FOREWORD

The advancement of medical knowledge depends on the training of intellectually stimulated, innovative scientists who will serve as the leaders of biomedical research in the future. The goal of UT Southwestern Graduate School of Biomedical Sciences is to give outstanding students the opportunity and the encouragement to investigate rigorously and to solve significant problems creatively in the biological, physical, and behavioral sciences.

To attain excellence in science, today’s graduate students also must master the art of communication; therefore, students in the Graduate School of Biomedical Sciences have many opportunities to express their ideas orally and in writing to others within the scientific community.

The Graduate School has two Divisions: Basic Science and Clinical Science. These Divisions include the following specific areas of graduate studies: Biological Chemistry, Biomedical Engineering, Cancer Biology, Cell Regulation, Clinical Psychology, Clinical Sciences, Genetics and Development, Immunology, Integrative Biology, Molecular Biophysics, Molecular Microbiology, and Neuroscience. The Graduate School is continually developing new Programs, described on the website at www.utsouthwestern.edu/graduateschool/index.html.

Although enrolled in a specific Program area, a graduate student is not restricted to courses in that area. Exposure to a wide variety of academic disciplines is necessary to prepare the student for rapidly changing emphases in biomedical sciences. Graduate students at the medical center gain a wide perspective of contemporary biomedical science through interdisciplinary courses, seminars, and informal discussions involving students and faculty from all three component schools: UT Southwestern Graduate School of Biomedical Sciences, UT Southwestern Medical School, and UT Southwestern School of Health Professions.

The opportunity for graduate students and postdoctoral scholars to obtain advanced training in the laboratories of faculty members doing cutting-edge research fosters an ability to make significant contributions to the advancement of our understanding of the basis of disease processes that are the targets of contemporary medical research.

UT SOUTHWESTERN GRADUATE SCHOOL OF BIOMEDICAL SCIENCES

The members of the Graduate School faculty are also members of the faculty of either UT Southwestern Medical School or UT Southwestern School of Health Professions. The major portion of research for graduate degrees is performed in the laboratories of these faculty members.

As it has matured into a separate entity of academic distinction, the Graduate School of Biomedical Sciences has benefited from the talents of the basic-science faculty of the Medical School, noted for its innovative contributions to research and teaching methods. Twenty faculty members have been elected to membership in the National Academy of Sciences, and five have won the Nobel Prize. These and their fellow faculty members, while internationally recognized leaders in their fields of study, foster a uniquely close-knit research environment on a campus noted for its congeniality and collaborations. As UT Southwestern continues to grow, talented new faculty members are recruited to keep the medical center at the forefront of biomedical research.

Many faculty members are serving currently or have served recently as heads of national professional societies, as editorial board members of major scientific publications, and as members of study sections and scientific review panels under the auspices of the National Institutes of Health, the National Science Foundation, and other disease-focused nonprofit organizations.

Throughout their course of advanced instruction, students and postdoctoral scholars in the Graduate School remain in close contact with faculty members and enjoy the highly interactive atmosphere promoted by faculty at all ranks. Courses of study are designed to develop...
individual abilities in an atmosphere encouraging maximal intellectual interchange between students and mentors.

Graduates of UT Southwestern have obtained postdoctoral fellowships at institutions such as Harvard University, Rockefeller University, Johns Hopkins University, Yale University, University of California San Francisco, Washington University, and the Salk Institute and have gone on to faculty positions at Harvard University, Duke University, University of Pittsburgh, University of Pennsylvania, University of North Carolina at Chapel Hill, and UT Southwestern. Others play key roles in scientific administration and/or research at Amgen, Genentech, Merck, GlaxoSmithKline, Eli Lilly, Roche, and AstraZeneca. Two UT Southwestern alumni have been awarded a Nobel Prize (Joseph Goldstein, M.D., Medical School, 1966; and Linda Buck, Ph.D., Graduate School, 2004).

**ACREDITATION**

UT Southwestern Medical Center is accredited by the Commission on Colleges of the Southern Association of Colleges and Schools to award the bachelor's (B.S.), master's (M.A./M.S./M.S.C.S./M.P.A.S./M.R.C.), doctoral (Ph.D./D.P.T.), and medical professional (M.D.) degrees. Contact the Commission on Colleges at 1866 Southern Lane, Decatur, GA 30033-4097 or call 404-679-4500 for questions about the accreditation of UT Southwestern Medical Center. The commission is to be contacted only if there is evidence that appears to support UT Southwestern's significant noncompliance with a requirement or standard.

UT Southwestern Medical School is fully accredited by the Liaison Committee on Medical Education of the Association of American Medical Colleges and the American Medical Association.

**MEDICAL SCIENTIST TRAINING PROGRAM**

The Medical Scientist Training Program (MSTP) at UT Southwestern Medical Center integrates medical and research training for qualified women and men at the graduate level leading to both M.D. and Ph.D. degrees. The goal of the Program is to prepare individuals as physician-scientists. Graduates of this Program typically pursue careers in academic medicine and biomedical research at the nation’s leading institutions.

This Program offers students an integrated curriculum in the scholarly setting of UT Southwestern Medical School and UT Southwestern Graduate School of Biomedical Sciences. The MSTP curriculum is flexible and individualized to suit the background and interest of each medical scientist fellow. The Program is designed to be completed in approximately seven to eight years. Additional time is allotted if needed to meet requirements for the Ph.D. degree. (www.utsouthwestern.edu/mstp)

**PREREQUISITES**

A baccalaureate degree is required, and significant experience in laboratory research is essential for admission. It is desirable, but not mandatory, that the minimum prerequisites for admission to UT Southwestern Medical School be supplemented by one year of college calculus and one year of physical chemistry. Potential applicants who have not had prior experience in a research laboratory should gain such experience before considering a career in academic medicine and medical research. It is possible to acquire the necessary research experience after entering medical school and to apply to the MSTP during the first or second year of medical school.

**MEDICAL SCIENTIST FELLOWSHIPS**

The Medical Scientist Training Program receives a training grant from the National Institute of General Medical Sciences of the National Institutes of Health. Support for the Program is provided by various philanthropic and industry sources. All students accepted into the Program receive stipend support and funding for tuition and fees. There is no priority assigned to an applicant’s state of residency. MSTP fellows come from all over the United States, and international applicants are also welcomed with full support.

**ORGANIZATION OF THE PROGRAM**

Throughout the course of the Program, medical scientist fellows are enrolled in UT Southwestern Medical School or UT Southwestern Graduate School of Biomedical Sciences. Students who complete the MSTP will have met all requirements for the Ph.D. degree in the graduate school and for the M.D. degree in the Medical School. The Ph.D. may be earned in one of the graduate Programs within the Division of Basic Science: Biological Chemistry, Biomedical Engineering, Cancer Biology, Cell Regulation, Genetics and Development, Immunology, Integrative Biology, Molecular Biophysics, Molecular Microbiology, and Neuroscience. Each of these Programs is interdisciplinary by design. Program faculty members are derived from both basic science and clinical departments of the Medical School.

The MSTP affords the student flexibility in the selection and scheduling of courses. A typical schedule would include the first two years of medical school with summer laboratory rotations before and after the first year and again after the second year. The summer laboratory rotations are research apprenticeships to aid the student in selecting a research area and a mentor for graduate training. These apprenticeships are established by discussion with each student, the MSTP committee, and the potential preceptor. They are intended to expose the student to a variety of excellent laboratories in his or her area of interest.

**REQUIREMENTS FOR ADMISSION**

The process for admission to the MSTP can be viewed at www.utsouthwestern.edu/mstp. Application is made by completing the AMCAS form.

**POSTDOCTORAL SCHOLARS TRAINING PROGRAM**

Postdoctoral scholars are recognized as crucial participants in keeping UT Southwestern at the forefront of biomedical research. The
objectives of the Postdoctoral Scholars Training Program are to extend the traditional best practices of postdoctoral training in basic sciences at UT Southwestern and to make available new initiatives to improve training. The ultimate goal is to provide a structured Program to aid the transition of each scholar to career independence through the development of professional and research skills.

**QUALIFICATIONS**
A postdoctoral scholar must have earned a Ph.D., M.D., or equivalent doctoral degree and perform research in a specialty area under the supervision of a faculty mentor. He or she should hold the position of postdoctoral fellow or postdoctoral researcher, depending on the source of financial support. Postdoctoral training presupposes that the scholar is capable of independently executing original research under the guidance of the postdoctoral mentor. Appointment as a postdoctoral scholar is limited to six years, including postdoctoral training received at other institutions, either inside or outside the United States.

**ORGANIZATION OF THE PROGRAM**
All postdoctoral scholars are enrolled in a Certificate Program that includes multiple tracks, each of which is intended to be completed in two years. Postdoctoral scholars register for three hours of course work in the fall and spring terms and two hours of course work in the summer term. The Program is organized as continuing professional training and is graded on a pass/fail system. Certificates are offered in a variety of tracks, each of which includes required course work. Courses in English as a Second Language are provided for selected trainees. A certificate is awarded upon completion of 15 credit hours of training. Beginning postdoctoral scholars are enrolled in the research track, which has requirements for course work in ethics, career advancement, supervised research, and works-in-progress or journal club series. Additional certificate offerings may include teaching, advanced technology, advanced research, and chemistry.

**BENEFITS**
In addition to providing postdoctoral scholars with unique experiences in specialized research and advanced course work, the Program affords access to services including health, mental health, and fitness and recreation opportunities at the Bryan Williams, M.D. Student Center, individualized assistance with career development, computer and software assistance, and the lowest campus parking rates.