SWEETER
South West Expertise in Expanding Training, Education and Research

NSF CC* Team
Vision and Strategy for Growing Research Computing

Dhruva Chakravorty, JoAnn Browning, Tim Cockerill, Diana Toups Dugas and Emily Hunt
September 25, 2019
Quad Chart for: **SWEETER: South West Expertise in Expanding Training, Education, and Research**

**Challenge Project Seeks to Address:**
- Multi-disciplinary research will be strengthened by offering opportunities to researchers to collaborate
- There is a need for computing research support at institutions at all levels of learning
- Research projects need more than enablement to succeed

**Deliverables:**
- Research exchange supports 20+ fields of science
- A boots-on-the-ground approach using existing CI resources is adopted
- All institutions are providers and consumers
- Site ambassadors support campuses
- Educational resources developed
- Engage community colleges
- Rotating annual conference and annual site activities

**Scientific Impact:**
- Holistic vision for researcher success envisioned
- Pushes envelope from cyber training to cyber research support
- Enablement is reimagined
- Regional MSI, emergent MSIs non-profits and industry learn together
- Three-pronged evaluation strategy

**Team:**
- Texas A&M, UT Austin, New Mexico State, West Texas A&M, UT San Antonio, Texas A&M San Antonio, University of Arizona, Prairie View A&M, LEARN, GCP, AWS, and the National Center for Genome Research

**Project Updates:**
- Stay tuned for updates at hprc.tamu.edu/sweeter/
- Lots of faculty and student programs
- Need more funds to support programs at other regional MSIs!
Objectives

▶ Establish a research exchange to rapidly assist with collaboration among researchers
▶ Create a research-centric approach as opposed to a compute service-centric approach
▶ Provide expertise in using large scale computing in research
▶ Broaden participation in computing by focusing on training, education and outreach
▶ Develop a portal to enable virtual communities
▶ Inform the R&E community about these efforts

“Leverage leadership in large scale computing technologies, education, and research services to design a scalable and portable framework that can keep abreast with the dynamic changes occurring in computing while simultaneously supporting the community of Science and Engineering researchers in Texas, New Mexico and Arizona.”