

Scholarship Standards

Department of Biology

Start Date: Spring 2021 (approved by Faculty Affairs spring 2021)

End Date: unspecified

DEPARTMENT OF BIOLOGY EXPECTATIONS FOR PROMOTION AND TENURE PROFESSIONAL ACTIVITY

(Approved by the Department of Biology 11/21/05)

Scholarship in any Seattle Pacific University program should ultimately focus on improving the learning of students. In most disciplines, this is because scholarship keeps the teaching scholar's mind active by focusing on the current state-of-the-art and allows the faculty member to bring new insights into the classroom. Within the sciences an additional factor drives scholarship: Involving undergraduates in the professional scholarly process via undergraduate laboratory and field research.

Professional activity in the discipline of Biology generally focuses on laboratory or field based experiments and observations placed in the context of current knowledge. Following the *Faculty Employment Handbook* (which, in turn follows Boyer's model), most scholarly activity can be called either Scholarship of Discovery or Scholarship of Application¹. These kinds of scholarship are most highly prized by the Department of Biology. Members of the Department of Biology may also conduct research in the Scholarship of Teaching and Scholarship of Synthesis². Although basic and applied laboratory and field research are central to the discipline, these other kinds of professional activity are important and recognized as legitimate forms of professional activity within the Department.

The products of professional activity within Biology are highly varied. Anonymously peer-reviewed journal articles are the easiest form of scholarship to recognize and provide a common currency across all subdisciplines of Biology and across all categories of Scholarship. They are rigorously reviewed and widely circulated. Successful nationally or internationally reviewed grants are also highly valued³. While not as widely disseminated as journal articles, they are more rigorously reviewed and less likely to be successful. Presentations by faculty members and their students at regional, national and international meetings are also valuable. While not rigorously reviewed⁴, meeting presentations widely disseminate the scholarly product. In the context of Seattle Pacific University, the Department of Biology values mentorship of independent student research. Similarly, we value successful intramural grants. Some forms

¹ Scientists often distinguish between “basic research” and “applied research.” The latter might include research designed to improve human health or determine appropriate environmental programs for governmental agencies. The Department of Biology recognizes this Scholarship of Application, if the work involves substantial field or laboratory components. We also recognize that the “field” or “laboratory” may be a medical setting. By our reading of the *Faculty Employment Handbook*, basic research would be defined as Scholarship of Discovery and applied research would be defined as Scholarship of Application.

² Scholarship of Teaching and Scholarship of Synthesis are defined in the *Faculty Employment Handbook*.

³ Such a grant may be awarded locally or nationally. The review process would determine the quality of the proposal.

⁴ Although on-site peer-review and discussion do occur.

of scholarship (e.g., books, professional reports) are more difficult to evaluate and must be dealt with on a case-by-case basis.

In order to recognize both the centrality of the Scholarship of Discovery and Application, together with the diversity of other valuable professional activity that faculty members may engage in, the Department of Biology has divided its expectations for promotion and tenure into two categories, “Core” and “Elective.” Core requirements are expected of every faculty member, and include publication of anonymously peer-reviewed journal articles in any of the Boyer categories (provided they involve a substantial field or laboratory component, i.e. they are not literature reviews), writing extramural grant proposals⁵, facilitating undergraduate research that leads to publication or professional presentations by the student, , and presentations made at regional, national or international conferences by the faculty member.

Elective requirements may include additional Core activities, successful grant proposals, anonymously peer-reviewed publications in areas outside the Scholarship of Discovery or that do not involve laboratory- or field-based work, books, professional reports, etc. In cases where a piece of work is not easily compared to a journal article, grant proposal, or other typical form of scholarly product, decisions on the merit of the work shall be made on a case-by-case basis. Criteria shall include the degree of dissemination, accessibility of the work (e.g., in libraries), the scientific quality, and the degree of laboratory or field effort required.

The Table at the end of this document illustrates Core and Elective requirements for promotion and tenure in two categories, “Expectation” and “Excellence.” The former is, as stated, the standard requirement for promotion or tenure. The latter is what would be typical of faculty at premier liberal arts institutions, based on Murdock Foundation reports of activities at institutions like Reed College and Whitman College. Faculty members are not faulted for failing to achieve this higher standard; rather, it is a goal to which we hope to attain⁶.

It is reasonable and expected that faculty hired directly out of post-doctoral training or graduate school will initially be publishing the results of research done prior to their arrival at SPU. The stated requirement for extramural grant proposals is intended to ensure that the faculty member is developing a trajectory of scholarly activity at SPU. The Department expects that faculty members hired at Assistant Professor will produce some finished products based on research done while at SPU prior to promotion to Professor.

While this document does not address most step increases, increases to Professor, Step 3 and Professor, Step 4 have been evaluated more carefully and

⁵ Though we do not require successfully *getting* the grant. Just preparing a grant proposal helps organize the scientist's thoughts and plans for professional activity in the near future.

⁶ “...a man's reach should exceed his grasp, or what's a Heaven for?” Robert Browning.

thoroughly than others and are thus considered here. The following activities may be considered as evidence in supporting these step increases:

- ❖ The quality of journal in which the applicant is publishing.⁷
- ❖ Leadership positions in guild organizations.
- ❖ Requests to review manuscripts and grants by high quality journals and granting organizations.
- ❖ Organizing national or international meetings, or symposia at such meetings.
- ❖ Providing plenary lectures at national or international meetings.

The Department of Biology intends these requirements to be effective for candidates hired (in the case of tenure or initial promotion to a rank above the rank at hiring) or last promoted (in the case of promotion to Professor after a prior promotion to Associate Professor) after July 1, 2004.

⁷ Journal quality can be determined by a variety of factors. Two easily-identifiable parameters are the geographic scale of the journal (i.e., regional, national, international) and impact factor. The latter is numerical value that represents the average number of times an article from the journal is cited within a fixed time frame following publication.

TABLE. PROMOTION AND TENURE REQUIREMENTS. THE APPLICANT SHALL COMPLETE THESE REQUIREMENTS IN THE TIME BETWEEN HIRING AND PROMOTION, HIRING AND TENURE, OR BETWEEN PREVIOUS PROMOTION AND SUBSEQUENT PROMOTION, AS APPROPRIATE.

ITEM	REQUIREMENTS	PROMOTION TO ASSOCIATE/TENURE		PROMOTION TO PROFESSOR ⁸	
		Expectation	Excellence	Expectation	Excellence
	Core (complete all of the following)				
1	Anonymously Peer-Reviewed Publications (Involving lab. or field work)	1	3-4	1	3-4
2	Intramural or Extramural Grant Proposals (Nationally Reviewed Extramural Proposals)	2 (1)	3 (1-2)	2 (1)	3 (1-2)
3	Faculty Presentations at Conferences	2	5	2	5
4	Student presentations at meetings	2	10	4	10
5	Credit hours of student research	10	30	10	30
	Electives (choose one of the following, or some equivalent combination⁹)				
6	Successful nationally-reviewed grants, additional publication	1	Not Applicable	1	Not Applicable
7	Additional extramural grant proposals	2	Not Applicable	2	Not Applicable
8	Faculty presentations at professional meetings	4	Not Applicable	4	Not Applicable
9	Student presentations at meetings	8	Not Applicable	8	Not Applicable

⁸ All items in this category are to be completed after promotion to Associate Professor or hiring at that rank. In addition, faculty members hired at Associate Professor shall, prior to promotion to Professor, demonstrate that they have met the sum of requirements for both promotion to Associate Professor and to Professor at some point in their careers.

⁹ For example, a candidate might choose to present 2 additional papers at meetings and have 4 additional student presentations. Thus, the candidate has met half of the requirement for line 7 and half for line 9. This would meet 100% of the "elective" requirement.

NOTES ON LINE ITEMS IN THE TABLE

Item 1. This is the “standard” peer-reviewed journal article. The specification of “laboratory or field based research” is in recognition of the additional time commitment required and the potential to involve undergraduates associated with this kind of work. In cases where questions arise as to whether or not a study is “laboratory or field” based, relevant questions include “Was more than library work required?” and “Could undergraduates be involved meaningfully in this work?” Certain theoretical studies, involving computer modeling, or complex analyses of existing data, would qualify.

Item 2. Grant proposals refers to nationally (or internationally) reviewed proposals. A standard model would be a National Science Foundation (NSF) proposal. Others might include USDA, NOAA, and NIH. The applicant has successfully met the expectation if they *either* write at least one successful proposal or two unsuccessful proposals. The Department does not expect successful proposals from every applicant. However, in the event a proposal is rejected the Department expects the applicant to revise and resubmit this proposal, or write a second completely novel proposal. Further, grant proposals may address any of Boyer’s four areas of scholarship.

Item 3. At least one presentation at a conference should be based on laboratory or field research, as noted for Item 1. For some meetings, abstracts are peer-reviewed prior to acceptance. However, the Department does not distinguish based on the review policy of the organization. Peer-review at all meetings occurs in the form of comments made by peers during the meeting itself. This kind of feedback may help frame future research activities, ultimately leading to new grants and journal publications. Further, this public dissemination enhances the reputation of the Department and the University.

Item 4. Student presentations at meetings represent the penultimate success of a student undergraduate research project. As such, they are expected for promotion and tenure. These presentations may be at intermural (e.g. Murdock Foundation Undergraduate Research Conference) or intramural (i.e., Erickson Conference, University Scholars’ Symposium) undergraduate research conferences. Although not usually publicly disseminated or rigorously peer-reviewed, they often represent intermediate steps toward the production of publicly disseminated, peer-reviewed products.

Item 5. Faculty members are expected to supervise multiple student research projects prior to promotion or tenure. Not all of these may lead directly to student presentations at meetings or peer-reviewed publications prior to promotion or tenure. This category recognizes the work in progress, or work towards “dead ends” that is a necessary part of the scientific endeavor.

Item 6-9. Additional work, as described for Items 1-5, meets the elective criteria as noted. For these electives, there is no restriction on the kind of scholarly product. That is, the product may be based on laboratory or field work, or be a literature review. It may be from any Boyer category of Scholarship as described in the Faculty Handbook.