To Participate

• Type questions into Zoom Q&A.
  • You can ask anonymously.
• Raise your hand to speak.
Agenda

• Introducing Research Computing & Data (RCD) Organization and People
• Overview of new infrastructure
• Improving and expanding research facilitation
• Open discussion and Q&A
Leadership

CIO
Brian Voss
(ELT Member)

AVP Research Computing & Data Interim - Brian Voss

RCD Infrastructure
Director Corey Ferrier

RCD Engagement
Exec Dir Jill Gemmill
New Infrastructure

Research Computing Infrastructure Refresh

- **EVPN/VXLAN Network**
  - Supports network virtualization for traffic isolation
  - $350K (spent)

- **Phase 1 FY23**: $3.5M
- **Phase 2 FY24**: $2.5M

- **Internet**

- **Higher-Ed Commercial Cloud Services**

- **National Supercomputing Centers**

- **Other Institutions and Research Platforms**

**DATA LAKE**
- Multipurpose research storage accessible from clusters, desktops, and labs
- 5PB storage with backups
- $1.5M (spent)

- **Clemson research desktop machines**
- **Clemson research labs**

**GIS VDI Hardware**
- Appropriately sized to support ARCGIS PRO
- $145K (spent)

**HIPAA/CUI VDI Instances**
- Isolated from general purpose VDI storage
- $200K (budgeted)

**AI Compute Cluster**
- High-end 4 and 8-way GPU nodes for AI/ML/DL training
- HIPAA?
- $2M (budgeted)

**CUI Compute Nodes and Storage**
- Separate secure and compliant research environment
- $500K (budgeted)

**NEW HPC Cluster**
- Dual CPU/GPU nodes
- SLURM
- HIPAA?
- $1.2M (spent)

**PALMETTO HPC Cluster**
- Dual CPU/GPU nodes
- OpenPBS
Renaissance 2022

DIRECTOR, INFRASTRUCTURE
C. Ferrier

DIRECTOR, CLOUD & SOFTWARE SERVICES
Sam Hoover

DIRECTOR, APPLIED MACHINE LEARNING
Hudson Smith, PhD

DIRECTOR, ADVANCED RESEARCH COMPUTING & DATA SUPPORT
Asher Antao
Doug Dawson
Ben Godfrey
Matt Moersen

LEGEND
Existing Position
NEW Filled
NEW Recruiting
Re-Assigned

EXECUTIVE DIRECTOR, ENGAGEMENT
Jill Gemmill, PhD

POTENTIAL NEW AREAS
• Concierge Services
• Regulated Data Help
• Documentation
• Data Analytics
• Life Sciences Scientist
• Materials Science Scientist
• Visualization

WHAT DO YOU NEED?

EXECUTIVE DIRECTOR, GEOSPATIAL TECHNOLOGIES CENTER
Patricia Carbajales
M. Mahani
G. Kato
P. Claflin

AVP RESEARCH COMPUTING
TBD – Brian Voss, Interim
Points for Discussion

• Future of Condo-Node Model – no annual funding
• Format for RCD infrastructure (Palmetto + Storage) and usage policy governance
• What are your current pain points?
• Other?
Discussion & Questions?

Reminder:
You can use the Q&A and Raise Hand features to participate.
What would be the best form for RCD infrastructure governance and usage policies?

e.g. how to allocate data lake storage?
e.g. what to purchase next?

• Open to anyone interested?
• Balance of colleges/owners?
• Part of the Faculty Senate committee?
What are your pain points?

- Short on compute power or data storage space?
- Need help with tuning code or applications?
- Partnership support for grants?
- Something else?
What is the future of the Condo-Node Model?

• We no longer have annual funding from Clemson for annual buys.