SGX3's workforce development activities contribute to broader impact by enriching existing and forming new relationships with minority serving institutions and organizations to bring gateway development into curricula, bring domain-specific gateways to relevant classrooms and research settings, and train faculty to scale these efforts to grow and live beyond SGX3.

The SGX3 Faculty Program builds a supportive HPC/Gateways community for the faculty while providing them the training and support needed to succeed. SGX3 staff assist faculty in establishing HPC accounts for their classes and consult with them through the implementation phase of their curriculum changes.

- HPC/SG Curriculum Enhancement Efforts

- Faculty workshops at ADMIUSA.ORG Symposiums

- Faculty Hackathons

- Faculty Poster Session at Gateways conference

- Gateway Community mentors assigned to faculty

What are the resource requirements of your training and education project? How do you find those resources? What could be improved?

- **What are the resource requirements ?** Community Mentors are critical to the success of the Faculty program. During the hackathon, faculty enhance their existing courses with HPC/Gateway content. They need the community to contribute use cases based on their current projects. Their suggestions will be used for class projects, assignments, homework exercises, etc. as the faculty revise their curriculum. They also help identify HPC accounts for faculty.
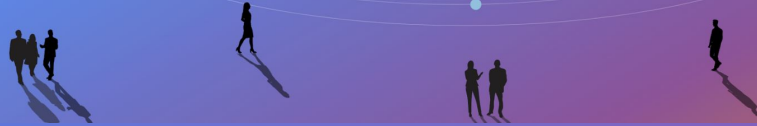
- **How do you find those resources?**

  Mentors use the application at https://sciencegateways.org/faculty-hackathon-

  2023 and indicate their role as mentor. SGX3 newsletter includes the call for community mentors.

- **What could be improved?**

  Target different 'classroom use' science gateways (nanoHUB, ChemCompute, SEAGrid, Ghub,

  Pulsars Science Collaboratory, etc.)

SGX3 | SGCI

Extend. Expand. Exemplify.

The SGCI team continues to offer its services AND brings you a new Center of Excellence to Extend Access, Expand the Community, and Exemplify Good Practices for CI through Science Gateways.

Do you share educational digital artifacts (e.g., software, homework assignments, etc.) related to your training and education projects?

- Highlights from the 2022 faculty hackathon can be viewed at https://hackhpc.github.io/FacultyHack-Gateways22/
- Efforts are now underway to house the curriculum produced on the SGX3 site.

Could your projects benefit by artifacts produced by others?

- Artifacts produced by others can be placed in the SGX3 catalog.
- https://catalog.sciencegateways.org/#/home

SGX3 | SGCI

2023 Coding Institute & Hackathon

- Sixteen students participated in the virtual 2023 Coding Institute. All were computer science majors. Weeks one and two of the Coding Institute focused on building non-technical and basic technical skills. Week three, led by TACC, was devoted to specific gateway technology. Finally, week four involved team projects via the hackathon.

- The Hackathon was co-sponsored by SGCI/SGX3, Omnibond Systems, Texas Advanced Computing Center and Amazon Web Services June 26th - 29th. All team projects focused on using UX Design techniques to revamp ADMIUSA.org and the HACKHPC.org sites. SGCI staffer Ali Baigelenov abaigele@purdue.edu served as a consultant and judge for the event.
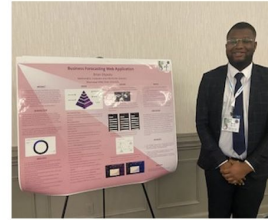

Professional development seminar speakers:

Dan Dietz, Suzanne Prentice and Jacqueline Jackson.   Ali Baigelenov is shown above

SGX3 |SGCI

Partnership with ADMIUSA.org has been a key ingredients to being successful.

Student Programs. Hackathons, professional development seminars, and coding institutes that have a focus on participants from traditionally underrepresented populations have been continued from SGCI.

- Summer Coding Institute
- ADMI Symposium
- ADMI Hackathon
- Gateways Conference Mentors
- Rising Star Awards
- HPC in the City Code-a-thon@ SC

2023 ADMI Symposium SGCI /SGX3 involvement

included Faculty Session: and Student Workshop

SGX3 SGCI