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Criteria for Evaluating Scholarship

The measure of success for SoLS faculty is excellent scholarship. Boyer\textsuperscript{1} defines scholarship as encompassing discovery, integration, application and teaching. This range is fully manifest in SoLS, where a broad range of systems and processes are explored from the molecular to the ecosystem level, and from scientific, historical, philosophical and social perspectives. SoLS has the responsibility to create and extend research-based knowledge that benefits the greater Phoenix area and Arizona, the Nation and the World. Thus, the faculty is actively engaged in the full spectrum of scholarly activities of fundamental and applied research, outreach, professional and social service, and education. Members of the faculty have specialized disciplinary expertise—in such fields as evolution and systematics, ecology and behavior, physiology, molecular biology, bioethics, and history and philosophy of science. Faculty scholarship reflects a balance consistent with individual appointments and the context of the school mission. Evaluation of scholarship acknowledges this diversity and the range of scholarly activities it includes. The primary expectation is demonstrated excellence and superior intellectual attainment in the context of the individual's appointment responsibilities.

TEACHING
We recognize that there are other ways to contribute to the teaching mission of our school that lie outside the classroom. We encourage and support those contributions from our faculty.

Qualitative evaluation of teaching includes consideration of classroom teaching and direct student mentoring. Excellence in teaching entails the stimulation of creative, analytical thinking among students at all levels. Clarity in communicating current thinking at an appropriate class level is a primary consideration. Other aspects of importance include availability to students, class organization, and continued curriculum development and improvement. Leadership in the development of teaching programs, advising, and the coordination of curriculum are additional, important indicators of teaching excellence. Student response evaluations of teaching are evaluated relative to the norms within the School of Life Sciences.

Direct mentoring of undergraduate and graduate students is another important component of teaching. This may be done directly in the laboratory or field, but will also include student advising, active participation on thesis and dissertation committees, service on qualifying examination committees, involvement in student seminars, and participation in graduate groups and undergraduate major programs. Mentoring doesn't end with graduate training. Postdoctoral mentoring is also an important role for faculty members in SoLS.

Quantitative measures of teaching loads are as follows:

\textsuperscript{1} Boyer, E. L. 1990. Scholarship Reconsidered: Priorities of the Professoriate. The Carnegie Foundation for the Advancement of Teaching. Princeton NJ.
1. A faculty member will typically commit 40% of his or her annual workload to teaching, that is, activities that support the educational mission of the School of Life Sciences. Deviations from a 40% commitment to teaching may be negotiated. However, consistent with ASU’s expectation that all faculty members teach, the allowable minimum commitment to classroom teaching is 10% of one’s annual workload. Teaching the equivalent of one course per year satisfies this commitment. Here are some conditions under which a faculty member’s annual commitment to teaching may deviate from 40% of their workload.

   a. Faculty members who maintain less active research programs are expected to have a higher proportion of their workload devoted to teaching.

   b. Some faculty members may negotiate lower loads in order to allow above average and important contributions in teaching activities other than teaching a class (e.g., preparing a training grant), research, and service.

   c. Under special arrangements or as a condition of his or her hire, a faculty member may have a zero-load semester.

2. In the School of Life Sciences, for faculty members with a productive and visible program of scholarly research, a 40% annual commitment to teaching will be satisfied by two activities.

   a. Twenty percent will be covered by teaching the equivalent of one course per semester each year as described in (3) below.

   b. Twenty percent will be covered by contributions to the SoLS educational mission to mentor and train students in research. These contributions include but are not restricted to:

      (i) formal and informal mentoring of undergraduate, graduate, and postdoctoral students;

      (ii) leading of journal clubs, lab meetings, and other regularly scheduled activities that educate our students in scholarship, and

      (iii) managing training programs for undergraduate, graduate and postdoctoral students.

3. Courses vary in the demands that they place on a faculty member and these demands will be taken into consideration in deciding if a faculty member’s contributions to a course in a given semester constitute the equivalent of one course. Teaching assignment will be adjusted so that the number of courses s/he teaches in a year reflects his/her workload commitment to teaching. Teaching assignments such as the following are the equivalent of one course per semester:

   a. Providing half the lectures and management for the lecture section of a large lower division course.

   b. Responsibility for all aspects of a medium-sized upper division lecture course.

   c. Responsibility for all aspects including TA supervision of a small upper division course with a lab.

   d. A small 3 credit hour graduate course.

   e. A small writing- or research-intensive undergraduate course.
RESEARCH
Excellence in research and a commitment to a productive program of research are clear requirements for all faculty members. Research is evaluated using both qualitative and quantitative standards. Expectations for research are evaluated in the context of SoLS aspirational peer institutions. (A list of aspirational peers is available from the Faculties Administration Office.) Collaborative, multidisciplinary investigation is an important aspect of research and is encouraged. However, each member of the faculty is expected to provide the intellectual leadership for an established program of creative, independent research.

Factors that enter into the assessment of the quality of a body of research include intellectual creativity in setting research goals and objectives, application of appropriate research methodologies in devising experiments and conducting investigations that address those goals and objectives, and intellectual rigor in the interpretation and presentation of research results. Useful criteria include the reputation of the journals and publishers where research results appear, the assessments of peers in the research community, successful competition for extramural research funding, and invitations to present research results at other institutions or at meetings of scholarly societies. Research results should appear in peer reviewed venues respected for rigorous publication standards in the candidate's subject matter area. The most important criterion is that the venue is appropriate for the research reported. In some cases, the appropriate venue may be of more limited distribution than others.

A successful research program normally requires funding beyond the resources that the University can provide. In those cases, research should be funded with extramural support from appropriate sources such as state and federal granting agencies, and private companies and foundations. The dollar amounts of funding support should fit the needs of the research program; e.g. more financial support does not necessarily mean a better research program. The measure of success is the quality, quantity, and impact of the research, not the cost.

Publication of results in refereed journals and books is the clearest measure of research productivity. It is not desirable to set strict quantitative expectations or guidelines, however, regular reporting of research in peer-reviewed venues is an essential responsibility of academic researchers. Quantitative measures of research productivity should be balanced against other scholarly contributions, such as teaching, student mentoring, and outreach activities. Such activities cannot, however, substitute for demonstrated intellectual leadership, creativity, and productivity in research. Similarly, faculty whose appointment responsibilities are more heavily weighted toward research are expected to demonstrate a commensurately greater commitment to research which should be reflected in the quantitative measures of productivity.

SERVICE
All faculty, regardless of appointment, have similar responsibilities for service. These responsibilities are met in many different ways and take different forms at different career stages. Service to the institution includes active participation in the affairs of the school, college, and university system. Service includes membership and leadership on
committees at all levels, active participation in campus centers, research units, and graduate groups, fulfilling responsibilities for personnel review committees, etc. Service responsibilities outside the university include service to governmental and community agencies, such as CDFA, USDA, NSF, NIH, and others.

PROFESSIONAL DEVELOPMENT
Faculty are expected to grow professionally. Measures of professional growth are often linked to peer recognition and include membership and leadership in scholarly societies, editorial service to scholarly journals, reviewing grant proposals and manuscripts, invitations to present talks to professional organizations, academic institutions, and industry. Receipt of special awards for service, teaching, and research are excellent indicators of professional growth.
Guidelines for Promotion to Associate Professor and Granting of Tenure

Tenure track faculty will normally be considered for promotion from Assistant to Associate Professor with tenure in their sixth year in rank. Promotion at an earlier time may be considered in cases of unusually rapid development accompanied by an exceptional record of achievements. Guidelines for promotion and tenure are as follows:

TEACHING
Effective and inspiring teaching and mentoring of undergraduate and graduate students, and postdoctoral researchers, which would be evidenced by the following:

1. Consistently excellent student evaluations and peer evaluations in classroom teaching;
2. Interest and involvement in new course development and teaching innovation;
3. Involvement of undergraduates in the research experience;
4. Successful mentoring of graduate students and postdoctoral researchers who perform publishable or patentable research in a reasonable time;
5. Productive postdoctoral researchers;

RESEARCH
Candidates should present a substantial record of productive research, indicative of future performance at a high level which is evidenced by the following:

1. Demonstrating intellectual leadership in the conduct of original, significant research
2. Publishing primary research results in reputable, appropriate, refereed venues;
3. Presenting research results in meetings and conferences within their disciplinary field;
4. Demonstrating a substantial and sustainable research program funded at a level that is appropriate for their discipline;
5. Engaging in collaborative research projects involving faculty, graduate students, and postdoctoral researchers;
6. Obtaining US Patent awards for original research;
7. Awards for excellence in research.

SERVICE
Candidates should:
1. Contribute to the shared governance and promote the activities of the school, college, university, and professional community;
2. Serve on committees at the school, college, university, and national level;
3. Participate in the review process for research papers and grant proposals.
Guidelines for Promotion to Full Professor

Promotion to Full Professor is based neither on promise nor longevity. The time required by different faculty members to attain the appropriate level of achievement will vary, with at least five years being the typical period in rank at the Associate Professor level. Promotion to the rank of Professor at an earlier time will only be considered in cases of unusually rapid development accompanied by an exceptional record of achievements. Indicators of such exceptional performance include:

TEACHING
Candidates should show:
1. Evidence of sustained, effective, and inspired teaching contributions at the undergraduate and graduate levels;
2. Evidence of effective student mentoring at the graduate level;
3. Evidence of developing and improving the curriculum; may also include obtaining grants for instructional equipment, curriculum improvement, and other instructional activities;

RESEARCH
Candidates should show:
1. Evidence of a substantial body of original research, with significant contributions to that body of work occurring since promotion to Associate Professor, that defines and/or significantly enriches one or more areas of the Life Sciences;
2. Evidence of a substantial and uninterrupted flow of publications in high-quality, refereed journals, books or other appropriate venues;
3. Evidence of national and international recognition in one or more areas of research which includes giving invited presentations at conferences and university of high stature, professional awards, election to positions in national and international professional societies;
4. Evidence of a continuing active and significant research program that supports graduate students and postdoctoral researchers;
5. Demonstrated ability to assume intellectual leadership and build collaborative research programs;
6. Funding at a level sufficient to sustain an active, collaborative research program that is independent of university funds.
7. Special recognition from funding agencies for excellence in research.
8. Election to membership in bodies such as the National Academy of Sciences, or to fellowship status in the individual’s professional society.

SERVICE
Candidates should show:
1. Service as journal editor, associate editor, or on editorial boards.
2. Holding a position as officer in professional organization.
3. Service on review panels and boards for agency and national professional organizations.
4. Service on national and international professional committees
5. Conscientious and effective service in committee assignments at all levels of the university.