Chairs' & Center Directors' Meeting Minutes

Date: March 30, 2015 (12:00 to 2:00 pm)
Location: WCH – Room 443
Attendees: Aguilar, Guillermo
                  Barth, Matt
                  Bhanu, Bir
                  Boretz, Mitch
                  Chrobak, Marek
                  Farrell, Jay
                  Garay, Javier
                  Haddon, Robert
                  Hartney, Pat
                  Matsumoto, Mark
                  Mulchandani, Ashok (for Nosang Myung)
                  Najjar, Walid
                  Parker, Linda
                  Ravi

Absent: Abbaschian, Reza
                  Balandin, Alex
                  Myung, Nosang
                  Vafai, Kambiz
                  Venkatram, Akula
                  Wang, Albert

The agenda for the meeting is shown in Appendix 1.

1. Welcome and call for agenda items - Mark
Mark noted that Reza is out of town and has asked him to lead today's meeting.
No items were added to the agenda.

2. Approval of Minutes – Pat
The minutes of the March 20th Chairs/Directors meeting were unanimously approved.

3. 25th Anniversary Celebration – Linda
Linda reminded the group that BCOE's 25th Anniversary celebration is scheduled for Saturday, May 16th on the WCH Patio. She expects about 300 attendees including Winston Chung and former Chancellor France Cordova. About $115K has been raised in event sponsorships. Linda distributed a handout entitled "Ideas for Potential Awards" at this event. Potential awards include a BCOE Fellow Award, Engineering Excellence Awards and Pioneer Faculty and Staff recognitions. She asked for feedback on these potential awards, particularly Pioneering Faculty and Staff. After discussion, it was recommended that Pioneering Faculty and

Staff be limited to those hired before 1993. Initial faculty hired in departments could be designated as departmental Pioneers. Linda will revise the list of names accordingly.

4. Cluster Hiring Proposals – Mark
Mark reported that there were 128 cluster hire proposals across campus. UCR Deans voted on the top proposals. Only four proposals received four votes and only seven received three votes. Proposals that included participants from across campus received the most votes. It was noted that these proposals were not evaluated for their connection to UCR's Strategic Plan. The top proposals will be reviewed by an independent faculty committee formed by RED.

5. Budget Inputs – Mark/Pat
Mark called attention to the "Phase 2 Budget Process Call" document attached to the agenda. This document summarizes this year's UCR budget request process. The Call requests input on undergraduate and graduate student projections and requests input on BCOE's plan to increase undergraduate success and increase graduate student enrollment. BCOE will provide three enrollment scenarios that will be based on: no faculty growth, steady faculty growth (to 140) and aggressive faculty growth (to 180). The Call also includes sections to request LSOE (lecturer with security of employment) positions and additional TA FTE. Reza asks that each department provide a justification for one LSOE and an additional one TA FTE. This input is due to Pat by this Wednesday (4/1) since the campus deadline is Friday (4/3).

6. Transfer Students/Recruitment Process – Ravi
Ravi distributed two handouts: BCOE Incoming Cohorts and 2010 UC-Wide Transfers by Region. He noted that the college strategy is to reduce the number of incoming BCOE freshmen but that we have tripled the transfer student numbers from 37 in 2008 to 118 in 2013. We are also very close to the 40:60 ratio for the LD:UD student enrollments that the CA master plan recommends. This year's transfer student target is about 110. BCOE's Student Affairs staff provide outreach to community colleges including providing specific community college courses needed to transfer to BCOE. We also set up STEM clubs at the CC's, and conduct engineering design projects, such as the Wind Turbine project at the CC's. These have had very significant impact. We also offer summer research scholarships (up to $5,000) to Hispanic transfer students. Approximately 40% of transfer applicants are admitted to BCOE. Next, Ravi stated that the second handout indicates that Inland Empire community colleges average 74 transfer students to UC campuses compared to over 200 for community colleges in the Central Coast, Orange County and Los Angeles County areas. BCOE Student Affairs engage in special recruitment efforts in a few community colleges such as Santa Monica, Orange Coast and Riverside. It appears that BCOE's transfer student target will remain in the 100-120 range per year. He noted that community colleges are rewarded for numbers of AA degrees conferred but not the number of students transferring to UC or CSU. This year's number of BCOE transfer student acceptances won't be known until after the 5/31/15 SIR deadline.

7 & 8. Hiring and Department/Center Updates
ME: Guillermo reported the EVC/P has approved an additional two ME faculty lines so that a three faculty cluster hiring opportunity can be pursued. Also, he expects that a recommendation will be made in late April for the joint faculty appointment with CEE.

CE-CERT: Matt reported that the offer for the joint appointment with CEE has been accepted by the candidate. This new faculty member will be bringing a post-doc.

BIEN: Bir noted that the fourth candidate for the department's Chair position will be visiting today. He expects that the search committee will make a recommendation soon afterwards. Also, Bir reported that he and Mitch had a productive conference call with NIH regarding a Big Data proposal.

CSE: Marek stated that the department has made three faculty hiring offers to date. The first response is due on 4/2. Also, the department's Target of Excellence candidate offers are being processed. Lastly, the department is losing one faculty member this year.

CNSE: Robert asked if it is now standard practice to distribute interview questions to candidates in advance of interviews. Pat responded that this has worked well in several recent recruitments and, although not required, is considered a best practice. CNSE was advised to send these questions to candidates the day before interviews. Robert commented that this would give candidates sufficient time to research responses to technical questions which would therefore make it difficult to identify the best candidate. Pat responded that interview questions should be given to candidates 10-15 minutes before interviews so that candidates can collect their thoughts. He did not advise sending questions the day before interviews.

ECE: Jay reported that there are three potential offers in ECE. One offer is pending salary approval from the EVC/P

9. Retreat Summary
Mark noted the BCOE 2015 Faculty Retreat Summary of Committee Recommendations attached to the agenda. This summary was prepared by Harvey Blanch. Since it will be sent to the EVC/P, it was suggested that specific key recommendations be added to the summary. Other feedback and suggestions should be sent to Reza.

10. Other Matters
No other matters were discussed.

UNIVERSITY OF CALIFORNIA

UC RIVERSIDE
BOURNS COLLEGE OF ENGINEERING

Chairs' & Center Directors' Meeting
March 30, 2015
Agenda

Winston Chung Hall – Room 443

1.	Welcome - Request for Agenda Items from the Floor	Mark
2.	Approval of Minutes from March 2, 2015 Meeting	Pat
3.	25th Anniversary Celebration	Linda
4.	Cluster Hire Proposals	Mark
5.	Budget Inputs	Mark/Pat
6.	Transfer Students/Recruitment Process	Ravi
7.	Hiring Updates	Chairs
8.	Department and Center Updates	
9.	Retreat Summary	
10.	Other Matters	

Please note next meeting will be on: Monday, April 13, 2015

Future Meeting Dates

2014	2015
Monday, July 7	Monday, January 5
Monday, August 11	Friday, January 23
Monday, September 8	Monday, February 2
Monday, September 22	Friday, February 20
Monday, October 6	Monday, March 2
Wednesday, October 22	Friday, March 20
Monday, November 3	**Monday, March 30**
Monday, November 17	Monday, April 13
Monday, December 1	Monday, April 27
Monday, December 15	Monday, May 11
	Friday, May 29
	Monday, June 8
	Monday, June 22
	Monday, July 6
	Monday, July 20

Phase 2 Budget Process Call

Enrollment Template:
- This template has been filled-in and includes projections through FY 19/20. Per the instructions on this template "The projections are based on discussions held between Institutional Research and Graduate Division with each of the Dean's evaluating Long-range Enrollment projections. If you feel the need to change any of the projections, you may do so, but we ask that you highlight those cells in blue, and explain your reasoning in the last discussion box provided."
- The questions on this template that will need responses are:
    - EXPLAIN YOUR STRATEGY TO IMPROVE UNDERGRADUATE STUDENT SUCCESS OVER THE NEXT THREE YEARS (INCLUDING RETENTION AND GRADUATION RATES - PLEASE REFER TO TABS 1 & 2 FOR BACKUP)
    - PLEASE DISCUSS YOUR ORGANIZATION'S PLAN TO REACH YOUR GRADUATE STUDENT TARGETS ANNUALLY
    - PLEASE EXPLAIN YOUR STRATEGY TO IMPROVE GRADUATE STUDENT SUCCESS OVER THE NEXT THREE YEARS
    - PLEASE EXPLAIN YOUR ORGANIZATION'S PLAN TO FINANCIALLY SUPPORT THE GRADUATE STUDENT ENROLLMENTS FROM NON-CENTRAL CAMPUS RESOURCES
    - IF YOU OPTED TO CHANGE ANY OF THE STUDENT PROJECTIONS, PLEASE EXPLAIN YOUR RATIONALE

General Funds Budget Request Template:
- This template consists of three sections:
- LSOE Request
    - PLEASE DISCUSS HOW THESE POSITIONS WILL HELP YOUR SCHOOL/COLLEGE PROVIDE NECESSARY COURSES FOR STUDENTS TO COMPLETE THEIR DEGREES IN A TIMELY MANNER, THEREBY MEETING THE CAMPUS GOAL FOR STUDENT SUCCESS
- TA Request
    - PLEASE JUSTIFY YOUR REQUEST FOR TA'S IN THESE HIGH DEMAND COURSES
- General Budget Request
    - Per the call letter, this year's process will only take into consideration one-time high-priority requests while we transition to the new budget model.
    - UCOP is providing a limited amount of funds for the Undergraduate Success campus goal. For requests that tie specifically to this goal, we are asking that the requests lead to improvements in graduation rates, time-to-degree, and/or other educational outcomes for educationally disadvantaged undergraduate students. Please note that you will be required to develop a tracking process on the impact of these funds based on the criteria indicated above.
    - Template Questions:
        - Your organization's carryforward information has been provided below, please explain why you cannot use your carryforward to fund your one-time requests? (Obviously, BCOE can list its Start-Up, etc commitments on carryforward funds).
        - PLEASE PROVIDE ANY ADDITIONAL INFORMATION NECESSARY TO EVALUATE YOUR REQUEST.

BCOE Incoming Cohorts

Incoming Freshmen and Transfers
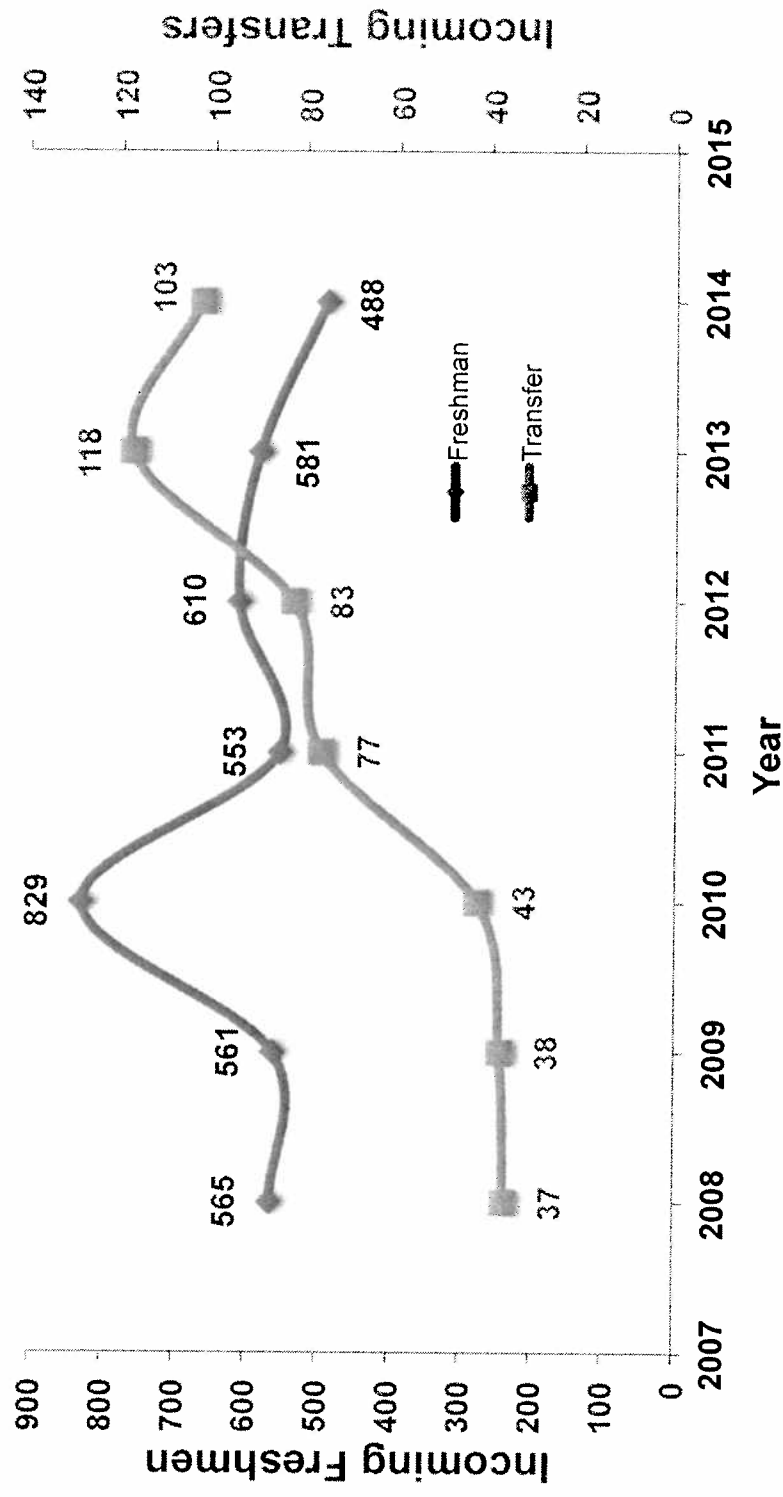
2010 UC-Wide Transfers By Region

Region	Number of CCs	UC Transfers per CC
Central Coast	6	218
Orange County	9	213
Los Angeles	21	201
San Francisco Bay	25	164
San Diego-Imperial	9	145
Sacramento-Tahoe	8	126
Monterey Bay	3	113
Inland Empire	10	74
North San Joaquin Valley	7	56
Superior California	2	27
South San Joaquin Valley	6	23
Upper Sacramento Valley	2	16
North Coast	2	11

C. V. Ravishankar

UCR

BCOE 2015 Faculty Retreat

Summary of Committee Recommendations

A common theme addressed by all Committees at the retreat was the proposed increase in tenure track faculty in the College by 50 over the next 5 years. These faculty will distributed among all BCOE departments and programs, with many of these new faculty being joint appointments within BCOE and with other UCR colleges. This will impact BCOE in a number of ways and each Committee provided recommendations to facilitate this growth of the College.

1. Administrative Infrastructure

A concern of the Administrative Infrastructure Committee was that BCOE will not receive campus funding for a proportionate increase in the number of administrative and IT staff to support the faculty/student/researcher increases. To address this, the Committee recommends planning for a shared services model for payroll/personnel transactions in BCOE prior to UCPath implementation. It recommends working with campus to develop the electronic tools necessary to implement payroll/personnel shared services in BCOE, and evaluating the establishment of a shared services center in BCOE for purchasing and travel transactions.

As even current staffing levels were thought to be inadequate, the Committee recommended that faculty raise concerns with the Academic Senate about future plans for staffing. To recognize staff accomplishments, the formation of a BCOE Staff Incentives and Recognition Committee could be formed to evaluate options including: BCOE staff retreats, staff spotlight and recognition on the BCOE news page and a letter of appreciation on each employee's employment date.

Information technology was also addressed by the Committee. A priority was to ensure that faculty in all BCOE departments can collaborate and share files easily between departments and with other non-BCOE departments regardless of affiliation. Additionally, a transitional email and file storage approach was suggested to be developed as a blended model between Engineering and Campus systems/services.

2. Development/Communications/Public Private Partnerships

The consensus of the faculty was that the recent centralization of development is not the best model for BCOE. Because of the complex nature of engineering, it is especially important for BCOE to have development officers who are based in the College and who have a good grasp of the overall needs and opportunities of the College. It was felt that it is unrealistic to expect the 21 UCR development officers located in offices across campus to adequately represent the College and capitalize on the potential opportunities for fundraising. In the technology sector, information changes rapidly and the Committee felt it would be difficult for someone who is

not based at the College to form working relationships with faculty and have insights into new areas of opportunity. Furthermore, BCOE needs continuity in communicating and cultivating donors and prospective donors.

By comparison, all of the engineering colleges at other UC campuses have dedicated development staff in their engineering schools or colleges, and have more staff than BCOE. Some of the research centers at other UCs have dedicated development officers who focus on both individual and corporate philanthropy. The Committee strongly believes that BCOE needs its own development officers, and that the activities of unit-based development officers need to be coordinated through a central office.

For BCOE's Communications efforts, the Committee recommended adding parents of current students to the *Engineering Times* distribution list. It also recommend updating the BCOE website to reflect the BCOE brand. It also suggested investigating the cost of on-campus support for web changes if the Office of Strategic Communications staff services are used. The Committee recommends developing a list of funding priorities for each BCOE department and requesting that each department assist with updating alumni information, outreach to parents, and the coordination of BCOE's communications efforts. It also recommended exploring Public Private Partnership (P3s) for new College buildings by initially looking at models that have been implemented at other UC campuses.

3. Graduate Education

Graduate student recruitment, support and coursework were the key areas considered by the Committee. It was proposed that a PhD/faculty ratio >5.0 be maintained primarily through faculty growth, with a more judicious approach to increases in the MS/faculty ratio. Any increases should be based on maintaining high standards, with strategic increases to garner revenue in support of department needs and to provide advanced degrees for practicing engineers.

To facilitate graduate student recruitment, the Committee recommended placing less focus on college recruitment fairs and relying more on GRE name search lists. Some specific opportunities for graduate student recruitment were considered; namely to seek/create/promote summer research internship opportunities with emphasis on juniors to evaluate their potential as research scholars and Ph.D. students; to build direct recruitment relationships with HBCUs and other institutions; to expand the Graduate Preparation Program (GPP) with Chinese universities and other countries (e.g., Brazil, Mexico); to become more aggressive in obtaining NSF REU-funding or other similar federal programs and to encourage BCOE faculty to participate in Mentoring Summer Research Internship Program (MSRIP).

Approaches were discussed to assess and improve admissions strategies. These included: developing an index score based on GPA, GRE, recommendation letters, undergraduate/MS

research, undergraduate/MS coursework and institution and the use of Skype student-faculty interviews to assess readiness (scholarly and language). Graduate student support issues included examining the possibility of providing non-resident tuition (NRT) for two full years or eliminate NRT for international students so that they are not forced to take qualifying exams too early in their doctoral studies, and making the GRMP fellowships available for international students.

A separate course for M.S. students emphasizing practice rather than research preparation (400-499 level courses) could be considered. It was observed that all students could benefit from professional development courses including technical writing and oral presentation and entrepreneurship, engineering management, etc.

4. Undergraduate Education

Two important statistics that reflects the overall effectiveness of undergraduate education are the faction of undergraduates who graduate and the time required to do so. It is important to note that UCR's graduation rate matches or exceeds that of the other UC campuses when normalized by the system-wide student quality measure. However, the Committee observed that despite demographic differences between UCR freshmen and those of the other UC campuses, UCOP, the Governor, and the Legislature are likely to hold UCR to the absolute graduation rate metric. Consequently, BCOE cannot ignore this metric, and must strive to improve its absolute graduation rate.

To better understand the factors that are important in determining graduation rates, the Committee reported that the AIS metric, which the Senate mandates for admission, favors students with stronger academic preparation. AIS correlates well with success. The Committee observed that it would be unfair to admit under-prepared students unless additional steps are taken to improve their success rate. The current strategy of focusing on AIS should thus continue unless BCOE faculty are willing to commit substantial amounts of their time and other resources to assist low-AIS student.

The Committee identified three primary determinants of success: connection with the college, advising, and effective teaching. BCOE appears to be doing well with respect to the first two criteria. To bolster the third, the committee recommended the following: (1) make greater use of campus resources, such as the Scholarship of Teaching series and the Academy of Distinguished Teachers. (2) Mentor Assistant Professors in teaching, and include information in their orientation packets. (3) Explore the possibility of capstone courses in Math, Physics, and Chemistry.

5. Strategic Areas for Research and Faculty Growth

As part of a continuing effort to identify multidisciplinary areas for research funding, the Committee identified the major strengths of each department in the College and the areas

considered important to the discipline but not represented among department faculty research interests. There are a number of existing multidisciplinary research areas in BCOE that have resulted from interactions among individual faculty. Most of these are in the form of "virtual" research centers. It is important that new Centers have research objectives that match well with Federal research priorities. It was noted that the current BCOE strategic plan maps well onto many Federal research priorities. It was observed that CECERT provides a model for a Center that is located at a physical site, and brings a multidisciplinary team together to address environmentally-relevant problems. There are also virtual "tool-based" Centers in BCOE, as well as problem-focused Centers.

One of the difficulties in developing multidisciplinary research programs and Centers was that the faculty are not sufficiently aware of ongoing research programs in other departments. Based on discussions at the retreat breakout sessions, several areas were proposed: "big data" collection and analysis (CS and ECE); secure, complex and multiscale systems (CS): robotics (CS, ECE, BioE, ME); and materials science and characterization (CEE, BioE, ECE, ME). A common theme across all departments was faculty involvement in biological problems. The Committee recommended that biology-related BCOE faculty meet and review problems that can be addressed by the collective expertise in BCOE, and seek funding opportunities for these multidisciplinary projects. Additionally, a database of major equipment items in the College, accessible to all faculty, would facilitate development of multidisciplinary proposals.

6. Research and Instructional Infrastructure

The Committee recommended a restructuring of the Dean's Office to include an Associate Dean of Research, with responsibilities to liaise with the campus Office of Research, provide a and implement a cohesive infrastructure plan for BCOE, assist in addressing multi-investigator proposals, serve as a point of contact for software and equipment, and oversee advisory groups for software and space needs in the College. An increase in support staff for this new position was recommended.

Research equipment needs were addressed by the Committee, with recommendations that a standard protocol be developed to share equipment and core facilities, together with a strategy for purchase of shared equipment. Such equipment may require ongoing service contracts and staffing, and financing these needs should be further explored. The need for a detailed database of campus and College user facilities and equipment was voiced, and this was also identified by the Strategic Areas for Research Committee.

The increase in faculty in the College will impact space requirements. The committee recommended the Associate Dean of Research establishes a faculty/staff committee to address space allocation. This should be coupled with an aggressive effort to re-initiate Building III.

The Committee recommended increasing the visibility of software available through the College, highlighting which software can be used for instruction and/or research purposes. Software versions and limitations should be made apparent. Availability of software for Mac

users should be increased. The availability of more costly software (Adobe, Labview etc) should be explored with UCR/UC . In addition, an effective means of reporting AV equipment issues should be established for classrooms and meeting rooms. Additional sources of support for AV equipment could be explored.