Statement on Significant Scholarly/Artistic Work - 2016
Biology Department

Types of Scholarly and Artistic Work

Original research: The most traditional type of scholarly work in the sciences is original research leading to publication of results in peer-reviewed professional journals. Other valued modes of original research dissemination include presentation of work at professional meetings and delivering seminars at other institutions. Mentoring undergraduates in summer or academic year research, and helping them to disseminate their work, is particularly valued. Collaborative research with other scientists, at St. Olaf or elsewhere, and joint publication of results are encouraged.

Grant seeking: Grant seeking is integral to the culture of scientific scholarship for two reasons. First, funding can be critical for fully realizing a faculty member's research program. In addition, the process of grant writing itself is valuable, independent of whether proposals are successfully funded, because it clarifies and refines a faculty member's research vision and priorities. However, the Biology Department recognizes that the degree of difficulty in securing external funding varies according to field of study and that some kinds of scholarly work can be successfully pursued without any significant need for funding, such as work that is computational in nature, or makes use of existing instruments and supplies.

Curriculum development / Scholarship of teaching: Another area of professional activity is the development or modernization of classroom or laboratory courses or teaching techniques. Valued work includes efforts such as textbook authorship, teaching resource development or pedagogical research. To be understood as scholarly work for the purposes of review for tenure and/or promotion, such activity should result in public dissemination or garner external funding.

Professional community: The Biology Department values a range of scholarly activities generally related to our roles as scientists, such as service within a scholarly society and peer review of manuscripts, external grants or external tenure cases. The department recognizes the importance of continued engagement in one's discipline and the establishment of a professional network. Regular attendance at professional meetings, visiting with scientific or industrial research groups, or similar activities constitute some of the ways in which currency and professional connections are maintained.

Stewardship and outreach: The Biology Department values networking between the College and local communities. This includes participating in and/or designing programming for science outreach in local schools and other community organizations, stewardship of the Natural Lands, curation of scientific collections. Although many of these activities fall under the category of "service," these are considered scholarly when they lead to peer-reviewed publications, grant seeking, or professional presentations.

Determination of Significance

Original research: Publication of articles in peer-reviewed journals is a clear indicator of significant professional activity. The timing and quantity of publications to be expected depends on the type of research program being pursued. For example, it is generally recognized that a significant new venture may require a substantial investment of time before yielding publishable results. Presentation of new results at professional meetings is an important indication that research work is ongoing and of interest to the larger community. The most significant meetings are national or international symposia where submitted abstracts are reviewed before acceptance. Presentation of an invited lecture at a professional meeting, as opposed to a contributed talk or poster, is usually a more significant activity that indicates an individual's work over a period of years is widely recognized in the profession. Presentation of research results at the invitation of academic, government, or industrial institutions is also considered significant scholarly dissemination.

Grant seeking: Developing a grant proposal for submission is considered significant professional activity. Funding awarded by external agencies in a peer-reviewed process confirms that the proposed research is valued by the profession. In terms of significance, the Biology Department considers the awarding of a noteworthy external grant, such as a competitive grant from the NSF, NIH or other national organization, to be the equivalent of a high-quality peer-reviewed publication.

Curriculum Development / Scholarship of teaching: The Biology Department values a range of activities in the area of curriculum development / scholarship of teaching. To be understood as scholarly work for the purposes of review for tenure and/or promotion, such activity should result in public dissemination or garner external funding. Examples include developing a new laboratory experiment or an approach to integrating research experiences into the academic-year curriculum, followed by presentation of this work at a conference or publication in a journal such as the journal *Life Science Education.* Authoring a textbook or creating and disseminating new teaching resources and developing or leading educational workshops are some other examples in this area.

Professional community: Another important area includes activities such as holding office in professional societies, chairing sessions at professional meetings, participating in review panels (for example: National Science Foundation, external department evaluations, or professional organizations), reviewing manuscripts for publication, writing book reviews, consulting in industry, testifying before legislative bodies, or offering summer short courses or workshops. Presentation of scientific topics, or issues growing out of the application of science, to departmental or general audiences is also encouraged and recognized as valid scholarly work.

Stewardship and outreach: The Biology Department values activities such as participating in and/or designing programming for science outreach in local schools and other community organizations, stewardship of the Natural Lands, and curation of scientific collections. Determination of significance in these areas may be assessed by peer-reviewed publications, grant seeking, professional presentations, the breadth and depth of the resulting partnerships and networks or the use of the Natural Lands and scientific collections in education and research.

Faculty achievement in the above areas indicates significant scholarly work. However, our students' success is also a measure of faculty professional productivity. For example, while research per se and the advancement in scientific understanding it brings is valued, our departmental mission to promote the learning and professional development of our students places greatest value on research that actively involves St. Olaf students. As another example, scholarship of teaching and learning is valued both for its pedagogical advancement as well as for its impact on students.

It should be noted that scholarly work in Biology is often collaborative. Faculty members are encouraged to develop productive collaborations with colleagues, whether at St. Olaf or elsewhere. Scholarly work done in collaboration with students and/or colleagues is equally significant to work done by an individual.

Expectations for Professional Accomplishment

It is important to establish the context for scientific scholarship at St. Olaf College as a selective undergraduate liberal arts institution competing with university research laboratories for funding. For faculty with a full teaching load (one FTE = six courses), the Biology Department considers the norm for time spent on scholarly activity per year to be the equivalent of about two-and-a-half months full-time. In contrast to a research university, there are no graduate students to assist with research at St. Olaf, and postdoctoral fellows and lab technicians are quite rare. Expectations for the extent of scholarly work should be calibrated to this institutional context.

For an Assistant Professor at the comprehensive review preceding the tenure review (normally in the fourth year): demonstrated progress toward establishing a productive research program. An assistant professor is expected to make significant progress towards developing a research program and disseminating results in one or more peer-reviewed publications. Whenever possible, the program should involve undergraduates in meaningful ways. Published papers with student co-authors provide strong evidence of this. Progress towards securing external funding is important at this stage. Presentation of scholarly work at professional meetings is typical throughout a scientific career.

For tenure and promotion to the rank of Associate Professor: successful establishment of a productive research program. For tenure and promotion to associate professor, at least one peer-reviewed publication based on original research that represents the work the faculty member has done at St. Olaf is expected. Work that has involved St. Olaf students is particularly valued. The awarding of a significant external grant, such as a competitive grant from the NSF, NIH or other national organization, is considered to be the equivalent of a prestigious peer-reviewed publication. However, the expectation regarding publishing results prior to tenure remains in effect, regardless of a major grant award.

Whenever possible, the faculty member's research program should involve undergraduates in meaningful ways. Published papers with student co-authors provide strong evidence of this. Attempts or success at securing external funding is expected. Presentation of scholarly work at professional meetings is typical throughout a scientific career.

For promotion to the rank of Professor: sustainment of a productive research program. For promotion to full professor, the individual must demonstrate consistent engagement in scholarly

work and a record of significant achievements. Individuals may demonstrate this sustained accomplishment in different ways. Examples include: a long-term record of mentoring undergraduate research; multiple peer-reviewed publications of original research; a record of external funding; successful transition/adaptation to new directions of research; evidence of regular involvement in and impact of professional activity at a regional or national level; breadth in the range of scholarly work across the categories of original research, grant seeking, curriculum development / scholarship of teaching, and science citizenship.

In accord with section 4.VII.C.3.c of the Faculty Manual, the Biology Department recognizes that service in administrative roles, such as department chair, program director, associate dean, director of a center or office, or other comparable position, will result in reduced scholarly activity.