Biomedical Sciences Graduate Program Faculty Membership Application (Revised September 2016)

The mission of the Biomedical Sciences Graduate Program (<u>http://biomedsci.ucsd.edu</u>) at UCSD is to provide outstanding graduate training competitive with the best graduate programs in biomedical sciences worldwide. The program consists of multiple training areas to help focus and develop training opportunities for students to advance toward the PhD or combinations of the PhD with other professional degrees. A distinctive characteristic of the program is its multidisciplinary nature.

Active participation of the faculty is essential. Therefore, a condition of membership is active participation in teaching, service, and research related to training in the BMS Program. New faculty that have documented prior experience training graduate students or were recently recruited to UCSD through national searches and have immediate access to significant funding for student support may be appointed as a member. All members will be reviewed to evaluate their continued participation in student training and program activities. Faculty that do not participate significantly in the program will not have their membership renewed. Please keep in mind that although having a student in your group contributes to the program, it does not represent a sufficient level of participation to justify continued membership and access to future trainees.

The requirements for MEMBERSHIP are:

- 1. Appointment in a Professorial series (Professor, In-Residence, Adjunct, or Clinical X) in a basic, applied, or clinical department at UCSD
- 2. Demonstrated past and ongoing independent research productivity in areas appropriate to biomedical sciences.
- 3. Research support for active, ongoing laboratory research, including funds to pay for thesis student stipend, tuition and fee remission and research supplies and equipment.
- 4. Adequate dedicated formally assigned research space
- 5. A training environment that provides opportunities for collaboration and participation in seminars and journal clubs.
- 6. Willingness to mentor graduate students (see attachment)
- 7. Active participation in the Biomedical Sciences Graduate Program, including
 - Annual recruitment of graduate students
 - Mentoring graduate students in laboratory rotations
 - Service on Research Proposition Qualifying committees
 - Service on Thesis committees
 - Teaching in core or elective courses (see below)
 - Service on standing committees (see below)

Please complete the attached questionnaire and send it back electronically to <u>pluetmer@ucsd.edu</u> (Patricia Luetmer, BMS Program Coordinator, 858-822-2001)

QUESTIONNAIRE FOR MEMBERSHIP BIOMEDICAL SCIENCES GRADUATE PROGRAM

Name/Title	Department
Campus Address	Mail Code
Office Phone	E-mail

- Yes, I am willing to participate *significantly* in Graduate Program functions, including teaching in core, elective and seminar courses, student recruitment and rotations, serving on the Minor Proposition and Thesis committees, participation in annual retreats, etc.
- □ No, I am not willing to participate *at this level*.

Indicate your appointment series (left column) and your rank (right column) at UCSD:

- Professorial
- AssistantAssociate
- □ In-Residence □ Ass □ Adjunct □ Full
- Clinical X

Indicate the training area(s) in BMS with which you would affiliate: (maximum of 3; indicate primary, secondary and tertiary, if more than 1)

- Cancer Biology
- Computational & Systems Biology
- Genetics & Genomics
- Immunology
- Microbiome & Microbial Science
- Molecular Cell & Developmental Biology
- Molecular Pharmacology
- Neurobiology of Disease
- Pharmaceutical Sciences & Drug Development
- Physiology & Endocrinology
- □ Stem Cell Biology
- Structural & Chemical Biology

(optional) Indicate your involvement/interest in the following Cross-Disciplinary Training Areas:

- Glycobiology (http://grtc.ucsd.edu)
- □ Anthropogeny (https://carta.anthropogeny.org)
- □ Q-bio (http://qbio.ucsd.edu)
- □ Multiscale Biology (http://interfaces.ucsd.edu)

Have you previously been a thesis advisor to PhD or MS students?

If you have not been a thesis advisor previously, indicate the name of a senior faculty member who has agreed to serve as your faculty mentor. You may need to contact your home department for this assignment.

□ I have read the attachment and agree to its terms.

Signature

- Please attach your current <u>NIH Biosketch</u>, including an up-to-date list of publications and <u>existing/pending grant support</u> (source of funding, project dates and annual direct costs). (4-page maximum)
- 2. **Briefly** describe any prior experience you have in training graduate students as a mentor, rotation advisor, member of thesis committees, instructor or in any other capacity you consider relevant.

<u>COMMITMENT FOR FUTURE PARTICIPATION</u> – This is the most important part of the application. Please see the following page for a description of committees.

1. Indicate which of the following activities are willing to do in the future. See the next page for a description of committees.

- **Curriculum Committee**
- Graduate Student Admissions and Recruiting Committee
- Student Awards Committee
- Committee Student Promotion and Advisory
- **D** Research Proposition Committee
- 2. Teaching:
 - BIOM 200A/B, Molecules to Organisms Fall Quarters
 - BIOM 201, Seminars in Biomedical Research Fall Quarters
 - BIOM 219 Ethics in Scientific Research Spring Quarters
 - BIOM 285 Statistical Inference- Spring Quarters
 - □ Courses in which you would volunteer to teach:
 - BIOM252 Genetics and Genomics I and II (Winter/Spring)
 - o BIOM253 Pathogens and Host Defense I and II (Winter/Spring)
 - BIOM254 Molecular and Cell Biology I and II (Winter/Spring)
 - o BIOM255 Drugs and Disease I and II (Winter/Spring)
 - BIOM226 Hormone Action (Spring)
 - PATH221 Molecular Pathology of Cancer (Winter)
 - Seminar Courses which you would volunteer to organize or in which you are willing volunteer to participate:
 - BIOM272 Seminars in Genetics (Spring)
 - o BIOM274 Seminars in Molecular and Cell Biology (Spring)
 - o BIOM275 Seminars in Pharmacology (Winter)
 - BIOM276 Seminars in Physiology (Spring)
 - BIOM277 Seminars in Molecular Pathology (Winter)
 - Other Courses relevant to Biomedical Sciences

Committee Descriptions

The <u>Graduate Student Admissions and Recruiting Committee</u> oversees the admissions process in the winter and recruiting efforts throughout the year.

The <u>Student Promotions and Advisory Committee (SPAC)</u> provides an important advisory system for the students, particularly during their first year in the program. The SPAC committee assists the BMS Chair in resolving problems arising with students as they progress through the program.

The <u>Curriculum Committee</u>, consisting of the Training Area Leaders and the Course Directors, oversees the development, the implementation and the evaluation of courses in the BMS program.

The <u>Research Proposition Committee</u> administers the Research Proposition Qualifying Exam. It also mentors first-year students with their applications for pre-doctoral fellowships and awards. The <u>Student Awards Committee</u> oversees the selection of awardees and presents the awards at the BMS annual retreat.

Course Descriptions

BMS students are expected to complete a series of required core courses during the first year that provide an overview of biomedicine, from molecules to organisms. The Seminars in Biomedical Research help students develop critical thinking skills. In the winter and spring quarters, students are required to take 3 or 4 elective courses offered by the various Training Areas, as well as additional seminar courses. Two short courses in Statistics/Computer analysis and Scientific Ethics are also required for all students and they are offered in the spring quarter. More information about course content can be obtained at http://biomedsci.ucsd.edu/students/resources.aspx

Mentorship Responsibilities of the Thesis Advisor

- A. Guidance of the student in development of a research project that is original, feasible, and will lead to a Ph.D. thesis and peer-reviewed publication(s).
- B. Determination that the student is making progress in meeting the Ph.D. requirements, including (a) the timely completion of the Research Proposition Qualifying examination by Thanksgiving day of the student's second year in the program, (b) the timely completion of the Advancement to Candidacy examination by the end of the Spring quarter of the student's third year in the program, (c) the timely submission of a formal annual evaluation of the student's research progress in consultation with the student's Thesis committee by the end of each Spring quarter beginning in the student's registration for the following year) and (d) a yearly thesis committee meeting where the student updates the committee on the status of his/her work. The committee meeting would ideally occur in conjunction with the annual evaluation form in the Spring.
- C. In consultation with the student, select a series of elective classes to expand the student's knowledge in the areas that are relevant and/or complementary to the student's Thesis research project.

D. Guidance of the student in developing skills to communicate scientific ideas in writing and orally, through participation in journal clubs, research meetings, seminars, symposia and the preparation of fellowship applications and manuscripts.

Financial Responsibilities of the Thesis Advisor

Thesis Advisors are obliged to provide financial support of the student for the duration of their Ph.D. The BMS program will support the first-year students for up to 10 months during their rotations through different research labs. Thereafter, the thesis advisor is expected to be fully responsible for the student, which amounts to approximately \$53,000 per year in stipend/tuition and fees for up to 5 years, as well as research resources. Faculty without stable funding should not take rotation students unless the rotation is for training purposes and both the student and faculty are aware of the situation. Faculty and students should communicate openly about whether the faculty member can support the student prior to the student rotating in the lab or joining a thesis lab. If the faculty member loses funding during the time a student is in their lab, it is the responsibility of the faculty member to find alternative sources of support.