



GRADUATE SCHOOL of BIOMEDICAL SCIENCES

George M. Stancel, Ph.D.

Dean

John P. McGovern Professor of Biomedical Sciences

PO Box 20334

Houston, Texas 77225-0334

George.M.Stancel@uth.tmc.edu

713 500 9850

713 500 9859 fax

If you are interested in joining the GSBS Faculty, please read the following document. For further information and to obtain an application form, please contact Dr. Tom Goka, Assistant Dean, by telephone at 713-500-9868 or by e-mail at Thomas.J.Goka@uth.tmc.edu. Thank you.

TO: Prospective Members of the Graduate School Faculty
FROM: George M. Stancel, Ph.D., Dean
RE: Initial Appointments to the Graduate Faculty

Thank you for your interest in The University of Texas Graduate School of Biomedical Sciences (GSBS). Our goal is to offer outstanding research training to an excellent, diverse student body, to support highly competitive research programs of our Faculty, and to graduate future leaders in the biomedical sciences for academic institutions, government, businesses, and private organizations.

The following information provides information on the mission of our School; a brief description of our programs and educational activities; the qualifications and responsibilities for Faculty membership; and the expectations that the GSBS Faculty, the leadership of our parent institutions, and I have for our faculty members. If you meet the qualifications for membership, believe you are in a position to accept the corresponding responsibilities, and share our goals for excellence in graduate education, I would welcome you to submit an application to join us.

If you have any questions about the process, please contact our Director of Faculty Affairs, Ms. Gaughan, by phone at (713) 500-9857 or email at Brenda.Gaughan@uth.tmc.edu. It is especially important that individuals interested in affiliating with one of our Specialized M.S. programs contact Ms. Gaughan for additional information as the attached document focuses primarily on our (M.S.)Ph.D. Program.

Before submitting your application you should discuss it with your chair or supervisor so that he/she is aware of your specific plans for GSBS participation, understands the commitments and responsibilities inherent in them, and indicates his/her support. I also suggest that you discuss your interest in GSBS with current faculty members or Directors of Programs that you may be interested in joining.

Thank you once again for your interest in GSBS and please do not hesitate to contact our Faculty Affairs Office at any time if you would like additional information.

-BACKGROUND INFORMATION FOR FACULTY APPLICANTS-

- Mission -

The mission of the Graduate School of Biomedical Sciences is threefold:

- To educate research scientists and science educators
- To generate new knowledge in the biomedical sciences, and
- To increase the public understanding of science

We achieve this mission by offering the Master of Science (M.S.) and Doctor of Philosophy (Ph.D.) degrees. The M.S. and Ph.D. degrees are intended to prepare scholars to conduct research in the biomedical sciences and/or use research-related skills in academic, government, private business, or other settings. The emphasis of the Ph.D., which is our major program, is to prepare scholars with the training and expertise to make independent intellectual contributions to their field. It requires that students obtain a broadly-based understanding of the underlying principles and fundamental concepts of an area of biomedical science and conduct independent research culminating in a Ph.D. dissertation. GSBS does not offer professional or practice-based doctoral degrees.

- Activities of GSBS Faculty Members -

Members of the Faculty participate in a broad range of activities, including:

- Courses, seminars, laboratory tutorials (and special projects for M.S. students) and other offerings ranging from broad overviews of a field to highly specialized offerings
- Tutorials and special projects in which students conduct projects to learn research design, methods, and skills while becoming familiar with a faculty member's laboratory
- Service on student committees, including
 - Advisory Committees that guide a student's preparation for the candidacy exam and subsequent independent research
 - Examining Committees that administer the candidacy examination and recommend whether the student should be promoted to candidacy
 - Supervisory Committees that assist the student (and supervisory professor) and monitor his/her progress toward completion of the doctoral research and writing of the dissertation (or thesis for the M.S.), and oversee the final oral defense
- Governance, service, and supporting activities of GSBS
 - Organizing and directing Programs, courses, training grants, or other activities
 - Standing and ad hoc committees of the Faculty or Programs
 - Student recruiting and visitation activities
 - Career development, advising, mentoring, or other activities that support students or the Graduate School
- Serving as the major supervisory professor (i.e., the chairperson of M.S. or Ph.D. Supervisory Committees) who provides guidance and financial support for the student's M.S. or Ph.D. research.

- Types of GSBS Faculty Appointments -

All of the above activities are important and essential for the Graduate School to achieve its mission. The GSBS Faculty thus welcomes applications from those who are qualified, have the necessary resources, and wish to contribute in any of the above ways. GSBS appointments are made for five years, with an interim review after three years for the initial appointment of new members. This midterm review is intended to

provide feedback to new faculty members about their performance and participation in graduate education activities.

Some applicants may wish to participate in selected aspects of graduate education but do not feel qualified for others and/or do not feel they are able to make the commitment, have the resources, and/or can provide the training environment needed for others. To enable these individuals to participate in graduate education, GSBS has two primary types of standard faculty appointments, Regular and Associate.

All GSBS faculty members (both Associate and Regular members) may teach, serve on student committees and GSBS standing committees, offer tutorial research projects, serve as the major advisor (i.e., chairperson of the Supervisory Committee) for M.S. students, and participate with voting privileges at GSBS Faculty Meetings. The only significant difference in rights is that only Regular members may serve as the major supervisory professor (i.e., the chairperson of a Supervisory Committee) for Ph.D. students. The following section provides information to help applicants decide the level of appointment for which they are qualified and wish to apply.

GSBS also has two additional types of faculty appointments for individuals who wish to participate in a more limited and very specifically defined activity. These are *Adjunct appointments* to the Faculty that enable an individual to serve on the advisory, examining, or supervisory committee of a specified student, and *Visiting Lecturer appointments* that enable interested individuals to give specific lectures in specified GSBS courses. Individuals interested in more information about either of these appointments should contact Ms. Brenda Gaughan, Director of Faculty Affairs. The following information applies only to GSBS Faculty appointments as Associate and Regular members.

-Considerations, Responsibilities, and Expectations for Types of GSBS Faculty Membership-

Core Requirements for Regular and Associate GSBS Faculty Appointments

The mission of GSBS is advanced research training and the generation of new knowledge in the biomedical sciences. All applicants for Faculty membership must thus have advanced knowledge of the biomedical sciences as demonstrated by their education, experience, and research contributions, and should hold a full-time academic position with a significant research expectation. Basic requirements for Faculty membership are:

- A terminal doctorate in one of the biomedical sciences or a related field, although exceptions may be considered in cases where the master's is the terminal degree in an area in which GSBS offers training or in cases where an individual without a doctorate has made major, sustained research contributions to the biomedical sciences
- A regular faculty appointment that has an expectation of significant research involvement and productivity at one of our parent institutions.
- Support of the department chair/supervisor for the applicant's proposed participation in GSBS
- The ability to contribute to one or more of the educational activities of the GSBS Faculty as evidenced by
 - Education and training
 - Prior teaching, research, and academic experience
 - Peer-reviewed publications in the biomedical sciences and related areas
- An interest in actively participating in GSBS activities in support of our basic mission of training biomedical research scientists

- An explicit statement of plans to participate in specific GSBS activities, e.g., specific lectures/courses, tutorial research descriptions, Program and GSBS governance and administrative work, etc.

Requirements for Regular Faculty Appointments (Eligibility to Chair Ph.D. Supervisory Committees)

In order to effectively guide our students' dissertation research, it is necessary that individuals with Regular appointments be actively involved to a significant degree with research in an area(s) of the basic biomedical sciences for which GSBS is approved to offer doctoral training. Applicants conducting clinical, behavioral, public health or related studies are welcome to apply, but all applications for Regular membership should indicate that candidates are involved in basic biomedical research.

Serving as the major research advisor for a Ph.D. student also requires a thorough, in-depth understanding of the nature of Ph.D. training in the biomedical sciences; the experience, ability, and resources to lead an independent research team; the resources, environment, time, and support required to guide students' completion of the dissertation research, and the willingness to provide mentoring and professional guidance to doctoral students.

An Understanding of Ph.D. Training Programs

While completion of a meritorious piece of independent, creative research is the *sine qua non* for the Ph.D., doctoral training involves other important elements. Faculty members serving as major supervisory professors should thus have a thorough understanding of the overall process. Completion of a Ph.D. degree in the biomedical sciences or a related field is considered sufficient evidence of an in-depth understanding of Ph.D. training. For applicants with terminal doctoral degrees other than the Ph.D., it is important to indicate clearly that they are familiar with the overall process; other indicators may include previous experience as an Associate GSBS member, appointments at other institutions including serving as the primary mentor for previous graduate students, previous service on graduate student committees, lecturing in graduate-level courses, or other involvement in graduate education.

Leadership of an Independent Research Team

The ultimate aim of doctoral training is to produce graduates capable of conducting independent research, which is thus a key requisite for dissertation supervisors. A number of factors are considered as evidence of the ability and experience to lead an independent research team. These include

- First-author and senior-author publications
- Consistency of publication record
- Major independent, peer-reviewed research support
- Length of time and research accomplishments in previous academic and non-academic professional positions
- Independent laboratory/research space and facilities

Independence also signifies an anticipated continuity of appointment and support that are important for uninterrupted guidance of a student's dissertation research, which may be a lengthy process.

Independent, peer-reviewed research support appropriate for a faculty member's discipline is required for Regular appointments. The ability to obtain such support is an important measure of peer recognition of a faculty member's research and also indicates the likelihood that he/she will be able to generate the resources needed to support graduate students. The Membership Committee and the Dean may consider exceptions to

this requirement in certain situations if the applicant's chair/supervisor certifies that funds will be available to support graduate student stipends and research expenses for the length of time needed to complete any dissertation research supervised by the faculty member. Examples of such circumstances may include but are not limited to the following situations:

- This requirement may be waived for the *initial* appointment of beginning assistant professors. In such cases *reappointment* to the Faculty will require major, independent peer-reviewed support.
- This requirement may be waived for the *initial* GSBS faculty appointment of more senior faculty members recently recruited to one of our parent institutions who may be without major extramural support at the time of application but who have established a consistent record of prior support and/or those who are unable to transfer their grants (e.g., international scientists whose grants cannot be transferred). In these cases, reappointment to the Faculty will require major, independent peer-reviewed support.
- [Note: This requirement may be waived for the *reappointments* of GSBS faculty members with an established record of extramural support, but who are experiencing a *temporary* interruption of funding. However, appointments as a Regular GSBS faculty member will not be continued for faculty members who experience prolonged periods without significant, peer-reviewed funding.]

Research Environment and Facilities

Excellent research training requires not only a capable, dedicated mentor but a research environment and facilities appropriate for high quality, contemporary research training in the biomedical sciences. Important considerations for Regular appointments to the GSBS Faculty thus include the following.

- A training environment with a critical mass of graduate students, faculty members and other trainees to provide the knowledge base and intellectual environment for Ph.D. training in the biomedical sciences
- Regular, ongoing seminars, journal clubs, and research meetings to provide a broad and in-depth exposure to contemporary research in the biomedical sciences
- Availability of adequate library and computer facilities to support leading edge research
- The availability of laboratory and other equipment and facilities needed to conduct the student's proposed doctoral research
- Availability of career development activities and opportunities, e.g., scientific communication skills, grant and manuscript preparation, computer skills, information about both academic and non-academic career options for biomedical scientists, etc.

Completion of the Ph.D. dissertation is a lengthy process and it is difficult to predict in advance how long it will take to complete. The research environment and resources should thus be such that a student making good academic progress could reasonably expect to complete his/her dissertation research without having to change supervisors or sites.

There may be circumstances in which the nature of the faculty member's research requires a site with specialized facilities, ability to collect specialized data (e.g., environmental samples), availability of a patient population restricted to a certain geographic region or location, etc., and such locations may not fit the above criteria the way a more traditional setting of an academic department does. Even in these cases, however, a faculty member seeking a Regular appointment should be able to provide reasonable assurance that the training environment is stable and provides solid support and an intellectual atmosphere for Ph.D. training in the particular area of biomedical science.

Mentoring and Support of Career Development

Faculty members must accept a commitment to provide mentoring and support the career development of students for whom they serve as major supervisors. This involves a wide range of skills (*vide supra*), guiding the professional socialization of the student (e.g., supporting travel to professional meetings, introducing the student to colleagues when appropriate, explaining and modeling professional behavior, etc.), and helping them to become a member of the community of scholars during and after the dissertation research. Applicants for Regular membership should review the appended *Core Tenets of Graduate Training* which outlines the commitment expected for GSBS Regular faculty appointments.

Department and Institutional Support

The successful completion of the doctoral dissertation requires substantial resources and is demanding, expensive, and time-consuming for students, faculty members, and the university. Graduate schools thus have the responsibility to insure that students making good progress will be able to complete the degree and that supervisory professors will be able to guide a student's dissertation until its successful completion. This requires that the faculty member's department and institution support the significant effort required. While graduate education is normally considered an important mission of basic science departments and other units heavily involved in basic biomedical research, departments with heavy clinical and service responsibilities may have different expectations and levels of commitment.

Applicants for Regular appointments should thus thoroughly discuss the expectations and responsibilities of GSBS Faculty membership, including those for guidance of dissertation research, with their department chairs/supervisors and obtain their endorsement and willingness to support the applicants' involvement. Applicants for Associate membership are also strongly encouraged to share this document with their chairs/supervisors. Chairs and supervisors should feel free to contact the Dean if they would like to discuss the expectations and commitments of the Graduate School for its faculty members.