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# RESEARCH MONTH

## April 2025

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### 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

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

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

\* Presenter

**Location:** The Ballroom

**10:10 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 Mission Systems Division

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

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 University

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

## **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

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

7:00 AM -4:00 PM

### **HBCU CHIPS Network Conference**

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 (QEM) 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

#### **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 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



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

### **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

## 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. Joseph Wilkins, Assistant Professor, of Arts & Sciences

Dr. Osinachi Ajoku, Assistant Professor, College 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

## 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.

**Presenters:**

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

**Location:** Interdisciplinary Research Building, Multipurpose Room

## Monday, April 14

### 11:00 AM - 7:00 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, AI/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 - AI 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 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 AI's societal impact, challenges in responsible AI development, and future research directions. With interactive discussions, and networking opportunities, this event is an invaluable experience for AI professionals, researchers, students, and technology enthusiasts looking to stay ahead in the rapidly evolving AI 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. 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. Shaolei Teng, Associate Professor, College of Arts & Sciences  
Dr. Lucretia Williams, Senior Research Scientist, Office , HCAI Institute

**Location:** Interdisciplinary Research Building, Multipurpose Room

## Wednesday, April 16

4:00 PM – 9:00 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. Talitha Washington, Professor & Executive Director, CADSA  
Dr. Amy Yeboah Quarkume, Associate Professor, College of Arts & 7Sciences

**Location:** Interdisciplinary Research Building, Multipurpose Room

**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 AI-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 - 5:00 PM The Howard University Research Centers for Minority Institutions (RCMI) Seminar**

**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 Center

### 8:30 AM – 1:00 PM **Interprofessional Education (IPE) Case Challenge: Blended Theories for Health Outcomes**

This workshop will highlight research focused on an Interdisciplinary Approach to Team-based care.

**Location:** The Reading Lounge

### 9:00 AM – 12:00 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 **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

## 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

### 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 well-being, and community development, are overcome through policy implementation. Blocking this goal are the mutually reinforcing historic and current processes that led and continue to lead to disparate outcomes for underserved populations.

**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-Elect, DC Branch of ASM

**Location:** Interdisciplinary Research Building, Multipurpose Room



## 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

**The Business of Innovation:** How Tech Transfer Fuels Entrepreneurship

**Presenters:**

Adia Coleman, Intellectual Property Manager, Office of Research

**Location:** Interdisciplinary Research Building, Multipurpose Room

## Monday, 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**

**Location:** Armour J. Blackburn University Center

## Tuesday, April 30

6:00 PM – 9:00 PM      **Howard University Undergraduate Research Journal Awards**

**Location:** Interdisciplinary Research Building, Multipurpose Room



Office of  
Research