

**BPC-AE – Scaling the STARS Alliance:  
A National Community for Broadening Participation through Regional Partnerships**

The Students & Technology in Academia, Research, and Service (STARS) Alliance of 20 colleges and universities and 88 regional partners is a **vibrant community of practice** for broadening the participation of women, under-represented minorities, and persons with disabilities in computing. We propose to scale the STARS Alliance practices and outcomes nationally to bring about the STARS Community Vision for 2016.

**The STARS Community Vision for 2016**

- ❖ 50 STARS colleges and universities will have institutionalized the STARS Leadership Corps, resulting in higher computing student diversity, enrollments, and graduation rates
- ❖ A vibrant STARS community of practice will flourish through online social networking and a digital library collection for SLC practices and assessment
- ❖ The STARS Institute nonprofit will sustain the annual STARS Celebration and Community to continue STARS Scaling beyond 2016

Our Scaling Project **Goals** are Recruitment, Bridging, and Retention of under-represented student populations; Faculty Advancement, Sustainability, Dissemination, and Scaling. We will realize our goals and the STARS 2016 Vision through the following **activities**:

- ❖ Enhancing, scaling and institutionalizing the STARS Leadership Corps (SLC) as a multi-year curricular program that catalyzes regional partnerships through the tiered participation of students, professionals, and educators in research and civic engagement.
- ❖ Enhancing and scaling the STARS Celebration, a national forum to connect regional communities for collaboration on the SLC, STARS demonstration projects, and other BPC initiatives.
- ❖ Creating the STARS Social Network with pioneering technology to support a vibrant community of practice integrated with mobile games and CONNECT technology.
- ❖ Demonstrating a new Tiered Research Experiences for Undergraduates (TREU) program
- ❖ Scaling the STARS Mentoring and Pair Programming demonstration projects
- ❖ Creating an *SLC Practices Collection* within the BPC Digital Library at BPCPortal.org
- ❖ Focusing participant stipends on new SLC adoption, contributions to the SLC Practices Collection, and organic growth of regional communities
- ❖ Advancing Faculty through SLC participation and mentoring.
- ❖ Enhancing evaluation to assess the participation of 50 STARS universities and the K-12 students that they engage.
- ❖ Establishing and growing the STARS Institute nonprofit to sustain the STARS Celebration and STARS Community and continue STARS Scaling beyond 2016.

**Intellectual merit:** The STARS Scaling project will strengthen and grow a community of practice that advances innovation and discovery by broadening participation in computing. The community will be realized through a nationally connected system of regional partnerships catalyzed by the STARS Leadership Corps (SLC). The project will contribute to BPC research by assessing 50 universities' participation in the SLC (including K-12 impact), pair programming, tiered mentoring, tiered REUs, the STARS Celebration, and an online social network and digital practices library. The STARS Social Network will establish a pioneering technology to support a vibrant community of practice integrated with mobile games and technology.

**Broader impact:** Fifty colleges and universities will have institutionalized the SLC, resulting in higher computing student diversity, enrollments, and graduation rates. A vibrant STARS community of practice will flourish through online social networking and a digital library collection for SLC practices and assessment. The STARS Institute nonprofit will sustain the annual STARS Celebration and Community to continue STARS Scaling beyond 2016.