Robert L. Raffai, PhD, Chair  
Graduate Council  
UCSF Office of the Academic Senate  
Campus Box 0764  

April 16, 2012

Dear Chair Raffai,

As requested in your letter dated November 17, 2011, which we unfortunately did not receive until April 10, 2012, we are writing in response to the External Report for the Academic Program Review conducted on May 24-25, 2011. We appreciate the thoroughness of the report, and we hereby provide a point-by-point response to the reviewers' recommendations (in bold below). As you know, we have re-organized the program leadership within the Oral and Craniofacial Sciences (OCS) Steering Committee. Pamela Den Besten, who has been the Director of the COHORT training grant since 2008, accepted to also serve as PhD Program Director after returning from her sabbatical, and Ralph Marcucio, who became Chair of the OCS Steering Committee in June 2011, agreed to serve as co-Director. Caroline Shiboski, who developed a more formal admissions process for the program became Chair of Admissions, and Stefan Habelitz, who has been actively engaged in restructing the curriculum, became Chair of the Curriculum Committee. Therefore, the following response has been prepared by these four members of the OCS Steering Committee.

1. As Drs. Shiboski and Habelitz move their visions forward for the PhD programs it is recommended that a formal outcome assessment process is put in place to monitor new/revised programs and student progress.

Program leadership response: In response to this recommendation, we have formalized the process by which students are both mentored and evaluated as they progress through the program. Each PhD student is assigned a Graduate Advisor upon entry into the program. Students who are enrolled in the DDS-PhD program are also assigned a Clinical Mentor. Students who have completed all research rotations chose a Thesis Advisor, in whose laboratory they will complete their PhD dissertation research.

Graduate Advisors are nominated by the OCS Steering Committee and are assigned students/advisees as they enter the program. Graduate Advisors are individuals with an in depth knowledge of the program, courses, and mentors, and who can then work with their students/advisees to: 1) review and develop their annual program plan, 2) report on the progress of their students/advisees through the program, 3) work with students/advisees to address concerns regarding their education and training.
Graduate Advisors make contact with the student soon after the student is accepted to discuss goals, interests and identify a potential initial research rotation. Graduate Advisors then meet with trainees quarterly, and prepare a written formal assessment of progress annually. Student records, including the Graduate Advisor’s assessment are discussed at an annual meeting of the Advisors, the Program Director, and the Chair of the OCS Steering Committee to discuss problems and develop plans to intervene if necessary. If problems exist, the Graduate Advisor will guide the student in the development of a written plan with specific milestones. Both the Graduate Advisor and the Program Director will meet with the student within 6 months to check on the progress according to the plan, and further assist the student as needed to help him/her overcome the identified challenges. Graduate Advisors are expected to meet with students once per quarter until the student has identified a PhD research project. Once a student has passed his/her qualifying examination and identified a home (i.e., lab) for his/her PhD research, a Thesis Advisor is assigned to the student (usually the PI of the lab in which the student is conducting his/her research).

Clinical Mentors are individuals who have been identified as outstanding clinical teachers and mentors who will facilitate coordination of schedules, courses and clinical care requirements for DDS-PhD students.

Thesis Advisors are all members of the OCS Graduate Group: Criteria required for faculty to serve as Thesis Advisors are the following:
1. Evidence of career and research independence.
2. Evidence of a strong and consistent publication record for career stage to guide and demonstrate success to mentees.
3. Evidence of continuous funding to support graduate student research projects and to ensure suitable career guidance, scientific mentoring and education on strategies to secure and sustain extramural funding
4. Evidence of participation in graduate training through teaching, participation in retreats, and/or previous record of mentoring students.

OCS Graduate Group membership is reviewed every three years and renewal is contingent upon demonstrated involvement in the OCS program. The expectation is that all principal faculty will make a substantial commitment, including teaching and/or organizing core or advanced courses offered by program, as well as regular attendance at retreats, service on important committees, participation in journal clubs and participation as requested in our mentoring program for students who may benefit academically from one-on-one coaching from a faculty member. The OCS Steering Committee performs the review based on each Thesis Advisor’s training record.

The graduate advisor, and for DDS-PhD students the clinical mentor meet at least once a year to review student progress plans for program completion.
Additional meetings will be scheduled as necessary. When a student has chosen a lab and a thesis advisor, the thesis advisor can replace the graduate advisor.

**Student evaluation:** Students are evaluated through grades, research rotations, and timely progress through the program. These assessments will be reviewed with the studies in the annual meeting held with the student's graduate advisor and/or thesis advisor and clinical advisor. A report is generated at this annual meeting, which becomes a part of the student's record.

**Program evaluation:** Each year the Program Director and co-Director will prepare of a report assessing the program's progress in meeting its objectives to recruit an excellent and diverse group of students, and to provide them with optimal training and experiences. This report will be comprised of sub-reports from Steering Committee Chairs for Admissions, Curriculum, Annual Retreat, Membership, and the Liaison to other graduate programs. The report will be reviewed by the Steering Committee, and recommendations for changes or improvements will be made. The report and the recommendations will be sent to all members of the OSC Steering committee for their review and comments. This report will include short-term outcomes including time to qualifying exam. In addition an exit interview will be complete with all trainees who have completed their training or leave the program for other reasons. A summary of the annually completed exit interviews and course evaluations will be included in the year-end report.

2. A careful review, to include student input, on core courses and electives available for all three tracks should be considered. Further, the number of required rotations for DDS/PhD students should be revisited.

Program leadership response: The curriculum has been revised under Stefan Habelitz's leadership (see OCS Curriculum 2012-13 attached). In this curriculum revision process Dr. Habelitz created a Curriculum Revision Sub-Committee that included 2 other members of the OCS Steering Committee, and he also sought input from students (both former students who already graduated from the program and current students). The final curriculum was reviewed and approved by the OCS Steering Committee. In this curriculum, we have reduced the time of rotations to 6 weeks. We have also revised the requirement for 3 rotations: a third rotation is no longer mandatory if a student identifies a "home" after his/her first 2 rotations. We also recognize the importance of fostering a "program identity" by organizing social events with students and faculty throughout the year, and discussion sessions that seek student input regarding any curriculum or program change. In this regard we are currently designing the curriculum for a core-course of the OCS graduate program. This course will encompass many areas of science and research related to orofacial and dental sciences as they are represented by a large number of faculty in the OCS graduate group. Emphasis of this course will
be on structure, properties and bioengineering of mineralized tissues which may be attractive to students from other programs as well. The course is planned to start in Spring 2013.

3. It is recommended that a more formal process is put in place for incoming graduate students to navigate their environment, e.g. a roadmap that outlines resources available; provides details on requirements and anticipated timelines for completion; and provides guidance for students as they move through the process.

Program leadership response: This is an excellent suggestion and we had drafted this “roadmap” for the students which we have attached.

4. It is recommended that the Internal Advisory Board continues to develop mechanisms to increase the applicant pool and diversity of applicants to the program. In addition, plans for supplementation of finances to support graduate students should be considered.

Program leadership response: The Admissions process was discussed in great detail during the External OCS Program Review, and we concur with the review committee that we need to continue to develop mechanisms to increase applicant pool and diversity. To that effect, we have restructured our Admissions Process under Caroline Shiboski’s leadership. Our recruitment plan and admissions process are both described in the attached file named OCS Program Admissions. We started implementing our new recruitment and admissions process in Fall 2012, and the following report reflects the positive outcome of the new plan.

We briefly summarize structure, process, and outcome pertaining to Admissions to the OCS PhD Program for academic year starting July 2012.

Structure: The OCS PhD Program Admissions Committee is composed of 4 members (Caroline Shiboski, Ralph Marcucio; Tamara Alliston; and Stefan Habelitz), and is a sub-committee of the OCS Steering Committee.

Process:
Admissions process for the dual DDS-PhD program: The application deadline for the DDS program was October 15, 2011, and the deadline for the PhD application has been extended from December 1, 2011 to January 2, 2012.

Applicants who were identified as meeting the minimum criteria for admissions in the DDS program, and who had indicated an interest in the PhD program, were identified through an initial screening process described in our grant proposal. After, attending a session of training and calibration for the review of DDS-PhD application, the OCS PhD Program Admissions Committee members reviewed applications using a standardized evaluation form (attached), and selected applicants for interviews that occurred on the
same day as the interviews for the DDS Program. Each file was reviewed by 2 reviewers. This 3-step process is described in detail in Appendix 2.

Admissions process for the single PhD program: The deadline for the PhD application has been extended from December 1, 2011 to January 2, 2012. The admissions process is similar to the one described above except the interview if granted are scheduled on a different day from the DDS interview day. The review of PhD applicant files utilizes the same evaluation form and metrics as used for the DDS-PhD Program.

Outcome:
Dual DDS-PhD program
Among 312 DDS applicants selected for interview for the DDS Program (among 1802), 70 (22%) checked the box indicating their interest in the dual DDS-PhD program. The summaries below reveal a diverse applicant pool with high level of academic achievement:

Socio-demographic characteristics of the DDS-PhD applicant pool (n=70)

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<th>Gender</th>
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<tbody>
<tr>
<td>Female</td>
<td>37</td>
<td>(53)</td>
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<tr>
<td>Male</td>
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<td>(47)</td>
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<table>
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<th>(%)</th>
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<td>(49)</td>
</tr>
<tr>
<td>White</td>
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<td>(34)</td>
</tr>
<tr>
<td>Latino</td>
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<td>(7)</td>
</tr>
<tr>
<td>Filipino</td>
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<td>(6)</td>
</tr>
<tr>
<td>African-American</td>
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</tr>
<tr>
<td>Unreported</td>
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<td>(3)</td>
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</table>

Summary statistics of academic achievements of the DDS-PhD applicant pool (n=70)

<table>
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<th>Median [range]</th>
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<tr>
<td>Science GPA</td>
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</tr>
<tr>
<td>PAT</td>
<td>21 [15; 30]</td>
</tr>
<tr>
<td>Science DAT</td>
<td>21 [15; 26]</td>
</tr>
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</table>

Among 70 files reviewed by the 4 members of the OCS PhD Program Admissions committee, 13 applicants were selected for interviews.

Three applicants have been selected for the DDS-PhD program. The socio-demographic characteristics of the 3 selected applicants are as follows: 1 African-American man, 1 Filipino man, and 1 Asian woman.

PhD program: We had 3 applicants to the PhD single degree program (2 Caucasian man and 1 Caucasian woman). We interviewed 2 applicants, and accepted one, a Caucasian male.
5. It is recommended that the new programs on campus to increase the applicant pool for all PhD programs, which we learned about during our visit, be actively pursued. Further, it is suggested that programs that enhance the visibility of OCS throughout the University, as well as increase interactions between the OCS students, postdocs and the OCS faculty throughout the students/postdocs time at UCSF, be developed.

Program leadership response: We fully endorse proposals that allow sharing of student applications across graduate programs at UCSF. We envision a process where students apply to graduate school at UCSF and rank individual programs. Then each program has the right of first refusal to interview students using the hierarchical list provided by the student. This approach would allow us to take advantage of the highly competitive applicant pool that are denied admission to other programs at UCSF. Ultimately, this would allow us to choose the best candidates for the OCS program. We plan to further explore the possibility of implementing such process with the Graduate Division.

We are developing ways to increase student-faculty interactions to maintain a program identity. Our annual retreat encourages faculty/student interactions and feedback. Additionally, over the course of this year we will implement a series of functions designed to foster the identity of OCS.

In addition, the Council is also asking for clarity on the current funding streams for students and what, if any, alternate plans are in place should the T-90/R90 training grant to the NIDCR not be renewed. Finally, the Council would appreciate an articulation of how faculty in the different tracts (CMB, BBS, CTS) interact with one another and with the program leadership.

Program leadership response: The T-90/R90 grant was not funded, and we have put alternate plans for funding existing students into effect. These are: 1) all existing students who have chosen a thesis lab are funded through their lab thesis advisor; 2) all existing students who are not yet in the PhD intensive portion of their studies are supported through funding by the Dean’s office; 3) we have set up an excellent support system to encourage students to apply for individual F30 and F31 training grants and have achieve a high level of success.

New DDS-PhD students recruited this year will follow a revised program formatted to allow them to start with their PhD curriculum. Two incoming DDS-PhD and one PhD student are funded by awards and funding through the Graduate School, and one DDS-PhD student is self funded. We are working with the Dean’s office to set up a long term plan that is not contingent on funding by NIDCR training grants (though we are resubmitting our application this coming fall 2012), and will work closely with students to submit F grant proposals to support their education beyond the first 2 years of support provided by Graduate school funding.
As previously indicated, following program review the Steering Committee carefully reviewed the scope of our curriculum with 3 separate tracks and came to the conclusion that a single curriculum with electives representing these three tracks or areas of emphasis would enhance program cohesiveness and faculty interaction. Progress of all students will be monitored by the program directors and steering committee. Specific criteria and requirements for faculty membership in the OCS graduate group, including the expectation that all OCS faculty will actively participate in the OCS graduate program have been articulated (see attached OCS program faculty guidelines). We expect faculty to attend at least one annual meeting or OCS retreat to enhance interactions. We will conduct annual course evaluations by students to further enhance our understanding of student needs, and the annual report by from the OCS program directors and Steering Committee will further enhance communication between faculty.

We hope that our responses satisfactorily address the External Reviewers' recommendations, and again we thank the Graduate Council for this opportunity to review and improve our program.

Yours sincerely,

Pamela Den Besten, DDS, MS, Program Director

Ralph Marcucio, PhD, Chair, OCS Steering Committee, Program co-Director

Caroline Shiboski, DDS, MPH, PhD, Chair, Admissions Subcommittee

Stefan Habelitz, PhD, Chair, Curriculum Subcommittee