A five-year review of the Air Quality Research Center (AQRC) organized research unit has been forwarded for comment.
RFC: ORU Review – Air Quality Research Center (AQRC)

The Graduate Council, based on a memo from its APD Committee, forwards its recommendations for the aforementioned RFC.

The Academic Planning and Development (APD) Committee met on April 7, 2015, and considered the ORU review of the AQRC.

Graduate council notes that the AQRC is a relatively new ORU (this is the first review) that has brought substantial benefits to graduate education at UC Davis, with promise for continuing valuable contributions. The AQRC’s interdisciplinary focus and strong extramural support has resulted in graduate research opportunities for students of various backgrounds. Besides the approximately two dozen graduate students who have worked on AQRC projects during the review period, AQRC has positively impacted the research of a sizable number of additional PhD students who are not directly associated with AQRC.

The contributions of AQRC to graduate education have however diminished in recent years. This is partly due to the ending of a substantial training grant that was associated with the activities of AQRC (though not developed through AQRC). The grant has not been renewed and this seems to have led to a decline of the number of graduate students participating in AQRC activities. There is also a lack of awareness among eligible graduate students of the opportunities provided by AQRC. The community of graduate students associated with AQRC is somewhat dispersed and less cohesive than would be desirable.

While GC notes that AQRC benefits the campus as a whole and should be continued as an ORU, the graduate student programs need to be revitalized and specific recommendations, based on the review recommendations, are as follows:

(1) To engage in sustained efforts to receive a graduate student training grant.

(2) To raise the awareness of graduate students on campus about the opportunities provided by AQRC for graduate research and training through an online forum, targeted e-mails and an event series aimed at generating student interest in the activities of AQRC.

(3) To create a cohesive community of graduate students that is associated with AQRC, and promote student networking activities. This could include supporting and reviving student run seminars, specific events addressing students and emphasizing interdisciplinary approaches, social events, and creating a supportive alumni network.
(4) To strengthen interdisciplinary curricula and work towards enhanced diversity of the participating students.

Sincerely,

Kyaw Tha Paw U, Chair
Graduate Council

C: Gina Anderson, Academic Senate Executive Director
Planning & Budget

May 12, 2015 2:14 PM

Response continued on next page.
ORU Review – Air Quality Research Center (AQRC)

CPB discussed the Air Quality Research Center ORU review. CPB commends the AQRC and its Director for past efforts. It’s clear that Dr. Wexler has worked very hard to undertaken the many activities necessary for an ORU to operate. However, the committee also noted a number of concerns, which when combined, led CPB to unanimous agreement that the ORU status should be discontinued.

The concerns noted included,

(1) Declining extramural research funding. The AQRC has had only one grant and it is expired;

(2) The lack of faculty engagement. In part, ORUs should drive increased faculty participation. This does not appear to be happening, and finally

(3) Declining engagement with students.

In addition, CPB also notes that both the AQRC and Crocker Nuclear Lab are run by the same Director and, and the air quality work within CNL is not substantively different from what might be expected to occur within the AQRC. Thus, it appears that there is a home for any faculty conducting air quality research.

In summary, the discontinuance of the ORU status should not displace active faculty participants, and CPB recommends discontinuing the status.
Response continued on next page.
ORU Review – Air Quality Research Center (AQRC)

Overall, the ad hoc committee's review was comprehensive and highly positive. Air quality has become a major concern for the health of our planet, and we frequently hear about the effects of our activities on air quality and global warming in the media. Knowing that UC Davis is making a difference in California and throughout the world is very exciting. This is a highly functional center, with strong faculty and well documented success on many fronts. The center does provide a "critical mass" for successful grant submissions. The strength in Centers, especially at their beginning (which is the case here) is to establish new collaborations among faculty who would otherwise not interface. That said, some COR members expressed concerns that once a center has been established for a long period of time, new interactions/collaborations occur less frequently, so the Centers (as well as Departments) should have a perpetual plan for looking across campus and schools for novel interactions and new faculty affiliates. Here that seems to rely on the networking talents of the current director.

Deans and others who responded seemed to find each of the suggestions worthwhile as provided in the ad hoc review, as do most COR members. This center seems to be doing an excellent job in virtually all categories but some COR members expressed concerns that student teaching be maintained at a high level, as implied as a concern in Dean Lairmore's letter. An explanation however may be the accounting the ad hoc team discusses: what the CENTER claims for itself is far less than the full impact of the entire center on teaching, research, and service. In fact, in reading this document many COR members revisited general frustrations with accounting for many of these issues on this campus: faculty in centers are promoted from their departments with a center director letter; there are no consistent standards for time or indirect cost sharing of faculty between centers and departments; in fact there is almost an inherent conflict of interest between departments and centers in some ways. COR agrees that these issues need to be addressed comprehensively. In the face of them, the successes of AQRC are quite clear and overall COR members have no concerns about its sustainability and value. COR is unanimous in its opinion that the center should remain independent of John Muir.

Tangential, but related - It seems that "soft-money" researchers more easily find homes in Centers than departments, but COR is unclear on the exact reason or administrative reason that this is the case. These are poorly followed positions and it reminds COR that there should be an effort in this, and other centers, to document success (publications, grants, job placement) of these positions within and/or between centers. It could serve to attract more funding or more excellence. This could be added to the review of centers.

In addition, the review spoke of creating Chinese experts trained at UC Davis who could return to China and have a significant impact on air quality policy. Is there any solicitation of funds from China to support specific students (graduate) to this effect?

Furthermore, some COR members felt that something was missing from the review. Although the director responded to the critique that specific impacts of the Center were omitted by listing several academic achievements, there were no "actual" impacts listed. For example, which specific policy changes at the State or national level came about because of the research or other activities of the Center? How has (or will) air quality been improved as a result of these activities (from a layperson perspective)? Do we have cleaner air now due to these activities? Finally, COR wonders whether the Center is getting credit when the media highlights its activity. Most COR members have not heard this Center named in the media (NPR, newspaper stories, TV); rather "UC Davis" is usually named. At the MIND Institute, where some COR members work, its profile has been increased among laypeople by ensuring that the Institute is named
and by having a National media campaign. Given the critical importance of air quality to the nation and world it seems that the AQRC should strive to obtain this visibility to the population.

In summary, as a review of the center's success and activities, the report was very thorough, but there is no specific section on the support that the center needs from campus, nor what specific positions would be most needed (complimentary expertise). What campus resources are currently provided, and what changes would be helpful. It is discussed in part by addressing the possibilities of combining AQRC and the Crocker labs, but not clearly beyond that. Lastly, some COR members questioned whether the AQRC has a mission statement because it was not clear in the documentation. If so, what is it?