JACOBS SCHOOL OF ENGINEERING

Shu Chien-Gene Lay Department of Bioengineering

Approved December 2025

**Bioengineering Standards for Merit Review**

The Department of Bioengineering expects continuing high level contributions and innovations of significance to students, researchers, and bioengineering professionals.

- Research contributions in the form of peer-reviewed research manuscripts (3 per year is suggested) and grants (continuous funding at a substantial level); in addition, outstanding contributions (e.g., articles in the most competitive journals, results that significantly impact commercial practice, or patents issued (not applications) or licensed) are recognized as substitutes for numerical counting.
- Common teaching contributions are three courses per year, with a mix of undergraduate and graduate courses, with good evaluation metrics; contributions to course and curriculum development add to the candidate's contribution. Mentoring of graduate students and often postdoctoral students is an important component of the teaching effort.
- Expected service includes serving on appropriate department and school committees, and, later in the career, at campus and national and international levels. Contributions or activities that broaden participation and access to STEM for students and/or the public are expected.

When Bioengineering Faculty are considered for Acceleration or Bonus Off-Scale or other promotions, we emphasize that quantitation – i.e. double the number of publications and/or issued patents – may comprise sufficient evidence, but note that this approach is a starting point for evaluation and that campus guidelines suggest flexibility in considering excellence. Further, there should be no weaknesses in any category: research, teaching or service.

Please refer to excerpts from the campus guidelines (PPM-230-20) which are available at the departmental site.

UC San Diego
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# Bioengineering Standards for Promotion to Associate Professor

The standard for promotion to Associate Professor is solid evidence of the likelihood of substantial contributions to teaching, research and service over a lifetime career. The descriptions below expand on ways the candidate/department and campus may interpret this broad standard.

1. Teaching: the candidate will have taught undergraduate and graduate students in a combination of classroom and research settings. Primary evidence of graduate mentoring is success of a student through the Senate Exam. Teaching metrics will indicate long term successful contributions.
2. Research: The candidate's record should show strong indications of long-term success.
    a. There should be a clear increase and attainment of research productivity, often visible as publications in rigorously reviewed journals and/or issued patents (not applications) or licensed; however, arguments that the research is deeper and more impactful are most important.
    b. The record should show clear independence of intellectual activity
    c. The candidate should demonstrate the ability to attract sufficient research funding for the work on which they are judged.
    d. There should be growing external recognition, possibly including invited talks, reviewing, and professional society activity.
3. Service: The candidate should make service contributions to Bioengineering and JSOE, typically through committees. Early efforts at service at national and international levels (i.e. journal reviewing) are expected. Contributions or activities that broaden participation and access to STEM for students and/or the public are expected.

Please refer to excerpts from the campus guidelines (PPM-230-20) which are available at the departmental site.

## Bioengineering Standards for Promotion to Full Professor

The standard for promotion to Full Professor is solid evidence of the likelihood of long term national and international leadership in a combination of research, service and teaching. The descriptions below expand on ways the candidate/department and campus may interpret this broad standard.

1. Teaching: the candidate will have a long-term and high quality contribution to undergraduate and graduate education. They will have a well established record of PhD and post-doc mentoring.
2. Research:
    a. The candidate's record should show strong indications of long term nationally and internationally recognized success. Likely sources of evidence include:
        i. Multiple publications in rigorously reviewed journals and/or issued or licensed patents (not applications)
        ii. Results recognized as highly significant and impactful regardless of publication
        iii. Strong impact on practice in industry and others in research
    b. The candidate must continue to demonstrate the ability to attract sufficient research funding for the work on which they are judged.
    c. Expected is growing national/international recognition, in the form of invited talks, advisory boards, etc.
3. Service: The candidate will likely make strong contributions to a combination of Campus, Bioengineering, and JSOE, most often through committees. National and international level service will be common (editorship or society officer or other). Contributions or activities that broaden participation and access to STEM for students and/or the public are expected.

Please refer to excerpts from the campus guidelines (PPM-230-20) which are available at the departmental site.