



MS-CC Workshop -Science DMZ and Networking for All

Jennifer Kim

Cyberinfrastructure Engineer

Internet2 Technology Exchange September 18, 2023





THE VISION

MS-CC envisions a transformational partnership to promote advanced cyberinfrastructure (CI) capabilities on HBCU, HSI, TCU, and MSI campuses. We are advancing connections across campuses around data, research computing, teaching, curriculum development, professional development, and capacity-building.

We will learn and grow as a consortium, lifting up all participating institutions by advancing cyberinfrastructure for research and education across diverse fields, disciplines, and communities in ways that reflect the unique voices and interests of our communities.



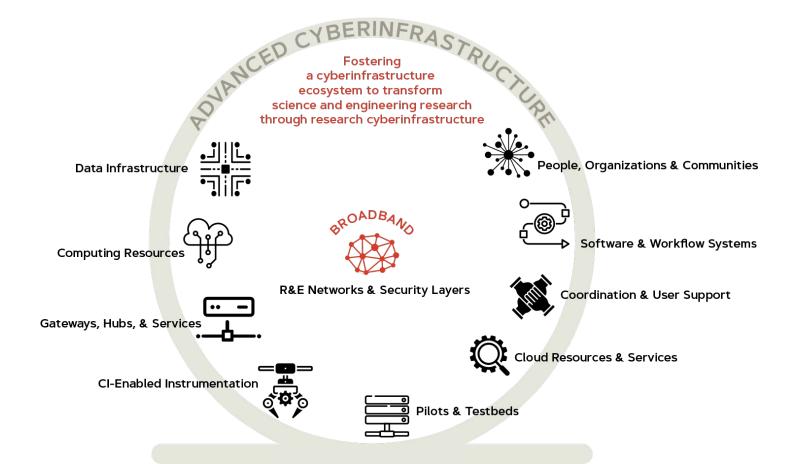
We will engage as full contributors to the global R&E community



- The term **cyberinfrastructure** refers to all the different technology tools and resources that an institution has access to, and that allows it to support and enable many of the day-to-day activities that happen on a college campus.
- Access, Privacy and Security are also a component, which includes identity and access management tools.

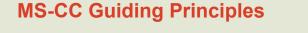
- Advanced cyberinfrastructure also includes the complex workflows for managing research data and the storage systems used to move this data from one department to another, across campuses all over the country, and often, across institutions all over the world.
- The people managing and running all of the aforementioned systems, tools, and software.

in partnership with



INTERNET

in partnership with



Inclusion | Innovation | Stakeholder Value

MS-CC Purpose

- Increase access to cyberinfrastructure (CI) capabilities across academic disciplines
- Enhance communication between researchers, IT professionals, campus leadership, and between institutional members
- Support IT for research-enabled professional and career development
- Collective advocacy and partnerships

MS-CC Stakeholders

- Researchers, educators, and students
- IT/CI professionals
- Campus leadership
- Industry partners
- Foundations and funding agencies



partnership





INTERNET

MINORITY SERVING-CYBERINFRASTRUCTURECONSORTIUM





CI Center of Excellence Demonstration Pilot (Award # OAC-2137123) and 21st Century Research-Cyberinfrastructure for MSIs through the MS-CC: A phased approach to engage the Missing Millions (Award # OAC-2234326)

Key Objectives

- Create a connective and collaborative organization that serves as a centralized hub for HBCUs, TCUs, and other MSIs to utilize for CI expertise, experience-sharing, and advocacy.
- Increase awareness, availability, and financial support for CI professional development for faculty, staff, and students at HBCUs, TCUs, and other MSIs.



Enhance communication among researchers, university leadership, and CI professionals.

MINORITY SERVING-CYBERINFRASTRUCTURECONSORTIUM





CI Center of Excellence Demonstration Pilot (Award # OAC-2137123) and 21st Century Research-Cyberinfrastructure for MSIs through the MS-CC: A phased approach to engage the Missing Millions (Award # OAC-2234326)

Key Objectives

- **Increase access to shared CI resources** for MS-CC organizations.
- Increase and accelerate CI-enabled research and education **capacity** at MS-CC campuses by piloting a model(s) for cyberinfrastructure development at HBCUs, TCUs, and other minority-serving institutions.
 - Initial allocation of at least five (5) Proof of Concept Grant (PoCG) Awards to select MS-CC institutions that allows each to perform campus specific CI assessments that drive an overall CI strategic plan and a roadmap to pioneer new capabilities that advance CI-centric research, and empower scientific advancements. [7]





MS-CC Proof-of-Concept Grant (PoCG) Program

- novel approach to CI planning and capacity building to advance research and education programs at TCUs and HBCUs
- combination of funding and dedicated expert facilitation
 - Up to \$250k in first year for local CI workforce development and planning activities
 - partnership with MS-CC's "Tiger Teams" of experts on campus CI capabilities and stakeholder alignment
- up to 5 years of support
 - five recipients announced April 13 for initial phase
 - future phase(s) dependent upon initial outcomes & additional funding
- complementary to existing CI funding mechanisms



partnership



MS-CC PoCG Program Recipients



GROUNDED IN TRADITION. CHARGING INTO THE FUTURE.





North Carolina Agricultural and Technical State University



Multi-Campus Cl

Image: Comparison of the set of the set

What is a Research and Education Network?

- Designed to serve the specific needs of the research and education (R&E) community, centered around the community.
- High speed network and capacity to handle data transfer needs of the R&E community.
- Often work to reach unserved and underserved areas of the community in which they serve.
- Offer specialized services enabling collaboration, opportunity, and discovery.



partnership

INTERNET

REGIONAL RESEARCH & EDUCATION NETWORKS IN THE UNITED STATES



Internet2 Nationwide Network: A secure, stable and trusted network for R&E



MINORITY SERVING-CYBERINFRASTRUCTURECONSORTIUM

Throughout the day, consider...

- What brought you here and what makes you excited
- Something you learned or things you liked
- What you'd like to see more of or what we could do better
- An opportunity to share your experience from today with the greater MS-CC community



INTERNET

in partnership with



Questions?

INTE/RNET_«

MS-CC Workshop - Science DMZ and Networking for All

Email: jkim@internet2.edu