

24 April 2008

To: Stephen Thorsett, Dean, Physical and Biological Sciences
From: Peggy Delaney, Professor and Chair, Ocean Sciences
Re: Departmental response to February 2008 *External Review Committee Report*

Thank you for the opportunity to respond to the *External Review Committee (ERC) Report* based on the departmental self-study and the January 2008 visit by the review committee. The ERC report focused on three main areas:

- (1) An evaluation of the status and overall quality of our department;
- (2) Interactions of the department among campus, regional, national, and international programs and an assessment of the department's place among these programs; and
- (3) The department's plans for faculty growth and an evaluation of the department's size under the current campus academic plan.

Overall, we were gratified by the overwhelmingly positive assessment of the department by the ERC, including statements like "The OSD [Ocean Sciences Department] faculty is of exceptional quality with national and international prominence in nearly all of the department's thematic areas," (p. 13, Recommendation 6), "...the UCSC Ocean Sciences Department has many strengths and few real weaknesses" (p. 12), and "Considering its small size, the OSD is world-renowned in nearly all of its core thematic areas and plans are being implemented to maintain and round out faculty excellence in all areas. Graduate students...are uniformly satisfied with their experiences, and the department's analytical facilities are world class."

The report focused on findings in each of these areas, followed by a succinct set of recommendations. In the following, we respond to two issues raised in the findings, then respond to each of the recommendations. We very much take their constructive suggestions as ways to consider to maintain and enhance our excellence.

ERC FINDINGS: SELECTED POINTS

We appreciate the thoughtfulness and detail of the ERC's findings, including the embedded suggestions for improvements in what we do. We wanted to comment on two issues raised in the findings, as we think the comments may reflect some misunderstandings.

The role of space in academic planning for the Ocean Sciences Department. The ERC Report expressed concern that space considerations had played an overly large role in our academic planning. It has been the experience of the present and past department chairs that space is the resource that is our most critical lack. The 2002

External Review Committee's Report from our last review included this statement in the Executive Summary: "The review committee views the issue of space as the most challenging one for the department." We have worked hard (space trades, long-term space loans) since 2002 to solve several pressing space needs identified at that time. This remains our largest challenge, with a shortage of wet lab and dry lab space to re-allocate, and with no office spaces to re-assign. While we fervently wish that our academic plans were not shaped by space considerations, the reality is that they are and have been. We are grateful for space support we have received from the Institute of Marine Sciences (e.g., post-doctoral scholar office space) and from the division (e.g., temporary allocation of space in Thimann for graduate students). We can't solve the larger problem without outside help. Certainly, the timing of our planned academic hires in the divisional plans has been controlled by the anticipated timing of new space for the division.

The focus of the current faculty recruitment and the role of space. The ERC Report expressed concern about our current recruitment in *Ocean Circulation and Climate/Physical Oceanography* and the role of space considerations. The ERC Report expressed concern (e.g., p. 7) that the areas considered for short list candidates had been driven in part by space considerations (that computing/data users require less space than a sea-going physical oceanographer). This was simply not the case. The position description explicitly stated that "research interests could include, but are not limited to, observational or data-based studies" of the role of the oceans on climate and climate change, with a physical oceanography focus. The short list for this position had been identified at the time of the ERC visit, but none of the candidates had yet visited. Our serious candidates included modelers and sea-going observationalists, and we are making an offer to an observationally oriented physical oceanographer. The concern the ERC heard was related to the mid-stream point of the search and our well-justified nervousness about the space limitations we have on what we could offer the candidate.

ERC RECOMMENDATIONS: RESPONSES

In the following, we present each ERC Report recommendation in boxed text, followed by our response. Where possible, the recommendation text has been shortened, with missing text indicated by ellipses; please see the ERC Report for the full text of each recommendation. In some cases, we have provided a combined answer for two related recommendations.

- (1) The planned long-term growth of the OSD is heavily dependent on the future availability of new space. ...*The ERC strongly endorses the planned construction of a new Coastal Biology Building at the Long Marine Laboratory as it will provide released space essential for the long-term growth of the OSD.*

We have and will continue to support the new *Coastal Biology Building*, to be located at Long Marine Laboratory, as a divisional space priority, as long as this continues to be explicitly coupled with released space in EMS for Ocean Sciences

research, office space, and teaching needs. This building is planned in lieu of an environmental sciences wing or annex to the EMS building, because of the anticipated lower costs of construction on flatter space. We continue to work with the division on other possibilities for releasing space in EMS or other nearby buildings. As noted in the section on findings, the ERC perceived more flexibility in our space assignments than are presently possible. When our current faculty recruitment in *Ocean Circulation and Climate/Physical Oceanography* results in a new faculty hire, we will have committed the very last of our office spaces in EMS to faculty members. Our three physical oceanographers will be sharing lab space formerly allocated to two of them. We are out of wet lab space, and the only way to create new lab space from the space allocated to us is with the expensive conversion of one of our graduate student bull-pens to a lab, with no space identified for the displaced graduate students. We currently 'borrow' some Institute of Marine Science (IMS) lab space in EMS for faculty use, and we rely on IMS for office space for our post-doctoral scholars.

- (2) The OSD needs to complete its on-going faculty search in Ocean Climate and Circulation and *should then move quickly to begin recruitment for their planned Biochemical / Ocean Ecology position. ...*

We are in the final stages of negotiation with our top candidate in the *Ocean Climate and Circulation/Physical Oceanography* search. We are eager to begin the planned recruitment in *Biochemical/Ocean Ecology*. This is currently slated for recruitment during 2010-11 in PBSci Divisional Plans. We would gladly start as soon as possible, subject to assistance from the division in solving space needs, to recruit in biochemical oceanography. Given the recent renewal of Zehr's MEGAMER (*Microbial Environmental Genomics, Applications, Modeling, Experimentation, and Remote Sensing* facility and program) funding for five years, this would build on existing instrumentation and faculty expertise and provide a critical element currently missing from our programs.

- (3) Within the next five years, there will be important retirements of core OSD faculty. *The Dean of Physical and Biological Sciences needs to aggressively protect and retain these core faculty positions in OSD* (preferably with the new hires having time to overlap with the retiring faculty), and take advantage of the unique laboratory facilities already in place (which will help reduce startup costs). In the short term, the OSD should begin to plan for what they want these positions to be. Last, it appears to us that the Bruland position should be recruited at open rank (i.e., up to full professor) in order to maintain the national / international stature of this thematic area.

We do anticipate retirements in the next few years, and we completely agree with the absolutely urgent need to replace any core faculty retirements in a very timely manner. We emphasize that these retirement replacements must be in addition to the one growth position allocated to us in the division's 2010-11 "Faculty Recruitment Priorities, Growth Positions" plan.

In an ideal world, we would prefer to recruit so that new hires would overlap with the retiring faculty. In a more practical world, we request that we be allowed to initiate a search immediately upon a faculty member's retirement. For example, if a core faculty retired in June 2009, we would search in 2009-10 for appointment in July 2010, giving us only one year's gap.

After completion of the current *Ocean Circulation and Climate/Physical Oceanography* search, we plan to discuss faculty hiring priorities, to clarify and refine our projected target. Note that divisional plans take us to a total of 11 faculty by 2010-11, so we are discussing only one growth position in addition to any faculty retirements. We would be glad to be allowed to recruit one of these at a more senior level, and we will make that argument as appropriate. However, we are also aware of our faculty seniority and demographic distributions, and we understand the divisional and institutional priority given to junior hires.

(4) *We strongly encourage the OSD and university to add a sea-going, coastal, interdisciplinary physical oceanographer to its planned FTE list....*

and

(5) *The ERC believes that an appropriate full faculty size for the OSD should be fourteen core OSD faculty members....*

We treat these two recommendations together, because we view faculty size and desired areas of expertise as related. In divisional academic plans, the Ocean Sciences Department is slated to grow to 11 faculty by 2010-11, with the addition of a position in *Biochemical Oceanography*. This faculty size takes us to only four faculty greater than our size in 2000, and to only three faculty more than the allotment of eight provided in 1998, as part of the campus commitment, at the time of our Ph.D. program approval. We recognize that we are not alone in the division in the lack of faculty growth since 2001. In our self-study, we presented our vision for the department having 13 faculty members by 2010-11, including two additional growth positions, one in *Oceanic Food-Web Dynamics* and one in *Marine Sedimentary Organic Biogeochemistry*.

The ERC treats two issues with Recommendations (4) and (5): how many faculty members should we have by 2010-11 and what area of expertise, if any, needs further emphasis. On the first point, we fully agree with the ERC that an optimal size for the department in 2010-11 is several faculty members larger than the planned size of 11. On the second point, as explained in the section on findings, the ERC left with some misapprehensions about the current search; we are hopeful that we will conclude the search by hiring a sea-going physical oceanographer. We would require the larger size advocated by the ERC to add additional expertise in coastal oceanography, and the ERC recognized the higher importance of our other hiring priorities.

(6) ...*The stature and prominence of the OSD both on campus and within the Monterey Bay region needs to be enhanced.* The ERC has provided suggestions of how this may be accomplished.

We take suggestions these to heart, as we realize that we have focused on our national and international prominence, sometimes at the expense of campus or regional visibility. We do not agree that we are introverted, but we understand that perception. We have a unique identity as ocean scientists, not merely as extensions of or replacements for other departments. Our students all experience a core curriculum in oceanography, and this common intellectual and research framework extends to our other graduate courses and to our research programs with graduate students and post-doctoral scholars. We also note that some of the suggestions here for regional visibility in ocean sciences are targeted at the Institute of Marine Sciences, our "home" ORU, and we will work to communicate these.

(7) ...*The current faculty does not have much enthusiasm for the development of a stand-alone undergraduate major in Ocean Sciences and the ERC agrees that this should not be pursued. The ERC does support participation in the planning of an undergraduate major in Environmental Sciences....*

We agree with this recommendation. We simply don't have the resources, in faculty numbers or in the field and lab-intensive support that would be required, to mount a stand-alone major. As campus experience has shown, a minor can lock a program into meeting curricular requirements that, in fact, serve a relatively small number of students. The department chair has been meeting during 2007-08 with an informal group exploring establishing an undergraduate major in Environmental Sciences, and she will continue this.

(8) ...*We have provided a series of suggestions which would improve the working environment for both graduate and postdoctoral students...*

Our Graduate Advisory Committee will consider these all of these suggestions, suggest priorities for addressing them, and recommend solutions for implementing them. We were glad to find that our graduate students were well satisfied with the more substantive aspects of their graduate education, and that what we need to improve is the aspects of the environment that make for a more cohesive social academic network. We also find that we can get "push back" from the students when we try to do exactly these things. For example, one function of the required annual two-unit OCEA293 graduate seminar is to build ties within the student cohort and to acquaint them with the range of student research. Yet, sometimes this requirement is the one about which they complain!

(9) ...*The ERC made a number of suggestions for improving graduate student recruitment...*

This is an issue important to the faculty as a whole and as individuals. We have instituted a graduate student recruitment open house in the past few years. This year, we made the Open House invitation process “opt out” for sponsors of potential students, rather than “opt in.” Attendance was good at this event, and it was well received by those in attendance. Nonetheless, we lost prospective students, including some who had attended the Open House, to other institutions, largely in response to better financial offers (multi-year and/or higher total compensation) or to guaranteed graduate student ship time experience. In practice, our graduate student cohort is well-funded, and we communicate this to our recruits. The small size of our block allocation, our relatively small commitment of TAs, and the highly leveraged nature of our student support model after year 1, with most students fully or nearly entirely supported on external funding, create challenges for us in terms of the written offers we can guarantee.

We will focus one/more department meetings on the issue of graduate student recruitment strategy, as this has hit many faculty members hard, especially this year when our recruitment season was not as successful as we would have liked.

(10) The previous two suggestions appear to place yet more work on the core OSD faculty who, although excellent and dedicated, are simply too few to successfully pull this sort of organization off year after year. Frankly, there are too many tasks needed to occur here that are inconsistent with expectations for the roles of UC faculty members. *The ERC notes the need for an additional career staff member to be the point of contact for the graduate student body and to be responsible for institutionalizing socialization and recruitment efforts.*

We completely agree that the several of these suggestions would result in more workload for core faculty and more work “inconsistent with the expectations for the roles of UC faculty members.” We would welcome an additional staff member, even a part-time appointment, to help with these issues. We recognize that, in this financial climate, this is unlikely to happen any time soon. We will need to carefully set priorities for what we do to avoid overload for faculty and existing staff members.

(11) Students and postdocs all pointed to improvements needed in the OSD website...*The ERC notes that these website issues are simple to correct and these improvements should be implemented as soon as possible...*

We have effective internal e-mail aliases for reaching our graduate students, post-doctoral scholars, and graduate group sponsors. This recommendation reminds us to make those internal groupings visible to the outside world. We are already working on putting in a *Department Contact List*, at the “Contact Us” button on our

web site, with phone and e-mail for department staff, core faculty, affiliated faculty, graduate students, and post-doctoral scholars.

We recognize the need to update and enhance the departmental web site, and we plan to use text written for the self-study to do so. Department web page support is provided by the division; because of divisional computing staff departures, we have been unsuccessful in getting this assistance. (Department staff met with the divisional IT designated contact about web page improvements; that person left within one month of the first meeting, with no changes made. Department staff met with the replacement, again going over the desired changes; that person left two months after the meeting, with no changes made. We will re-initiate contact here, hoping for a different outcome.) We will discuss the web page and individual lab group pages as one component of responding to Recommendation (9).