The STEM Initiative 2007-2008 Subcommittees

Subcommittees:
1. Marketing and Communication
2. Math/Science Teacher Recruitment and Preparation
3. Program Development to Support the STEM Pipeline
4. Campus STEM Education & Infrastructure
5. Retention and Success

Task Forces:
1. Minority Serving Institute
2. Inventory
3. Grant Applications

Subcommittees:

1. Marketing and Communications
   Charge: Increase public awareness of STEM disciplines at Sacramento State, and promote programs that can effectively recruit students and faculty to our campus.
   ➢ Core: Bill DeGraffenreid, Scott Gordon, Mike Ward
   ➢ Suggested Directions:
     ✔ develop showcase DVD, promoting STEM programs at Sacramento State.
     ✔ develop and maintain Sacramento State STEM website
     ✔ produce STEM newsletter
     ✔ arrange off-campus STEM-related demonstration programs. (consider writing an HP mobile computers for education grant?)
     ✔ STEM Seminar Series
     ✔ Promote and/or host STEM-related events (e.g., Expanding Your Horizons, Science Olympiad, Sally Ride Group, etc.)

2. Math/Science Teacher Recruitment and Preparation
   Charge: Address the need for more math and science K-12 teachers, and expand awareness among students and STEM faculty at Sacramento State, of teaching as a career option.
   ➢ Core: Laurel Heffernan, Daniel Orey, Bob Pritchard
   ➢ Suggested Directions:
Identify future teacher candidates
Direct more students towards teaching career options
Provide and support quality in-service to K-12 STEM teachers
Invite K-12 people to be members (Matt Perry, Glenda Golobay)

3. Program Development to Support the STEM Pipeline

Charge: Recruit a large, diverse population of STEM majors and provide a seamless transition into Sacramento State.

- Core: Jim Baxter, Juanita Barrena, Tom Landerholm
- Suggested Directions:
  ✓ Form partnerships with regional K-14 educational institutions
  ✓ Bring prospective college students onto campus and show them the benefits of becoming Sacramento State STEM majors
  ✓ Partner with Student Affairs Outreach and Admissions and local K-14 to form recruiting efforts at local schools and community colleges
  ✓ Arrange for faculty, staff and students to go to schools and other venues to promote STEM interest
  ✓ Get more middle and high school students to want to take courses that lead them towards STEM careers
  ✓ Use campus STEM talks, classes, etc. to actively recruit undecided majors
  ✓ Increase our curricular involvement in local K-12 schools (e.g., ACE, Magnet Schools, etc.), and establish more ties
  ✓ Support the production of informal STEM education materials

4. Campus STEM Education & Infrastructure

Charge: Develop programs and funding streams to assist in the continuous upkeep of high-quality facilities and competitive STEM education.

- Core: Charlie Alpers, Rebecca Thompson, Jill Trainer
- Suggested Directions:
  ✓ Collaborate with government agencies and regional industries to bring Sacramento State’s science and technology facilities and equipment up to par with leading undergraduate programs worldwide.
  ✓ Increase opportunities for cutting-edge faculty development in research, pedagogy, university and community service
  ✓ Support departmental and interdisciplinary curricular updates, revisions and new development to align with changing regional, state and national needs
  ✓ Increase participation of undergraduates in research
  ✓ Increase participation of faculty in research
5. Retention and Success

**Charge:** Creating a supportive educational environment that retains students in the STEM disciplines through graduation, then assists them towards success in STEM careers.

- **Core:** Antoinette Herrera, Analia Mendez, Tom Landerholm will help get started
- **Suggested Directions:**
  - Help faculty and staff identify, fund and provide programs aimed at helping our students succeed
  - Develop a STEM Learning Center to provide comprehensive resources directly to students
  - Help to establish a campus partnership among campus entities already focused on student success (i.e., Career Center, Student Affairs, Advising, etc.) to share resources, best-practices and develop programs
  - Increase opportunities for STEM-related internships
  - Increase the effectiveness of data keeping on alumni to stay in touch and keep them engaged with Sacramento State

**Task Forces:**

1. **Minority Serving Institute:** continue pursuing MSI designation and our eligibility for MORE Division grants or other NIH grants with MSI limited eligibility. This is essential for making Sacramento State a valuable partner in the common commitment to educating underrepresented minority (URM) students for careers in science and technology. This was proposed to the NIH in April 2006 but was rejected at that time. This task force would prepare documents for resubmission.

2. **Inventory:** complete the inventory and assessment of STEM activities on campus, which describes how we currently interface with the professional community, and identifies specific issues and needs relating to each item. The inventory will help us understand where we are now, what works and doesn’t, what is lacking and what we are duplicating. The majority of STEM Departments have participated in the first stage of the process.

3. **Grant Applications:** Task forces are created to write and submit individual grants as they are identified. One such example was the NSF STEP grant submitted September 2007. Composition of each task force depends on each particular grant, and are formed as needed. Jill Trainer, Laurel Heffernan, Tom Landerholm, Scott Gordon, Daniel Orey and Sharon Puricelli