Workforce Development

Linda Akli, SURA

XSEDE
Extreme Science and Engineering Discovery Environment

October 4, 2013
Linda Akli – Who?

- Academically
  - Product of a low performing inner-city school system
  - 3rd African American Female to earn BS-CS @RPI
  - 1st Generation College Educated

- Personally
  - Live and breath diversely
  - Concerned Parent & Citizen

- Professionally
  - Member of the XSEDE Underrepresented Community Engagement responsible for MSIs and Minority Research Community programs
  - Former AAAS EHR Program Manager
  - Former Entrepreneur and Industry Middle Manager
What is XSEDE?

• Comprehensive program of digital services sponsored by the National Science Foundation

• Unprecedented integration of diverse digital resources
  – innovative, open architecture making possible the continuous addition of new technology capabilities and services

• Focus on building a workforce capable of using these services and techniques
XSEDE Training, Education & Outreach

• Prepare the current and next generation of researchers, educators and practitioners.
• Create a significantly larger and more diverse workforce in STEM.
• Inculcate the use of digital services as part of routine practice for advancing discovery.
We are Failing to Meet National Needs

- Although the numbers have been rising recently, the number of undergraduate and graduate degrees in science and engineering are not meeting national needs.

Source: KEY SCIENCE AND ENGINEERING INDICATORS: 2010 DIGEST
Insomnia Inducers

• State of the Education Pipeline
• Public Understanding and Perception
• Aging HPC Community
• Inculcating New Institutional Practices
• Difficulty of Culture Changes
Our reach will forever exceed our grasp, but, in stretching our horizon, we forever improve our world.