# Diversity Plan Colorado School of Mines Fall 2007

#### Mission

To meet national and regional demands for engineering and scientific talent for the foreseeable future, Colorado School of Mines will become a significantly diversified science, technology, engineering, and mathematics (STEM) institution, continuing to deliver a highly competitive education and conduct world-renowned research on a welcoming and embracing campus comprised of a broader spectrum of students, faculty, and staff.

#### Vision

Given shifts in the engineering workforce and global marketplace, the engineer and scientist of the future must be culturally fluent, socially adaptable, technically sophisticated, and perennially revising her/his competencies. To prepare graduates for the global economy, Colorado School of Mines must adapt its campus climate, expand its educational opportunities, and broaden the profile of the students, faculty, and staff who make up our campus community.

# **Guiding Principles**

Colorado School of Mines must continue to recruit highly qualified students, faculty, and staff, maintain rigorous expectations, and retain, graduate, and employ persons with significant expertise in their areas of education and responsibility. The campus community must be a place that welcomes and fosters a broad range of personal and cultural identity, belief, and practice, even as it encourages academic and professional excellence.

## **Diversity Defined**

At Colorado School of Mines, the principle of diversity is defined as an openness to and tolerance for differences of thought, opinion, and practice held by members of its campus community. President Myles W. "Bill" Scoggins has called for a change in the campus culture to make it more welcoming, comfortable, and safe for anyone who participates in the life of CSM. Stakeholders include students, faculty, staff, alumni, industry employers, the Board of Trustees, and the residents of Colorado.

Practically, who enrolls and seeks employment at our institution is a factor in how campus community members perceive their experience at the institution. Historically, engineering has enrolled and employed few women and minorities, and CSM is no exception. CSM seeks to broaden its representation among women and minorities—African Americans, Asian Americans, Latinos/Latinas, and Native Americans—and be sensitive to and inclusive of age, ability, first-generation to college and socio-economic status, geography, sexual orientation, nationality, religion, and first languages.

## **Why Does Diversity Matter?**

*Quality of Life* 

A more diversified CSM will mean a more flexible, tolerant, sustainable institution that maintains high standards and expectations, while including a broader capacity for the human experience of students, faculty, and staff.

# Mentoring, Role Modeling, and Critical Mass

The relative absence of women in teaching and decision-making capacities at CSM is problematic because of the mentoring and role-model functions faculty serve, as well as being the transmitters (through teaching) and originators (through research) of knowledge. If there are few women within an institution, it becomes more difficult to recruit and retain female students because students perceive that the institution does not "look like them."

The same applies for minority students. If ethnic and racial minorities are absent from the ranks of faculty and administration, their voices feature less prominently or not at all in critical delivery of and decision making about institutional priorities. Additionally, if the institution is not culturally open and comfortable to students of different identities and beliefs, they may not choose to stay; instead, they may opt to transfer to an educational environment that is more inclusive.

## Institutional Vitality

Failure to act strategically and immediately regarding diversifying CSM will impair the institution's capacity for future success. As internal research conducted among potential students in Spring of 2007 indicated, those who opt not to go to CSM are making highly competitive decisions—to attend Stanford and UC Berkley, among others—based on academic options and financial resources offered by those universities. Because these institutions are aggressive and rigorous—and already focused on diversifying—CSM stands to lose if it does not act now.

# Diversifying for Excellence

This effort will require developing sensitivity to the needs of new populations, as well as the capacity to meet those needs, even as we maintain high standards and programs and a safe and comfortable transition for current members of our campus community.

Goals and measurable outcomes are essential to success; however, numbers alone are not the answer. Because this initiative is focused on quality, change requires more than simply shifting percentages to declare the job finished. Institutional change of CSM's climate and culture will be essential to diversity success.

## Where are we?

Students

It is no secret that CSM has a low enrollment of women and racial and ethnic minorities, as do STEM disciplines across the United States (although some institutions have much higher representation of Asian Americans than does CSM). CSM's enrollment percentages have remained fairly static for a number of years, despite numeric increases.

Additionally, the majority of CSM's student population is from the Denver metropolitan area.

- Enrollment of women has ranged from 25.9 percent in Fall 2002 to 22.5 percent in Fall 2006.
- Enrollment of all minority students at CSM has ranged from 12.2 percent in Fall
- 2002 to 12.6 percent in Fall 2006
- Between 2003 and 2006, more that 60 percent of all CSM students arrived on campus from roughly a 75 mile radius from 1500 Illinois.

However, aggregated percentages do not really capture the experience of the people on our campus.

- In Fall 2006, four CSM academic departments enrolled no African American undergraduate students.
- In Fall 2006, seven CSM academic departments enrolled fewer than ten Asian American undergraduate students.
- In Fall 2006, CSM enrolled a total of eight Native American women in engineering majors; none of them were juniors, only one, a senior.
- Among graduate students in Fall of 2006, CSM had neither an African American nor a Native American woman enrolled out of a total 196 female graduate students

Numbers such as these suggest the potential for isolation and loneliness for women and minority students. Furthermore, given the structure of laboratories and research projects, opportunities for mentoring, collaborative work, and learning from more senior role models are sharply curtailed, if they exist at all.

# *Faculty*

The CSM faculty does not look that much different than STEM faculty across the U.S. Some institutions report higher percentages of international faculty; a few STEM programs report higher numbers of female faculty. Underrepresented minorities are scarce among STEM university faculty. By and large, STEM faculty are white and male.

This is not simply a "pipeline" problem; it is a climate problem for STEM fields in higher education. In fact, the numbers of women and underrepresented minorities graduating with advanced degrees in science and engineering have steadily increased for two decades. However, academia has been an unattractive career option for women and underrepresented minority Ph.D.s.

Furthermore, women and underrepresented minorities tend to be clustered in the lower academic ranks, among assistant and associate professors. Nationwide, the fastest growth in teaching ranks is among "alternative appointments," non-tenure track faculty; women make up the majority of these ranks. Women in these positions earn less and have less career stability than do white men. Underrepresented minority faculty have lower rates of tenure and job satisfaction than do white men.

Women and underrepresented minorities who remain past tenure become highly sought after, and universities frequently pirate competitors' stars. CSM cannot solve alone what is a systemic problem; however, focused attention and redirected resources, along with attention to climate and culture will be measurable strategies to shift the status quo.

### Where Do We Go from Here?

Recognizing the complexity of diversity within an institution, it is important for CSM to develop strategies that are based in present circumstances and address current needs. To do so, decision makers need data and clear understanding of now to be able to make institutional change for tomorrow.

Thus, President Scoggins sets the following priorities and timelines for diversifying CSM.

## Climate Survey

To drive change for the future, CSM will launch a faculty/staff climate survey during AY 2007-2008. Knowledge about current circumstances for faculty and staff is necessary to understand what we need to do better to make CSM a highly desirable employment opportunity, both for our existing community and for those we hope to recruit and retain.

The survey will be developed by an external firm experienced in collecting qualitative data regarding workplace and environmental issues. Topics about which the Climate Survey will gather data include

- Have all units implemented family-friendly scheduling consistently?
- Do all employees feel they have access to appropriate redress to workplace concerns/complaints?
- What are critical work/life balance concerns for CSM faculty and staff?
- How can CSM adapt to be a more tolerant, nurturing work environment?

The results will be disseminated to the campus community and will drive decision-making about how to improve the quality of work-life at CSM.

By better understanding the quality of workplace experiences and needs of CSM's present faculty and staff, we will be able to address issues of attractiveness and retention. If CSM is a highly desirable employment option for highly qualified faculty and staff, recruitment becomes easier; retention naturally follows.

#### Research into Best Practices

Because other institutions of higher education have focused resources and attention into diversifying for as long as three decades, a body of literature has emerged on successful practices for diversifying universities. During AY 2007-2008, the President's Diversity Initiative will conduct research into best practices across higher education, concentrating on peer institutions, to the best possible degree. A report of findings and recommendations for best practices in higher education to foster and nurture a diverse

climate appropriate to CSM's needs and future goals will be delivered to the CSM community in Fall 2008.

# Institutional Diversity Leadership Council

President Scoggins has called for the development of a Institutional Diversity Leadership Council composed of decision makers from across CSM. During AY 2007-2008, the IDLC will meet for a facilitated two-day session, which will include training, priority setting, and development of strategies for dissemination and implementation across the campus.

In collaboration with the President's Diversity Committee, this council will be charged with developing measurable goals and action items to serve as the foundation for institutional objectives for diversifying CSM. The final outcome from the IDLC will be to develop a game plan for CSM and strategies for implementing it at the unit level.