Cultivating Relationships Between Institutions

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Moderator Questions

• What is the importance of establishing working relationships between Undergrad, MS, and PhD institutions in order to enable participation of Bridge students?

• How do we successfully build these relations?

• How do we sustain these connections?

• What are examples of how these relationships have proved to be useful?
Importance

• The importance can not be overstated for the students in BS institutions ... it is their window into the research world.

• The research experience helps in many ways:
  • Awareness
  • Motivation/excitement
  • Possibility of fellowships/internships
  • Decision making process ... career choices

• For the faculty members, it opens up avenues for collaborative research proposals.
How to build a relationship

There certainly is no one-size-fits-all approach ... here are some suggested steps that I have found useful.

• **Identify** the institution - obvious, but not always easy to get this right.

• **Get invited to give a seminar/colloquium.** Meet with key faculty and as many physics majors as possible.

• **Arrange return visit for a “Physics Day” type of event at your department.** Faculty meet other faculty, while students meet with local undergrads engaged in research. **It is important that the lab visits are between undergrads with no grad students/postdocs/faculty present.**
If you have made it this far, the real work is now starting.

• Approach your *Administration for support*. All campuses now have some sort of diversity office. The funding amount is not very important initially ... $$ \Rightarrow \text{size of program. Starting with even one student is useful.}$$

• Arm-twist like-minded faculty to participate and provide summer *research opportunities*

• *Legwork* for logistics. Arrange affordable accommodations, Lab tours, Field trips etc.
Now you have started a program. You need to make it a successful one.

- Find synergies with existing programs (i.e., shamelessly exploits their resources). Examples at Davis: REU, McNair, UC Leads (AGEP funded).

- Have frequent chat sessions with students. Integrate with local students (~12 undergrads w/ me each summer)

- Part of the expectations from the student is a final report. Closure is essential.

- Document the students’ progress and keep track in the future.
How to sustain?

Examples
1. Program with CSU, Chico

~2010. The first connection that I tried. Not very successful. The biggest problem was geography (>2 hour drive). Staying in touch during the school year was difficult.
2. CSU, Sacramento

~2011. Much more successful. Proximity helps (~20 min drive).

Students started during their junior year, continued through summer, took the GRE boot camp, and applied in the Fall.
3. UT, El Paso

~2013. A new program started. The challenge is to overcome the geographical separation.

Initiated through contact with V. Incera as COM members

The program being helped by NSSC (Nuclear Science and Security Consortium) funding:

- Research grant to Prof. C. Ramana of the Mechanical Engineering department at UTEP.
- Summer fellowships to URM students
- REU recruitment

Three UTEP students at Davis this summer (1 NSSC, 1 REU, 1 MARC).
California Professoriate for Access to Physics Careers

Our mission

Email entire CPAPC

Subscribe to the Mailing List

Our membership (table of UC chapters and associated CSUs, with emails of members and contacts)

A model for initiating the partnership: Physics Day at UC Davis, Feb 20, 2010

Helping prepare - GRE Bootcamp (Southern, Northern)- (Facebook for the Sep 8-9, 2012 UCD Bootcamp)

REU programs and other internship opportunities for undergraduates and graduates

Important data on CSU enrollment

Physics Trends from AIP

Calendar

www.physics.ucdavis.edu/cpapc/