

Scholarship Guidelines for Biology

Based on discussions within the department, we have come to a consensus about the following points regarding scholarship:

- we endorse the Whitman ideal of the active teacher/scholar, and recognize that the ideal may take a variety of forms;
- we recognize the importance of on-going scholarly activity for faculty, including the expectation that that our faculty publish peer-reviewed work;
- we acknowledge that it takes a substantial investment of time for scientists beginning their careers at Whitman to develop a productive research program, and that it takes considerable effort to maintain such a program over the course of a Whitman career;
- we highly value the submission of external grant proposals to procure research funds to support such research programs;
- we highly value research that involves students and recognize that such research requires substantial additional effort and time.

The specifics of our scholarship guidelines are embedded (**bold**) within the statement of Excellence in Professional Activity, as reproduced below from the Faculty Handbook, as reproduced below:

2. Excellence in Professional Activity

Professional activity and growth ranks second to excellence in teaching in the evaluation of faculty. Progress in professional activity should be consistently apparent with successive appointments. Research and writing that appears in peer-reviewed publications, noteworthy performances or exhibitions, or other appropriate peer-reviewed professional activities in the candidate's field(s) of study are necessary at such key points as the granting of tenure and promotion to the rank of professor. The Personnel Committee will evaluate scholarly or creative work deemed to be professionally appropriate to each candidate's field, recognizing the variety of possible forms. (10/07/09)

Several modes of professional activity are considered in the evaluation of professional activity, but the most important mode is evidence of the candidate's engagement in the intellectual life of his/her field of study beyond the boundaries of the campus community.

While all items on the list below are valuable, the first is necessary:

- a. Research and writing that appear in peer-reviewed publications, noteworthy performances or exhibitions, or other appropriate peer-reviewed professional activities in the candidate's field(s) of study. External reviews by recognized experts in the candidate's discipline of productions or exhibits occurring at Whitman shall qualify as peer-reviewed measures of professional activity;

Research may take a variety of forms, including experimental, theoretical, or descriptive work. Especially towards the beginning of a career at Whitman, faculty members may be publishing work generated prior to their arrival. Given the time required to build a successful research program at Whitman, it may be a period of years before faculty are able to publish work done primarily at the College. As a person's career advances, however, evidence of work accomplished at Whitman should become more evident.

Peer-reviewed publications in biology may take the form of print or electronic journal articles, chapters in books, books (including textbooks), and contributions to science literature for wider circulation (books, magazines, web encyclopedias, etc.). Not all of these

forms are necessarily peer-reviewed, however, and candidates should clearly indicate which are or are not.

Grant writing and participation in professional meetings are particular activities that may be peer-reviewed, and thus are pertinent to this section; when a grant or talk is peer-reviewed, candidates should make this clear to reviewers (please see items e and f).

Peer-reviewed, original publication done primarily by the candidate is necessary, particularly for tenure and for further promotion. We do not, however, recommend a numerical minimum requirement for the number and type of publications necessary for contract renewal, tenure, or promotion. Instead, suitable productivity should be evaluated in terms of how well publications serve to achieve the goals and expectations outlined in each candidate's statement of scholarship.

In biology, one's contribution to a paper may be indicated in a number of ways, and candidates should make clear their relative contributions:

1. First authorship on a publication typically indicates major contribution to coordination and writing of the manuscript. First authorship should be viewed in very high regard by the Personnel Committee.
2. Faculty are typically listed as the last authors for a project conducted by a student, staff, or other collaborators under the leadership of that faculty member. In such cases, the faculty member is considered the "senior author". In the context of an institution like Whitman, this senior position indicates that the faculty had a more substantial intellectual contribution to the project (including project conception, data analysis, and writing) than any other authors. In some cases, the senior author may appear in a different position on the author list, but will be indicated as "communicating author".
3. In a collaborative project with no clear senior author, order of authorship may reflect relative contribution to the project, with the first author having the largest contribution and successive authors making smaller contributions. The communicating author may be considered the senior author.
4. In a collaborative project with large numbers of authors, or in other special situations, author order may be determined in other ways, such as alphabetically. If such is the case, candidates should make the degree of their contribution clear.

b. Peer-reviewed publication in related areas, including but not limited to, matters of pedagogy and curricular design;

c. Non-peer reviewed publications and professional activity as defined in (a) and (b) above;

Research with student collaborators may result in peer-reviewed work, in which case it would fall under item (a). However, it often does not. Such work is highly valued, however, because it inextricably links teaching and scholarship, with students learning science by conducting research with a mentor; such an apprenticeship model is the epitome of our desired teacher/scholar model.

d. Active involvement in professional organizations;

Active participation in professional organizations is valued, primarily because it involves the faculty member in the larger community of scholars outside the College; it promotes collaborations and connections that serve the College.

Editorships of professional journals and newsletters are worthy scholarly activities, however, not to the exclusion of pioneering work which furthers the knowledge base in one's field. Typically, editorial positions are held by those academicians who are already recognized as major contributors in their field, and the College should also recognize this achievement.

Invitations to review grant proposals, manuscripts, and books are indicative of standing in one's field. The work involved in these reviews should be considered valuable scholarly activity.

e. Participation in professional meetings and conferences, including presentations made with student co-authors;

Presentations, lectures, conference papers, and posters at local, national, and international meetings are valued forms of scholarship. These activities indicate that a faculty member is engaged in an ongoing research program which is open to critique by peers in the scientific community. In the sciences, faculty often deliver reports at national meetings, describing ongoing but unfinished research. These reports, which might take the form of a poster or a talk, elicit formative feedback from other scientists. In general, speaking at a conference represents a higher level of scholarship than does a poster presentation. We recognize that such presentations are indicative of progress, as well as being an important means of staying current in one's field and engaging with scholars outside of Whitman.

Moreover, there are also certain cases where an invitation to present at a conference or an institution might be especially important (i.e., may involve some form of peer-review). In fact, there are some conferences where an invitation to attend is a significant accomplishment - a recognition by one's peers of contributions to the field. Such an accomplishment should be carefully considered when weighing scholarly activity, and candidates should make it clear when such is the case.

f. The writing and submission of proposals for external grants.

In the sciences, grant writing is an integral component of scholarship. It is extremely time-consuming and requires obtaining supporting data, often over multiple years, thorough review of relevant literature, and a long-term (multi-year) research plan. Because seeking external grants is a fundamental aspect of scholarship, it must be recognized as such by the Personnel Committee.

Furthermore, given that external funding is extremely competitive (funding rates can be as low as 5-10% for some NSF or NIH panels), individual research grant proposals may face more stringent peer-review than do journal publications. Consequently, funded or favorably reviewed, yet unfunded external research grant proposals are indications of active scholarship, a long-term research trajectory, and positive peer review.

Participation in division- or campus-wide grant writing efforts (e.g., HHMI) is also a form of scholarship. Such efforts require time and expertise, and if successful often result in

enhancements of equipment and other resources for scholarly research and teaching. Evaluations of scholarship should consider faculty contributions to such grants and candidates should make their relative contributions clear.

The Personnel Committee will also consider activities, such as the development of new areas of expertise in the discipline, that may not bring the candidate into the larger intellectual dialogue of his or her field, as well as interdisciplinary professional activities. The judgment of the Committee will not be based solely on the quantity of the candidate's professional activity, but also will consider its quality, breadth, and contributions to the candidate's teaching and the mission of the College. The Personnel Committee will consider the candidate's written statement, letters from the candidate's peers both within and without the College, and direct examples of the candidate's professional activity.