Graduate Program Review
Department of Oral Health Sciences
School of Dentistry
University of Washington

The review committee was composed of two internal and two external reviewers:

Internal Reviewers

- David A. Stahl, Professor, UW Civil & Environmental Engineering (Committee Chair)
- Christian A. Sidor, Professor, UW Biology and Associate Director of Research and Collections, UW Burke Museum

External Reviewers

- Paul C. Dechow, Regents Professor and Chair, Department of Biomedical Sciences, Texas A&M, University Baylor College of Dentistry
- Christopher A. Squier, Professor, Department of Oral Pathology, Radiology & Medicine, University of Iowa

Introduction

The review committee was charged with assessing the quality of graduate degree programs in the Department of Oral Health Sciences in the School of Dentistry, and to provide its faculty with constructive suggestions for strengthening those programs. Prior to the two-day site visit (November 16-17, 2015) the committee was supplied with the self-study report prepared by Dr. Presland (Graduate Program Director), with major input from Dr. Ramsay (Department Chair), Eileen Kakida (department administrator), and Kathy Hobson (Counseling Services Coordinator). Other contributors included Dean Berg, and the Associate Deans of Research and Graduate Programs (Drs. LeResche and Slayton). The committee thanks these authors for providing an excellent and well-documented self-study report.

Overview and Historical Background

The graduate program was last reviewed in 2004-2005, prior to the 2011 merger of the Department of Oral Biology and the Department of Dental Public Health Sciences into the new Department of Oral Health Sciences (OHS). The new department retains the three degree programs of the previous Oral Biology Department: MS (regular and dental hygiene), PhD, and the DDS/PhD. The Department of OHS offers the only PhD program in the School of Dentistry. Thus, maintaining departmental excellence in graduate education is critical to the national and international stature of the entire dental school.

The graduate program is presently directed by Dr. Presland, with assistance from the program advisory committee consisting of Drs. Cox, Herring, Popowics, and Ramsay, together with

Ms. Hobson, the Counseling Services Coordinator. Over the last decade, the graduate programs have accepted about one-quarter of applicants, with a mean entering GPA of 3.47. A total of 46 students have graduated over the past 10 years (11 regular MS and 11 dental hygiene MS students, 21 PhD students, and 3 DDS/PhD students). Of these, six students (5 PhD and 1 MS) graduated between January and August of 2015. At present there are 13 PhD students enrolled in the program, while another 5 students are enrolled in the dual DDS/PhD program. There is currently 1 student in the MS program and 2 in the Dental Hygiene component.

A total of 27 OHS training faculty are partially or fully supported by 6.8 FTEs. The low State support in part reflects the retirement of three senior faculty members shortly before the departmental merger, whose positions remain unfilled. In addition, there are 26 adjunct faculty, holding primary appointments elsewhere in the School of Dentistry, or in Medicine or Engineering, and 36 affiliate faculty holding positions outside the University of Washington.

Findings of the Review Committee

1). UW remains one of the top scholarly dental schools nationally. As the Oral Biology Graduate Program is the only PhD degree program in the School of Dentistry, it is imperative that it continues not only as a necessary component of a top program in oral and craniofacial research but as a source of future leaders and scholars in this field. However, the present fiscal status of the department, the school, and the university, in particular the onerous tuition costs, adversely impacts the graduate training mission. This is aggravated by national trends in federal grant funding. A consequence has been inadequate support of faculty FTEs, their research programs, and therefore opportunities for student research and training.

2). The merger of the Department of Oral Biology and the Department of Dental Public Health Sciences has not been without consequences. In particular, the breadth of research expertise in the combined OHS department has not been translated into its graduate program.

Thus the graduate program in Oral Biology has not realigned its focus to take advantage of the opportunities possible with the merger, such as embracing the translational and clinical correlates of basic oral biology research. These are necessary and integral components needed for a program to advance the field and to remain competitive in securing extra-mural grant support.

3). The program has an excellent record of training PhD students who have gone on to successful careers in their area of specialization. The department has successfully retained competitive NIH supported training grant funding. The current training grant reflects the request by NIH that the former clinical and basic science training grants be combined in order to provide for more comprehensive graduate training opportunities and improved career prospects.

4). The permanent and adjunct faculty of the new departmental organization (Department of Oral Health Sciences) are deeply committed to graduate training. The new departmental

organization permits a wider scope of research and training opportunities. Although the course structure, composition and titles have remained unchanged, the students are actually engaged in a greater range of research activities (see below, suggested curriculum restructuring).

5). The OHS faculty is a hard working and productive group of research scientists, with international reputations. Considering the current climate for federal funding, the average level of grant funding of the faculty is good.

6). Current students in the graduate program are bright, mature scholars, who are deeply appreciative of the quality of training they are receiving. However, some problems associated with communication and the effective orientation of new students and trainees were identified. For example, new students often do not know which laboratories/faculty have active research programs and were unaware of university wide support systems, including career guidance.

7). The DDS/PhD program, supported by the NIDCR training grant, has been active for approximately ten years. It is recognized as a challenging program for the students. The sequenced model, requiring completion of the DDS before PhD research, seems to have worked well for the first cohort (three students have graduated), with a reasonable (7–8.5 years) time to completion.

8). The PhD program is viewed as the heart of the program and essential for the continued reputation of the dental school as a premier research institution. A total of 21 PhD students, and 3 DDS/PhD students have graduated since the last review in 2005, and the majority has gone on to academic positions. There are currently 13 students enrolled in the PhD program, as well as 5 students enrolled in the dual DDS/PhD program.

8). The MS program is small and serves as an adjunct to the PhD program. It provides a mechanism to bring in students with little prior research experience to determine if they are qualified to complete a graduate research program. The dental hygiene component is intended to train dental hygiene educators, but has a very small enrollment (1–2 graduates/year).

9). The previous review in 2005 strongly recommended increases in resources to insure continued success of the program, including the replacement of retiring faculty. This was not done and has contributed to some of the difficulties encountered in the current program.

Recommendations of the Review Committee

Scope and organization of the program

1). The scope of the program must be expanded to reflect contemporary trends in oral health research and take advantage of the additional expertise offered by the departmental merger. This vision has been articulated already in the current training grant. The committee

recommends changing the degree title from "Oral Biology" to "Oral Health Sciences" (or similar) to reflect this increased scope. The program could include several tracks (options) reflecting new components and the full breadth of the program. Examples of such tracks might be : translational/clinical research, dental public health and epidemiology, craniofacial genetics/genomics, etc. This will require significant curriculum review and appropriate revision. Furthermore, the program will require sufficient resources to advance as a multidisciplinary research and educational program.

2) Despite this expansion, it is essential that a basic research program, including components of the Oral Biology Program, be maintained within the Dental School.

3) The suggested changes will, ideally, engage a greater number of research faculty within the school. Although the graduate program is centered in OHS, in reality it is a school-wide program. Therefore, it is suggested that the program engage all research faculty within the school of dentistry. The use of joint appointments may be a way to facilitate greater engagement and commitment of research faculty. This recommendation will undoubtedly influence future hiring decisions.

4) MS tracks – although justification was provided for continuance of the MS (Oral Biology) and MS (Dental Hygiene) tracks, current enrollment is very small and this raises questions of viability. This may be an opportunity for the School to review all its masters programs, including the MSD (which was not in the remit of the present review).

Students

1). The review committee recommends changes to the recruitment, interviewing, and orientation of students in the program. These include:

- Visits by prospective students to better match student expectations with available research programs,
- A structured orientation upon arrival,
- Timely development of a study plan for the first 2 years, including coursework and research opportunities leading to the selection of a mentor, and
- Development of a departmental policy to match student recruitment with the available research resources.

2). All entering Ph.D. students should be provided with initial funding (e.g., minimally one year) to stabilize the program and facilitate student transition into their mentors laboratories.

3). We encourage OHS to require evidence of progress toward refereed research publication for all graduate students. This may take the form of offering a publication-based thesis as an alternative to the traditional format.

Facilities

1). Although the self study indicated that the physical space and equipment resources of the department are adequate, they are not state of the art and will require remodeling/updating in

the near future. A program of continuous remodeling should be considered.

Review frequency

1). The committee recommends an interim review at 5 years (~ 2020) to assess progress with the development of new tracks and an expanded Oral Health Science graduate training program.