological & Biomedical Sciences Stigma as Barrier to Care for Invividuals with HIV, Poster Presentation

Chase Austin Undergraduate Student, Translational & Clinical Sciences *Projecting Perfection, Masking Mental Strain: How "False Facebook-Self" Predicts Psychological Ill-Being in HBCU Students, Poster Presentation*

Tiffani Baker Undergraduate Student, Social Sciences *Exploring the link between undergoing an oophorectomy and surgically induced menopause and how anxiety and depression affect patients as a result, Poster Presentation*

Maegan Barber Graduate Student, Social Sciences *The Role of Racial Socialization*Competency and Coping Self-Efficacy in Black Emerging Adults: Moderation and Mediation
Effects on Childhood Trauma and Race-Related Stress, Poster Presentation

Jonathan Barnes Graduate Student, Environmental Sciences & Studies *Evaluation of Aerosol Models with Topological Data Analysis, Poster Presentation*

Frankie Bethea Junior Faculty / Lecturer / Instructor, Creative Arts & Design *The History of Final Generation of Scarification ART & TRIBAL MAKEUP, Poster Presentation*

Yogesh Bhattarai Graduate Student, Physical Sciences & Engineering *Predicting lead* contamination risk with machine learning, Poster Presentation

Julia Biantey Graduate Student, Biological & Biomedical Sciences *Effect of High Fructose Diet (HFrD) on Insulin Signaling in Ovarian Tissues of Hepatic PKCε Heterozygous Female Mice., Poster Presentation*

Madison Blackwell Professional Student, Biological & Biomedical Sciences *Inflammatory* and Metabolic Markers in Hidradenitis Suppurativa: A Preliminary Analysis of TNF-α, Poster Presentation

Jermaine Blakley Professional Student, Biological & Biomedical Sciences *The Impact of Childhood Trauma on Depressive Symptoms Among African American Young Adults, Poster Presentation*

Sarah Bolarinwa Undergraduate Student, Biological & Biomedical Sciences *Treatment with RON Kinase Inhibitor Ameliorates Podocytes Injury in Sickle Cell Disease Mouse Model, Poster Presentation*

Kevin Boluyt Professional Student, Biological & Biomedical Sciences Severe Amlodipine Toxicity treated with Veno-Arterial Extracorporeal Membrane Oxygenation, Poster Presentation

Jasmine Branch Graduate Student, Social Sciences Prevalence of Head and Neck Injuries in Black NFL Players, Poster Presentation

Jada Brooks Undergraduate Student, Creative Arts & Design *A Redefining of the Gallery Experience Through Embodied Design, Poster Presentation*

Sophia Brooks Undergraduate Student, Biological & Biomedical Sciences *Characterizing Sodium Taurodeoxycholate as a Cholesterol Alternative in Lipid Nanoparticles Formulations, Poster Presentation*

Rebecca Brown Professional Student, Biological & Biomedical Sciences *The Evolution of GLP-1: A Journey from Basic Science to Clinical Impact, Poster Presentation*

Hailey Burnette Undergraduate Student, Humanities Estate Planning and Black Wealth: A Case Study of the DMV Region, Poster Presentation

Kaylah Callender Undergraduate Student, Biological & Biomedical Sciences *Suppression* of the H3K27me3 demethylase disrupts diapause formation in mosquito Culex pipiens, Poster Presentation

Amaya Calloway Graduate Student, Biological & Biomedical Sciences *Investigating the Mechanism of Coronavirus-Induced Cell Cycle Disruption Through 5'-PolyU Targeting, Poster Presentation*

Melissa Campbell Undergraduate Student, Biological & Biomedical Sciences *Association between stress markers and collective hypertensive disorders among birthing persons in DC - 2018 to 2022 PRAMS, Poster Presentation*

Julia Capp zilles Graduate Student, Biological & Biomedical Sciences *Kojic Acid Dipalmitate-Loaded Nanoparticles: Development and Characterization, Poster Presentation*

Kelaiah Carey Undergraduate Student, Biological & Biomedical Sciences *Optimizing Lipid Nanoparticles: Effects of Lipid Composition on Particle Size., Poster Presentation*

Chiehhsiung Chang Graduate Student, Biological & Biomedical Sciences *Machine learning algorithms predicting cancer associated with diabetes and hypertension: NHANES* 2021 to 2023, Poster Presentation

Cameau Charleus Professional Student, Biological & Biomedical Sciences *Rhabdomyolysis associated by Salmonella Infection: A Case Report, Poster Presentation*

Cherline Chery Graduate Student, Humanities Coming of Age in Crisis: Visualizing Liberation in Civil Rights Photobooks, Poster Presentation

Divinegift Chimere Graduate Student, Physical Sciences & Engineering *Investigating* the impact of protein content in proteo-lignocellulose materials on their dietary fiber classification through tribo-electrostatic separation, Poster Presentation

Mykenzie Clark Graduate Student, Physical Sciences & Engineering *Development of the TIGERISS Thermal Control System: Design and Analysis, Poster Presentation*

Kemuel Clarke Undergraduate Student, Translational & Clinical Sciences *Pathway-Focused Analysis of BTBRob/ob Mice Kidneys Reveals Critical Chromatin Modification Enzymes involved in Progressing Diabetic Kidney Disease, Poster Presentation*

Aminah Coleman Undergraduate Student, Biological & Biomedical Sciences Uncovering the mechanisms of potato leaf roll virus' effect on Myzus persicae's antiviral immunity, Poster Presentation

Aminah Coleman Undergraduate Student, Biological & Biomedical Sciences Developing Safer Chelators for Iron and Other Metal Overload Disorders, Poster Presentation

Garland Collier Undergraduate Student, Social Sciences *Examining the Influence of ICT Adoption on Agricultural Commercialisation in Rural Rwanda, Poster Presentation*

Natalia Connor Undergraduate Student, Creative Arts & Design *How can the generational traditions of the black community influence the creation of a space that promotes the well-being of the black youth?*, *Poster Presentation*

Faith Crawford Undergraduate Student, Creative Arts & Design Exploring Avant Garde Fashion: Innovation, Identity, and Boundaries in Design, Poster Presentation

Alexandria Curry Professional Student, Translational & Clinical Sciences *Pain Management in Prostate Cancer Patients in Africa, Poster Presentation*

Ramyla Dahmer Undergraduate Student, Biological & Biomedical Sciences Interrogating the Influence of Grooming on Hippocampal Place Cell Activity, Poster Presentation

Makenna Davis Undergraduate Student, Biological & Biomedical Sciences Functional Characterization of a small RNA in Staphylococcus Aureus that may Regulate Drug Resistance, Poster Presentation

Rebbie Davis Undergraduate Student, Humanities *The Tear Between Two Timelines Abstract, Poster Presentation*

Khari Davis Undergraduate Student, Translational & Clinical Sciences *The Role of Angiogenesis in Follicle Activation and Fertility Preservation Following Chemotherapy and Oophorectomy, Poster Presentation*

Kayin Davis Undergraduate Student, Physical Sciences & Engineering *Computational Fluid Dynamics Methods for Measuring the Material Properties of Superconductive Materials at Unexplored Temperature Ranges.*, Poster Presentation

Leikwaivion Davis Undergraduate Student, Biological & Biomedical Sciences *Evaluation* of Long-Term Neuronal Activation in the Lateral Habenula of Rats with Varied Preferences for Highly Palatable Foods, Poster Presentation

Alrick Davis jr. Graduate Student, Physical Sciences & Engineering Artificial Intelligence Meets Anaerobic Digestion: Improving UASB Reactor Efficiency with Data Augmentation and Dropout Regularization, Poster Presentation

Mia Dean Graduate Student, Social Sciences Fostering Friendships: Black College Women at HBCU's, Poster Presentation

Jaydn Decuir Undergraduate Student, Physical Sciences & Engineering *Investigation of Compressed Stabilized Earth Bricks (CSEBs) for Vaulted Floor Systems, Poster Presentation*

Matthew Deleary Professional Student, Biological & Biomedical Sciences *Demand Dynamics for Female, Black, Brown, and Spanish-Speaking Urologists: A Google Trends Analysis, Poster Presentation*

Destiny Dewar Undergraduate Student, Biological & Biomedical Sciences *The impact of RACK1 playing a role in nitrogen deficiency reponse, Poster Presentation*

Toni Dismuke Undergraduate Student, Social Sciences Framing Mental Health: Sentiment Analysis of News Coverage on Racial-Ethnic Minority Groups in 2024, Poster Presentation

Toni Dismuke Undergraduate Student, Social Sciences Framing Mental Health: Sentiment Analysis of News Coverage on Racial-Ethnic Minority Groups in 2024, Poster Presentation

Jaylah Dorman Undergraduate Student, Biological & Biomedical Sciences *Assessing Visual Representation in Medical Media: Examining Diversity in Health-Related Imagery and Its Implications for Healthcare, Poster Presentation*

Thane Douglass Undergraduate Student, Translational & Clinical Sciences *Modernizing Neuroprosthetic Interfaces Through Multi-Modal Sensory Integration, Poster Presentation*

Somtochi Edeh Professional Student, Translational & Clinical Sciences *Double Jeopardy: The Impact of Diabetes on Guillain-Barré Syndrome Outcomes, Poster Presentation*

Faithful Egharevba Undergraduate Student, Biological & Biomedical Sciences *Urinary Activin A in Sickle Cell Disease: Correlation with Urinary Biomarkers of Inflammation and Risk of Progression of Chronic Kidney Disease., Poster Presentation*

Faithful Egharevba Undergraduate Student, Biological & Biomedical Sciences *Urinary Activin A in Sickle Cell Disease: Correlation with Urinary Biomarkers of Inflammation and Risk of Progression of Chronic Kidney Disease., Poster Presentation*

Chinemere Ekezie Post Doc/Resident/Fellow/Research Associate, Translational & Clinical Sciences Sexual Health Matters: Group C Streptococcus Infection leading to Bacteremia and Pelvic Inflammatory Disease., Poster Presentation

Rashidat Elesho Graduate Student, Biological & Biomedical Sciences *The Impact of Telehealth Intervention On Therapy Adherence In Oncology Patients: A Systematic Review of Randomized Clinical Trials, Poster Presentation*

Yehnara Ettinoffe Graduate Student, Biological & Biomedical Sciences *PDX1 as a Tumor Promoter in Prostate Cancer: Metabolic Regulation, EMT, and Implications for Aggressive Disease in African American Men, Poster Presentation*

Oluebubechukwu Eze Professional Student, Biological & Biomedical Sciences *The American Journal of Surgery Medicaid Expansion and Thyroid Cancer Stage at Presentation: A Comparative Study of Two US States, Poster Presentation*

Jaelle Faison Graduate Student, Social Sciences The Right to Remain Silent: The Impact of Colorblind Ideologies on Engagement in Intergroup Dialogue, Poster Presentation

Toyosi Falegan Graduate Student, Biological & Biomedical Sciences *Time to Clozapine:* Analysis of treatment initiation for patients with Treatment-Resistant Schizophrenia [TRS] (vs Schizophrenia Spectrum Disorder [SSD]), Poster Presentation

Alea Farmer Graduate Student, Translational & Clinical Sciences *Social Needs, Life Purpose, Cancer History and Psychological Stress among U.S. Adults: a Moderated Mediation Model, Poster Presentation*

Kenja-rae Farquharson Graduate Student, Social Sciences Who Consents: Legacies of Harm and the History of Medical Research - A Critical Textual Analysis of Informed Consent, Poster Presentation

Sara Fauzia Professional Student, Translational & Clinical Sciences Vestibular Schwannoma Dementia and Hearing 10-Year Outcomes with Surgical Treatment: A TriNetX Study, Poster Presentation

Sara Fauzia Professional Student, Translational & Clinical Sciences Vestibular Schwannoma Dementia and Hearing 10-Year Outcomes with Surgical Treatment: A TriNetX Study, Poster Presentation

Sara Fauzia Professional Student, Translational & Clinical Sciences *Vestibular Schwannoma Dementia and Hearing 10-Year Outcomes with Surgical Treatment, Poster Presentation*

Kobii Forney Undergraduate Student, Biological & Biomedical Sciences *Analysis of Ebola Virus NP Protein Interaction with Protein Phosphatase-1 and Transcription Complex Assembly using AlphaFold 3, Poster Presentation*

Arsene Frederic jr. Graduate Student, Social Sciences *Policy Advocacy, Implementation and Educational Inequities (PIE): A Critical Study of State Actors' Influence on College Affordability at Public HBCUs., Poster Presentation*

Kidest Gebremariam Graduate Student, Education & Outreach Online Learning and Learner's Challenges Across States, Poster Presentation

Teshane Gibson Undergraduate Student, Social Sciences *Rebuilding Bonds: Examining Family Dynamics During the Reentry Process of Formerly Incarcerated Individuals, Poster Presentation*

Zamarie Grayson Undergraduate Student, Business Diversifying the Sports Industry, Poster Presentation

Kamaya Green Undergraduate Student, Biological & Biomedical Sciences Analysis of microglia distribution in the brain of HIV-transgenic and wild type mice, Poster Presentation

Kayla Griffin Graduate Student, Social Sciences Unseen and Unsupported: Addessing Racial Trauma in Therapeutic Spaces, Poster Presentation

Aniyah Guiden Undergraduate Student, Biological & Biomedical Sciences *Synthesis and Characterization of Carboranyl Benzaldehydes, Poster Presentation*

Jibek Gupta Undergraduate Student, Social Sciences Designing an Open-Source Tool to Investigate Demographic Shifts in U.S. Urban and Rural Communities, Poster Presentation

Nadia Hackett Professional Student, Translational & Clinical Sciences *The Role of Body Mass Index in Perioperative Complications Among Patients Undergoing Total Hip Arthroplasty, Poster Presentation*

Zoey Hall Undergraduate Student, Translational & Clinical Sciences *Polygenic Risk Scores* as Predictor for Attention Deficit/Hyperactivity Disorder within BIPOC Communities, Poster Presentation

Malik Hamilton Professional Student, Biological & Biomedical Sciences Enhanced Enamel Remineralization through Polymer-based Fluorapatite, Poster Presentation

Holiday Hammond Graduate Student, Social Sciences Comparing Programs Addressing Gender-Based Violence in Two African Countries, Poster Presentation

Sabrina Harrell Post Doc/Resident/Fellow/Research Associate, Translational & Clinical Sciences *Subclinical Hyperthyroidism: a risk factor for heart failure., Poster Presentation*

Lauryn Hash Undergraduate Student, Social Sciences Seen but Misunderstood: An Intersectional Analysis of the Portrayal of Black Women within Pop Culture, Poster Presentation

Aaron Hemphill Professional Student, Biological & Biomedical Sciences *The Sweet Life: Optimizing Diabetic Distress Management in African Americans to Improve Patient Care and Treatment Adherence, Poster Presentation*

Amari Henry Graduate Student, Education & Outreach *The Role of Artificial Intelligence in Higher Education, Poster Presentation*

Chloe Hightower Graduate Student, Humanities *The Moderating Effects of the Nguzo Saba on College Freshman Adjustment, Poster Presentation*

Amirah Hill Undergraduate Student, Physical Sciences & Engineering Reducing Energy Consumption and Carbon Emissions in Paper Pulping: The Role of Deep Eutectic Solvent Cellulase Enzymes in Sustainable Manufacturing, Poster Presentation

Robert Hill Undergraduate Student, Creative Arts & Design *Digital Disruption: Exploring the Long-term Effects of AI in the Media and Entertainment Industry, Poster Presentation*

Papa Hoyeck Graduate Student, Biological & Biomedical Sciences *Prevalence of FPN Q248H in People Living with HIV-1 and its Impact on HIV Restriction Factors, Poster Presentation*

Cameron Humes Undergraduate Student, Environmental Sciences & Studies *Disproportionate Air Pollution Exposure in Birmingham, Alabama, Poster Presentation*

Amanda Ifeanyi Undergraduate Student, Social Sciences *The Effects of the BBl in the Black Community, Poster Presentation*

Jahmere Jackson Undergraduate Student, Education & Outreach A Systematic Review of Factors Influencing Black Male Educator Retention, Poster Presentation

Zainab Jackson Graduate Student, Social Sciences Exploring Professional Help-Seeking among American Muslims: A Health Belief Model Perspective, Poster Presentation

Maada Jajua Graduate Student, Education & Outreach Oral COVID-19 Therapy Utilization in an Outpatient Urban Facility, Poster Presentation

Kennedy Jester Graduate Student, Biological & Biomedical Sciences *Enhancing Cancer Immunotherapy in HNSCC: A Literature Recuew on Epigenetic Modulation, Poster Presentation*

Janet Johnson Undergraduate Student, Biological & Biomedical Sciences *Optimizing Protein-Encapsulated Nanoparticles: A Dynamic Light Scattering Analysis, Poster Presentation*

Kiersten Johnson Undergraduate Student, Biological & Biomedical Sciences *Exploring Fuctionalized 1,4-Napthoquinones, Poster Presentation*

Jayson Johnson Undergraduate Student, Physical Sciences & Engineering Surrogate Modeling for Rapid Thermal Analysis of ISS Payload, Poster Presentation

Victor Jolly Professional Student, Biological & Biomedical Sciences *Paradoxical Relationship Between Vitamin A Deficiency and Inflammatory Bowel Disease, Poster Presentation*

Cassidy Jones Undergraduate Student, Biological & Biomedical Sciences *Exploring Phage Diversity: Discovery and Genomic Characterization of Phages Blessjoy and Temprado., Poster Presentation*

Morgan Jones Undergraduate Student, Physical Sciences & Engineering Floating Offshore Wind Turbine Wake Modelling and Prediction in Changing Climate Patterns, Poster Presentation

Jamela Joseph Graduate Student, Education & Outreach *American K-12 Parasitic* Syndrome: Examining the Systemic Exploitation of Black Women Educators Through a Structural-Historical Epistemology, Poster Presentation

Aethiopia Joseph-salmon Graduate Student, Social Sciences *The Impact of Fibromyalgia on Cognitive-Communicative Skills and Dysphagia, Poster Presentation*

Kehinde Joshua Graduate Student, Physical Sciences & Engineering *Investigating the Role of Tryptophan Analogs as Substrates for LAT1: A Novel Approach Using Surface Plasmon Resonance and Nanoparticle Technology, Poster Presentation*

Oluwadara Kalejaiye Graduate Student, Social Sciences *Understanding the Language Use Differences between Reviews Associated with Star Rated Restaurants on Yelp, Poster Presentation*

Nima Karodeh Professional Student, Translational & Clinical Sciences *Trends in Hidradenitis Suppurativa: A 10-Year Analysis in the United States of America, Poster Presentation*

Daniella Kayembe Undergraduate Student, Biological & Biomedical Sciences *Identification of key genes and pathways for Cardiovascular Disease (CVD) progression in Type 2 Diabetes African Americans in Washington D.C., Poster Presentation*

Daniella Kayembe Undergraduate Student, Biological & Biomedical Sciences *Identification of key genes and pathways for Cardiovascular Disease (CVD) progression in Type 2 Diabetes African Americans in Washington D.C., Poster Presentation*

Saley Keita Undergraduate Student, Social Sciences Self-Efficacy In Undergraduate Chemistry Students, Poster Presentation

Francisco Kelley Professional Student, Biological & Biomedical Sciences *Spontaneous* Corneal Perforation in Pellucid Marginal Degeneration, Poster Presentation

Amaya Keys Undergraduate Student, Creative Arts & Design *Exploring Effects of Interactive VR Sensory Environment on Anxiety Reduction in Adolescents with Autism: A Pilot Study, Poster Presentation*

Abhishek Khanal Undergraduate Student, Physical Sciences & Engineering Crack the Interviews with InterviewBot: AI-Powered Interviews, Bias-Free Practice, Poster Presentation

Lotus Khanal Graduate Student, Physical Sciences & Engineering Functional Properties of Tribo-Electrostatically Separated Yellow Pea Protein Concentrates, Poster Presentation

Daquan Lawrence Graduate Student, Social Sciences *Urban Class Structure in Post-Apartheid South Africa's Gauteng Province: Case Studies from Johannesburg and Tshwane* (Pretoria) •, Poster Presentation

Sophie Lee Undergraduate Student, Biological & Biomedical Sciences *Understanding the functions of SroA and SroB and their impact of Sigma S, Poster Presentation*

Daniel Lee Graduate Student, Social Sciences *Indepdendentist/Anti-colonial milestones across Francophone Africa under the late IIIe, IVe, and early Ve republics: An exercise in modelling, Poster Presentation*

Tajah Lewter Professional Student, Biological & Biomedical Sciences *PCOS and Gallbladder Disease: A Comparative Analysis of Metformin vs GLP-1 Agonists, Poster Presentation*

Tajah Lewter Professional Student, Biological & Biomedical Sciences *Outcome of Laparotomy vs Laparoscopy in Patients with Endometriosis, Poster Presentation*

Adrian Loke Graduate Student, Business *The Competitive Landscape of the Lao Coffee Industry, Poster Presentation*

Jordan Lowery Professional Student, Biological & Biomedical Sciences *Comparison of Hypertension Management Guidelines Utilizing the National Ambulatory Medical Care Survey* (2019), Poster Presentation

Haley Lucas Undergraduate Student, Social Sciences *Exploring Racial Differences in Mother-Daughter Communication about Sex and Relationships, and Their Impact on Women, Poster Presentation*

Cai Malone Undergraduate Student, Biological & Biomedical Sciences MiaA is Necessary for the Expression of GroES and GroEL during Heat Shock in Escherichia coli, Poster Presentation

Lorraine Martin Undergraduate Student, Education & Outreach Exploring the Idolization of the Hourglass Figure in Black Women, Poster Presentation

Nina Martin Graduate Student, Translational & Clinical Sciences Telemedicine and Health Information Exchange Challenges, Poster Presentation

Sani Maryanne Undergraduate Student, Biological & Biomedical Sciences Laponite Nanocarrier for Sustained Release of Chloroquine, Poster Presentation

Tyla Mcaffity Undergraduate Student, Biological & Biomedical Sciences *Examining Sex-Specific Behavioral Patterns in FoxP2 +/- Female Mice, Poster Presentation*

Savannah Mcbride Undergraduate Student, Biological & Biomedical Sciences *Unveiling the Viral Mysteries of Phages Iridessa, Jesabah, and Chalmers, Poster Presentation*

Courtney Mcclain Graduate Student, Social Sciences *The Modern Southern Strategy:* Enhancing the Advancement of Civil and Social Rights for Black Americans through the Utilization of the Electoral Process, Poster Presentation

Elijah Mcmillan Graduate Student, Biological & Biomedical Sciences *Increased Hospital Readmission After Cesarean Delivery with Epidural Anesthesia in Patients with Substance Use Disorder, Poster Presentation*

Angelina Mcneill Graduate Student, Social Sciences "He desperately wanted help": A causal analysis of the use of force cases and mental health outcomes, Poster Presentation

Thandwa Mdluli Graduate Student, Social Sciences Exploring the Prevalence of Psychological Distress in Black International Students and First-Generation Black American Students at HBCUs, Poster Presentation

Keleb Mehari Professional Student, Biological & Biomedical Sciences *Fracture Risk in HIV-Positive ESRD Patients: A Comparison of Femur and Hip Fractures from 2004-2013 to 2014-2023, Poster Presentation*

Sade Mewborn Undergraduate Student, Social Sciences *The Impact of Home and School Environment on Academic Achievement in Children, Poster Presentation*

Praise-el Michaels Graduate Student, Physical Sciences & Engineering Disclosure of Anxiety Concerns on Social Media: Do Concerns Vary by Age and Forum?, Poster Presentation

Praise-el Michaels Graduate Student, Physical Sciences & Engineering Understanding the Expressions of Loneliness on Social Media Across Racial Groups, Age Groups, and Genders., Poster Presentation

Alani Miller Graduate Student, Biological & Biomedical Sciences Neuroimmune Mechanisms Underlying Neuropsychiatric Disorders and Substance Abuse: A Role for Microglia, Poster Presentation

Meram Mohammed Undergraduate Student, Biological & Biomedical Sciences Using Combinatorial Gene Silencing to Interrogate the Role of Bacterial Virulence Factors During Eukaryotic Host Pathogenesis, Poster Presentation

Ahmad Mohammed Graduate Student, Translational & Clinical Sciences *Navigating Complexities: A Case of Multiple Abdominopelvic Vascular Compression Syndromes in Ehlers-Danlos Syndrome, Poster Presentation*

Sanae Muhammad Professional Student, Biological & Biomedical Sciences Hepatic PKCE Heterozygosity Does Not Improve Skeletal Muscle Insulin Resistance in Male Mice on High Fructose Diets, Poster Presentation

Darby Mutagoma Undergraduate Student, Social Sciences Multi-Sensory Learning and Child Development in Elementary School Students, Poster Presentation

Heather Noriega Graduate Student, Biological & Biomedical Sciences *Optimizing PEGylated Monoclonal Antibodies for HER2-Targeted Nanoparticles Using Multiscale Computational Methods, Poster Presentation*

Uchechi Nwaneri Graduate Student, Biological & Biomedical Sciences *Rising Temperatures* and Link to Increased Incidence of Latex Fruit Allergies Climate Change and the Surge in Latex-Fruit Allergies: Unveiling the Hidden Connection, Poster Presentation

Uchechi Nwaneri Graduate Student, Social Sciences Racial and Ethnic Inclusion in Atopic Dermatitis Clinical Trials. Poster Presentation

Ugonna Nwannunu Professional Student, Translational & Clinical Sciences *Bullous Pemphigoid Outbreak After a Series of Multiple Vaccinations: A Case Report, Poster Presentation*

Ugonna Nwannunu Professional Student, Translational & Clinical Sciences A Survey Evaluating Dermatology Awareness, Skincare Practices, Concerns and Consumer Preferences Among HBCU Undergraduate Students at Howard University, Poster Presentation

Adaku Ofoegbu Junior Faculty / Lecturer / Instructor, Translational & Clinical Sciences The Impact of Discordant Health Insurance Policies on Health Care Provider Reimbursement for Opioid Use Disorder Treatment, Poster Presentation

Faith Ogini Graduate Student, Translational & Clinical Sciences Cost-Effectiveness of a Pharmacological Agent for the Prophylaxis of Delirium Among Adult ICU Patients, Poster Presentation

Kai Ohashi dixon Graduate Student, Creative Arts & Design Artificial Intelligence, Poster Presentation

Kai Ohashi dixon Undergraduate Student, Environmental Sciences & Studies *Green Hydrogen in the Built Environment, Poster Presentation*

Atuwatse Okorodudu Undergraduate Student, Business *Stigmatized Social Framing and Financial Disparities: Comparing Microfinance Exclusion in Ghana and Racialized Financial Barriers in the U.S., Poster Presentation*

Atuwatse Okorodudu Undergraduate Student, Business *Stigmatized Social Framing and Financial Disparities: Comparing Microfinance Exclusion in Ghana and Racialized Financial Barriers in the U.S., Poster Presentation*

Oluwabukunmi Olajubutu Graduate Student, Biological & Biomedical Sciences Innovative Combination Drug Therapy for Pancreatic Cancer Treatment, Poster Presentation **Ifeoluwa Oluwatowoju** Post Doc/Resident/Fellow/Research Associate, Translational & Clinical Sciences *Vertebral Artery Stenosis, Poster Presentation*

Kojo Osei-ntansah Undergraduate Student, Physical Sciences & Engineering *sUAS* and AI/ML Technologies for High-Resolution Air Quality Monitoring in Urban and Industrial Regions, Poster Presentation

Jeffrey Palmer Graduate Student, Translational & Clinical Sciences *Outcomes in Guillain-Barré Syndrome (GBS) Between Black/African American and White/Caucasian Patients, Poster Presentation*

Kritika Pant Undergraduate Student, Physical Sciences & Engineering Using Open-weight BART-MNLI for Zero Shot Classification of Food Recall Documents, Poster Presentation

Janesha Peay Undergraduate Student, Social Sciences *The Burden of Care: Analyzing the Dual Burden of Caregiving and Incarceration, Poster Presentation*

Ebun-oluwa Popoola Undergraduate Student, Translational & Clinical Sciences *Secondary Analysis of the Recover Study: Analyzing the Acceptability/Adherence of Innovative Concussion Treatments, Poster Presentation*

Elijah Pratt Undergraduate Student, Biological & Biomedical Sciences *Exploring Bacterial Stress Adaptation: Sedimentation Dynamics and Gene Regulation in Staphylococcus aureus, Poster Presentation*

Quentin Price Undergraduate Student, Biological & Biomedical Sciences *The Effects of Pathogenic Mutations on the Structure and Functions of the RECQ1 Helicase – A DNA Chromatin Binding Protein, Poster Presentation*

Kendal Pully Undergraduate Student, Biological & Biomedical Sciences *Staphyloocus Aureus: DHT and Biofilm Formation, Poster Presentation*

Amy Quarkume Senior Faculty, Environmental Sciences & Studies *Advancing Solar Adoption and Sustainability at HBCUs: Barriers, Opportunities, and Pathways Forward, Poster Presentation*

Md Rahman Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences siRNA Targeting Hepatic Androgen Receptor (AR) Ameliorates Gluconeogenesis and Insulin Resistance in PCOS Mouse Models, Poster Presentation

Elizabeth Roberts Undergraduate Student, Biological & Biomedical Sciences *Biomaterials* as a Tool for Recreating the Pancreatic Niche for β -Cell Therapies, Poster Presentation

Damon Ross jr Professional Student, Translational & Clinical Sciences *Distressed* Communities Index and Utilization of Total Hip Replacement in Maryland, Poster Presentation

Alexa Ryan Undergraduate Student, Biological & Biomedical Sciences *The Impact of Orexin Receptor-1 antagonism on the Gut Microbial Communities of Rats with Varied Feeding Phenotypes, Poster Presentation*

Peterson Saint cyr Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *A stuttering case of pure alexia as a manifestation of an embolic stoke, Poster Presentation*

Tamryn Sainten Undergraduate Student, Humanities *Minimizing the Impact of Brain-Drain in Afro-Descendent Communities in the Latin- American and Caribbean Region: The Role of HBCUs, Poster Presentation*

Michael Salako Undergraduate Student, Social Sciences *The Effects of Childhood Trauma on Affective Engagement Among College-Aged African American Students, Poster Presentation*

Abdul nafay Saleem Undergraduate Student, Biological & Biomedical Sciences *Integrating Polynomial Regression and Machine Learning to Model Growth of Staphylococcus aureus Biofilms, Poster Presentation*

Helena Sanchez Graduate Student, Social Sciences Debt sentence: Financial and debt stress in student well-being?, Poster Presentation

Azamit Seyoum Graduate Student, Translational & Clinical Sciences *Artificial Intelligence* in Healthcare, Poster Presentation

Sarees Shaikh Graduate Student, Biological & Biomedical Sciences *Investigating the Role of sroA in Staphylococcus aureus Biofilm Formation and Growth Under Static and Hydrodynamic Conditions, Poster Presentation*

Paul Sheriff Professional Student, Biological & Biomedical Sciences *Sleep Duration and Pulse Wave Velocity, Poster Presentation*

Raevin Shirley Undergraduate Student, Social Sciences *Stuck in the Trap: The Dual Impact of Violent Trap Music on Black Youth's Self-Perception and Lifestyle Choices in the Era of Celebrity Culture. Poster Presentation*

Jaleel Shivers Undergraduate Student, Biological & Biomedical Sciences *Peak High Frequency Heart Rate During Sleep is Diminished in a Perceived Unsafe Environment, Poster Presentation*

Christina Simms Undergraduate Student, Environmental Sciences & Studies *Climate Change and its Impacts on Women's Health, Poster Presentation*

Cody Sims Undergraduate Student, Social Sciences *Examining the Legacy of Black Male Emasculation: Historical Damage, Masculinity, and Family Relations, Poster Presentation*

Warren Small Undergraduate Student, Social Sciences *To what extent does the homophobic discourse surrounding men who have sex with men (MSM) have a corresponding influence on the perceived politics of their sexual behavior and struggle to maintain healthy, successful romantic relationships., Poster Presentation*

Madison Smith Undergraduate Student, Social Sciences *How Clinician Bias Leads to the Misdiagnosis of ODD and CD in Incarcerated Black Youth Within the U.S. and Ultimately Contributes to Racially Disparate Recidivism Rates, Poster Presentation*

Asia Smith Undergraduate Student, Biological & Biomedical Sciences *High Fat, High Sugar Diet Exposure Influences Drug Preference Behaviors, Poster Presentation*

Jaren Smith Graduate Student, Social Sciences *Employing commonly used model-based predictions for snowfall to determine best practices for forecasters, Poster Presentation*

Michel Smith Graduate Student, Environmental Sciences & Studies *Exploring the Role of Natural Ecosystems in Mitigating Tropical Cyclone Impacts, Poster Presentation*

Devonte Sobamowo Professional Student, Biological & Biomedical Sciences *Open Surgery vs Systemic Therapy for Cranial Meningioma Post Treatment Complications, Poster Presentation*

Katrina Sookraj Graduate Student, Biological & Biomedical Sciences Effect of Relative Autonomy Index on Exercise in Black Women, Poster Presentation

Ilham Spingher Graduate Student, Biological & Biomedical Sciences Endocrine Disruption and Dentistry: A Study on BPA Exposure and Prevention, Poster Presentation

Kaylyn Steward Undergraduate Student, Biological & Biomedical Sciences *Harnessing Biomaterials to Direct Stem Cell Differentiation Towards Pancreatic Fate, Poster Presentation*

Kaylyn Steward Undergraduate Student, Biological & Biomedical Sciences *Small Molecule Replacement of Growth Hormone bFGF, Poster Presentation*

Christian Swaby Undergraduate Student, Social Sciences *Prevalence of Depression among Black International Graduate Students, Poster Presentation*

Nishevithaa Thayalan Undergraduate Student, Social Sciences Rewiring Trauma: Can Ayurvedic Medicine HelpTreat PTSD?, Poster Presentation

Nishevithaa Thayalan Undergraduate Student, Social Sciences Rewiring Trauma: Can Ayurvedic Medicine HelpTreat PTSD?, Poster Presentation

Allana Thompson Undergraduate Student, Social Sciences *Ethics of True Crime: Analyzing Public Fascination and the Impact on Victims, Poster Presentation*

Jazmyn Thorpe Undergraduate Student, Business Entrepreneurship Connection to Social Capital- Exploring the Socio-Economic Influence of the Family on Ghanaian Self-employment, Poster Presentation

Morgan Tongue Undergraduate Student, Environmental Sciences & Studies *Investigating the Gasdermin- B Gene to Address Early-Onset Asthma in Adolescent African Americans, Poster Presentation*

Armando Ugarte Professional Student, Translational & Clinical Sciences *Uncovering the Hidden Cardiovascular Risks of Psoriasis: A Deep Dive into the Data, Poster Presentation*

Rakchhya Uprety Graduate Student, Social Sciences Cost-effectiveness of Sulopenem versus Ciprofloxacin for the Treatment of Uncomplicated Urinary Tract Infections in Women: A Decision Analysis, Poster Presentation

Nicholas Uptgrow Graduate Student, Humanities "Whoever Controls Cinema, Controls History": How Lovecraft Country Disrupted the United States' Historical Imaginary, Poster Presentation

Naomi Vinod Graduate Student, Social Sciences *The Relationship Between Psychosocial Support Service Utilization, Coping and Post-Traumatic Growth Among Breast Cancer Survivors, Poster Presentation*

Jonathan Vuillier Professional Student, Translational & Clinical Sciences *Lobular Capillary Hemangioma of the Nasal Septum During Pregnancy: A Case Report, Poster Presentation*

Kamryn Walker Graduate Student, Biological & Biomedical Sciences *Synthesis of Imidazole Derivatives via GBB reaction for VCP inhibition, Poster Presentation*

Haley Warren Undergraduate Student, Biological & Biomedical Sciences Development of Consistent Lipid Nanoparticles for the Synthesis of Biodegradable Amino Acid Surfactants, Poster Presentation

Makinzie Warren Graduate Student, Education & Outreach Exploring the Role of Mental Health Services in Promoting the Well-Being of Black Adolescent Boys in Schools, Poster Presentation

Christopher Watson Graduate Student, Physical Sciences & Engineering AI-Driven Decision Support Systems for Tactical Decision Making: Enhancing Accuracy and Reducing Stress with Retrieval-Augmented Generation, Poster Presentation

Jerome Watts Professional Student, Translational & Clinical Sciences A Case Report of Oral Abscesses in the Context of Sickle Cell Disease: Concerns for Ludwig Angina and Lemierre Syndrome, Poster Presentation

Ashton Webber-deonauth Graduate Student, Biological & Biomedical Sciences *Role of Scaffold Protein the Receptor for Activated C Kinase 1 (RACK1) in the regulation of crosstalk between ABA induced Saline Stress and Auxin Signaling, Poster Presentation*

Dantasia Welch Post Doc/Resident/Fellow/Research Associate, Social Sciences "I Feel Seen": Insights from Using Raceless Population Descriptors in Hair Research, Poster Presentation

Mia Weller Undergraduate Student, Biological & Biomedical Sciences The Impact of Paternal Immune Activation on Offspring Response to Viral Infection, Poster Presentation

Joslynn White Graduate Student, Social Sciences *Our Voice Matters: A Critical Discourse Analysis of Black Women on Cable News Outlets, Poster Presentation*

Osei-sekou Whylie Undergraduate Student, Physical Sciences & Engineering Characterizing the Electron Transport of Various Semiconductor Materials using Fourier Transform Infrared Spectroscopy, Poster Presentation

Alexis Williams Undergraduate Student, Biological & Biomedical Sciences *Understanding* an Athlete's Perception of Pain and the Body's Response to Therapeutic Modalities, Poster Presentation

Zoe Williams Undergraduate Student, Social Sciences *Examining Racial Disparities in U.S. Incarceration Rates and Capital Punishment, Poster Presentation*

Gabrielle Wood Undergraduate Student, Physical Sciences & Engineering *Modeling Diffusion-Reaction Dynamics in Immobilized Methanotrophs for Methanol Production, Poster Presentation*

Bria Woodard Undergraduate Student, Biological & Biomedical Sciences *Classifying Gamma Band Oscillations in the Cerebellum Using Convolutional Neural Networks, Poster Presentation*

Kira Yates Graduate Student, Biological & Biomedical Sciences A Comparative Analysis of Patient Demographics in Trabeculectomy vs. Tube Shunt Procedures., Poster Presentation

Nebyat Yifter Professional Student, Biological & Biomedical Sciences *Spicing Up Medicine: A Comprehensive Survey of Capsaicin's Multifaceted Roles in Modern Medicine, Poster Presentation*

Jordan Young Professional Student, Translational & Clinical Sciences *Exploring GLP-1 Agonists as a Therapeutic Option for Hidradenitis Suppurativa: A Retrospective Cohort Analysis***corrected final submission**, Poster Presentation

Arsema k. Zadu Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *The Role of TikTok in Health Education and Early Detection of Hidradenitis Suppurativa, Poster Presentation*

Arsema Zadu Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *The Role of TikTok in Hyperpigmentation: A Cross-Sectional Analysis, Poster Presentation*

Amaar Zarrieff Undergraduate Student, Social Sciences Beyond the Screen: Parasocial Bonds and their Impact on Human Behavior, Poster Presentation

Luwei Zeng Post Doc/Resident/Fellow/Research Associate, Physical Sciences & Engineering Evaluating Prevention Strategies for Impaired Driving: An Integrated Assessment of Community Perceptions and Response Intentions, Poster Presentation

POSTER EXHIBITION

April 25, 2025

Yaya Abangma Graduate Student, Education & Outreach Disrupting "Push Out" and Creating Equitable Learning Atmospheres: Culturally-Responsive Alternatives to Exclusionary Discipline Practices in K-12 Schools, Poster Presentation

Najah Adams Undergraduate Student, Biological & Biomedical Sciences From Gains To Guilt: Body Dysmorphia & Disordered Eating In Young Males, Poster Presentation

Simeon Adesina Senior Faculty, Biological & Biomedical Sciences *Impact of Polymer Molecular Weight on Nanoparticle Size and Size Distribution, Poster Presentation*

Jabez Agyemang-prempeh Undergraduate Student, Physical Sciences & Engineering Improving Machine Translation With Context-Aware Entity-Only Pre-translations with GPT40, Poster Presentation

Mildness Akomoize Undergraduate Student, Physical Sciences & Engineering Logitbased Supervised Token Classification for Multilingual Hallucination Span Identification Using XGBOD, Poster Presentation

Tatiana Anthony Graduate Student, Education & Outreach Fighting to be Black and Joyful: Resistance and Refusal, Poster Presentation

Maasia Apet Undergraduate Student, Physical Sciences & Engineering *Investigating Factors That Enhance Methane Monooxygenase (MMO) Activity for Methanol Production, Poster Presentation*

Simona Arkorful Undergraduate Student, Social Sciences The Relationship Between Perceived Racism, Self-Rated Health, Inflammation and Personality, Poster Presentation

Taniya Bogler Undergraduate Student, Social Sciences Adultified & Angry: Examining the Effects of Adultification on Black Youth's Anger Responses, Poster Presentation

Mharisi Bonner Graduate Student, Social Sciences *The Context of Coping Dynamics:* Understanding Mental Health Disparities ?and Coping Strategies among Urban Youth of Color?, Poster Presentation

Hassan Brim Staff, Biological & Biomedical Sciences Serum miRNA Profiling in Obese, Diabetic African American Colon Adenoma Patients, Poster Presentation

Taylor Broudy Professional Student, Translational & Clinical Sciences *Unbiased CSF Proteomic Profiling Reveals Distinct Neuroinflammatory Signatures in Pediatric Neurologic Diseases, Poster Presentation*

Aavash Budhathoki Undergraduate Student, Physical Sciences & Engineering Computational Analysis of Additively Manufactured Inconel Alloys for Turbine Blade Applications, Poster Presentation

Kamili Campbell Undergraduate Student, Physical Sciences & Engineering *Haptic Feedback for Tonal Language Learning: A Culturally Responsive Approach to Preserving Linguistic Diversity, Poster Presentation*

Mykenzie Clark Graduate Student, Physical Sciences & Engineering Development of the TIGERISS Thermal Control System: Design and Analysis, Poster Presentation

Jaide Cotton Graduate Student, Translational & Clinical Sciences *Racial Disparities in the Treatment of Rheumatoid Arthritis, Poster Presentation*

Nana Crentsil Graduate Student, Translational & Clinical Sciences A Comparison of the ASCVD vs. PREVENT Calculators in Urban HIV-infected Affected Cohort., Poster Presentation

Miles Davis Undergraduate Student, Physical Sciences & Engineering Estimating Floor Stiffness in Multi-Story Buildings for Structural Condition Assessment, Poster Presentation

Alexis Davis Undergraduate Student, Physical Sciences & Engineering Augmented Reality for Emergency Decision Making Support: A Design Approach, Poster Presentation

Darnell Davis Graduate Student, Biological & Biomedical Sciences Rapid Detection of Active Coronavirus Infection by Lateral Flow Test Strips: A New Approach to Distinguish Replicating Viruses from Non-Replicating Viruses, Poster Presentation

Prasun Dhungana Undergraduate Student, Physical Sciences & Engineering Leveraging LLMs with Ensemble Meta-Classification for Robust Multilingual Multi-Label and Multi-Class Classification of Entity Roles and Narratives in News Articles, Poster Presentation

Abhitej Divi Graduate Student, Physical Sciences & Engineering VLSI CHIP DESIGN AND FABRICATION FOR SOLAR PANEL DIAGNOSIS SYSTEM, Poster Presentation

Clarke Donaldson Undergraduate Student, Physical Sciences & Engineering Modeling the Integration of Anaerobic Digestion (AD) for Methanotrophic Production of Methanol, Poster Presentation

Thane Douglass Undergraduate Student, Social Sciences From Culture to Code: An Intersectional Analysis of AAVE Slang in Large Language Models, Poster Presentation

Shahnoza Dusmatova Graduate Student, Translational & Clinical Sciences *MELAS Syndrome: Case of MT-TL1 c.3243A>G Mutation and Cardiogenic Shock, Poster Presentation*

Shahnoza Dusmatova Graduate Student, Translational & Clinical Sciences *Trends in Caffeine Toxicity and Cardiac Arrhythmias: A Retrospective Study of U.S. Health Data from* 2011-2024, *Poster Presentation*

Nia Dyson Graduate Student, Social Sciences TikTok Made Me: The Impact of Social Media Sites in Ethnic & Racial Identity Development, Poster Presentation

Nia Dyson Graduate Student, Social Sciences *TikTok Made Me: The Impact of Social Media Sites in Ethnic & Racial Identity Development, Poster Presentation*

Azure Erskine Professional Student, Translational & Clinical Sciences *Hidden Infections, Hidden Risks: Unveiling the Connection Between Chlamydia and Preeclampsia, Poster Presentation*

Sana Fathima Undergraduate Student, Social Sciences If One Is Hurting, We Are All Hurting: An Islamic Theological and Psychological Science Framework, Poster Presentation

Sana Fathima Undergraduate Student, Social Sciences Supporting Persons Affected by HIV and Cancer: A Family Matter, Poster Presentation

Narvale Fincher Undergraduate Student, Biological & Biomedical Sciences, Segmenting brain regions in whole-brain zebra fish light sheet images, Poster Presentation

Kelly Garrett Graduate Student, Social Sciences Exploring the Impact of Perceived Neighborhood Disorder on Mental Health Outcomes among Black Emerging Adults, Poster Presentation

Sadaf Ghaderzadeh Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *Kidney MiRNA Expression in BTBR ob/ob Mice at a Critical Time Point in Disease Development and Progression, Poster Presentation*

Shantol Grahamhyatt Graduate Student, Translational & Clinical Sciences *Title: APOE Genotype-Dependent Effects of Exercise on the Short Chain Fatty Acid and Brain Function in Mice., Poster Presentation*

Terinney Haley Professional Student, Translational & Clinical Sciences *The Association Between Marijuana Use and Hypertensive Disorders of Pregnancy, Poster Presentation*

Eduardo Han Professional Student, Education & Outreach Exploring AI Chatbot Effectiveness in Enhancing Pharmacy Education, Poster Presentation

Nailah Harvey Graduate Student, Education & Outreach High School ELA Teachers' Preparedness & Its Impact on Black Students' Writing Literacy, Poster Presentation

Lakin Hatcher Professional Student, Education & Outreach Development of a Novel Health Literacy Tool for A Free Student-Run Orthopaedic Clinic for Underserved Patients, Poster Presentation

Jennifer Hayes Graduate Student, Translational & Clinical Sciences Leveraging Generative artificial Intelligence (AI) Large Language Models (LLMs) and Reinforcement Learning in Medicinal Chemistry Patent Review, Poster Presentation

Morgan Henderson Undergraduate Student, Biological & Biomedical Sciences *Carboplatin* and Tamoxifen combination treatment suppress the pro-tumorigenic activity of mutant p53 via regulating the ERbeta-p53-p73 signaling pathway in TNBC cells, Poster Presentation

Jordaina Hewitt Undergraduate Student, Physical Sciences & Engineering Optimizing Camera Calibration and Lucas-Kanade Optical Flow for High-Precision Structural Displacement Measurements, Poster Presentation

Jaylin m Holmes Undergraduate Student, Physical Sciences & Engineering *Optimizing Urban Mobility and Patterns throughout the DC Metropolitan Area to Surrounding Neighborhoods: A New Innovative Way of Travel, Poster Presentation*

Merssaideiz Howard Undergraduate Student, Physical Sciences & Engineering *Assessing the Impact of Bike and Scooter Initiatives on Transportation Behavior in Washington, D.C., Poster Presentation*

Michael Hoyal Undergraduate Student, Biological & Biomedical Sciences TXNIP Expression Does Not Change The Localization of EGFP-Merlin, Poster Presentation

Chao-hsiung Hsu Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *t-SNE Analysis of Microglial Morphology in Brain Injury, Poster Presentation*

Amir Ince Undergraduate Student, Physical Sciences & Engineering *Combining Expert Personas via Prompting for Enhanced Multilingual Emotion Analysis, Poster Presentation*

Kelsea Jacobs Undergraduate Student, Physical Sciences & Engineering *Enhancing Transportation Safety Through a Computer Vision System: Case Study of Georgia Ave & Irving St Intersection in Washington, D.C., Poster Presentation*

Ashley Jones Undergraduate Student, Biological & Biomedical Sciences *Exploring Protein Kinase C's Influence on Glucose Metabolism and Insulin Resistance in Skeletal Muscle, Poster Presentation*

Anverly Jones Undergraduate Student, Physical Sciences & Engineering *Standoff* Raman Spectroscopy: A Proof-of-Concept for Advancing Lunar Science and Exploration, Poster Presentation

Sunlyn Kearney Graduate Student, Social Sciences Assessing the Impact of Implicit Biases on People with Disabilities, Poster Presentation

Francisco Kelley Professional Student, Translational & Clinical Sciences *Ocular Syphilis: Analyzing Rising Incidence and Inequities Over the Past Decade, Poster Presentation*

Najma Knobloch Graduate Student, Social Sciences Exploring Relationships Between Trauma-Informed Practice Training and Elementary School Teacher Efficacy, Burnout, and Intent to Remain in the Profession, Poster Presentation

Neemah Koroma Professional Student, Social Sciences *Unseen Wounds: The Prevalence of Psychiatric Disorders in Foster Care Populations, Poster Presentation*

Scheleck Laraque Graduate Student, Education & Outreach Exploring the Impact of School Mobility on Academic Achievement: A Focus on Foster Children and Educational Equity", Poster Presentation

Abdulmujeeb Lawal Undergraduate Student, Physical Sciences & Engineering Using GPT 40 and CLIP-ViLTto Decode Figurative Language Across Text and Images, Poster Presentation

Zipporah Lewis Graduate Student, Education & Outreach Breaking Stereotypes: How Gender and Racial Bias Shape Caregiving and Childrearing Expectation, Poster Presentation

Kristen Linton Graduate Student, Translational & Clinical Sciences Barriers to Aural Rehabilitation and Communication Access for Deaf and Hard-of-Hearing Individuals in the Caribbean, Poster Presentation

Da-yuan Liu Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences Lorentzian Analysis of DGE MRI: Unveiling Glucose Metabolism Changes in TBI-Affected Brains, Poster Presentation

Alana Manuel Undergraduate Student, Social Sciences *More Than a Game Abstract, Poster Presentation*

Shawn Meepagala Professional Student, Translational & Clinical Sciences *Cardiac Complications in MELAS: Quantifying the Burden in a Retrospective Study, Poster Presentation*

Alemu bejiga Melka Graduate Student, Education & Outreach *Preparation and Application of Carboranyl Ionic Liquids for Rare Earth Element and REY Recovery from Coal Fly Ash, Poster Presentation*

Brittney Menefee Graduate Student, Physical Sciences & Engineering Synthesis of Carborane Containing Vancomycin Analogs as Novel Glycopeptide Antibiotics for Combatting MultiDrug Resistant Bacteria, Poster Presentation

Lashondra Mitchell Graduate Student, Education & Outreach How Does Culturally Responsive Practices Impact Pre-Literacy Outcomes in Young Black Children, Poster Presentation

Ryan Mitchell Graduate Student, Translational & Clinical Sciences A Silent Threat: Uncovering the Severe Complications of Group C Streptococcus Bacteremia in PID., Poster Presentation

Gabrielle Morgan Undergraduate Student, Biological & Biomedical Sciences *Significance* of Tunneling Nanotubes in Potential Therapies for Modern Medicine, Poster Presentation

Natalia Murataeva Post Doc/Resident/Fellow/Research Associate, Biological & Biomedical Sciences *Cannabinoid regulation of sex-dependent murine odorant-stimulated salivation, Poster Presentation*

Lauren North Undergraduate Student, Social Sciences *Algorithmic Injustice: The Racial Bias of Risk Assessment Tools in Sentencing, Poster Presentation*

Onyinyechi Obidiro Graduate Student, Biological & Biomedical Sciences *Development of Multifunctional Nanoparticles for the treatment of Triple-Negative Breast Cancer, Poster Presentation*

Onyinyechi Obidiro Graduate Student, Biological & Biomedical Sciences *Biodegradable* Nanoparticles for the Treatment of Triple-Negative Breast Cancer Fabricated by Dispersion Polymerization Technique, Poster Presentation

Kamdili Ogbutor Professional Student, Biological & Biomedical Sciences *Incidence of HPV Head and Neck Cancer following Vaccination, Poster Presentation*

Michael Parks Professional Student, Translational & Clinical Sciences *Examining The Effectiveness of Church Participation on Black Americans Quality of life and Black Americans Perceptions of Occupational Therapy Addressing Spirituality and Church Participation., Poster Presentation*

Christianna Percy Undergraduate Student, Biological & Biomedical Sciences *Impact* of Chronic Cannabis Use on Neurotransmission Pathways, Neuroplasticity, and Cognitive Development in Young Adults, Poster Presentation

Kinara Phillips Undergraduate Student, Social Sciences *Born Black but Not Breathing: A Medical and Autobiographical Account of the Black Experience in Chicago, Poster Presentation*

Nya Ray Undergraduate Student, Social Sciences Hamstring Strains and the Mental Health of Howard University Athletes, Poster Presentation

Suprabhat Rijal Undergraduate Student, Physical Sciences & Engineering *Crosslingual Fact-Checked Claim Retrieval-Combining Zero-Shot Claim Extraction and KNN-Based Classification for Multilingual Claim Matching, Poster Presentation*

Garima Rokaya Undergraduate Student, Social Sciences Beyond Western Frameworks: How Culture Shapes the Expression of Depression, Poster Presentation

Sloan Sanford Staff, Biological & Biomedical Sciences "Everyone's a Traditionalist at Night: Integrating Traditional 'Religious-Cultural' Beliefs and Practices with Biomedical Care to Improve Maternal Health Outcomes in Ghana", Poster Presentation

Maryanne Sani Undergraduate Student, Biological & Biomedical Sciences *Laponite Nanocarrier for Sustained Release of Chloroquine, Poster Presentation*

Maryanne Sani Undergraduate Student, Biological & Biomedical Sciences *Laponite Nanocarrier for Sustained Release of Chloroquine, Poster Presentation*

Joseph Sankah Undergraduate Student, Physical Sciences & Engineering Augmenting Naval Ship Images for Viewing Distance using Adobe Generative Fill, Poster Presentation

Charlie Sconiers Undergraduate Student, Biological & Biomedical Sciences *Effects of Different Drying Methods on the Bioactive Compounds of Beetroot Powder (Beta vulgaris), Poster Presentation*

Cheyenne Scott Undergraduate Student, Biological & Biomedical Sciences *Comparison of KRT5 Negative Basal Cells in Distal and Proximal Pulmonary Airways, Poster Presentation*

Nnamdi Shockley-okeke Undergraduate Student, Biological & Biomedical Sciences Characterizing Macrophage Markers Within Rodent Adrenal Glands, Poster Presentation

Jada Smith Graduate Student, Social Sciences Exploring the Intersectionality of Flow State Experiences Among Marginalized Athletes: A Qualitative and Quantitative Study, Poster Presentation

Toni Smith Undergraduate Student, Social Sciences *Mental Health Practitioners' Perception* of the Quality of Care Provided to Residents in Kwaprow, Ghana, Poster Presentation

Peyton Smith Professional Student, Biological & Biomedical Sciences *Li Fraumeni Incidence of Long-term Non-malignant Side Effects of Chemotherapy, Poster Presentation*

Carrie Sweet Graduate Student, Physical Sciences & Engineering *Kinetic Control of Competing Carborane Functionalization Reactions, Poster Presentation*

Saharsha Tiwari Undergraduate Student, Physical Sciences & Engineering *DeepTabCoder* - Code-based Retrieval and In-context Learning for Question-Answering over Tabular Data, Poster Presentation

Harrell Tolentino Graduate Student, Physical Sciences & Engineering Machine Learningbased Adaptive Fault-Tolerant SRAM-based FPGA designs for Medium Earth Orbit, Poster Presentation **Janae Tucker** Undergraduate Student, Biological & Biomedical Sciences *Mathematical Modeling for Glucose Regulation: Evaluating the Predictive Power of the Metabolic Disposition Index (mDI), Poster Presentation*

Armando Ugarte Professional Student, Biological & Biomedical Sciences *Medicaid Expansion and Lung Cancer Survival in California vs. Texas, Poster Presentation*

Nkemdirim Ugochukwu Professional Student, Biological & Biomedical Sciences Comparing the Distressed Communities Index and Area Deprivation Index in Predicting Firearm-Related Emergency Department Visits, Poster Presentation

Chinwekele Uzoije Undergraduate Student, Biological & Biomedical Sciences *Exploring* the distinct roles of innate and adaptive type 2 lymphocytes during Nippostrongylus brasiliensis infection, Poster Presentation

Shivani Waghmare Professional Student, Translational & Clinical Sciences *Neuroprotective* effects of CCBs on Parkinson's Disease development: Population cohort study, Poster Presentation

Tongxin Wang Senior Faculty, Biological & Biomedical Sciences *Biomineralization:* Biomimetic Growth of Enamel-like Structures from Non-enamel Substrate, Poster Presentation

Jenna Warren Graduate Student, Social Sciences *The Relationship Between Community-Level Urban Life Stress and Depression among Breast Cancer Survivors: The Mediating Influence of Concerns of Recurrence, Poster Presentation*

Shealtiel Weekes Graduate Student, Education & Outreach *Empowering Educators:* Unveiling the Potential of the ECHO Autism Model in Enhancing Autism Related Knowledge and Competency, Poster Presentation

Dyani Wilkins Undergraduate Student, Physical Sciences & Engineering Hack-Proofing the Commute: Cybersecurity in Modern Transit Systems, Poster Presentation

Christian Wong Graduate Student, Translational & Clinical Sciences Cardiotoxicity of Immune Checkpoint Inhibitors: Risks and Clinical Implications, Poster Presentation

Guiqin Xie Senior Faculty, Biological & Biomedical Sciences *Augmenting Cancer Cell-Intrinsic IFN-I Signaling Enhances Immune Responses and Controls Tumor Growth in HNSCC, Poster Presentation*

Emmanuel Yakubu Graduate Student, Physical Sciences & Engineering Fine Tuning Perforance of Li-ion Batteries via Experimental Technique, Poster Presentation

Jordan Young Professional Student, Translational & Clinical Sciences *When Scars Come Alive: Spontaneous Keloid Eruption in an African American Woman on Dialysis, Poster Presentation*

Jordan Young Professional Student, Translational & Clinical Sciences *Exploring GLP-1 Agonists as a Therapeutic Option for Hidradenitis Suppurativa: A Retrospective Cohort Analysis, Poster Presentation*

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