Harnessing Systemness. Delivering Performance:
Charting a New Path for Higher Education
Second Annual Critical Issues in Higher Education Conference
November 8, 2012

Dr. Timothy Killeen
President, Research Foundation for SUNY
SUNY Vice Chancellor for Research
SUNY ASSET BANK

PEOPLE
468,000 Students
88,000 faculty and staff
3 million alumni

INFRASTRUCTURE
64 Campuses
6 Centers for Advanced Technology
8 Centers of Excellence
17 Incubators

TECHNOLOGY
Over 1,000 issued patents
Over 700 active licenses
72 active startups
COLLABORATIONS: 
THE NEED FOR SYSTEM THINKING

The PATH FORWARD:
1/3 of all Peer Reviewed S & T articles now internationally collaborative!
SPARC brings together researchers in upper atmospheric and space physics from around the world, providing them a set of online collaboration tools and workspaces that link together scientific instruments, models, data archives and researchers.
Lessons Learned from Collaboratory Movement

- Added Value an absolute requirement (value proposition)
- Trust Essential (Rules of the Road)
- Formative Behavioral Sciences Incredibly Beneficial
- Nimble Technology Migration a Key (most digital libraries failed)
- Open Access and Low Adoption Thresholds are Key Success Indicators
What is Networks of Excellence (NOE)?

A Network of Excellence is an instrument for strengthening excellence by tackling the fragmentation of European research, where the main deliverable is a durable structuring and shaping of the way that research is carried out on the topic of the network.

- Develop An Explicit Intervention Logic
- Assess The Performance Of New Instruments Compared To Traditional Research Collaboration
- Examine The Reasons For A Low Investment Level
- Improve Management Conditions

European Court of Auditors Special Report No. 8
AN NSF FUNDED COMMUNITY LEAD INITIATIVE

http://earthcube.ning.com/

>1100 members to the EarthCube website

113 white paper submission; 185 respondents to capability survey

~80 formal Expressions of Interest

17 Community/Special Interest Groups

Untold number of hours of pro-bono contributions by the community

Unprecedented view of the cyber needs of the geosciences

Significant international engagement and building interagency engagement
LESSONS LEARNED FROM NSF EARTHCUBE

◆ Early Career Investigators and Students are Ready for Prime Time
◆ Rapid Pace Possible and Builds Momentum
◆ “If you come we will build it”, rather than “If we build it, they will come”
◆ Science and Technology can go Viral with the Right Leadership
To date, the $1.1 million pilot investment has yielded greater than $20 million in extramural funding – a **20:1 return on investment**

19 grants to date: 12 are NIH, 4 are NYS agencies, and 3 other
Lessons Learned from SUNY REACH

- SUNY can work as a system for targeted research
- 20:1 growth is possible
- Provides a model for additional future system networks of excellence fostering collaboration
IMPACT = EXCELLENCE x SCALE

\[ I = (E \times S) \]