

Strengthening the Professoriate @ Iowa State University

Iowa State's Broader Impacts Resource • <http://www.spisu.iastate.edu>

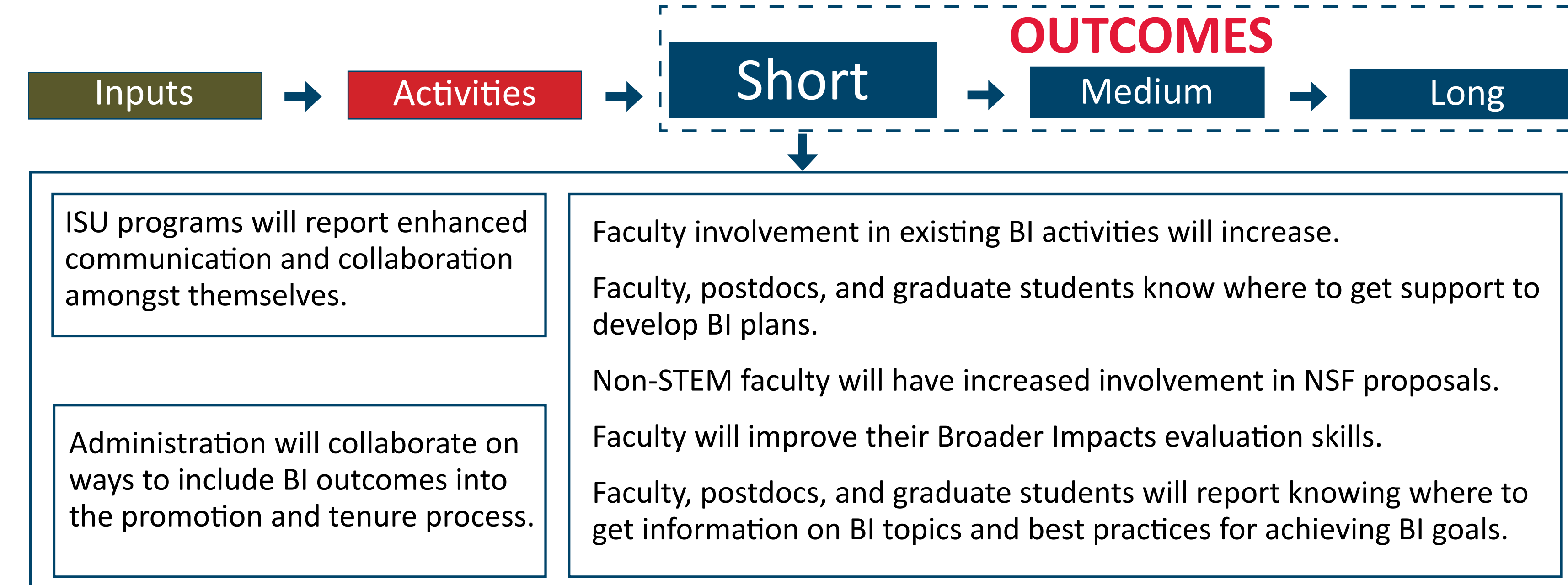
What is SP@ISU?

SP@ISU is a single point of contact for faculty, postdoctoral associates, and advanced graduate students in STEM to gain knowledge in developing quality Broader Impact plans, and facilitates connections between researchers and resources to develop and implement these plans. The goal of SP@ISU is to strengthen the professoriate by enabling professional development in STEM, while promoting and enhancing a diverse community of scholars and learners.

- Build on current NSF programs to increase efficiency and effectiveness of ISU programs to broaden participation in STEM
- Create a clearinghouse of programs, resources, information, and network of people to assist and guide in the development of a Broader Impacts culture at Iowa State University
- Facilitate and enhance the knowledge base needed by faculty to develop well-researched Broader Impacts plans as part of their research enterprise
- Develop protocols for assessment and evaluation of faculty Broader Impacts initiatives for inclusion in the promotion and tenure process

What are Broader Impacts and Why are they Important?
"Proposals submitted to the National Science Foundation are evaluated through use of two merit review criteria, which all proposals must address explicitly. Experience shows that while most proposers have little difficulty responding to the criterion relating to intellectual merit, many proposers have difficulty understanding how to frame the broader impacts of the activities they propose to undertake." NSF Merit Review Broader Impacts Criterion: Representative Activities
<http://www.nsf.gov/pubs/gpg/broaderimpacts.pdf>

Logic Model

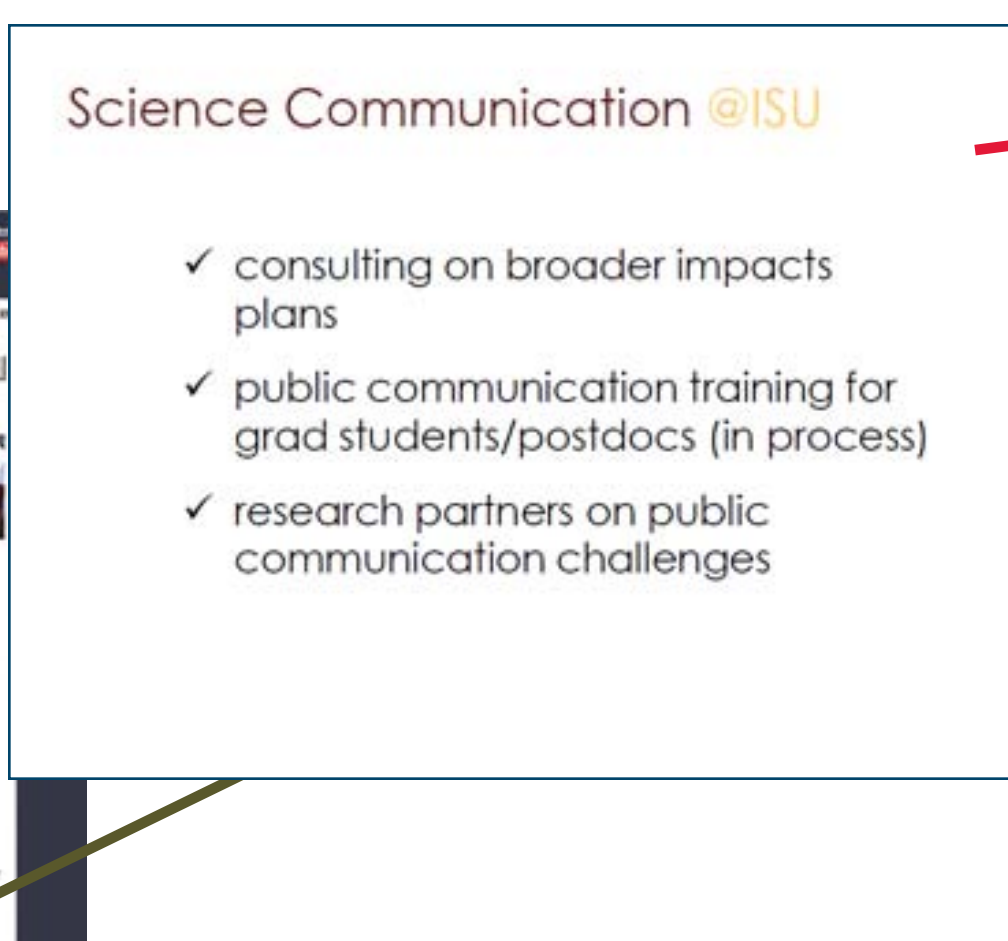


Partnerships & Activities

SP@ISU held a series of workshops to inform faculty, postdocs, and graduate students of Broader Impact opportunities and resources on campus. The first workshop was to recognize recent NSF CAREER grant awardees and highlight the process of attaining such an award. This was followed by two workshops that highlighted SP@ISU partners and informed faculty of resources they may utilize.

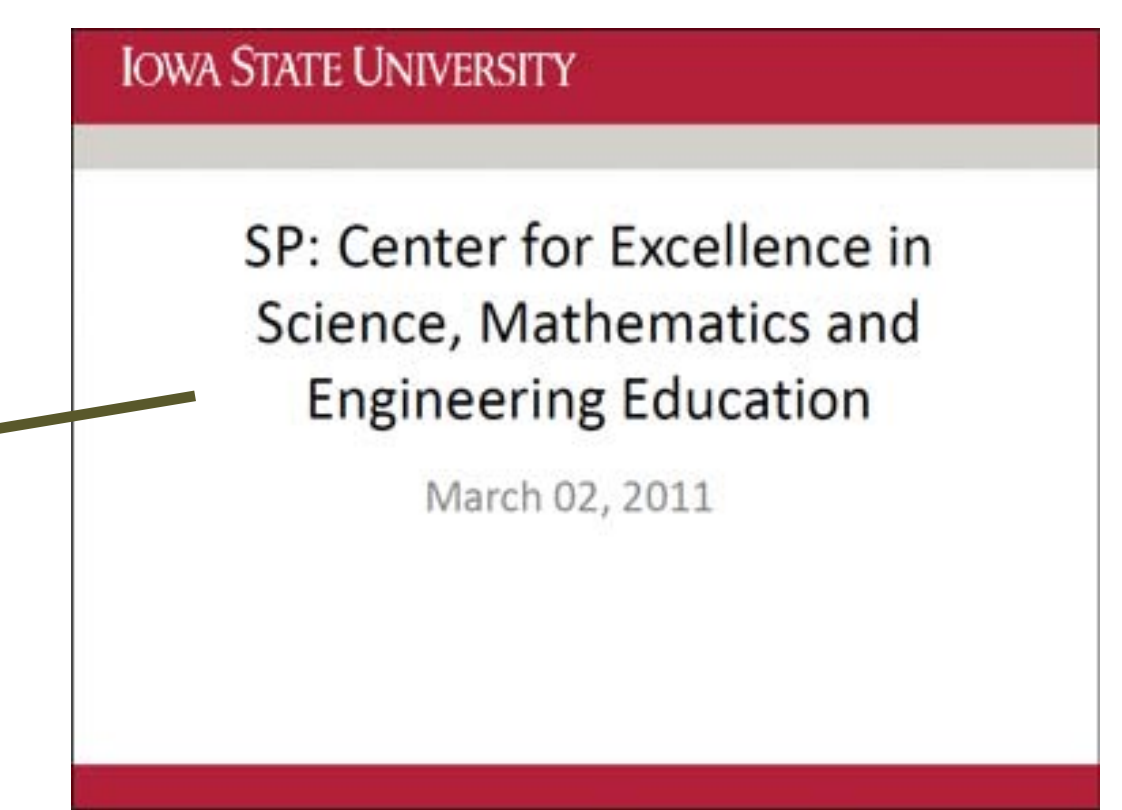
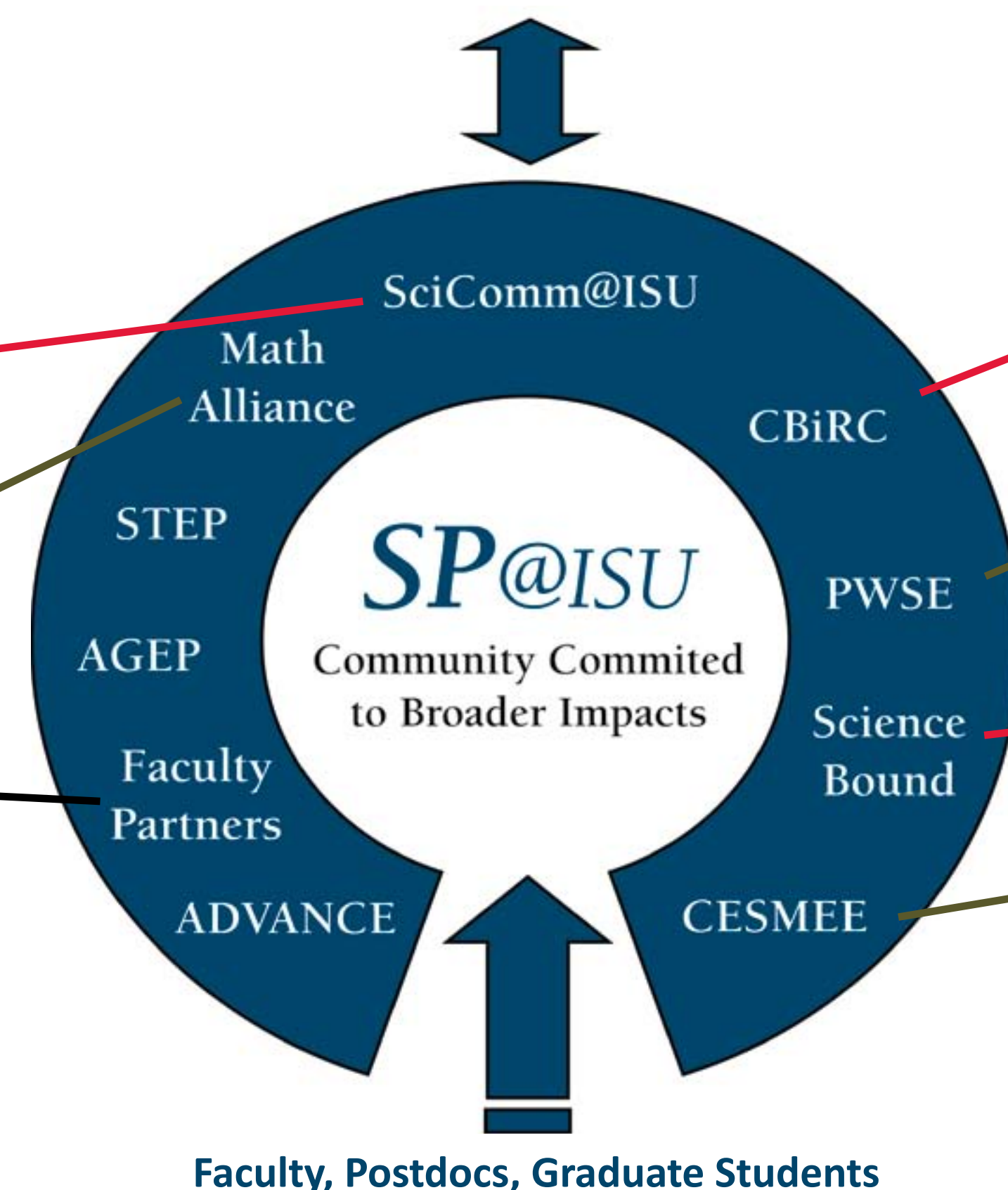
NSF Broader Impacts Workshop: Sampling of Opportunities

Presenters: Faculty who have done extensive work in various areas of broader impacts. Topics included Broadening Participation, Broad Dissemination, and Benefits to Society.



A schematic representation of SP@ISU as a gathering place to connect with external resources through NSF-funded and other campus programs with a goal of fostering and maintaining a broader impacts culture.

CONNECTION TO: National Initiatives, Best Practices Research, K-12 Outreach Programs, Funding Opportunities



NSF Broader Impacts Workshop: K-12 Education and Education Research
Programs on campus that promote K-12 education and education research presented ways their programs can partner with faculty to develop successful broader impact plans.

Evaluation



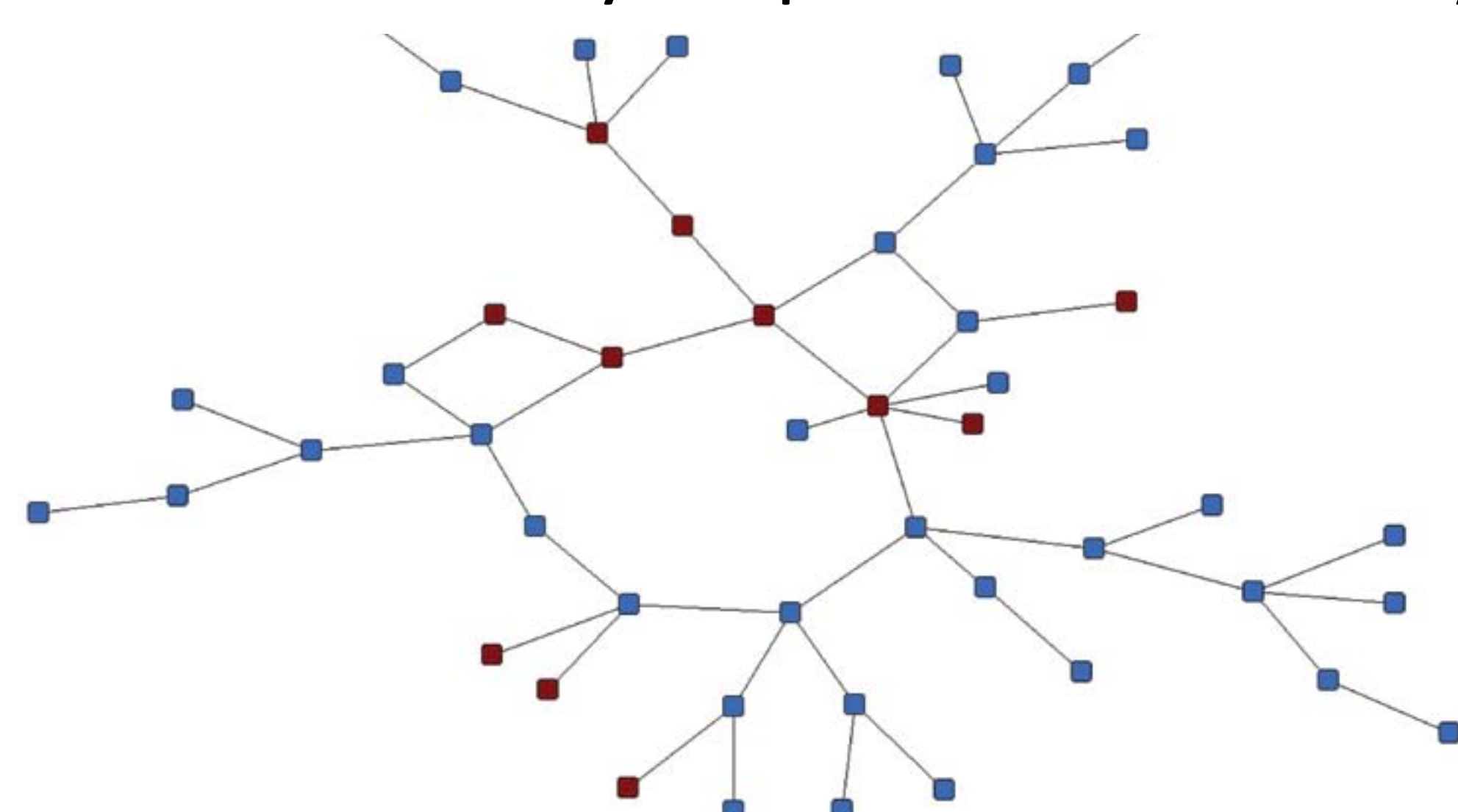
Focus Groups to Assess Faculty Needs

In the Fall of 2010, SP@ISU conducted a series of focus groups with program stakeholders (including program administrators and all levels of faculty in STEM) to determine their knowledge of current programs, their views on Broader Impacts, and their strategies for enhancing efforts across programs.

Major Needs Established by the Focus Groups Included:

- Faculty lack awareness of existing programs on campus
- Faculty lack knowledge on Broader Impacts criteria
- Faculty want a centralized campus resource for developing Broader Impact plans

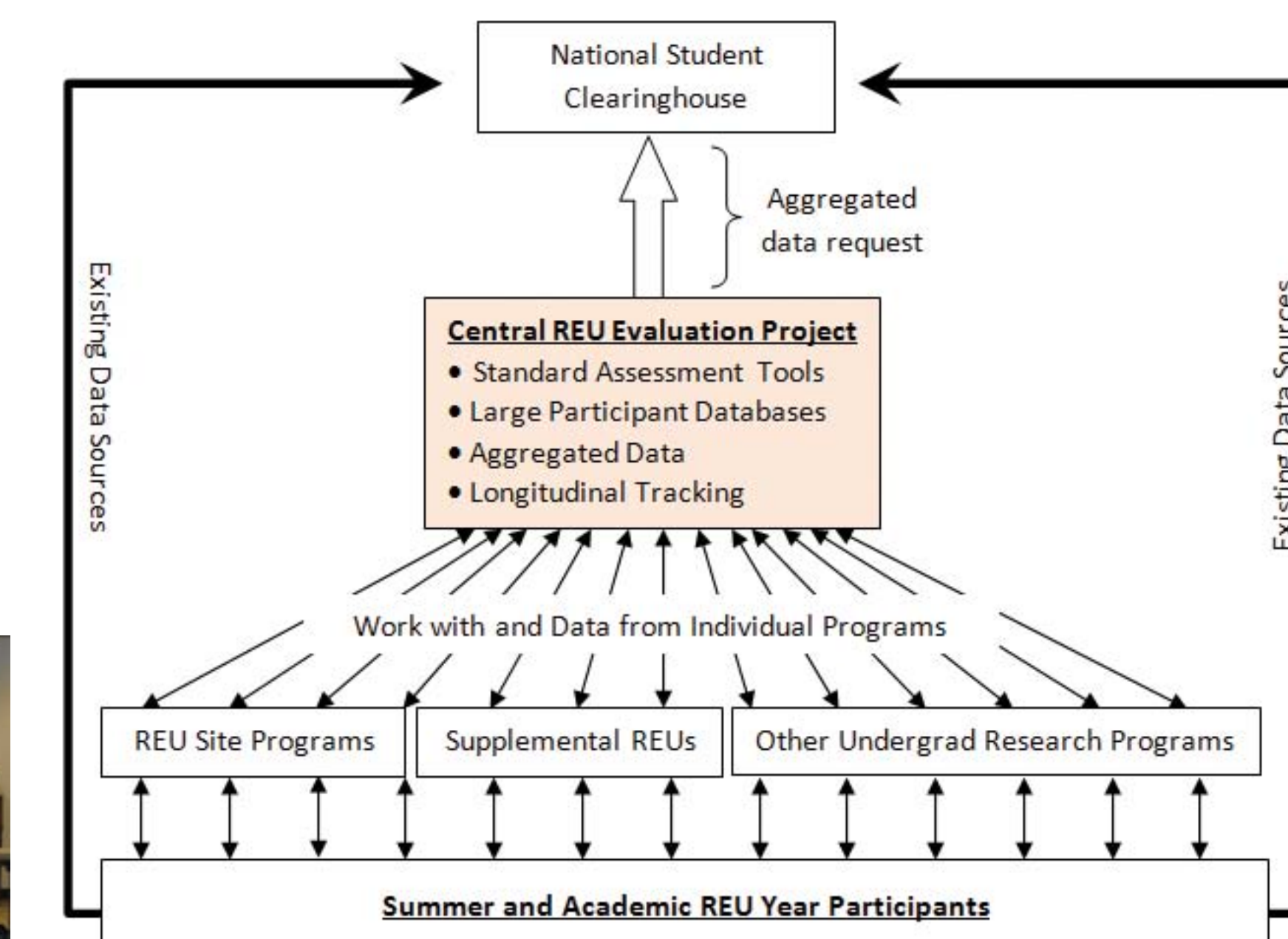
Social Network Analysis: Importance of Statistics Faculty



A graph showing the major connections between NSF-funded ISU PIs from 2002-2011. Red nodes indicate ISU faculty from the Department of Statistics. Consider how many blue nodes would no longer be connected to the main component if the red nodes were removed. The names associated with the nodes have been removed for anonymity.

Combined REU Evaluation Project

SP@ISU has partnered with Survey and Behavioral Research Services (SBRS) to provide a central place on campus that can support REU evaluation as well as pool resources from programs across campus to increase the assessment capability of any individual program. This project offers ISU the capacity to create a larger database of students who participate in summer research programs and track them longitudinally.



PI Team
Sharron Quisenberry, PI
Bonnie Bowen, Co-PI
Diane Rover, Co-PI

Evaluators
Chitra Rajan
Sandra Norvell
Megan Heitmann

College Equity Advisors
Jason Pontius, Internal
Mariko Chang, External

College Equity Advisors
Kristen Constant, Engineering
Lisa Larson, Liberal Arts and Sciences
Susan J. Lamont, Agriculture and Life Sciences
Katherine Bruna, Human Sciences

Grant No. HRD-0963584, July 2010 - 2015

This material is based upon work supported by the National Science Foundation under Grant No. HRD-0963584. Any opinions, findings, and conclusions or recommendations expressed in this material are those of the authors and do not necessarily reflect the views of the National Science Foundation.