PROGRESS ON RECOMMENDATIONS OF 9/30/2011
CU-BOULDER ENGINEERING ADVISORY COUNCIL MEETING

The key recommendations of the CU-Engineering Advisory Council (EAC) at its 9/30/2011 meeting are provided below in italics, followed by summaries of the progress and plans made to-date on these recommendations. This summary report, prior reports, and other EAC information are posted at http://engineering.colorado.edu/overview/advisory_boards.htm.

Education Committee: Steve Dunn reported that the Education Committee discussed the first-year experience (kudos to Brian Argrow and Bev Louie for the intro course), Honors Program (immensely successful, and campus funding now provided for its Residential Academic Program), Engineering Management and Entrepreneurship Program (now partnering with a cross-campus entrepreneurship program), and a culture of inclusive excellence (task force being formed to help understand and improve student retention). Key recommendations include

- **Establish an advisory board for the Honors Program**
  This recommendation has not been implemented.

- **Continue to support an undergraduate engineering management program, with college and private support**
  The College is now providing full salary support for the coordinator of our undergraduate Engineering Management and Entrepreneurship (EME) program, Seth Murray, and we have secured funding from our graduate Engineering Management Program for the adjunct faculty. The private support raised is now available for program enhancement.

- **Create a faculty-development program and reward structure to improve the climate for inclusive excellence**
  In the Spring 2012 semester, Associate Dean Brian Argrow hosted a workshop by a national expert on active learning and presented a draft document to our Administrative Council on a comprehensive rubric for teaching assessment. The Administrative Council also agreed to implement faculty-development plans for faculty who fall below expectations in any category (teaching, research, or service) and not just overall. It also agreed to an enhanced celebration and reward structure for faculty and staff excellence.

- **The education committee is large and has lots to do – consider meeting the afternoon before EAC**
  Meeting the afternoon before the April 2012 EAC meeting is not feasible, due to the Biotechnology Building Dedication and the BOLD Celebration of Excellence. It will be considered for future meetings.

Partnership Committee: Pam Drew reported that the Engineering Leadership Program is being launched this spring with a gateway course, two elective courses, a team-based project or leadership experience, mentoring, seminars, and a portfolio required. The program is being offered in partnership with the Presidents Leadership Institute. Key recommendations include
• Establish an advisory board of faculty and industry
The campus has appointed Sandy Bracken to the Newton Leadership Chair. (Hank Brown was the first and previous chair.) Assistant Dean Zelasko is engaged with Sandy, and will be working with him to partner with other leadership programs. A proposal for an advisory board will be pursued in AY 2012-13, in concert with the campus efforts led by Sandy Bracken.

• Solicit EAC members for mentors and seminar speakers
As of April, 2012, there are 16 students in the Engineering Leadership Program. Mentors for these students were sought through the EAC and through the College’s alumni newsletter. There was good response from the EAC and also through the newsletter. Eleven students are taking the Engineering Leadership Class, and have been matched with mentors. Additional mentors are needed in some key disciplines, most notably Chemical Engineering, and specific help to identify a larger mentor pool will be requested from EAC members and our alumni this summer. The launch of seminars is planned for Fall 2012. Ideas for seminar topics and speakers should be communicated to JoAnn Zelasko.

Research Committee: Frank Doerner reported on considerable success in research, with grant funding reaching a new high this past year despite increased competition for flat or declining federal funds. Key recommendations include

• Bring in corporate CTOs to help forecast future research needs, and then develop a five-year plan
The desire to better forecast research needs is a high priority. As academic research is largely community-driven, we have continued bringing in national research program leaders through our Research Visions Seminar Series. Examples include Dr. Thomas Russell (AFOSR Director); Dr. Brian Holloway (DARPA), and this summer Dr. Doug Sicker (NTIA CTO, and former FCC CTO). Additionally, the Associate Dean for Research (ADR) Kurt Maute attended the AFOSR Annual Program Review and disseminated information to faculty. The ADR and his team are in close contact with the former ADR (Marty Dunn), who is on leave at NSF and helps make the ADR aware of upcoming research opportunities. In addition, the CU system recently invested in a government relations professional (Abby Benson) in Washington DC, who will work with agencies as well as congressional representatives to advance the CU presence at the national level. We have already engaged with her and are developing a strong working relationship.

• Seek more intellectual-property royalties, to help self-fund research
This is a long-term activity and we have made modest short-term advances. They include the participation by the ADR on a campus committee charged with developing policy related to issues that arise with commercialization of research, including proprietary and classified research. We have supported a small trial that connects the Colorado Center for Atmospheric Research in ASEN with CUBRIC (http://www.cubrc.org – an independent, not-for-profit, research corporation) to carry out unrestricted research that is part of an overall restricted and proprietary project.
• **Partner with top schools, such as Stanford and MIT, on major opportunities**
  We are increasingly seeking meaningful partnership opportunities to respond to large initiatives, and developing efforts to better support the preparation of proposals for those initiatives. For example, we partnered with Stanford, ETH-Zurich, and the University of New Mexico on an NSF Engineering Research Center proposal (~$5M/yr for 10 years). We were not successful with this specific proposal, but will continue to develop strategic partnerships. This development is part of a larger effort to provide increased support for faculty in developing large proposals.

• **The research committee would like to be more active, with engagement between meetings**
  The EAC Research Subcommittee has increased its activities to seek impactful ways to work with the ADR and the College. A positive start was a telecom in Fall 2011. The chair of the EAC Research Subcommittee has visited the College earlier this Spring and met with Dean Davis. We plan to resume regular teleconference starting this summer.

**Resource Development Committee**: Doug Smith reported that the Dean’s Fund garnered almost $500K last year, with about half of this amount attributed to Dean’s Club members (annual donations of $1000 or more). The Biotechnology Building will be completed in February 2012. Of the $75 million fundraising goal for this building, there is about $30 million left to raise (including $5 million from engineering donors). Doug also thanked Nan Joesten for leading the successful effort to raise support from EAC members for a lab in the Dean’s honor. Key recommendations and action items include

• **RDC and other EAC members are asked to suggest individuals and companies that may have interest in learning about the Biotechnology Building and what it will enable**
  EAC members were very helpful in connecting the development team and the College to energy companies in Houston prior to our corporate event there in March. They also have facilitated connections such as those with Accenture and the Accenture Foundation. The development team will continue to follow up with EAC/RDC members to secure more suggestions and connections for the Biotechnology Building and other funding priorities.

• **RDC and other EAC members are asked to host small events or otherwise help us get in front of people**
  Two EAC members and two other individuals have expressed interest in hosting small events at their homes or in their cities, beginning this spring. The development team will follow up with them on available dates, guest lists and other details.

• **The Engineering Development team should consider whether loyal donors with regular contact should still receive annual solicitation phone calls from students**
  The development team discussed this issue and noted that the CU Foundation will remove anyone from the call list if asked. Some loyal and generous donors like to talk to students, including one alumnus who makes his gift of $20,000 annually to the Dean’s Fund via the phone because he likes to “make a student’s day.” Any EAC member or other constituent who would like to be removed from the call list should notify a Foundation team member or tell the phonathon caller to remove him or her from the list.
Other Items: Other recommendations and items of note include

- **EAC members raised $230,000 to name a lab in the Biotechnology Building in the name of Dean Davis – a plaque was presented to the Dean, who was overwhelmed with gratitude for this honor**
  
  The Davis research group moved into this new lab at the end of March 2012, and it will be available for a tour after the building dedication on 4/26/2012.

- **Enrollments of women and minorities are at all-time highs in the college, but retention rates are a concern and an EAC taskforce on retention, chaired by Gary Anderson and Nan Joesten, is being formed and will give a report at the next meeting**
  
  The task force has been very active, and a report will be presented on 4/27/2012.

- **Representative Mark Ferrandino described the decline in public funding of higher education (from 20% to 9% of the state general funds in recent years), while the local/state funding mix of K-12 education has shifted from 60/40 to 35/65 due to low property taxes – he noted that higher education provides both private and public good and yet public funding for it will run dry without a change in the state budget structure**
  
  There is another state cut to higher education planned for next fiscal year, but it is smaller than previously expected as revenue forecasts have improved.

- **For the next EAC meeting, involve the department chairs, with a couple of them presenting on their departments**
  
  Two departments, Mechanical Engineering and Chemical and Biological Engineering, are scheduled to make presentations on 4/27/2012.

- **Move forward on cultural changes and strategy issues with big goals, even if not clear how to achieve them, and focus on positive versus negative (e.g., budget cuts)**
  
  Dean Davis will present an update on 4/27/2012 on exciting progress in this arena.