

STRATEGIC PLAN
Graduate School of Biomedical Sciences (GSBS)
(Updated September 2011)

I. Background

The GSBS has a longstanding policy of developing annual goals for each academic and fiscal year (September 1 – August 31) and holding itself accountable for reaching, or attempting to reach, those goals. It is important to develop goals that pertain to all important endeavors and may improve the school in the context of its vision and mission. Therefore, in this update and in our previous strategic plans, we outline new or updated goals for the GSBS for FY'12, and we provide information about goals achieved during the previous academic year (FY'11).

With direction from President Callender, entity strategic planning for 12-18 month periods is required and timed to align closely with the timeline for annual institutional budget preparation and submission each August to the UT System and State. The state biennial budgetary Fiscal Years for 2011 & 2012 run from September 1, 2010 to August 31, 2012, coincident with our academic years 2010-2011- & 2011-2012. This updated version reports our progress since the last update in September 2010.

It is essential that all GSBS goals fall within the published mission statements of The University of Texas Medical Branch (UTMB) and the GSBS. These mission statements are listed below:

A. Current UTMB *Mission, Vision and Values* statement

Our Mission

UTMB's mission is to improve health for the people of Texas and around the world.

Our Vision

We work together to work wonders, as we define the future of health care and strive to be the best in all our endeavors

Our values

Our values define our culture and guide our every interaction.

- *We demonstrate **compassion** for all.*
- *We always act with **integrity**.*
- *We show **respect** to everyone we meet.*
- *We embrace **diversity** to best serve a global community.*
- *We promote excellence and innovation through **lifelong learning**.*

B. GSBS *Mission statement*

The Graduate School of Biomedical Sciences at the University of Texas Medical Branch advances human understanding and knowledge in health-related disciplines through scholarly teaching and research in the biomedical sciences, promoting excellence in academic pursuits and activities, and developing individual leadership, communication, motivation, and scholarship in all students.

II. GSBS Goals for FY'12

1. *Recruit and retain high caliber students*

Strategy: Increase number of Presidential Scholarships to 12-13

In FY' 10, with support from the Provost, Presidential Scholarships were established that are designed to recruit annually some of the most promising first year GSBS students in the basic sciences who are US citizens or permanent residents (eligible for NIH training grant support). The scholarships provide an additional \$5,000/year (plus fringe benefits) of stipend for up to 5 years and up to \$3,000 for a one-time relocation expense. The initial cadre of 5 such scholars was recruited and enrolled in fall 2010, and an additional 4 Presidential Scholars were recruited for fall 2011. For FY' 12, the goal is to increase the number of scholarships by 4, to give a total of 12-13 Presidential Scholars in residence.

Strategy: Determine requirements needed to increase GSBS enrollment by 25% over a 10 year period

GSBS student enrollment has remained relatively flat during the past 15 years even though UTMB external research funding has increased substantially over that period. However, enrollment of UTMB postdoctoral fellows and postdoctoral trainees in fall 2010 and 2011 has increased the overall GSBS student enrollment (headcount) by 45-50%. Our current goal is now to plan to increase the basic science student enrollment of US citizens or permanent residents who are training grant eligible by 25%. This would support the research effort and, at the same time, contribute more PhD biomedical scientists to the scientific workforce. An increase of 8 first-year stipends for the incoming participants of the Basic Biomedical Science curriculum over the next 10-year period (i.e., by 2020) could achieve the goal. However, because of current cuts in state funding for higher education for FY' 12 and '13 and because of the fragile US economy and flat NIH budget, it is not advisable to plan for an increase in enrollment for the next several years, perhaps beginning in 2014. At that time an increase in institutional stipend support for 1-2 students/year could achieve the stated goal by 2020.

Strategy: Plan for a future increase in the GSBS base student stipend in order to remain competitive with our sister Texas schools for recruitment of outstanding students.

For fall 2010, UTMB graduate student base stipends were increased from \$25,000/year to \$27,000/year. The stipend amount is supplemented by additional payments of fringe benefits, tuition & fees, and health insurance. These costs bring the total expense/student to ~\$40,000/year. The increase is borne by the GSBS for first year Graduate Assistants and by faculty research grants after the first year. The challenge for the GSBS is to identify new institutional funds; for the faculty it is to find the increase from existing and future grant support. This is especially problematic when faculty are in the middle of a grant budget that did not plan for such an increase, and it is compounded currently by the challenged economy, level NIH budget, and increasing competition for the scarce dollars awarded. Loss of faculty grant support when that faculty member has a PhD student working in their laboratory means that the GSBS, department, or some other source must scramble to muster emergency support for the student involved. To help with this problem, the GSBS decided to enroll a smaller class than usual for fall 2011 in order to reserve some stipend money for interim support of students whose faculty may encounter a lapse in grant support.

Because of the uncertain economic situation, it seems inadvisable to raise the base student stipend again for at least 2 years. We currently are “in the ballpark” of what our sister schools are paying, particularly, UTHSC-Houston, UTHSC-San Antonio, Baylor College of Medicine, and Texas A&M. It is difficult to keep pace exactly with UT Southwestern and Baylor, both currently offering \$28,000/year.

Strategy: Better utilize current and new e-technologies to aid recruitment of new students

Currently the GSBS employs several technological initiatives to help with student recruitment. One is that we have outsourced some key recruitment strategies to a commercial software firm, Hobson’s, that offers specific, proven programs to attract student inquiries and convert them into applications. This outsourced effort has proven highly effective and cost-effective as well. Currently, we also are contracting for iPhone and Android apps that are designed to attract both student inquiries and applications.

We know from surveys that the vast majority of graduate school applicants get their information from the web, so that a modern, easily navigated, up to date website is essential to our successful recruitment of excellent students. A year ago we worked diligently to contract for a redesigned GSBS website. This was part of a Provost mandate that each of the UTMB schools modernize their websites. We believe this effort, and the others we employed described above, contributed to a large increase in applications that we experienced in 2010-2011. Total applications to the GSBS were the highest in a decade and the number of

US/permanent resident applications was the highest ever. The ratio of applicants/acceptances for the incoming basic science class approached 10:1. The current goal is to maintain this new website with up-to-date information and ensure the websites of the various GSBS programs to which we link also are up to date. This will not be easy since there are 14 GSBS programs scattered across campus, and most of them do not have a person dedicated to maintaining their program website. Likewise the GSBS does not have such a person, and finding and funding someone is difficult or even impossible in the current economic climate. Even if GSBS had such a person, the job of getting up to date information from each program still would be exceedingly time consuming. Nevertheless, we need to create a plan to approach this problem and begin to implement it this year.

2. Enhance evidence based curricula to prepare students for leadership in their fields.

Strategy: Transfer the newly designed GSBS program, *Human Pathophysiology & Translational Medicine (HPTM)*, administratively to UTMB's Institute for Translational Sciences.

HPTM is a modern, innovative program that supplants the former, outdated program in Cellular Physiology & Molecular Biology (CPMB) formerly housed in the Department of Neuroscience & Cell Biology. Over the past 2 years, the new program director and key faculty have overseen the students who entered the previous CPMB program to assure they could complete their PhD degree. Concurrently, a newly designed HPTM translational curriculum has been developed, and the physical "home" for the program has been transferred from the Department of Neuroscience & Cell Biology to the new UTMB Institute for Translational Sciences. The GSBS and the Institute have partnered to employ a staff coordinator for the program, and the first 4 students enrolled in the new program in fall 2011. The goal now is to build the core of new program research faculty who are equipped to mentor the new students and also to assure that suitable former CPMB faculty have the opportunity for membership in this or another GSBS program.

3. Advance GSBS postdoctoral programs of study to help recruit high quality postdoctoral fellows and promote their development

Strategy: Enroll all postdoctoral fellows and trainees in GSBS certificate programs

In accord with national 'best practices', the GSBS has developed certificate coursework for all UTMB postdoctoral research fellows and trainees. To access the coursework, participants must enroll in the GSBS and take 4 credit hr/term for each of the 3 terms/yr. Tuition is paid by the GSBS, and coursework is scheduled so as not to interfere with the daily laboratory work and responsibilities. Credit earned is documented by an official UTMB transcript, and 12 total credit hr of coursework earns a certificate in 1 of 4 Certificate Programs (Critical Research

Skills, Advanced Management Skills, Teaching & Mentoring, and Translational Research). For the academic year 2010-2011, all postdoctoral fellows and trainees in years 1 and 2 of their training were enrolled. For fall 2011 essentially all remaining postdoctoral fellows & trainees beyond years 1 & 2 were enrolled. New postdoctoral hires at UTMB are automatically enrolled in the GSBS certificate program as part of their employment “on boarding” and orientation process at UTMB.

Strategy: Support the Organization of Postdoctoral Scientists (OPS) and their leadership by helping them conduct professional development activities for their members

The Director of the Office of Postdoctoral Affairs and the Faculty Postdoctoral Advisory Committee meet regularly with the OPS officers to support workshops, lectures, seminars and other professional development efforts that they propose to conduct throughout the year. Additionally, the leadership is supported to attend the annual meeting of the National Postdoctoral Association, and the OPA Director attends the annual meeting of the AAMC Postdoctoral Leaders Section of the Graduate Research Education and Training (GREAT) Group. New efforts underway currently involve identifying ways to help postdocs with job searches and continuing to push postdoctoral salaries at UTMB to a level consistent with those the NIH proposes annually for its postdoctoral trainees.

Strategy: Implement a policy that ensures each postdoctoral fellow or postdoctoral trainee and their supervisory professor signs and agrees to follow the guidelines of the AAMC *Compact Between Postdoctoral Appointees and Their Mentors*

The Compact provides guiding principles to foster development of a positive mentoring relationship between postdoctoral fellows and trainees and their mentors. The Compact lays out broad guidelines for professional commitments by both student and mentor that are necessary to ensure a high quality postdoctoral training experience and serve as a framework for ongoing frequent discussions between the two parties. The Compact can be found on the AAMC website for downloading [<http://www.aamc.org/research/postdoccompact/start.htm>]. The GSBS has made development and signing of the Compact part of a postdoctoral certificate course required of all postdoctoral fellows and trainees. Additionally, the mentor and the postdoctoral student must annually review the student’s progress.

**III. Goals Accomplished During the Previous Academic Year
Beginning September 2010 (FY’11)**

Goal: Increase the GSBS base stipend to remain competitive for recruitment of excellent students

Beginning with the fall term 2010, all GSBS Graduate Assistants received an increase of \$2,000/year in their stipend. The new base stipend was \$27,000/year plus fringe benefits, plus tuition and fees, plus health insurance. This brought UTMB students more in line, in terms of financial support, with our three other sister biomedical graduate schools in the UT System health science centers and at Baylor College of Medicine.

Goal: Recruit 5 more Presidential Scholars for the second year of the initiative

The special recruitment committee for this new initiative recruited 4 new Scholars who enrolled in the GSBS in September 2010.

Goal: Restore the Summer Undergraduate Research Program (SURP) to its Pre-Hurricane Ike level

In summer 2009, because of funding restrictions and damaged student housing for participants in this 10-week program, SURP was limited to only 12 participants, all local residents who could commute daily to UTMB. This contrasted with the usual 25-30 participants from Texas and across the country that previously were housed on campus. With recovery underway, in summer 2010, the 19th year of SURP, we were able to host 25 participants. Financial support from the Provost, funding from the American Society of Pharmacology & Experimental Therapeutics, and continued generous philanthropic support from the Galveston Kempner Family Fund all contributed to make this a successful renewal of SURP, which we have documented to be one of our very best tools for recruiting students.

Goal: Gain from the Texas Higher Education Coordinating Board (THECB) final approval for Rehabilitation Sciences as a full-fledged, stand-alone Program.

Rehabilitation Sciences has been a curricular track since 2002 in the GSBS Population Health Sciences Program, with “preliminary authority” to move toward Program status. In spring 2009, we petitioned the THECB for final approval as a “Program”. After rapid approval from UT System and the UT Regents, considerable delay ensued. However, in spring of 2011, a THECB external site visit occurred and the proposal subsequently was endorsed by the THECB commissioner, placed on the Board agenda for a July 2011 meeting where it was voted final approval.

Goal: Transfer administrative oversight and operation of the new GSBS Program in Human Pathophysiology & Translational Medicine to the new Institute for Translational Science (ITS)

This transfer was accomplished in fall 2010 and funding associated with the transfer was shifted from the Department of Neuroscience & Cell Biology to the ITS. This helps the ITS by bringing graduate education into its portfolio and

benefits the program by putting student trainees into the defined center of translational research on our campus.

Goal: Redesign and activate a new GSBS website

Funds were expended to hire a professional staff person to design a new GSBS website. After unforeseen delays, a new website was completed and activated in early 2011. The new site is more attractive and easier to navigate and was implemented with the goal of attracting more applicants. This, together with our other new approaches yielded a high number of applicants for fall 2011. Previous surveys, both locally and nationally, indicate the web is the primary way applicants find us and not through Face book, Twitter or other social media.

Goal: Develop a procedure to ensure that GSBS students and their mentors utilize the AAMC *Compact Between Biomedical Graduate Students & Their Research Advisors* as an annual tool for discussion about reciprocal obligations of both parties and professional development of the student

The GSBS implemented a new policy that requires the student and their PhD supervisory dissertation advisor meet, discuss the compact, sign it and submit it to the GSBS as one of the requirements for the student to enter Candidacy for the PhD. Annual meetings and revisions are encouraged and expected.

Goal: Enroll all first- and second-year postdoctoral fellows and trainees in the GSBS for certificate coursework

For fall 2010, all UTMB first and second year postdoctoral fellows and trainees were required to enroll in the GSBS and take certificate courses. This increased total GSBS student enrollment by 100 or ~25%.

Goal: Increase philanthropic support for GSBS

Members of the UTMB Development Office worked on behalf of the GSBS to increase philanthropic support. Due to their efforts and the generosity of GSBS alumni and friends, numerous overall pledges, cash gifts, and lifetime memberships were obtained. The funds are used almost entirely to support student scholarships, awards, and travel to professional meetings.

Goal: Continue to support the student and postdoctoral *Committee for Career Development (CCD)* hosted workshops, seminars, and skill building certificate courses.

For FY' 11, GSBS utilized professorship funds to provide major financial support for a multi-week *Advanced Business Management* course involving a contract with the University of Houston Clear Lake (UHCL) business school faculty. In spring 2011, professorship funds also supported a 1 ½ day *Career Forum* held on campus with 10 invited GSBS alumni and friends representing a variety of career paths serving as visiting faculty. Additionally, a UTMB faculty member offered writing courses to international and domestic postdoctoral fellows. Throughout the year, several other seminars and workshops also were supported. These professional development activities were organized by graduate students and

postdoctoral fellows who are members of a Committee for Career Development (CCD) that the GSBS has supported for many years.

Goal: Continue to work to enhance diversity in the GSBS

The GSBS continued to work closely with undergraduate science advisors in minority serving undergraduate schools in Texas and the region to recruit deserving minority and otherwise disadvantaged students to our Summer Undergraduate Research Program (SURP) and to our GSBS PhD programs. For summer 2011, the 20th year of SURP, 30% of participants were underrepresented minorities. Additionally, the GSBS administered two NIH/NIGMS funded minority training programs (“Bridging Master’s Students to the PhD” and “PREPping to a Biomedical PhD”), both of which continued to admit and train predoctoral students during FY’11.

**Goal: Enhance financial support for the GSBS sponsored radio program
*Medical Discovery News***

“MD News”, the brainchild of Drs David Niesel (GSBS Vice Dean) and Norbert Herzog (GSBS Associate Dean for Recruitment & Special Programs) has continued to flourish and grow over the past year. The program now is broadcast on more than 100 stations coast to coast in the US, as well as in Mexico and Puerto Rico. Additionally, the program website records >2 million hits/year from around the world and more than 6 thousand podcasts accessed/month. This past year, the program received financial support from the Galveston Island Kempner Family Fund, the University Federal Credit Union, and the UTMB President’s Cabinet.

Goal: Periodically Conduct External Reviews of GSBS Programs

GSBS graduate programs typically are externally reviewed every 5-7 years. Programs housed physically in one of the School of Medicine departments are reviewed together with the departmental review by the same team of reviewers. In spring 2011, two GSBS programs housed in the UTMB Department of Neuroscience & Cell Biology were reviewed together with the Department. The departmental self study document was developed and provided to reviewers before the site visit. The overall self study document contained self studies of each of the two GSBS programs - *Neuroscience* (Program Director: Dr. Volker Neugebauer) and *Cell Biology* (Program Director: Dr. Darren Boehning). The final report from the review team was highly supportive of the quality of the two programs and highly complimentary of the two Program Directors, in terms of their leadership, their mentorship, and the evident student satisfaction that was relayed to reviewers during their interviews with students in the programs.