LA-SiGMA

Louisiana Alliance for Simulation-Guided Materials Applications

Formative Assessment
(Baseline Statistics)

Ramu Ramachandran (LA Tech)
Cheryl Stevens (Xavier)
Scott Whittenburg (UNO)
Diola Bagayoko (SUBR)
Hank Ashbaugh (Tulane)
Shantenu Jha (LSU)

Louisiana
EPSCoR

Survey Overview

- Goal was to collect statistics for the year prior to LA-SiGMA funding
- The time window deliberately had a small overlap (1 month) with the current project.
- The purpose of the overlap was to see how quickly we were able to pick up or transfer students to LA-SiGMA funding.
- Survey covered all aspects of the project:
    - Graduate students
    - Undergraduate students
    - Diversity in the G and UG populations
    - Research Productivity – papers, presentations, proposals
    - Research Collaboration – collaboration tools/mechanisms
    - Computational Science/Technology utilization
    - External Engagement
    - Intellectual Property Development
    - Recruiting Efforts

Louisiana EPSCoR

Number of Responses by campus
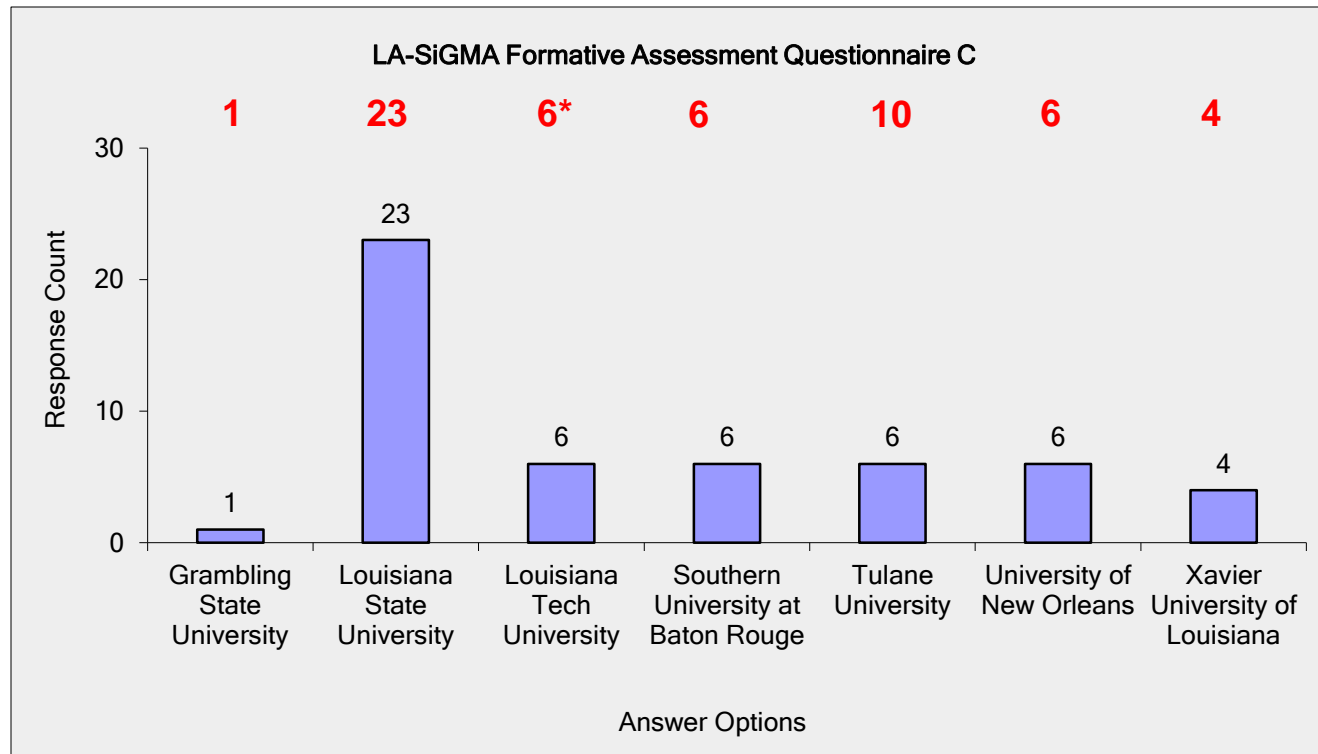
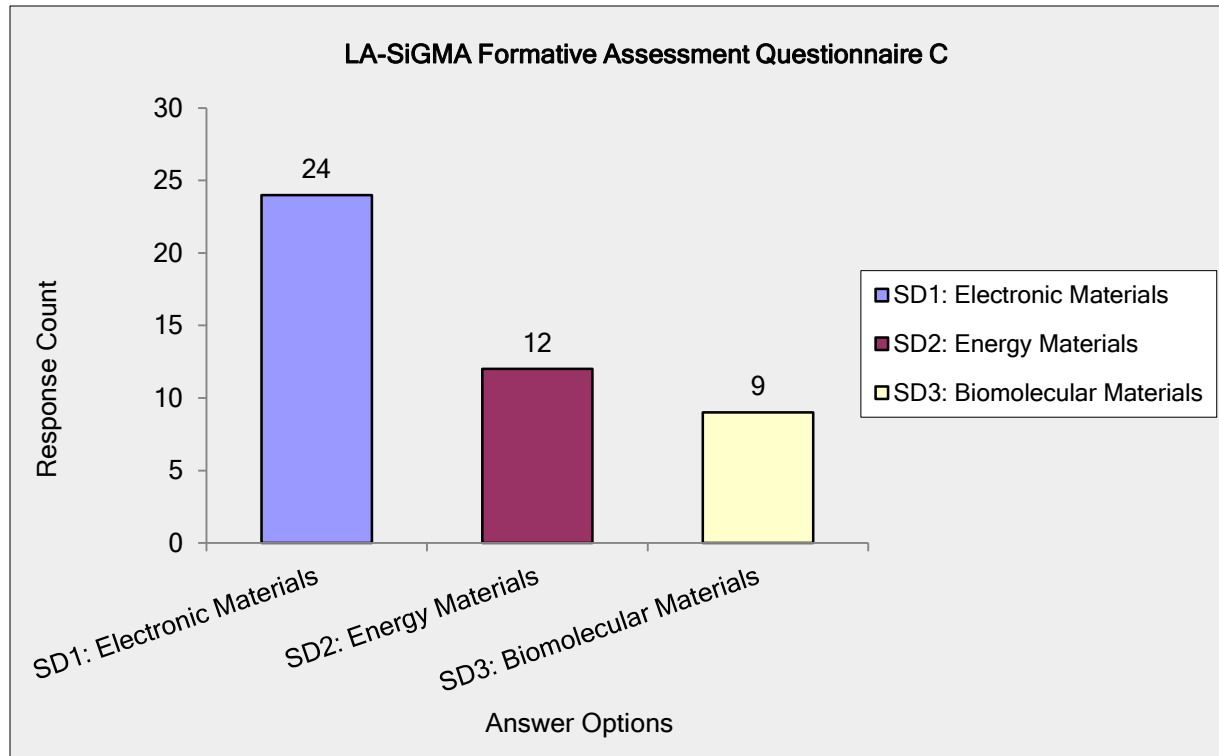Expected responses from each campus in red.
52 responses total. 56 expected. 93% response rate.
*LA Tech count excludes Derosa (answered for GSU) and Dobbins (on leave)

Several people skipped some or all questions about students.
Some of them may not have any students. Want to see "0."
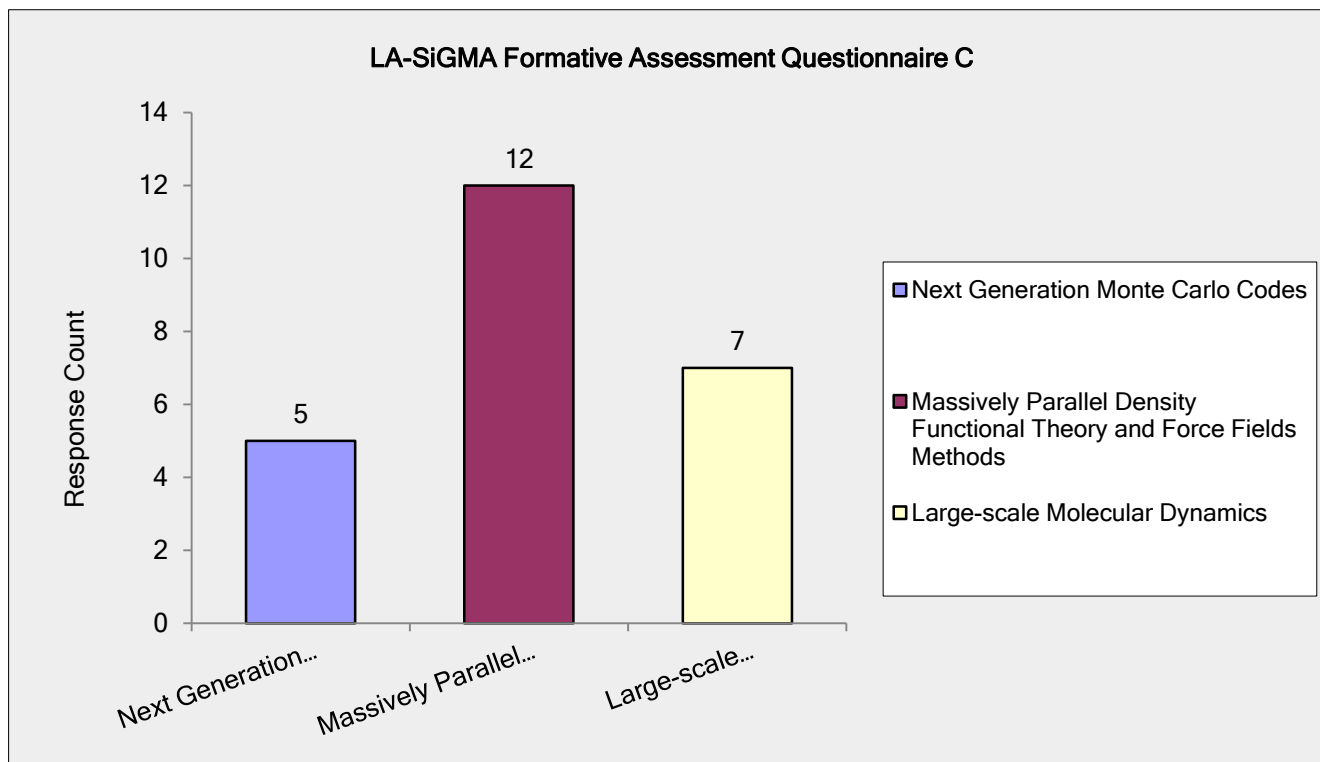Some of them have students (we know) but chose to skip.

Primary Science Driver

LA-SiGMA Formative Assessment Questionnaire C

Adds up only to 45. Should have included "CTCI" as a science driver.

Computational Teams (CTCI)

LA-SiGMA Formative Assessment Questionnaire C

Response Count

- Next Generation Monte Carlo Codes — 5
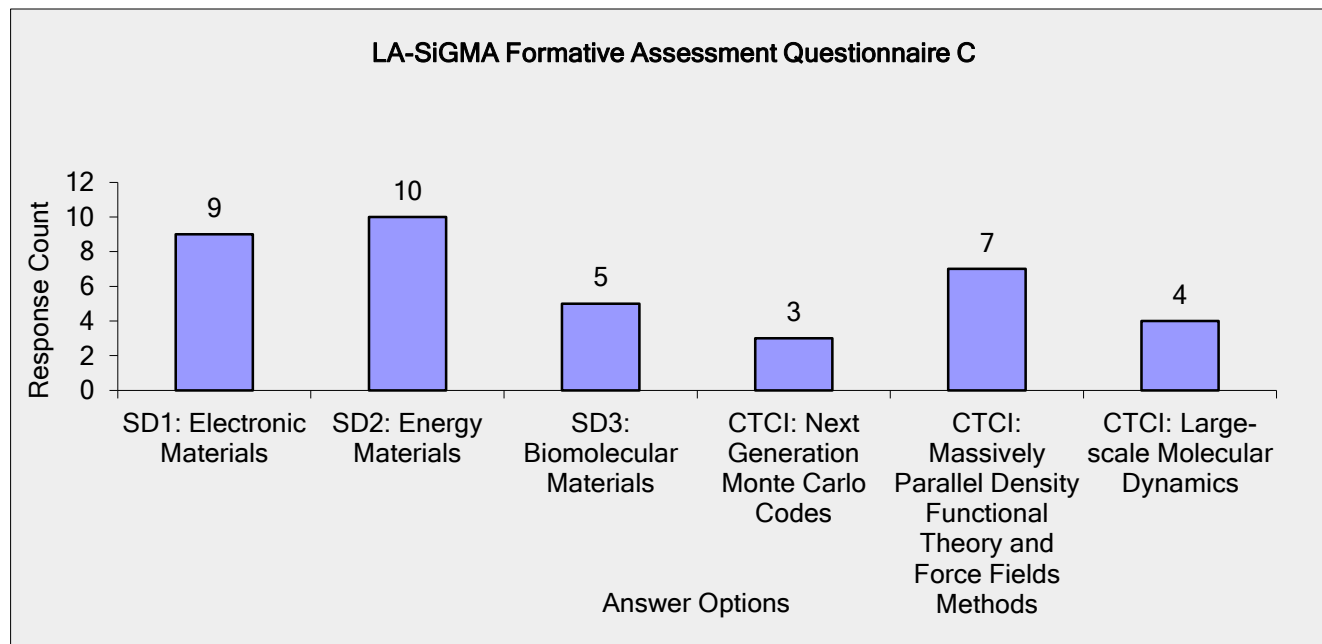- Massively Parallel Density Functional Theory and Force Fields Methods — 12
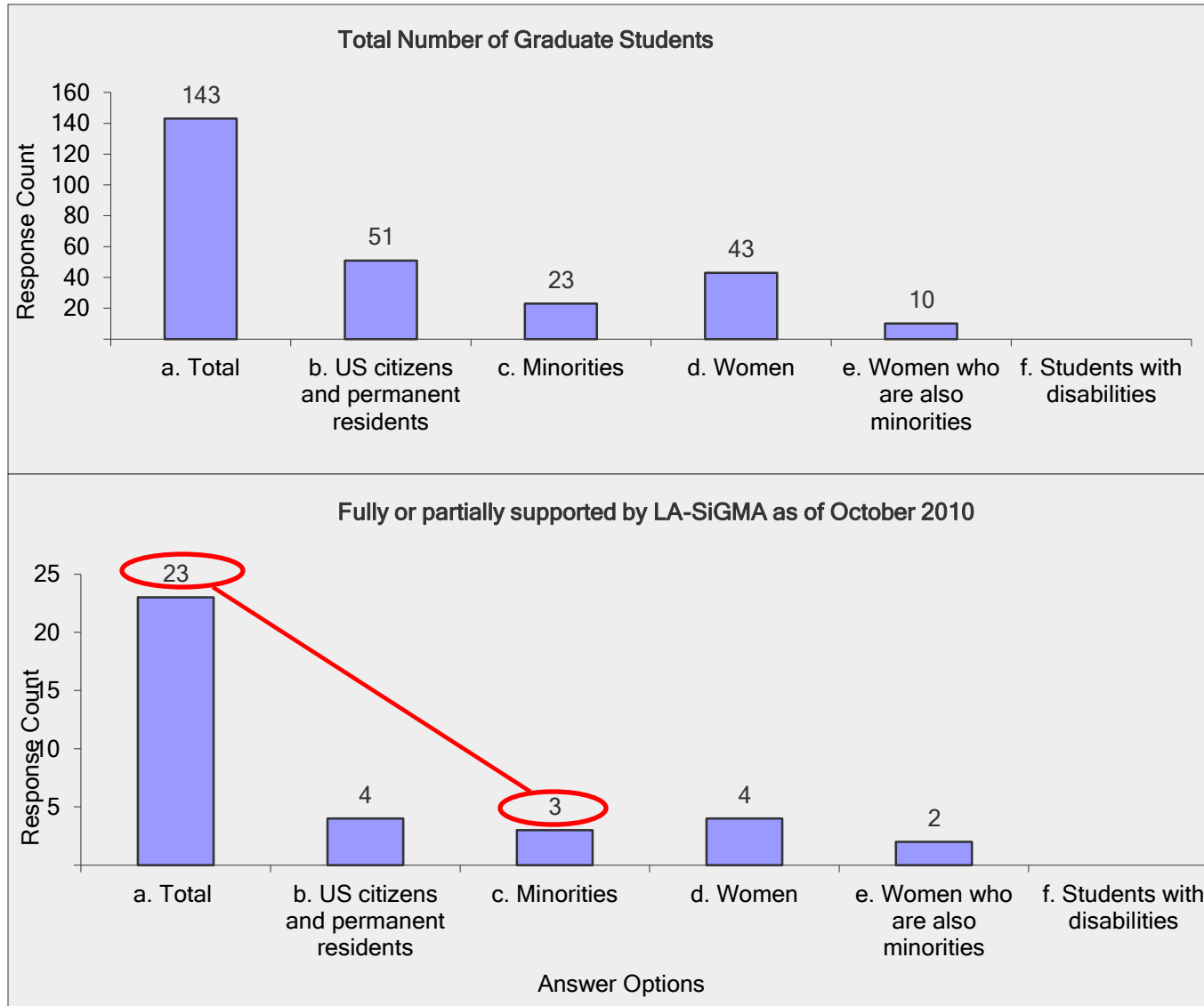- Large-scale Molecular Dynamics — 7

46% of respondents identify with at least one Computational Team.

Additional Membership in SD or CTCI teams

LA-SiGMA Formative Assessment Questionnaire C

Total No. of Graduate Students

Total Number of Graduate Students

Response Count

- a. Total: 143
- b. US citizens and permanent residents: 51
- c. Minorities: 23
- d. Women: 43
- e. Women who are also minorities: 10
- f. Students with disabilities

Fully or partially supported by LA-SiGMA as of October 2010

Response Count

- a. Total: 23
- b. US citizens and permanent residents: 4
- c. Minorities: 3
- d. Women: 4
- e. Women who are also minorities: 2
- f. Students with disabilities

Answer Options

13% URM among graduate students

Louisiana EPSCoR

Shared Graduate Students at <u>another</u> institution
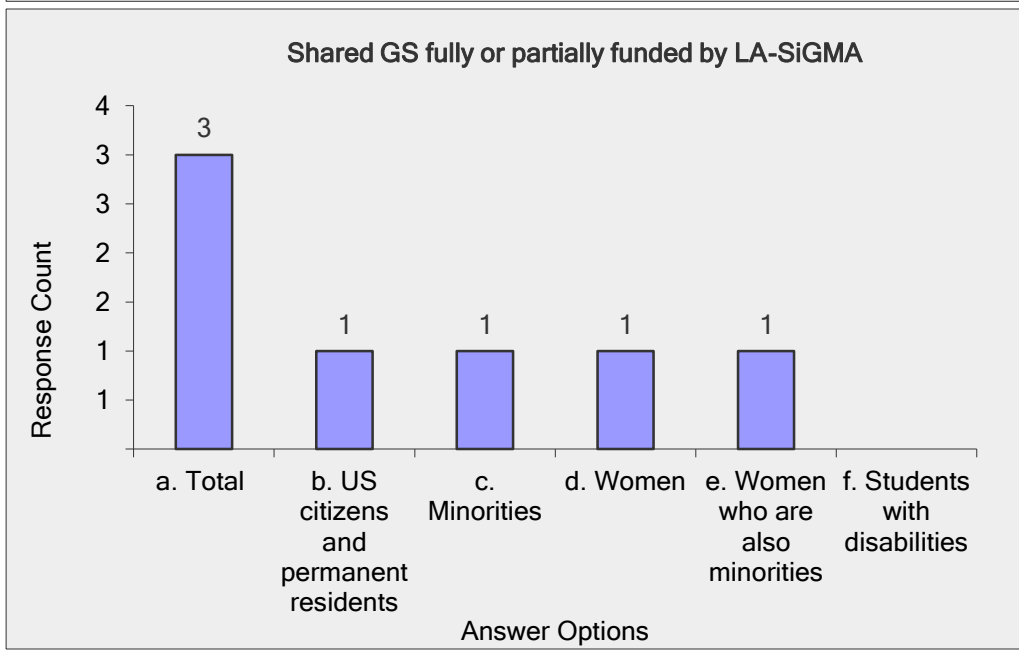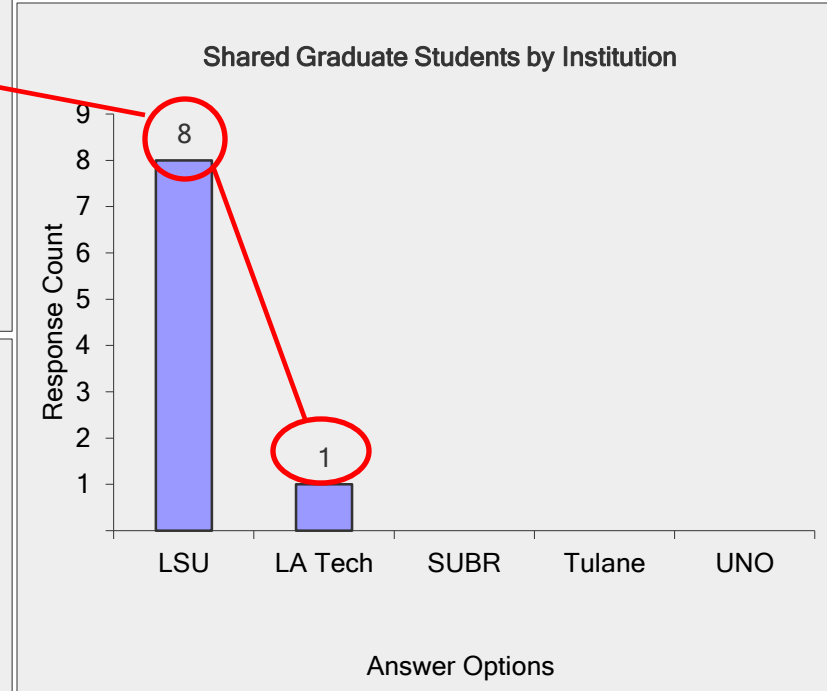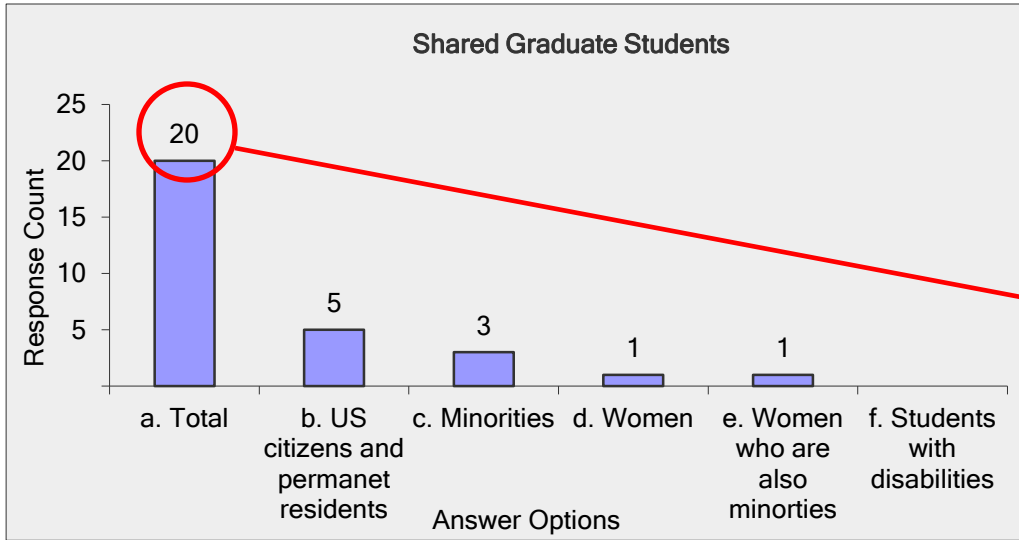
Total No. of Undergraduate Students

Total number of undergraduate students
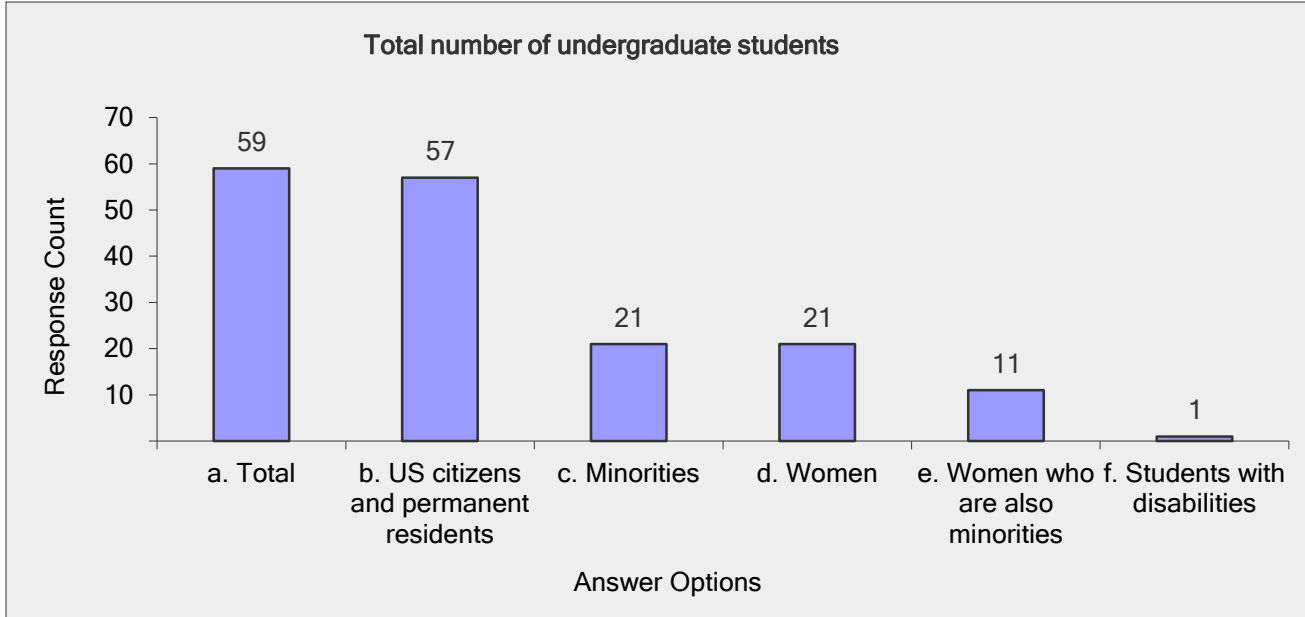
1.1 undergrad per funded LA-SiGMA SI. Was the question mis-understood?

UG students fully or partially funded by LA-SiGMA
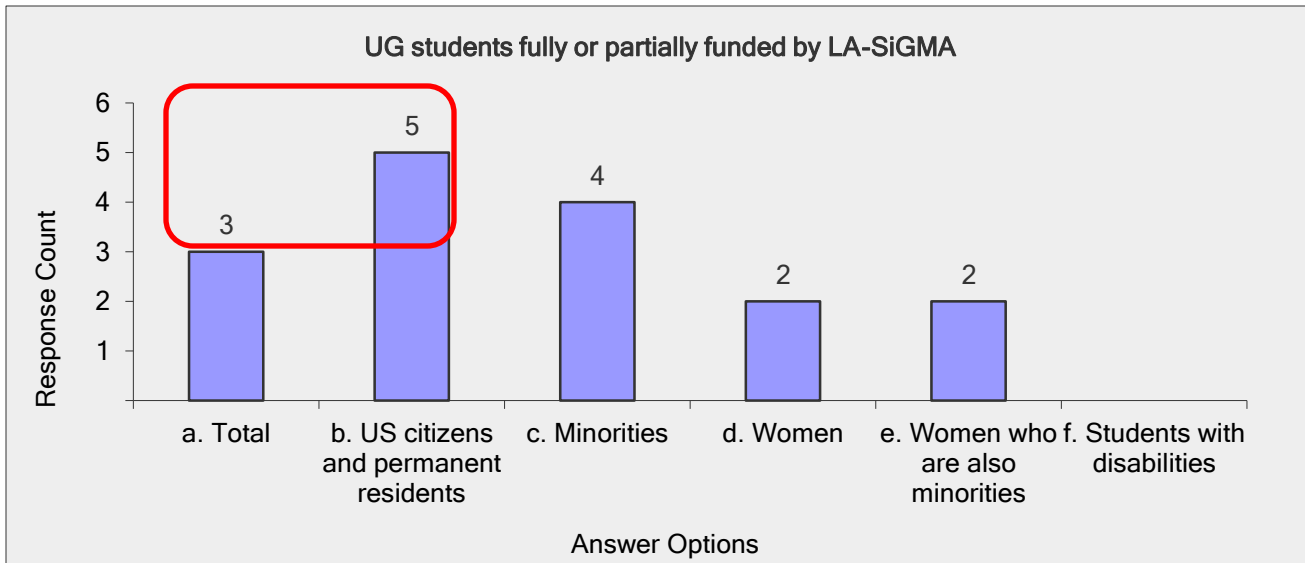
Can't explain this one.

Louisiana EPSCoR

Shared Undergraduate Students at _another_ institution

Shared UG Students at another institution

Shared UG students by Institution

Shared UG Students funded by LA-SiGMA
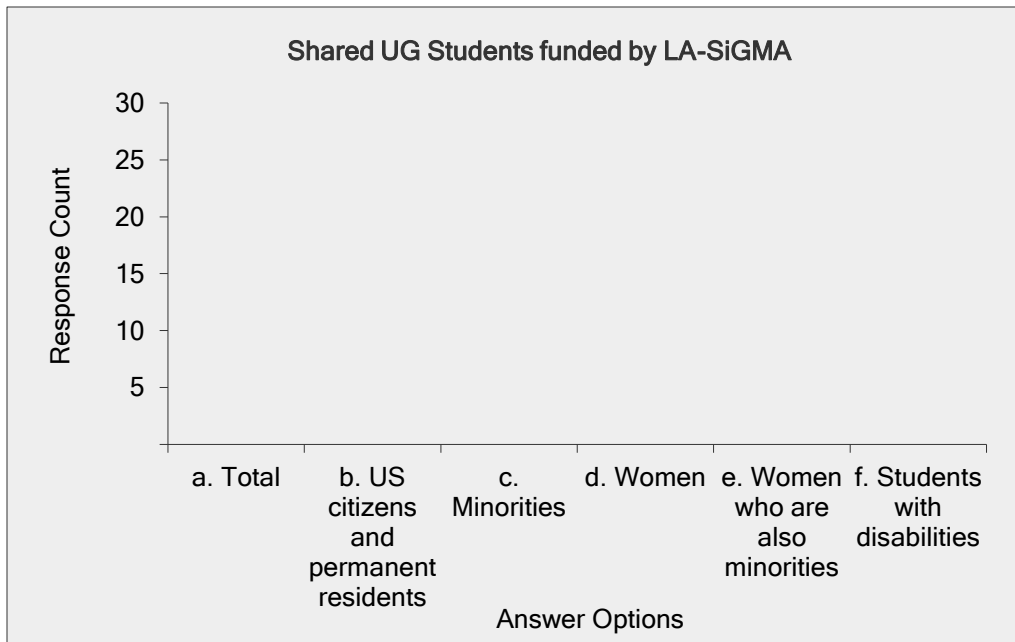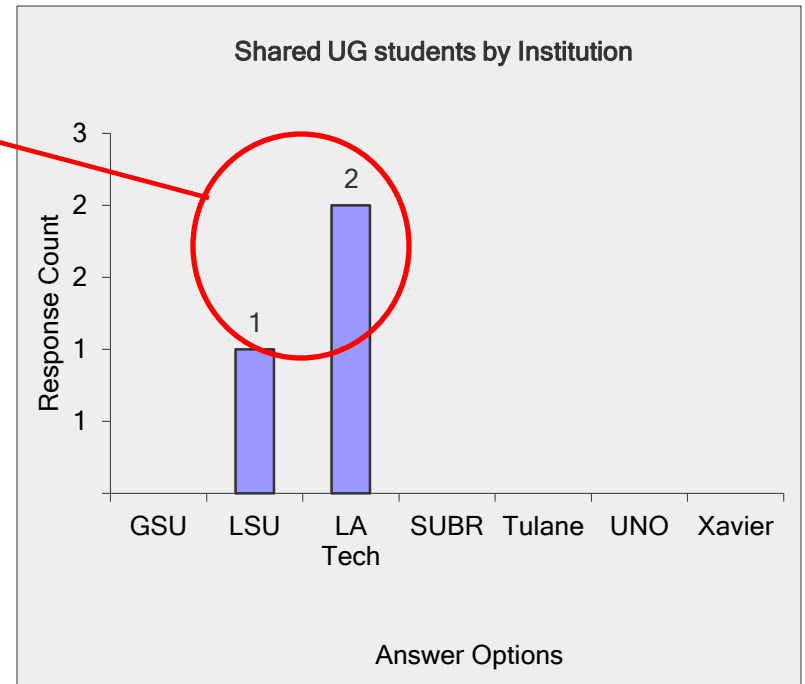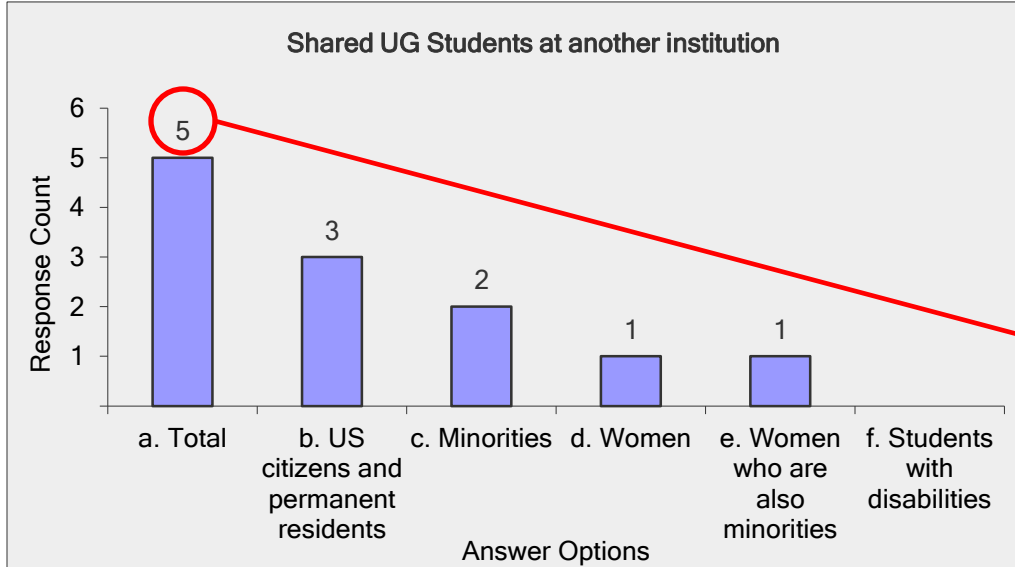
Difficult/impossible to avoid double-counting.

Louisiana
EPSCoR

Peer-reviewed papers:
October 1, 2009 to October 31, 2010
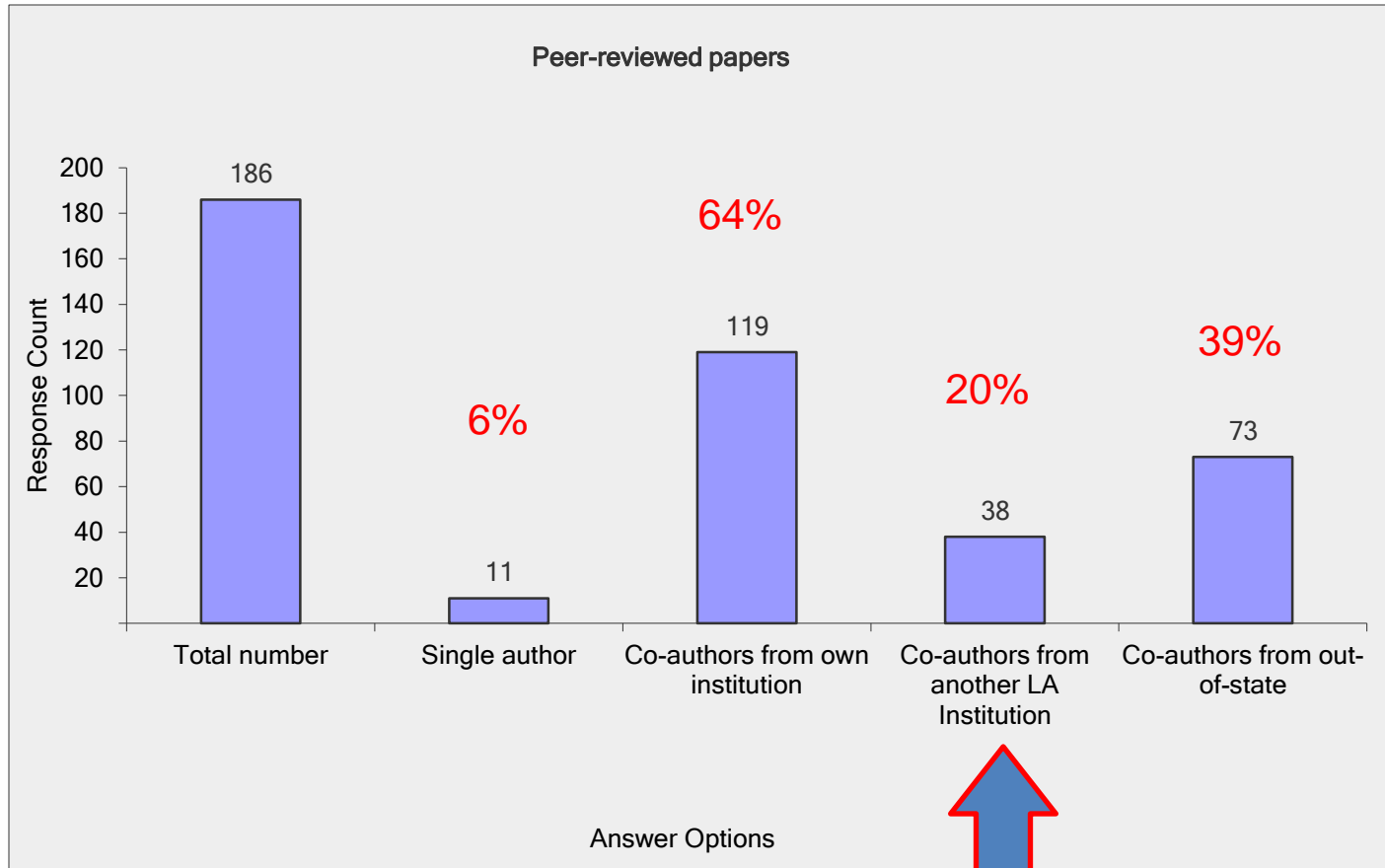
Invited oral presentations:
October 1, 2009 to October 31, 2010
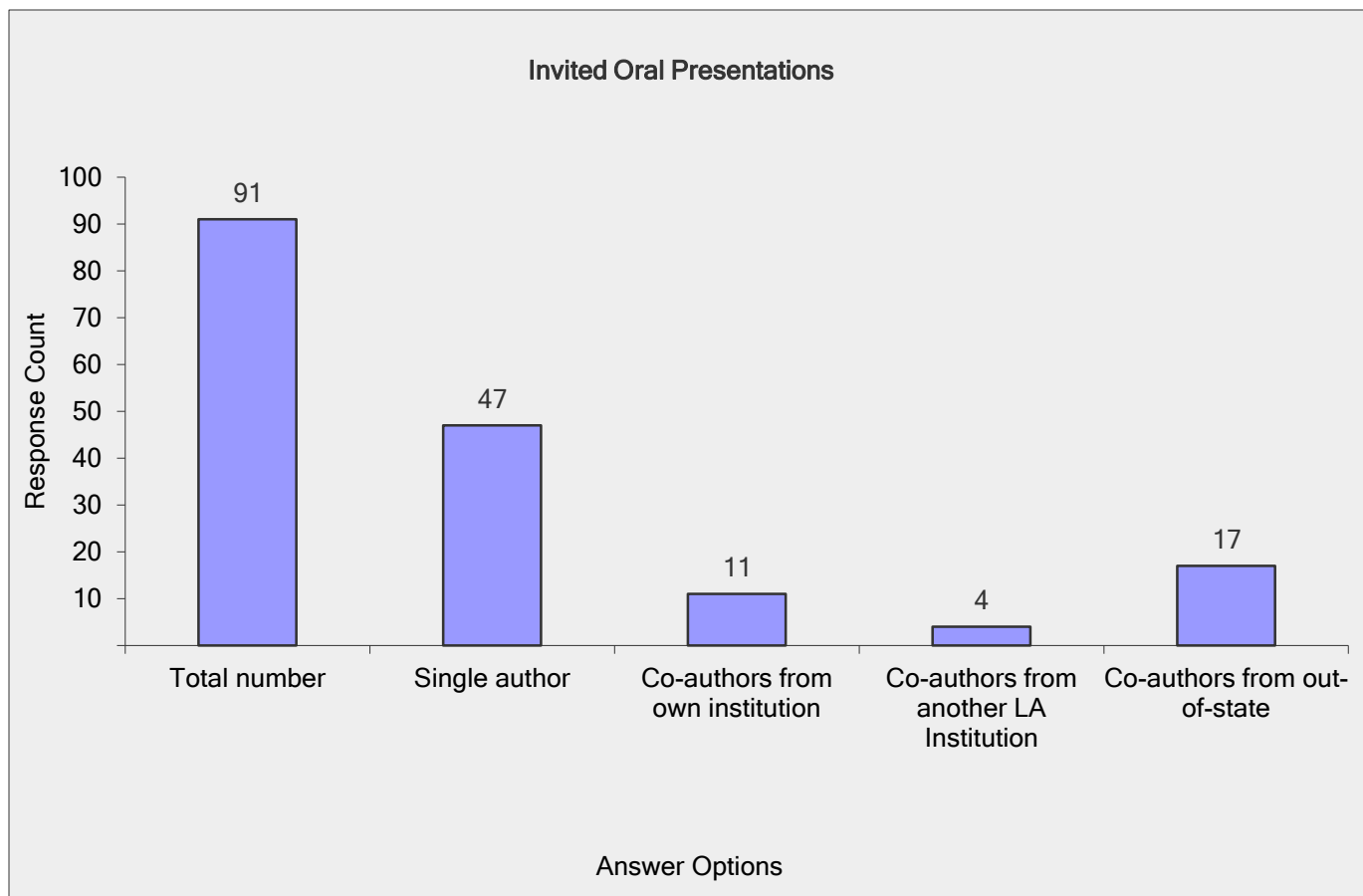
Proposals:
October 1, 2009 to October 31, 2010
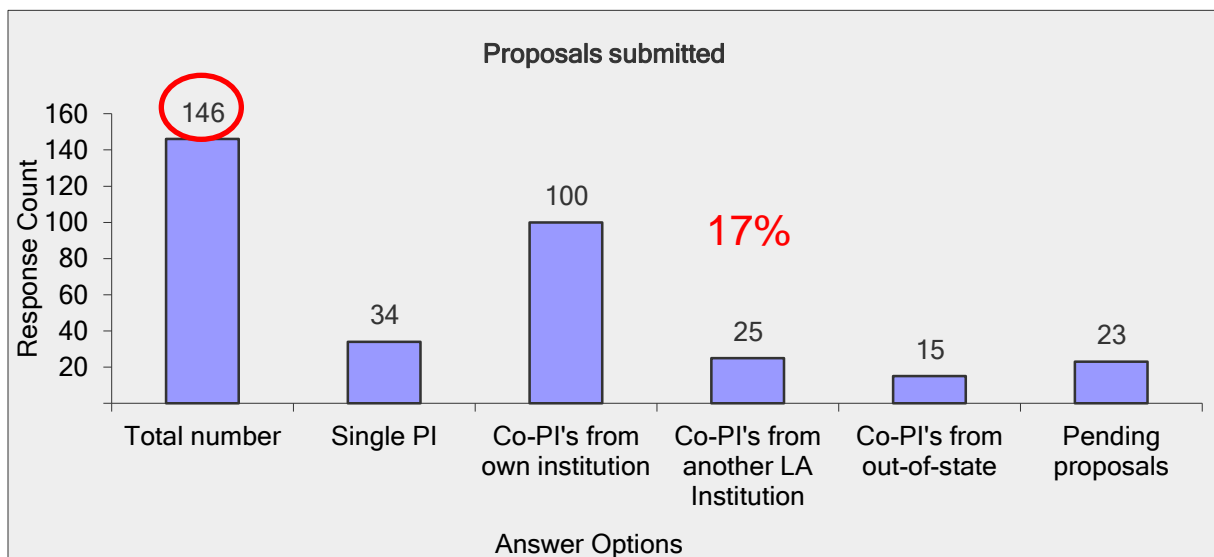
Success rate of 45%.
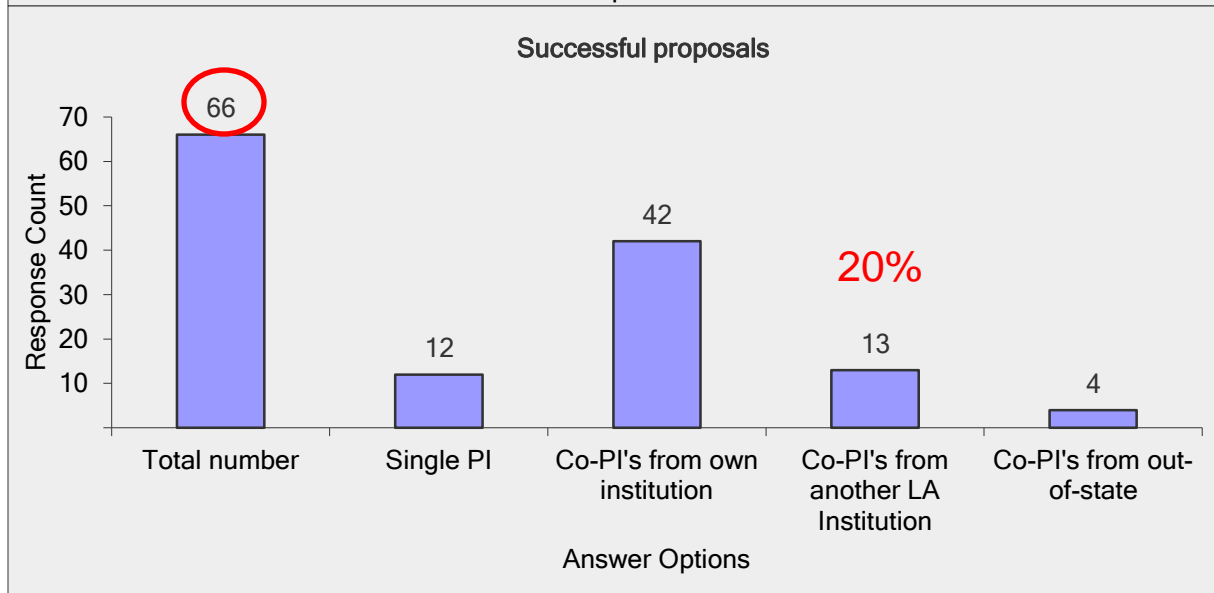
Unfunded Research Collaborations:
October 1, 2009 to October 31, 2010

Unfunded Research Collaborartions
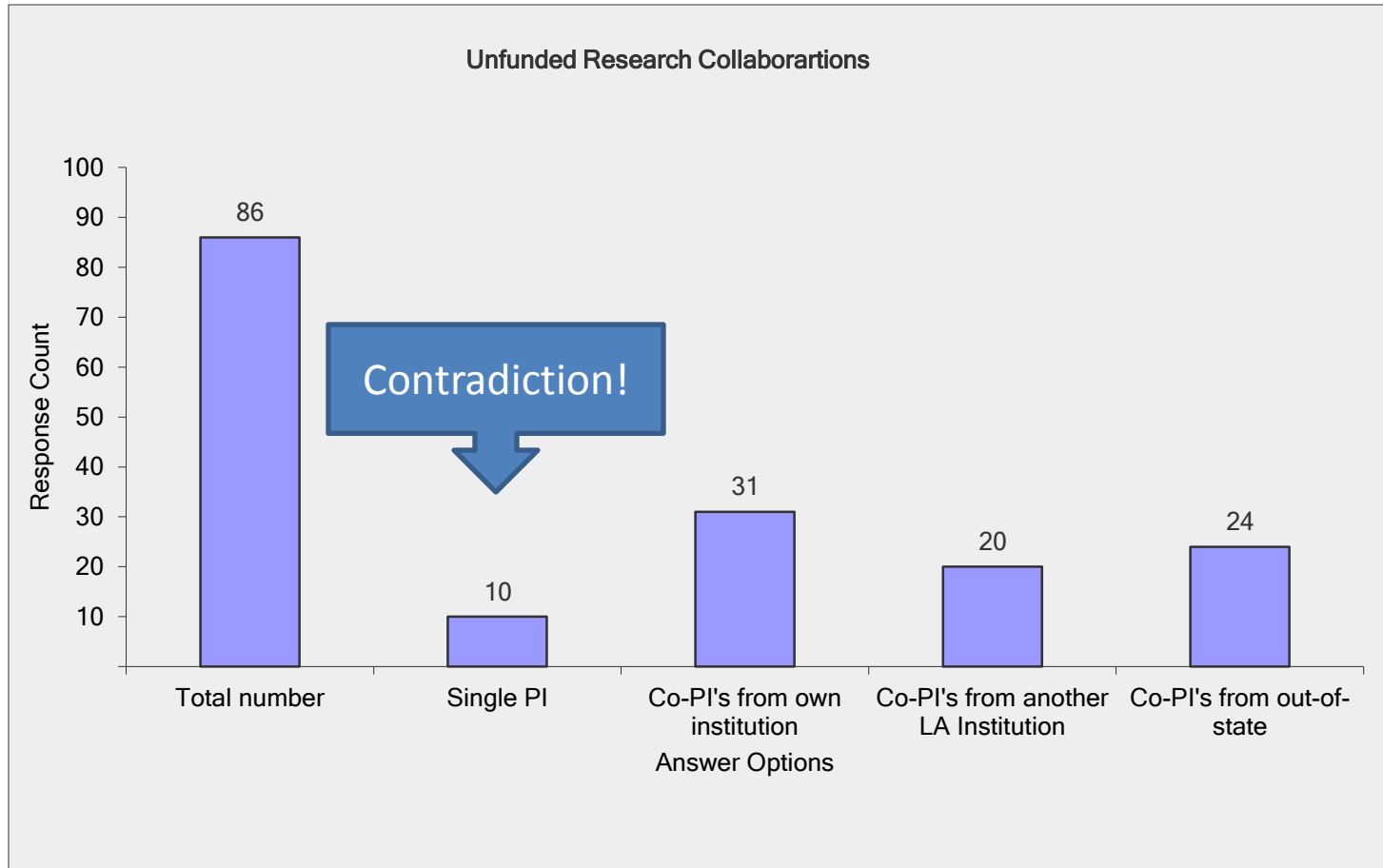
Defined as projects currently not funded but leading to proposals in the near future.

All computing tools and activities: October 1, 2009 to October 31, 2010

Computational Tools and Activities
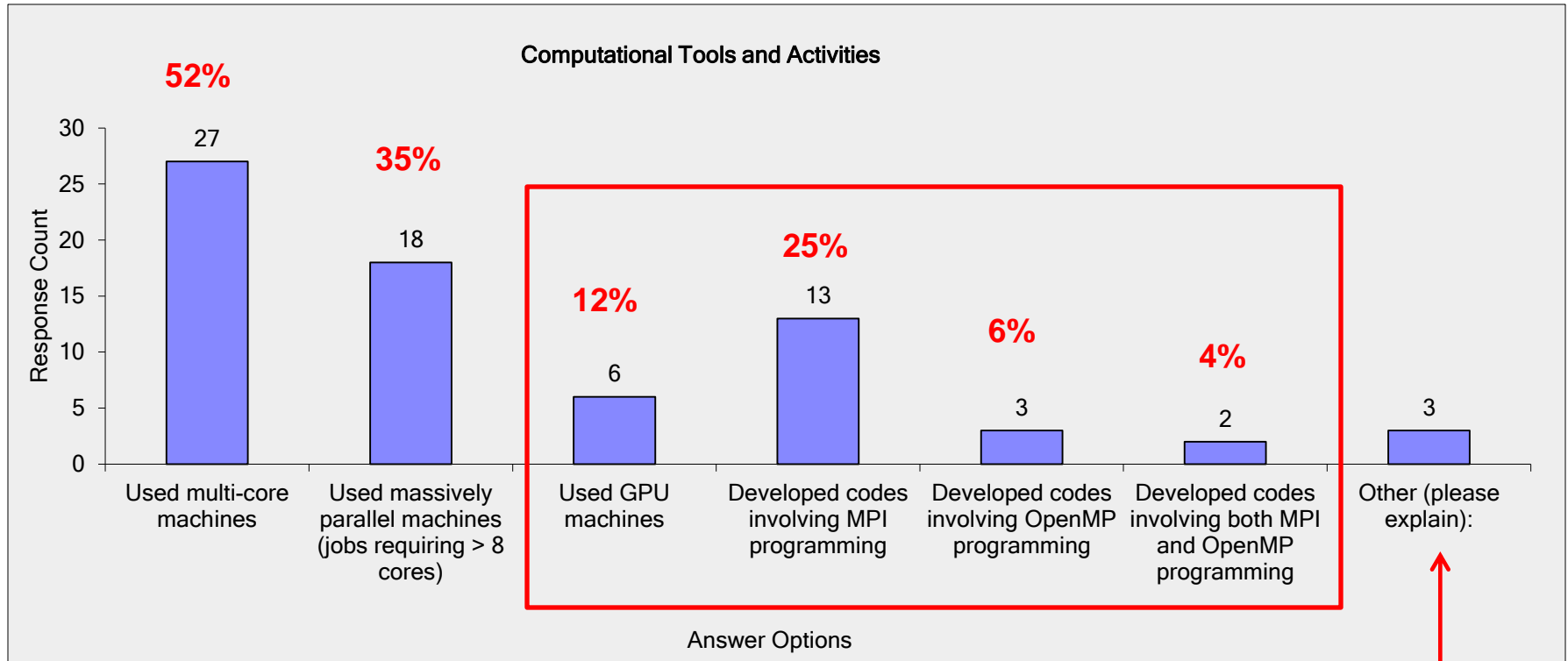
21 people skipped this question. Need to provide a "None of the above" option.

Duh!

Hybrid codes: MPI + Scalapack; Local cluster for DFT; Parallel Mathematica code.

Computing platforms/resources:
October 1, 2009 to October 31, 2010

Computing resources

Response Count

Category	Count
Used computing platforms owned and operated by my research group	31
Used computing platforms owned and operated by my campus computing center	20
Used LONI computing platforms located on my campus	24
Used LONI computing platforms located on other campuses	16
Used Supercomputers located in other states	6
Used TeraGrid resources	6
Other (please explain):	1

Kraken and Jaguar at ORNL

Louisiana EPSCoR

Collaboration Tools:
October 1, 2009 to October 31, 2010

Collaboration Tools

Response Count (y-axis: 0, 5, 10, 15, 20, 25, 30, 35)

- Conference calls (voice only) to interact with collaborators: 31
- Desktop video-conferencing tools (Skype, EVO, AdobeConnect, etc.): 21
- Access-Grid or HD Polycomm: 13
- Collaboration tools like Google docs, SVN, TeamViewer, etc.: 19
- Other (please explain): 1

Answer Options

15 people skipped this question. Need to provide a "None of the above" option.

Numerous one-to-one meetings

Louisiana EPSCoR

EEWD & IP:
October 1, 2009 to October 31, 2010

External Engagement, IP, and Economic Development

LSU Math VIGRE, CAMD Open House

Category	Response Count
Filed a report of invention with my campus intellectual property office	6
Initiated a patent application based on research findings	2
My IP resulted in a licensing agreement with an industrial partner	1
Participated in summer research/training programs on my campus (REU, RET, workshops, etc.)	19
Gave a public lecture about science/engineering	15
Visited a school (K-12) to talk about my research or science/engineering in general	6
Advised a science museum on their exhibits or events	3
Appeared on local or statewide media (radio, television) to talk about my research or science/engineering in general	5
Submitted a research highlight to my funding agency	13
Other (please explain):	2

Perhaps we should group the items in a different way to match the sections of the proposal.
15 people skipped; add "none of the above" option.

Louisiana
EPSCoR

Distance Ed. and Recruiting:
October 1, 2009 to October 31, 2010

21 people skipped this question. Need to provide a "None of the above" option.

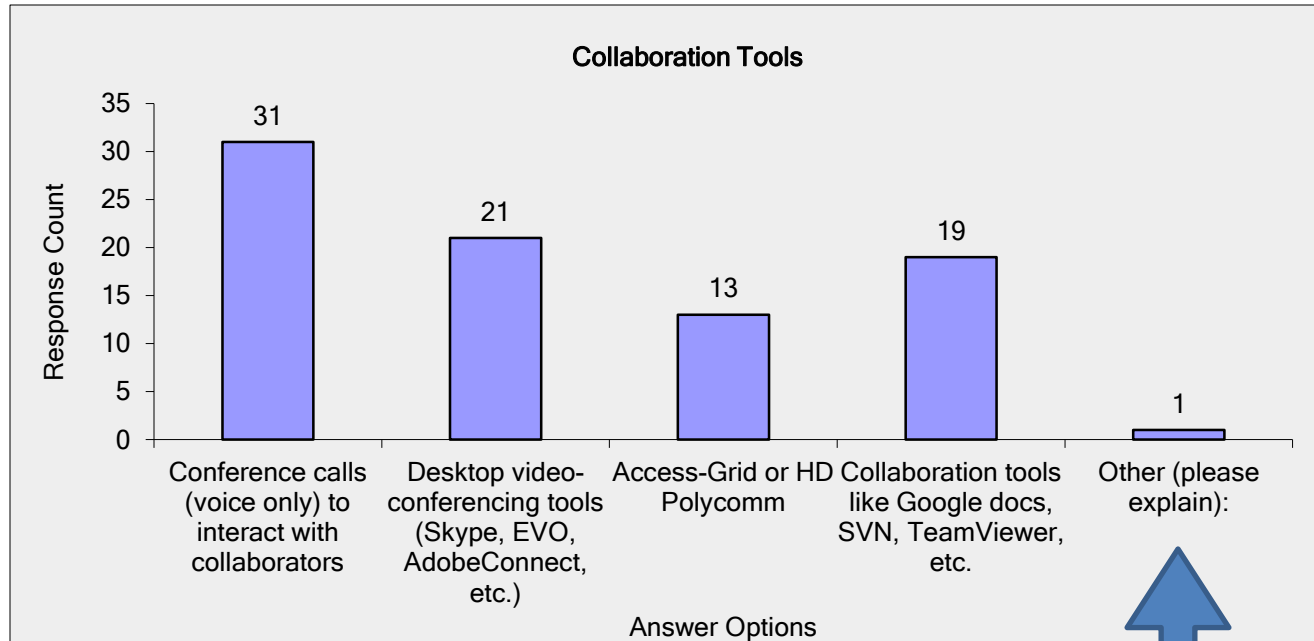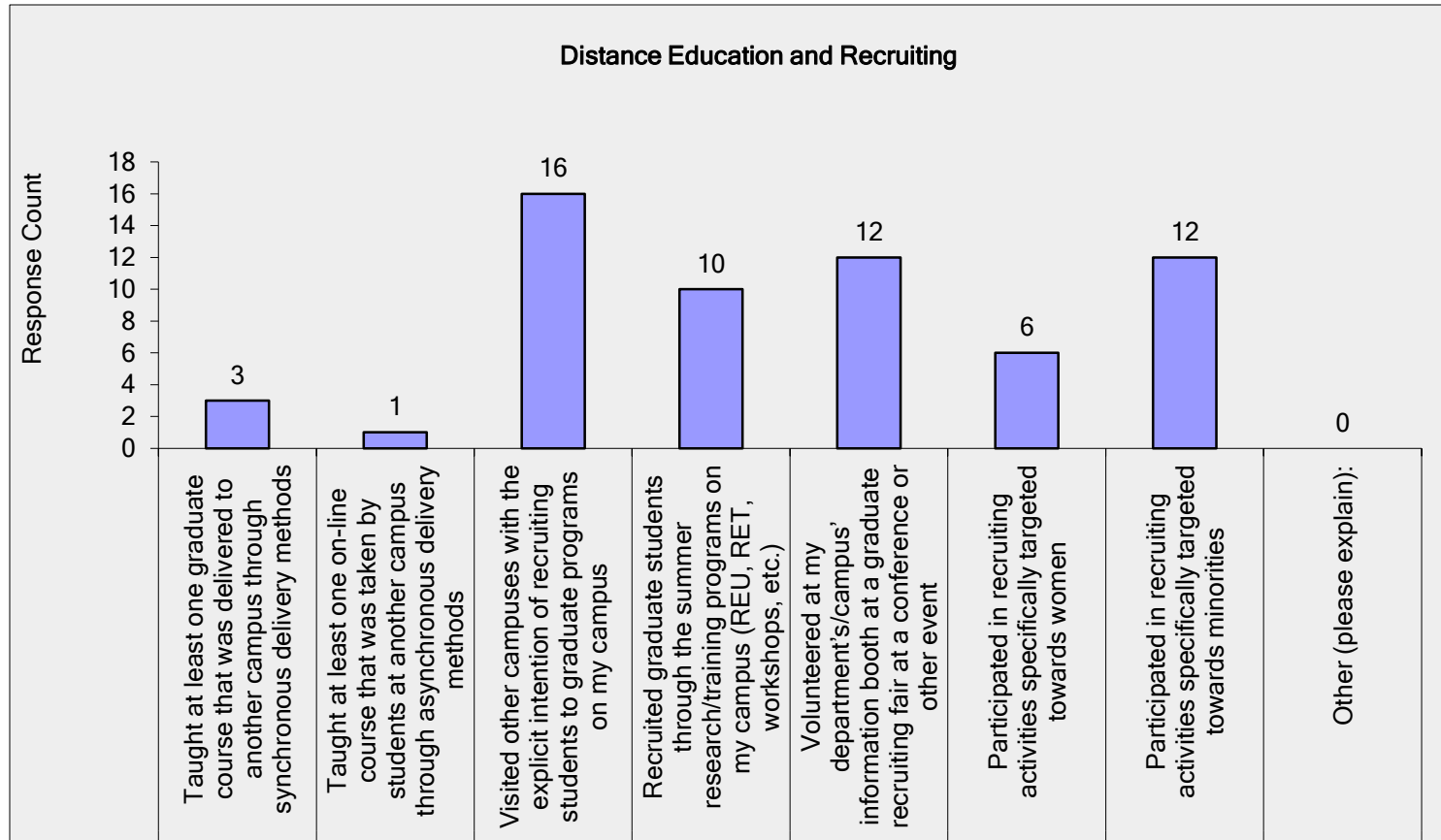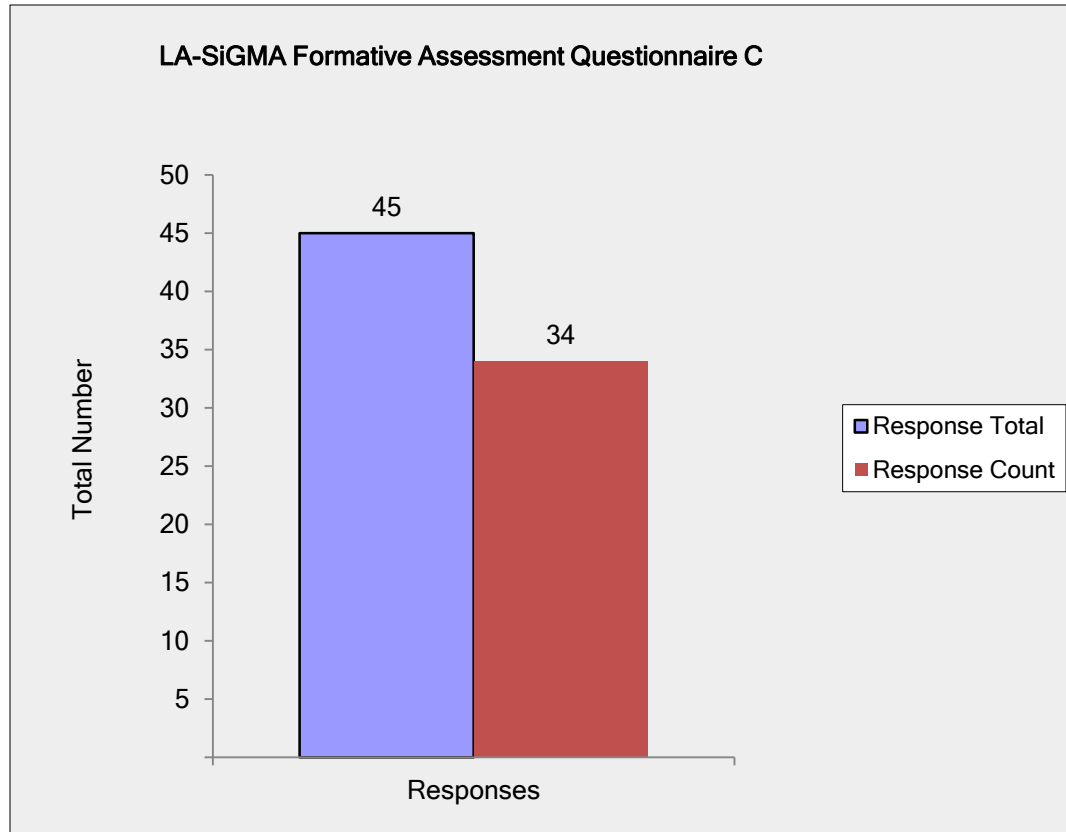# No. of graduate students recruited through personal effort

LA-SiGMA Formative Assessment Questionnaire C

143 graduate students total - 31% of graduate students recruited through personal efforts.

External Evaluator

- The Office of Educational Innovation and Evaluation (OEIE) at Kansas State University was secured as of May 1, 2011 to serve as the external evaluators for the LA-SiGMA project.

- A detailed evaluation plan has been created.

- Ongoing evaluation of LA-SiGMA project will be done in collaboration with OEIE.

Office of Educational Innovation & Evaluation

Linking the College of Education to partners across the university, schools, and communities through development, research, and technical assistance.

CINDI DUNN, Ed.D.
Evaluator
Vita: Click here to view

Email: ckdunn@ksu.edu
Phone: 620.624.6313

Home
Services
Projects
Resources
Personnel
Employment
Contact Us

Cindi Dunn is a principal evaluator in the Office of Educational Innovation and Evaluation (OEIE). She is responsible for developing and implementing program evaluations for externally funded projects. Dunn serves as the principal evaluator for the Equity and Access: Teacher Quality Enhancement; Comprehensive School Reform; and Science, Technology, Engineering, Mathematics Teacher Preparation grants. She joined OEIE in June 2003.

From 1995 - 2003, Dunn served as a clinical instructor, university instructor and university supervisor for the Kansas State University, College of Education, Professional Development Schools (PDS) program. She coordinated the establishment of six new PDS sites. In addition, from 1992 – 2001 Dunn served as the Instructional Facilitator for Manhattan High School where she developed and implemented a peer evaluation program for teacher evaluation and collaborated in the development of a new teacher mentoring program for the school district.

During the period 1985-1998, Dunn taught a variety of secondary mathematics and computer application and programming courses. She also taught College of Education courses during the period 1995- 2005.

Dunn holds an Educational Doctorate in Curriculum and Instruction: Technology from Kansas State University. She also earned a Masters of Science degree from Iowa State University in Curriculum and Instruction: Educational Computing and graduated with a Bachelor of Science degree in Secondary Mathematics and Business Education from the University of Nebraska.

http://www.oeie.ksu.edu/staff/ckdunn.html

Louisiana EPSCoR

Thank you!

Ramu Ramachandran (LA Tech)
Cheryl Stevens (Xavier)
Scott Whittenburg (UNO)
Diola Bagayoko (SUBR)
Hank Ashbaugh (Tulane)
Shantenu Jha (LSU)

Louisiana
EPSCoR