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Workforce Development

Linda Akli, SURA

XSEDE

Extreme Science and Engineering
Discovery Environment



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.

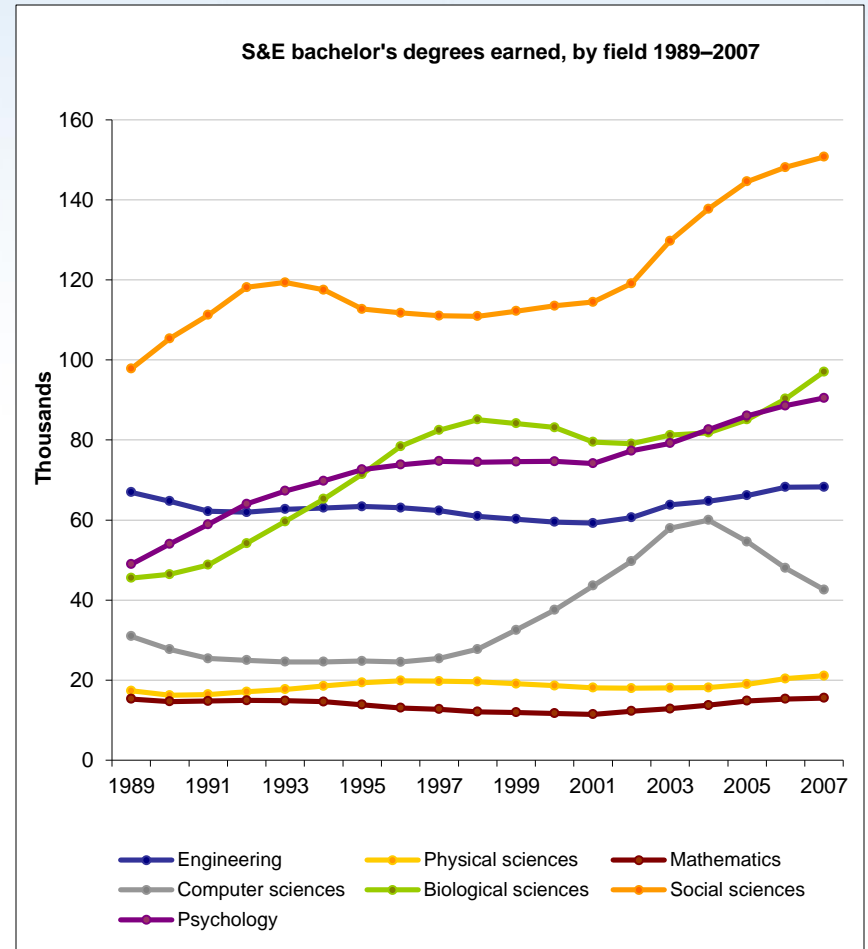


XSEDE

We are Failing to Meet National Needs

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


Source: KEY SCIENCE AND ENGINEERING INDICATORS: 2010 DIGEST



XSEDE

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.

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