



THE GRADUATE SCHOOL

UNIVERSITY *of* WASHINGTON

July 5, 2012

To: Sheila A. Lukehart, Assistant Dean for Research and Graduate Education
School of Medicine

From: Gerald J. Baldasty, Vice Provost and Dean

James S. Antony, Associate Vice Provost and Associate Dean for Academic Affairs

RE: Department of Pharmacology 2011-2012 Review

This memorandum outlines the recommendations from the 2011-2012 review of the Department of Pharmacology. Detailed comments can be found in the documents that were a part of the following formal review proceedings:

- Charge meeting between review committee, department, and administrators (September 21, 2011)
- Department self-study (November 10, 2011)
- Site visit (January 9-10, 2012)
- Review committee report (February 6, 2012)
- GPSS report (January 12, 2010)
- Department response to the review committee report (March 27, 2012)
- Graduate School Council consideration of review (June 7, 2012)

The review committee consisted of:

Trisha Davis, Professor, UW Department of Biochemistry (Committee Chair)
John Clark, Professor and Chair, UW Department of Biological Structure
Richard Neubig, Professor, Department of Pharmacology, University of Michigan
John Nilson, Professor and Director, School of Molecular Science,
Washington State University

A subcommittee of the Graduate School Council presented findings and recommendations to the full Council at its meeting on June 7, 2012. Specific comments and recommendations regarding the Department of Pharmacology M.S. and Ph.D. degree programs include the following:

Highlights:

- The department ranks 6th out 116th pharmacology departments nationwide by the National Research Council (NRC) (publications per faculty, citations per publication, percentage of faculty with grants, awards per faculty).
- It ranks 3rd among the top 14 NIH-funded Departments in members of the National Academy of Sciences and Royal Society of London.

- Between the years of 2000-2010, 73% of the post-graduate students pursued post-doctoral training, 21% attained academic appointments, and 8% worked for a government agency. For 1990-1999, the final career outcomes were 48% academic, 33% pharma/biotech, and 6% government/regulatory.

Program Strengths:

Administration

- Chairman Dr. William Catterall is an outstanding scientist and well-organized, skilled administrator. He has a clear vision of how Pharmacology education fits into the Health Sciences. Skillful at getting outside funding support.
- The graduate program committee is well organized and interactive. Very effective at recruiting strong classes of 4-12 students over the last 10 years.
- Strong external funding of individual faculty and the Pharmacological Sciences training grant provides a remarkable level of student support.

Faculty

- Highly regarded internationally; strong experience in education as well as research.
- Impressive external funding- clear vision/focus in cell signaling, ion channel function, and molecular pharmacology.
- Excellent recruitment of new faculty in diverse areas broadens research opportunities for students.
- Active interdisciplinary research programs spanning a number of research centers. Areas of interdisciplinary education have grown and are impressive.
- Mid-level faculty are enthusiastic and accomplished suggesting a healthy future.
- Faculty are highly supportive of the graduate training mission

Curriculum

- The introductory pharmacology courses are solid.
- The neuro-pharmacology curriculum is outstanding, but more flexibility is recommended in the required courses and elective selection to reflect broader diversity of new faculty research interests.
- Rotation structure for first year students is outstanding. The quarterly evaluation process involving reviews from all faculty is unique.
- Graduate students gain teaching experience in two quarter-long pharmacy courses, which includes running quiz sections weekly.
- A new medical curriculum may offer more in-depth opportunities.

Research

- Outstanding research training supported by the strong publication record of the students (average publication number for graduating Ph.D. students is 4).
- The cross-disciplinary collaborations among groups within and outside of Pharmacology are valuable.

Challenges, Risks, and Concurrences

The following summarizes challenges/risks identified by the review committee. The department's response indicated concurrence as well as immediate movement to act on

recommendations. Some topics, such as consolidation of laboratory spaces, will be limited by broader institutional constraints and allocations.

- Clarify roles and relationships of program committees.
- Enhance recruitment of underrepresented minorities; more creative and active approaches will be critical for training grant renewal.
- Facilitate transitions and interaction; e.g., provide new faculty written guidance on department resources/procedures; consolidate laboratories for education of graduate students in experimental research to support more interaction and access through proximity.
- Greater faculty involvement in graduate student recruitment.
- Evaluate alternatives to the current comprehensive exam format. The current in-class format is inordinately time consuming and with more limited value added relative to other formats such as a take-home exam or grant-writing based exam.
- Strengthen advising and career development (for both faculty and post-doctoral trainees), particularly for positions outside of academia as reflected in the GPSS survey. Some current mechanisms (bioscience career seminars, campus-wide post-doc trainings) are not well suited to these needs. An office of postdoctoral affairs in the School of Medicine would be highly desirable.
- Resist temptation to “rest on one’s laurels”; vigorously pursue ideas presented in the self-study regarding future directions.
- Additional financial support during this period of economic constraint.

Recommendations to the Graduate School

The Council noted the Department of Pharmacology excels in teaching, research, and service.

- The Department should continue to design new educational programs and expand existing research programs. This may require additional support from the upper administration, but will ensure that the Department remains a national leader in Molecular Pharmacology.
- We recommend the next review occur in 10 years, specifically in the 2021-2022 academic year.

We concur with the Graduate School Council’s comments and recommendations.

c: Douglas J. Wadden, Executive Vice Provost, Office of the Provost
 John T. Slattery, Vice Dean for Research and Education, School of Medicine
 James S. Antony, Associate Vice Provost and Associate Dean for Academic Affairs
 The Graduate School
 William A. Catterall, Professor and Chair, Department of Pharmacology
 Edith Wang, Associate Professor, Department of Pharmacology
 Pharmacology Review Committee
 Graduate School Council
 Augustine McCaffery, Senior Academic Program Specialist, The Graduate School