

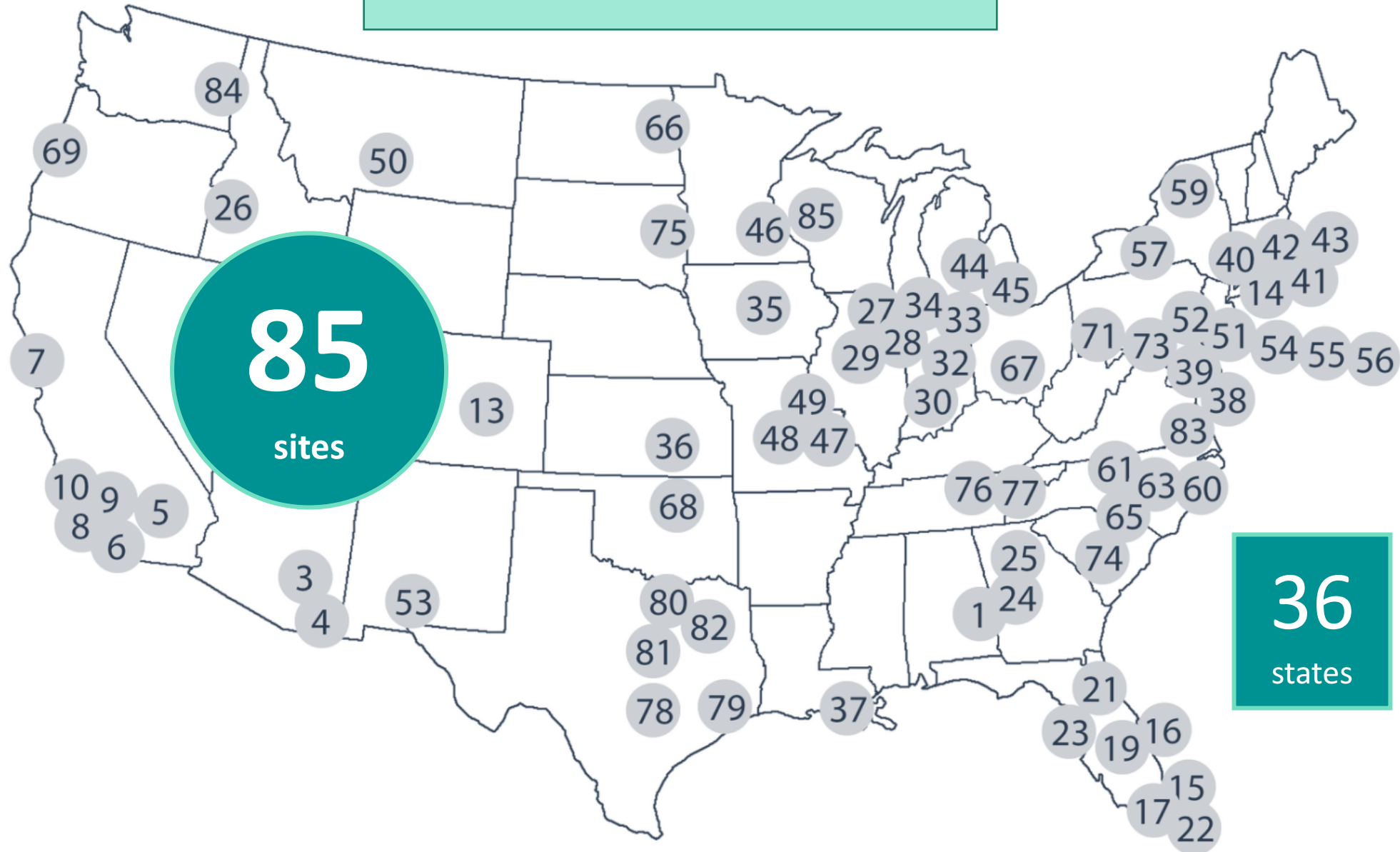
NSF CISE REU Site New PIs Meeting



Erwin Gianchandani, NSF Deputy Assistant Director for CISE

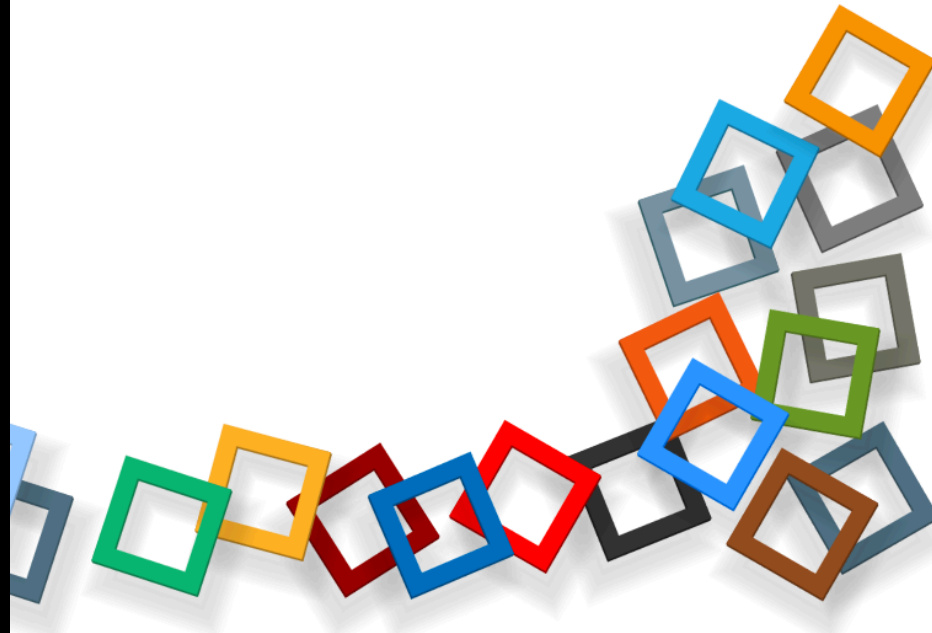
March 23, 2017

2017 CISE REU Sites



Generation CS:

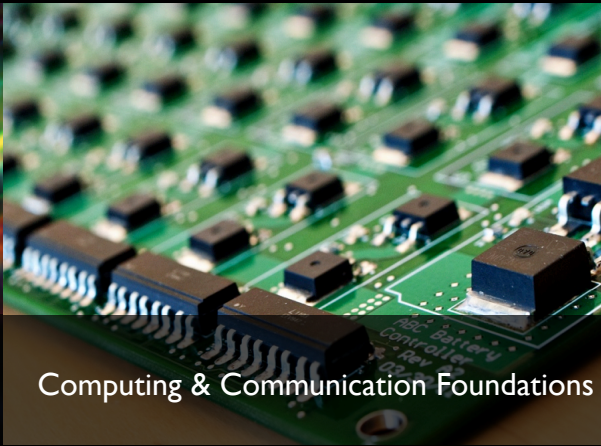
Computer Science Undergraduate Enrollments Surge Since 2006



Advancing the frontiers of computing



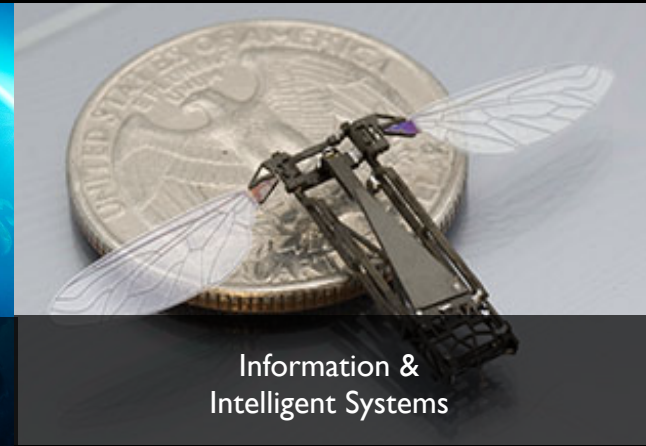
Advanced
Cyberinfrastructure



Computing & Communication Foundations



Computer & Network
Systems



Information &
Intelligent Systems

Addressing national priorities



Image Credit: CCC and SIGACT CATCS

Big Data



Image Credit: ThinkStock

Cybersecurity

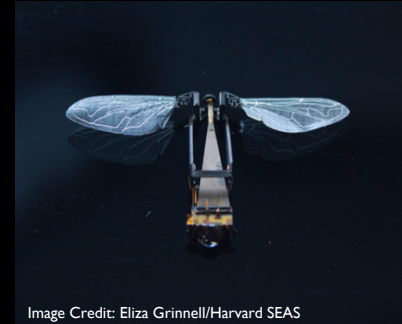


Image Credit: Eliza Grinnell/Harvard SEAS

Robotics



Image Credit: ThinkStock

Understanding the Brain



Image Credit: Texas Advanced Computing Center

Advanced Computing Infrastructure



Image Credit: US Ignite

Smart Cities



Image Credit: College of Engineering, University of Texas, Austin

Computer Science for All



Image Credit: WINLAB, Rutgers University

Advanced Wireless Research

Looking ahead: Ten big ideas

RESEARCH IDEAS

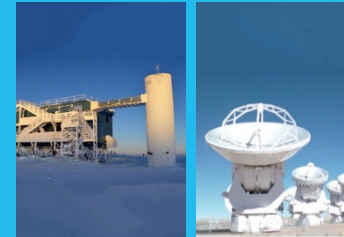


Harnessing Data for 21st Century Science and Engineering

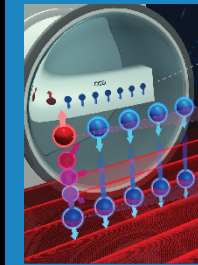
Work at the Human-Technology Frontier: Shaping the Future



Windows on the Universe: The Era of Multi-messenger Astrophysics



The Quantum Leap: Leading the Next Quantum Revolution

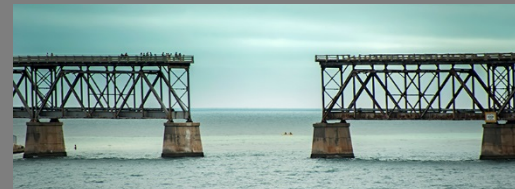


Understanding the Rules of Life: Predicting Phenotype



PROCESS IDEAS

Mid-scale Research Infrastructure



NSF 2050: Seeding Innovation



Growing Convergent Research at NSF



NSF-INCLUDES: Enhancing Science and Engineering through Diversity



It is an ***exciting, impactful & important***
time for **CISE** research!

Ubiquity: Advances in CISE are critical to science and society

Engagement: The CISE community is impactful

Urgency: CISE research and researchers are in demand