

# CI Milieu (Mafia, Peeps, Homies)

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High Performance  
Computing Center

ACI-REF Virtual Residency  
August 7-13, 2016

# Are You Lonely?

- I was....
- Everybody needs friends

# Why, What, How?

- When Google can't help
- Communities of Practice
- Some organizations exist around a specific element (hardware, training, etc)
- Various rules for membership

# Champions

- HPC Directors
- System Administrators
- User Support specialists
- Faculty evangelists
- Central IT staff
- Non-academic organization staff, e.g. USGS, USDA-ARS, KINBER, Idaho National Lab
- Plus friends of the family



# XSEDE

Extreme Science and Engineering  
Discovery Environment

## Campus Champion Institutions

- ★ Standard – 119
- ★ EPSCoR States – 73
- ★ Minority Serving Institutions – 15
- ★ EPSCoR States and Minority Serving Institutions – 10

**Total Campus Champion Institutions – 217**

PUERTO RICO  
VIRGIN ISLANDS

Revised June 29, 2016



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# What do champions do?

- Facilitate computing- and data-intensive research and education;
- Help their local researchers and educators to find and use the advanced digital services that best meet their needs;
- Share CI challenges and solutions.

(at all levels: workgroup, institutional, regional, national, and international)



# Campus Engagement

- New umbrella in XSEDE: Champion Program plus new stuff
- Co-managers: Dana Brunson & Henry Neeman
- Deputy Manager: Kay Hunt
- Regional coordinator (and more): Jeff Pummill

# Goals

- Increase scalable, sustainable institutional uptake of advanced digital services from providers at all levels;
- Foster a broader, deeper, more agile, more sustainable and more diverse nationwide cyberinfrastructure ecosystem;
- Cultivate inter-institutional interchange of resources, expertise and support;
- Sustain this community beyond XSEDE

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# ACI-REF++

- Started with Clemson-led Phase 1 project
- Virtual Residents – us!
- More projects in the pipeline

# What is an ACI-REF?

- Advanced Cyberinfrastructure Research & Education Facilitator (term invented by Miron Livny)
- Work with users -- researchers and educators -- to help them improve their research and/or education productivity using advanced cyberinfrastructure.
- Typically, one or a few ACI-REFs have responsibility for an entire institution, or multiple institutions.
- Some ACI-REFs are:
  - faculty or former faculty;
  - postdocs or former postdocs;
  - research staff or former research staff;
  - IT professionals;
  - graduate or undergraduate students.



# Software/Data Carpentry

- Volunteer instructors teaching basic lab skills for research computing (over 450!)
- Collaboratively developed lessons (over 200 people contributed to 2016.06 version)
- Research based pedagogy & instructor training certification
- HPC Carpentry efforts ongoing



# CASC

- Coalition for Academic Scientific Computing
- 86 member institutions
- Federal Relations
- Meets 2x per year in DC.
- \$4K/year to join
- “HPC Directors club”

# Dizzying list- how many are you in?

- Campus Champions
- ACI-REF
- Software/Data Carpentry
- CASC
- XSEDE Level 3 service providers
- OSG
- ACM SIGHPC ( + chapters)
- International HPC training forum
- New International CI practitioners consortium
- BD HUBs
- State/Regional Collaborations (e.g. OneOCII)
- Linux Clusters Institute
- More?

What other professional communities do you belong to? (CI or otherwise)



# Inspiration

“Never doubt that a small group of thoughtful people could change the world. Indeed, it’s the only thing that ever has.”

Margaret Mead

“Far and away the best prize that life offers is the chance to work hard at work worth doing.”

Theodore Roosevelt



# Thanks!

## Questions?

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