



Research Collaboration Forum

In Collaboration With:









NOVEMBER 7-8, 2023



TECHNOLOGY SQUARE RESEARCH BUILDING 85 FIFTH STREET, NW ATLANTA, GA 30308



SPECIAL THANKS TO





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William Robinson





George Freiberger



Kory Hawkins





Showna Price



Bisi Abikoye



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Ken Benson



Raj Gopalaswamy



Tina Kosmicki





Scottie-Beth Fleming





Jonathan Brown

KEYNOTE SPEAKERS

Conference Keynote Speaker

Dr. Dietra Trent

Panel Keynote Speakers

Mr. Terrence Mosley
Dr. Thyaga Nandagopal
Ms. Kylie Patterson
Ms. Annette Owens-Scarboro
Dr. Victoria Coleman

DIETRA TRENT



Executive Director of White House Initiatives on Advancing Educational Equity,
Excellence, & Economic Opportunity through HBCUs

Dietra Trent earned a bachelor's degree in Sociology and Criminal Justice from Hampton University and completed her master's and doctoral degrees in Public Administration and Policy from Virginia Commonwealth University.

She has over twenty-five years of experience working to advance equity for Virginia's most disadvantaged populations. Most recently, she served in several leadership positions at George Mason University, including chief of staff and interim VP for Compliance, Diversity, and Ethics. In 2016, Dr. Trent was appointed as Virginia's Secretary of Education.

Prior to her appointment, she served as Deputy Secretary of Education, a position she also held during the administration of then-Governor Tim Kaine. Having served in the Administrations of three former Governors (including Mark Warner), as well as the Office of Congressman Bobby Scott, she has a wealth of federal, state, and higher education experience.

TERRENCE MOSLEY



Senior Advisor for Diversity, Office of Energy Efficiency & Renewable Energy

As the Senior Advisor for Diversity and STEM for the U.S. Department of Energy's Office of Energy Efficiency and Renewable Energy (EERE), Terrence Mosley is one of DOE's leaders in ensuring that diversity, equity, inclusion, and accessibility principles are woven into EERE activities, programs, and engagement. He is focused on ensuring broad diversity in STEM program development, R & D engagement, and recruitment programs that will expose more underrepresented minorities to fast-growing clean energy career fields. His current efforts include lowering barriers to entry for HBCUs and other MSIs, as well as for minority businesses, through policy or program initiatives that will result in increased levels within Department of Energy R&D funding assistance and procurement programs. New programs initiated through Interagency Agreements with the Army and the National Science Foundation have provided close to \$20M in R&D work with MSI's as lead researchers.

Prior to his DOE career, he served in various regional engineering and management roles for GM and Delphi Automotive Systems. He has worked on the design and implementation of many programs designed for increasing participation of women and underrepresented minorities in STEM fields and has mentored many underrepresented K-12, undergraduate, and graduate students through programs like the GEM Fellowship and FIRST Robotics. He was previously honored with a Black Engineer of the Year Special Recognition Award for his efforts at increasing the diversity of the future STEM Pipeline.

THAYAGA NANDAGOPAL



Division Director of the Division of Innovation and Technology Ecosystems in the Directorate of Technology, Innovation and Partnerships

Dr. Thyaga Nandagopal is the Division Director of the Division of Innovation and Technology Ecosystems in the Directorate of Technology, Innovation and Partnerships at the National Science Foundation. In this role, with an annual budget of over \$350M, he oversees NSF investments in convergent and translational research in emerging technologies and in building inclusive innovation ecosystems around the country. Dr. Nandagopal is the co-chair of the NSF-wide Quantum Leap Steering Committee, that coordinates NSF investments in inter-disciplinary research in quantum computing, communications and sensing. He also serves on the NSF-wide Semiconductor Steering Committee that coordinates NSF investments in semiconductors, microelectronics and packaging.

Prior to his current role, he was the Deputy Division Director of the Computing and Communication Foundations (CCF) Division in the Directorate of Computer & Information Science and Engineering (CISE) at the NSF, where he oversaw the division's investments in the theory and foundations of computing systems and communications technologies, with an annual budget of nearly \$200M. His current interests are in research policy, partnerships, quantum computing, artificial intelligence and advanced wireless networks (beyond 5G).

KYLIE PATTERSON



Senior Advisor for Opportunity and Inclusion

Kylie Patterson was the director of the Subcommittee on Diversity and Inclusion for the U.S. House of Representatives Committee on Financial Services, chaired by Rep. Maxine Waters. Previously, Patterson served as a professional staff member on the U.S. Senate Committee on Small Business and Entrepreneurship, chaired by Senator Ben Cardin. She was a key member of the policy team that negotiated the 2021 Minority Business Development Act that codified the U.S. Minority Business Development Agency at the U.S. Department of Commerce, as well as the reauthorization and extension of the Paycheck Protection Program.

Patterson's career is characterized by her commitment to centering and supporting Black, Indigenous and People of Color (BIPOC), women, veterans, individuals with disabilities, and people living in underserved and rural areas.

Prior to serving on Capitol Hill, she spent more than 10 years directing multi-million-dollar programs, investigations, and evaluations to address racial, gender and wealth inequality at Johns Hopkins University and Health System, Prosperity Now (formerly CFED), management consulting firm BCT Partners, the City of Minneapolis, the Pew Charitable Trusts, and the AFL-CIO.

ANNETTE OWENS-SCARBORO



Small Businesses & Historically Black Colleges and Universities/Minority

Servicing Institution Program Manager

Dr. Owens-Scarboro serves as the National Institutes of Health (NIH) Small Business Program Manager, and reports to the Head of the Contracting Activity (HCA), Director, Office of Acquisition and Logistics Management (OALM). She was formerly the acting Deputy Director for Operations in the Department of Health and Human Services (HHS) Office of Small Disadvantaged Business Utilization (OSDBU) and a senior Small Business Specialist supporting the NIH team of four small business specialists. She has supported all ten-operating division at the HHS as a specialist.

Dr. Owens-Scarboro is responsible for providing operational and technical assistance on a day-to-day basis for acquisition and program officials and overseeing and managing special projects. She participates in numerous state and local government and private sector outreach activities and represents the OSDBU and NIH HCA at speaking engagements and conferences. Additionally, she has served as an advocate and liaison for the Small Business Community marketing their capabilities to the HHS, NIH and other government and private sector communities.

VICTORIA COLEMAN



Chief Scientist of the US Air Force

Dr. Victoria Coleman is the Chief Scientist of the United States Air Force, Arlington, Virginia. She serves as the Chief Scientific Adviser to the Secretary of the Air Force, Air Force Chief of Staff, and Chief of Space Operations. She provides assessments on a wide range of scientific and technical issues affecting the department's mission. In this role, she identifies and analyzes technical issues, bringing them to the attention of department leaders. She interacts with other principals, operational commanders, combatant commands, acquisition, and science and technology communities to address cross-organizational issues and provide solutions. Dr. Coleman also interacts with other services and the Office of the Secretary of Defense on issues affecting the Department of the Air Force's technical enterprise. She serves on the Executive Committee of the Air Force Scientific Advisory Board and is the Principal Science and Technology Representative of the Air Force to the civilian scientific and engineering community and to the public at large.

Dr. Coleman is on leave from the University of California, Berkeley. Since 2016, Dr. Coleman has held an academic research appointment at the Berkeley Center for Information Technology in the Interest of Society where she leads science and technology policy on microelectronics and efforts to develop tools for countering digital authoritarianism.

DAY 1 RCF @ GT

Check-In and Continental Breakfast

7:30am - 8:00am

Technology Square Research Building 85 Fifth Street NW Atlanta,GA 30308 Combined Meeting Room 132-134

Map link: https://map.gatech.edu/?id=82#!m/11255

TSRB Parking Deck: https://map.gatech.edu/?id=82#!m/385935

Welcome & Introductions

8:00am - 8:10am

Dr. George White, Sr. Director Strategic Partnerships, Georgia Institute of Technology

Dr. Taiesha Smith, Sr. Program Director HBCU/MSI Research Partnerships, Georgia Institute of Technology

Dr. Kinnis Gosha, Hortinius I. Chenault Endowed Professor of Computer Science

Morehouse College

Dr. Talitha Washington, Director of the Atlanta University Center Data Science Initiative (AUC DSI)

Mr. John Rosenthall, President and CEO of Tougaloo College Research and Development Foundation (TCRDF)

Introduction of Speaker

8:10am - 8:30am

Dr. George White, Sr. Director Strategic Partnerships, Georgia Institute of Technology

Value of Partnerships & Collaborations with HBCUs

Dr. Chaouki Abdallah, Executive Vice President of Research, Georgia
Institute of Technology

Introduction of Morning Keynote Speaker

8:30am - 8:55am

Dr. George White, Sr. Director Strategic Partnerships, Georgia Institute of Technology

Building Partnerships & Collaborations Across The Research Ecosystem

Dr. Dietra Trent, Executive Director of White House Initiatives on Advancing Educational Equity, Excellence, & Economic Opportunity through HBCUs

8:55am - 9:15am

Break & Networking

Overview of Conference Format

9:20am - 9:30am

Dr. George White, Sr. Director Strategic Partnerships, Georgia Institute of Technology

Event Objectives Description of Breakout Room Structure Research Focus Areas of the Day

Funding Priorities for the Department of Energy

9:35am -10:40am

DOE Keynote: Terrence Mosley, Senior Advisor for Diversity, Office of Energy

Efficiency & Renewable Energy

Panel Moderator: Dr. Tim Lieuwen, Executive Director of Strategic Energy Institute, Georgia Institute of Technology

Panelists

Mr. Terrence Mosley, DOE

Mr. Ken Benson, Director IT Operations, NNA Information Technology, Novelis
Innovation Hub

Dr. Comas Haynes, Principal Research Engineer, Georgia Tech Research Institute

Dr. William Robinson, Deputy Director for Research, Information and Cyber Sciences
Directorate, Georgia Tech Research Institute

Dr. Olubemiga Olatidoye, Professor of Engineering and Director of the VIsualization, Simulation & Design Laboratory, Clark Atlanta University

Breakout Sessions

10:45am - 11:55am

Cybersecurity/ Energy Security: Dr. William Robinson, Lead Renewables/Alternative Energy: Dr. Comas Haynes, Lead

Climate Resiliency: Dr. Annalisa Bracco, Lead

Energy Infrastructure: Dr. Christine Conwell, Lead

Clean Energy Justice: Dr. Joe Bozeman, Lead

Critical Minerals and Materials - Dr. Yuanzhi Tang, Lead

*EWD is a cross-cutting theme and should be addressed in each research area.

Breakout Room Scribes

Annalisa Bracco/ Ahron Cervania
Joe Bozeman/Makaela Burch
Yuanzhi Tang/Yinghao Wen
Christine Conwell/Azell Francis
Comas Haynes/Wyatt Williams

12:00pm-1:00pm

Lunch & Networking

Funding Priorities for the National Science Foundation

1:05pm -2:10pm

NSF Keynote: Dr. Thyaga Nandagopal, Division Director of the Division of Innovation and Technology Ecosystems in the Directorate of Technology, Innovation and Partnerships

Panel Moderator: Dr.Julia Kubanek, Professor and Vice President for Interdisciplinary Research, Georgia Institute of Technology

Panelists

Dr. Thyaga Nandagopal, NSF

Dr. Pascal Van Hentenryck, Professor and Director for NSF AI Institute for Advances in Optimization (AI4Opt), Georgia Institute of Technology

Dr. Kinnis Gosha, Hortinius I. Chenault Endowed Associate Professor and Director of the Culturally Relevant Computer Lab, Morehouse College

Dr. Jennifer Hirsch, Senior Director for the Center for Sustainable Communities Research & Education (SCoRE), Georgia Institute of Technology

Ms. Harley Brigman, University Partnerships Program Lead, Boeing

Breakout Sessions

2:15pm -3:25pm

Al & Machine Learning: Mr. Sandeep Kakar, Lead

Quantum: Dr. Martin Mourigal, Lead

Data Science & Mathematics: Dr. Srinivas Alaru, Lead

Social & Behavioral Science: Dr. Justin Biddle, Lead Sustainability: Dr. Stefan France, Lead

Physical and Life Sciences: Dr. Lewis Wheaton, Lead

EWD is a cross-cutting theme and should be addressed in each research area.

Breakout Room Scribes

Lewis Wheaton/Phenique Parker
Justin Biddle/Jide Olugbade & JP Nelson

3:25pm -3:40pm

Break

Introduction of Speaker

3:45pm -4:05pm

Dr. Taiesha Smith, Sr. Program Manager for HBCU/MSI Research Partnerships,
Georgia Institute of Technology

Best Practices in Collaborative Research

Dr. Rebecca Terns, Director of Research Development, Georgia Institute of Technology

Special Announcement

4:05pm -4:15pm

Microsoft Accelerate Foundation Models Research Program

Mr. Kory Hawkins, Director of Innovation & Society, Microsoft

4:20pm -4:45pm

White Paper Overview
Sandia Partnership Program Fund

Dr. George White, Sr. Director Strategic Partnerships, Georgia Institute of Technology

Closeout Session

4:45pm -5:00pm

Report Out from Breakout Sessions

Overview & Updates for Day One Closing

Reception

6:00pm -8:00pm

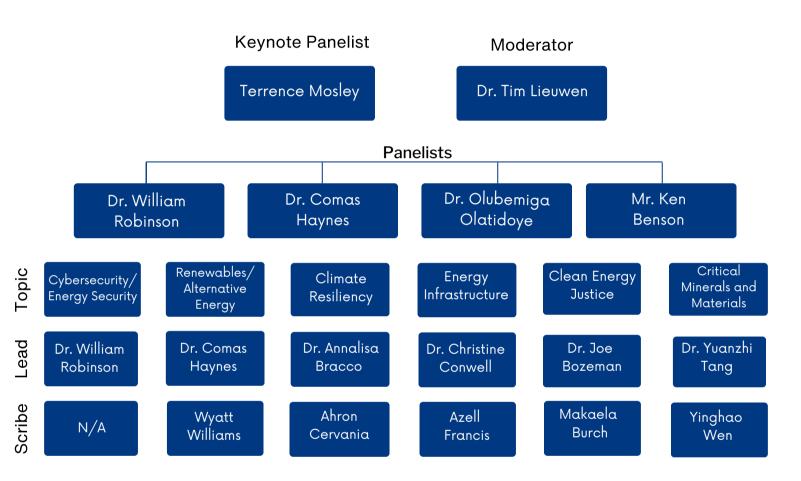
Georgia Tech Hotel & Conference Center

Salon 4-6

800 Spring St NW Atlanta, Ga 30308

Map link: https://map.gatech.edu/?id=82#!m/195322

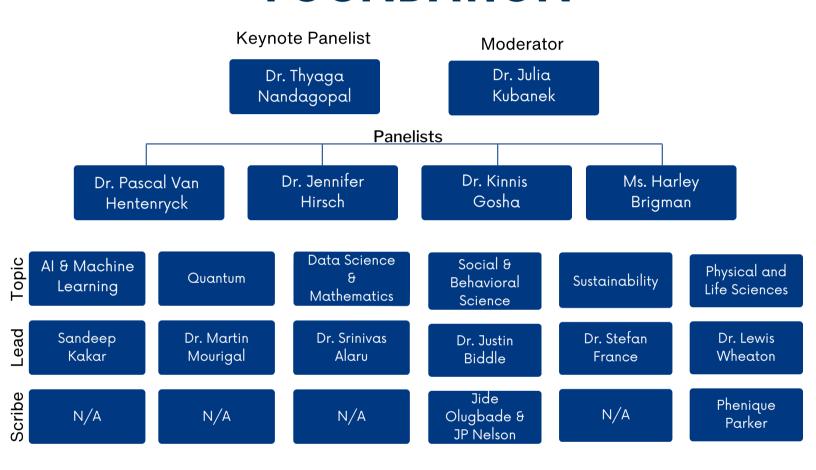
FUNDING PRIORITIES FOR THE DEPARTMENT OF ENERGY



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FUNDING PRIORITIES FOR THE NATIONAL SCIENCE FOUNDATION



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YOU ARE MOST LIKELY TO ATTEND



DAY 2 RCF @ GT

Check-In and Hot Breakfast

7:30am - 8:00am

Technology Square Research Building 85 Fifth Street NW Atlanta,GA 30308 Combined Meeting Room 132-134

Map link: https://map.gatech.edu/?id=82#!m/11255 TSRB
Parking Deck: https://map.gatech.edu/?id=82#!m/385935

Opening Session

8:00am - 8:10am

Dr. George White, Sr. Director Strategic Partnerships, Georgia Institute of Technology

Description of Breakout Room Structure
Research Focus Areas of the Day

Funding Priorities for the Department of Commerce

8:10am - 9:15am

DOC Keynote: Ms. Kylie Patterson, Director of Opportunity & Inclusion, CHIPS R&D

Panel Moderator: Dr. Muhannad Bakir, Dan Fielder Professor in the School of Electrical and Computer Engineering, Georgia Institute of Technology

Panelists

Kylie Patterson, CHIPS R&D

Dr. Azad Naeemi, Professor of Electrical and Computer Engineering, Georgia
Institute of Technology

Dr. Shyam Aravamudhan, Associate Professor of Nanoengineering & Director of Joint School of Nanoscience & Nanoengineering (JSNN) Core Facilities, North Carolina A&T University

Ms. Bika Carter, Director of External R&D gfLabs, GlobalFoundries

Dr. Li Song, Director Memory CAD Engineering & Al/ML, Micron Technology

Breakout Sessions

9:20am - 10:30am

Semiconductors & Advanced Packaging: Dr. Vanessa Smet, Lead
Education & Workforce Development: Dr. Mikkel Thomas, Lead
Supply Chain: Dr. Chelsea White III, Lead
Community Engaged Research: Ms. Donna Ennis, Lead
Metrology: Dr. Walter Henderson, Lead

*EWD is a cross-cutting theme and should be addressed in each research area.

Breakout Room Scribes

Chelsea White III/Joe McCarthy

10:30am - 10:45am

Break

Funding Priorities for the National Institutes of Health

10:50am - 11:55am

NIH Keynote: Ms. Annette Owens-Scarboro,
Small Businesses & Historically Black Colleges and Universities/Minority
Servicing Institution Program Manager

Panel Moderator: Dr. Talitha Washington, Director of AUC Data Science Initiative

Panelists

Ms. Annette Owens-Scarboro, NIH

Mr. M.G. Finn, James A. Carlos Family Chair for Pediatric Technology and Professor and School Chair of Chemistry and Biochemistry, Georgia Institute of Technology

Mr. Albert Sweets, Director for External Research Partnerships, Morgan State
University

Dr. Sean Kimbro, Professor of Microbiology, Biochemistry and Immunology, Director of Center for Translational Research in Health Disparities, Morehouse School of Medicine

Dr. Jon Duke, Principal Research Scientist and Director of the Center for Health
Analytics and InformaticsGeorgia Tech Research Institute

Breakout Sessions

12:00pm - 1:00pm

Biomanufacturing: Dr. Stephen Balakirsky, Lead
Health Disparities Research: Dr. Greg Gibson, Lead
Data Science/AI: Dr. Renata Rawlings-Goss, Lead

Biomedicine: Dr. Johnna Temenoff, Lead

Treatments, Interventions, and Cures: Dr. Melissa Kemp, Lead

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Breakout Room Scribes

Greg Gibson/Prachi Chopde Johnna Temenoff/Ryan Miller Stephen Balakirsky/Nate Damen

1:00pm - 2:00pm

Lunch & Networking

Funding Priorities for the Department of Defense

2:05pm - 3:10pm

DOD Keynote: Dr. Victoria Coleman, Chief Scientist of the US Air Force

Panel Moderator: John Rosenthall, TCRDF

Panelists

Dr. Victoria Coleman, US Air Force

Dr. Nathan Brooks, Senior Technical Fellow, Electromagnetics & Antenna Systems, Boeing

Dr. Majed Dweik, Vice President of Research & Economic Development,
Alabama A&M University

Dr. Pamela A.G. Clarke, Director of Research Development, Howard University

Mr. Albert Sweets, Director for External Research Partnerships, Morgan State
University

Dr. Clayton Kerce, Division Chief, Advanced Research in Computing and Artificial Intelligence, Georgia Institute of Technology

3:10pm - 3:30pm

Break

Breakout Sessions

3:30pm - 4:40pm

Advanced Manufacturing/Robotics: Dr. Tom Kurfess, Lead

Autonomous Systems: Dr. Lonnie Parker, Lead Biomanufacturing: Dr. Carolyn Yeago, Lead Trusted Microelectronics: Dr. Lee Lerner, Lead

Hypersonics: Dr. Krishan Ahuja, Lead **Al**: AnnMarie Spexet, Lead

*EWD is a cross-cutting theme and should be addressed in each research area.

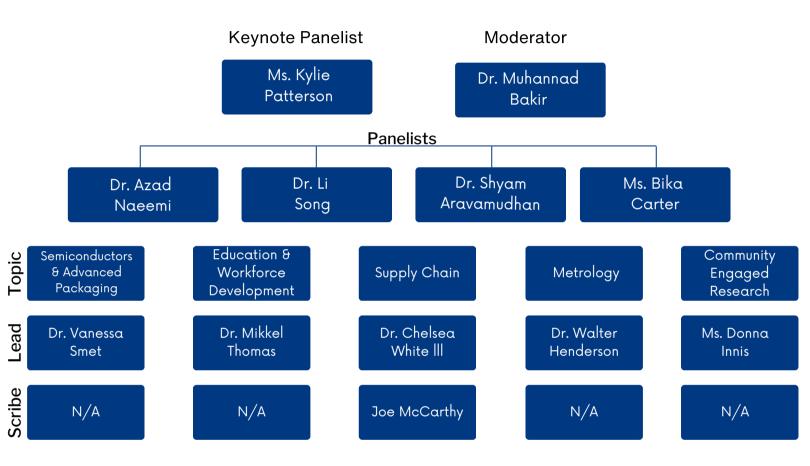
Closeout Session

4:40pm - 5:00pm

Next Steps

Meeting Adjourned

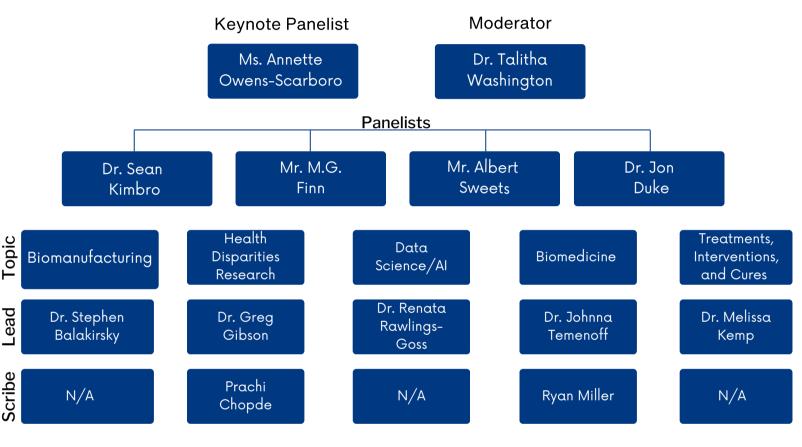
FUNDING PRIORITIES FOR THE DEPARTMENT OF COMMERCE



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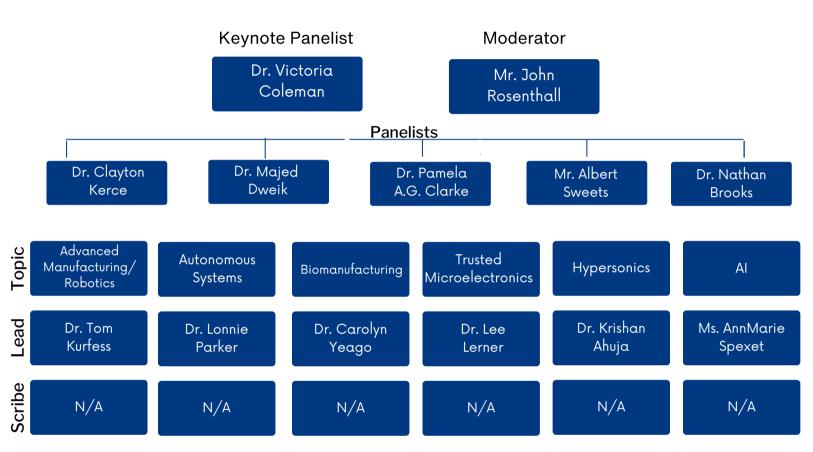
FUNDING PRIORITIES FOR THE NATIONAL INSTITUTES OF HEALTH



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ROOM YOU ARE MOST LIKELY TO ATTEND



FUNDING PRIORITIES FOR THE DEPARTMENT OF DEFENSE



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WHITE PAPER PROPOSAL GUIDELINES

RCF Seed Grant Proposal Program: Spring 2024

Description: Multiple grants to be awarded for the purpose of catalyzing research and innovation across a number of research focus areas. Proposals can focus on team and capacity building that will allow for positioning to pursue larger federal funding opportunities. The deliverable is a white paper identifying the opportunity for a diverse stakeholder group that includes one or multiple HBCU(s) and Georgia Tech, a summary of the strength and weaknesses in this domain, identification of the opportunities which may exist nationally or internationally and an analysis or statement of the competitive landscape. Respondents are encouraged to address a US Sustainable Development Goals (USDG) or Grand Challenge but not required. Co-PIs from GT and HBCUs are strongly encouraged.

Application: Proposals should be limited to a two-page PDF file that describes the opportunity and explains the need for funding and specify 6-month goals. Budget should also be included, which is not included in the page count. Examples include producing a white paper, responding to a RFI or otherwise influencing policy or funding agency priorities, participating in team science or workshops, or focused on building a team and building team skills.

Budget: \$10K -\$50K

Deadline: January 12, 2024

Performance Period: February 2024 – July 2024

Final Presentations: Summer of 2024

All invited Institutions to the RCF@GT are eligible to submit:

Additional Information will be posted shortly after the collaboration forum

RESOURCES & OPPORTUNITIES

Opportunity	Point of Contact	Links
Microsoft Accelerate Foundation Models Research Program	Kory Hawkins	Invitation for Proposals
Building Capacity in Research Administration	Renata Rawlings-Goss	<u>Interest Form</u>
HBCU UP	Carleitta Paige-Anderson	<u>Website</u>
IMERSE Program	Billyde Brown	Slide Presentation
Centers for Disease Control	Victoria Phifer Gyebi	HBCU Excellence at CDC Fellowships & Internships Pathways Programs

IMPORTANT LINKS

RESEARCH PROJECTS

Colleagues from Georgia Tech and HBCUs provided information about their research interests with the hopes of facilitating collaboration. Please click the link above to view the research that is being performed across the space.

BREAKOUT ROOM OVERVIEWS

PANEL PRESENTATIONS

CONFERENCE RESOURCES

This link leads to all documents from the conference including the agenda and all the items above.