

Addressing the Student Learning Experience: Achieving Diversity in STEM Disciplines Colorado State University Omnia El-Hakim, Peter Dorhout, & Rick Miranda



Undergraduate Programs

- Colorado Alliance for Minority Participation (CO-AMP)
- Computer Science, Engineering, Math, Science Scholarships (CSEMS), providing opportunities for low income students including women
- Student Leaders in Engineering Program for academic year research assistantships (SLE)
- Student Leaders in Science (SLS), providing undergraduate, leadership and research opportunities in the College of Natural Sciences
- Colorado Institute of Technology (CIT) Summer Research Program
- Tutoring and Mentoring
- Diversity Scholarships
- National and Regional Conferences
- Annual Banquet
- Professional Development Workshops (PDW)
- Freshman Orientation

SLE

Pairing undergraduate students with faculty members during the school year for a paid undergraduate research experience



Diversity Initiatives at Colorado State University

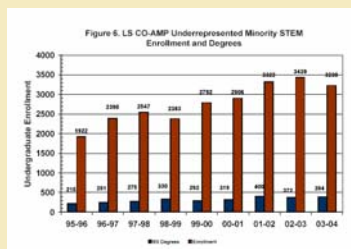
The primary goal of the Diversity Initiatives at Colorado State University is to create an academic community that welcomes, respects and promotes diversity through its teaching, learning, research, scholarship, recruiting, outreach, and other university programs. The Colleges of Engineering and Natural Sciences look to embrace women and minority students typically underrepresented in the disciplines of Science, Technology, Engineering, and Mathematics (STEM) aim to create a classroom climate that is inclusive of diverse populations.

Fast Track Scholarship
CSEM Scholarship opportunity for graduate students



Graduate Programs

- Alliance for Graduate Education and the Professoriate (AGEP)
- Fast Track to Work Scholarships
- GEM Fellowships
- Bridge to Doctoral Degrees (in process)
- McNair Program: Recruiting and supporting 1st generation students, preparing qualified juniors and seniors, who are seeking careers in research and/or college teaching, to enter graduate school, and obtain doctoral degrees



AGEP

An alliance with CU-Boulder (lead institution), providing sustainable campus programs that facilitate the development of Ph.D. scholars and academic leaders in Science, Math, and Engineering disciplines.

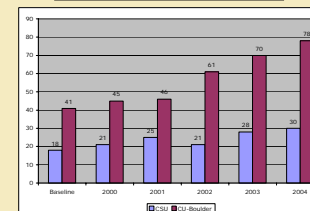
Outreach Programs

- Saturday Morning Engineering Club for Elementary School girls to learn about engineering and math principles
- Math Science Partnership "No Child Left Behind" Middle School Summer Camp Middle School
- U.S. Army JETS-UNITE Summer Bridge Program for High School students
- Math Science Partnership "No Child Left Behind" High School Summer Bridge program

MSP

A chance to do science, math and engineering lab projects. The goals are to implement hands on activities in Math and Sciences, to expose young students to engineering concepts.

Colorado PEAKS Alliance PhD Underrepresented, STEM, Enrollment



Conclusion

The objective of all of these programs is to promote excellence through diversity and to demonstrate an ongoing commitment to recruiting and retaining women and minority students, as they have been traditionally underrepresented in STEM fields. These programs provide students of these populations opportunities to develop their interests and prepare them for STEM fields. In technological fields, the best results are often obtained through the contributions and ideas of individuals from various societal groups. A strong community is being built within the university to embrace the creative ideas minority groups contribute to STEM research and projects. In doing so, the university is moving closer to finding better solutions to global challenges, as well as sensitivity and acceptance of diverse opinions.