

NSF South Big Data Hub



THE UNIVERSITY
of NORTH CAROLINA
at CHAPEL HILL

Co-Executive Directors

Georgia
Institute of
Technology



University of
North Carolina
at Chapel Hill

Renata Rawlings-Goss, PhD Lea Shanley, PhD

PIs



Srinivas Aluru, PhD

Stan Ahalt, PhD

Organizational Structure



Steering Committee

Advisory
Council

Executive Committee

Executive
Committee

Working Groups

Education

Community
Partnership

Data &
Infrastructure

(Provisional)
Spoke Theme
Communities

Health

Coastal
Hazards

Social

Habitat

Data Science
Education

Big Data
Sharing and
Infrastructure

Materials and
Manufacturing

Big Data
Economic
Modeling

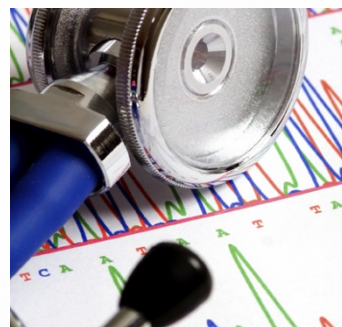
Data Security,
Privacy and
Policy

Emerging
Themes

South BD Hub Initial Priority Areas



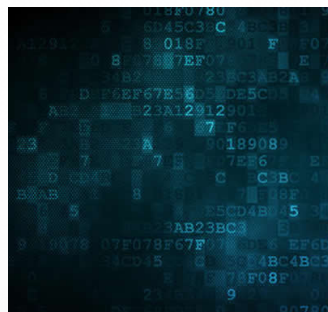
Big Data Sharing
and Infrastructure



Healthcare



Coastal Hazards



Economics, Privacy
and Policy Issues



Industrial Big Data



Materials and
Manufacturing



Habitat Planning

What makes the South BD Hub unique?



- Test beds for industry @ Texas Advanced Computing Center at UT-Austin (Dan Stanzione, pragmatic visionary), BEN, exoGENI
- Oak Ridge National Lab
- Georgia Tech Engineering schools, DARPA xdata, GTRI
- RENCi software sustainability -- open source software development expertise, federated networking expertise
- NC State Freedom Center simulated test grids
- Federal Government (NOAA Coastal Services Center, Water Center and NCEI in Ashville, NASA Goddard and Marshall Centers, EPA campus in Research Triangle Park)
- Highest concentration of historically black colleges and universities (HBCU) in the United States
- 5 out of 12 Gigabit connected cities (Austin, Richardson, Lafayette, Chattanooga, NC Ignite)

What are some of our infrastructure priorities in the South?



- Flexible architecture for communities of science.
- Providing member benefits (e.g., discounts for established services?).
- Models for repositories where there is no discipline-attached mechanism.
- Domain-specific integration of piloted repositories and resources.
- Domain concierge's to cyber-infrastructure (lowering the barrier to adoption)



Questions?

Contact us at:

www.southbdhub.org

info@southbdhub.org