

BOARD OF HIGHER EDUCATION
REQUEST FOR COMMITTEE AND BOARD ACTION

COMMITTEE: Academic Affairs

NO.: AAC 12-27

COMMITTEE DATE: February 28, 2012

BOARD DATE: March 6, 2012

APPLICATION OF MGH INSTITUTE OF HEALTH PROFESSIONS TO AWARD THE DOCTOR OF PHILOSOPHY IN REHABILITATION SCIENCES

MOVED: The Board of Higher Education hereby approves the Articles of Amendment of the **MGH Institute of Health Professions** to award the **Doctor of Philosophy in Rehabilitation Sciences**

Authority: Massachusetts General Laws, Chapter 69, Section 30 et seq.
Contact: Dr. Shelley Tinkham, Assistant Commissioner for Academic, P-16 and Veterans Policy

INTENT

MGH Institute of Health Professions (MGH-IHP), a New England Association of Schools and Colleges (NEASC) accredited independent graduate school of health sciences, located in Boston, MA is seeking approval to offer the Doctor of Philosophy degree in Rehabilitation Sciences. Rehabilitation science encompasses basic and applied aspects of the health sciences, social sciences, and engineering related to restoring functional capacity in a disabled person and improving their interactions with the surrounding environment.

The proposed program's intent is to help to fulfill one of the Institute's primary missions: to serve a leadership role in research and scholarship that contributes to advancing care for a diverse society. Graduates of the program will be prepared to enter health professions that require doctoral-level personnel who can conduct independent clinical research in rehabilitation.

Increasing recognition of the huge impact that disabilities have on society and the economy (in particular with the aging population) has led to the need for scientific advances that can improve the effectiveness of rehabilitative approaches, including the establishment of doctoral programs to train a new generation of scientists to conduct research that focuses specifically on rehabilitation, an emerging field. To more directly test the level of interest for the proposed Ph.D. program, the Research and Scholarship Committee at the MGH Institute recently conducted a survey of Institute alumni regarding their interest in a research oriented Ph.D. program. Over 70% of the respondents (n=426) were from the Communication Sciences and Disorders and Physical Therapy programs, and 80% of respondents graduated within the last 8 years. Alumni from this sample are very much in support of the Institute offering a Ph.D. Program in Rehabilitation Sciences with 37 respondents indicating an interest in enrolling within five years. 131 respondents left their names and contact information to be notified if the program is approved.

The proposed interdisciplinary Ph.D. in Rehabilitation Sciences was primarily developed by the Research and Scholarship Committee at the MGH Institute of Health Professions which is chaired by the Associate Provost for Research and has representation from all of the disciplines at the Institute. Additional input was provided from interested researchers and clinicians representing a wide range of health/rehabilitation fields at major collaborating institutions including Harvard Medical School, Massachusetts Institute of Technology, Massachusetts General Hospital, and Spaulding Rehabilitation Hospital.

The proposed program was reviewed, modified and approved via the process for new initiatives at the MGH Institute which included faculty from various academic committees, selected members of the Board of Trustees, and academic administrative leadership. The proposal was forwarded to and authorized by the MGH-IHP Board of Trustees on December 7, 2010.

INSTITUTIONAL OVERVIEW

MGH institute of Health Professions was founded in 1977 and incorporated as a subsidiary of Massachusetts General Hospital in 1985. The Institute's mission is to "prepare health professionals and advance care for a diverse society through leadership in education, clinical practice, research and scholarship, professional service, and community engagement". The Institute offers doctoral and master's degrees, certificates of advanced study and continuing education to practicing professionals as well as to baccalaureate educated individuals entering health care from another field. In 2007, MGH Institute of Health Professions was awarded authority in the Commonwealth of Massachusetts to grant the Bachelor of Science in Radiologic Technology, the Bachelor of Science in Respiratory Therapy, the Master of Science in Dietetics,

the Doctor of Nursing Practice, the Master of Science in Nursing, the Bachelor of Science in Nursing, the Doctor of Physical Therapy, the Master of Science in Physical Therapy, the Master of Science in Speech Pathology, the Master of Science in Clinical Investigation, and the Post-Baccalaureate Certificate in Medical Imaging. MGH Institute of Health Professions is now seeking authority to grant the Doctor of Philosophy in Rehabilitation Sciences.

ACADEMIC AND RELATED MATTERS

Curriculum (Attachment A)

Students must complete a minimum of 42 credit hours. The program is designed to be full-time for the first two years (six semesters including summers) during which time all of the required coursework will be completed. Students will typically enter the dissertation phase of the program in the third year which is expected to take an average of an additional two years to complete. The overall curriculum is divided into three main parts: a set of core courses that are taken by all students; coursework in an area of concentration that is specifically tailored for each individual student; and successful completion and defense of a dissertation.

As part of the course of study, students are required to register in each of the first six terms for an interdisciplinary seminar in rehabilitation sciences in which ongoing research (by current students and faculty) and current publications, events and trends related to rehabilitation research will be presented and discussed. Students are also required to complete two full-time mentored research experiences in each of the first two summers of the proposed program during which time they will conduct research under the direction of a senior researcher in rehabilitation sciences. Students are also required to enroll for one term in a mentored teaching practicum that is connected with a graduate course in their clinic specialty. In addition, each student will work closely with a primary faculty advisor and a committee of selected faculty members (Academic Advisory Committee-AAC) to create an individually designed plan of study that will enable the student to become an expert researcher in his/her chosen area of concentration. After completing coursework, each student must pass a qualifying examination (which entails writing a National Institute of Health (NIH)-style grant application for a project the student plans to pursue for a dissertation) before being considered a candidate for the doctoral degree and being permitted to move on to the dissertation phase of the program.

The dissertation will be comprised of a series of papers formatted for submission to peer-reviewed journals for publication along with an introduction chapter and an overall conclusions chapter. This approach is modeled after the format that has been used successfully for some time in several European and Scandinavian countries and is being increasingly adopted by academic departments in the US as a way to facilitate the publication of dissertation research. The final product must be successfully presented and defended orally before a dissertation committee comprised of faculty with expertise in areas related to the dissertation topic.

Admission Requirements

The institution plans to admit 4-6 new students per year. In order to be considered for admission into the proposed program, applicants must:

- Be clinically-certified and/or licensed in a rehabilitation field (e.g. physical or occupational therapy, speech-language pathology, rehabilitation nursing, psychiatry etc),
- Submit a written personal statement;
- Submit written recommendations from former professors/clinical supervisors/colleagues;

- Provide evidence of scores from the Graduate Record Examination (GRE);
- Achieved a grade point average equivalent to a B (3.0) or higher for their graduate degree in a clinical rehabilitation field; and
- Complete a personal interview.

Tuition and Fees

MGH-IHP will provide full tuition support to the core cohort of 4-6 new students per year for Institute courses. Students will be responsible for covering the cost of any course taken outside the MGH Institute. In addition, students will be provided with the equivalent of half-time positions (Clinical/Teaching/Fellowships) at the MGH Institute (for supervision in the in-house clinics and/or involvement in teaching) or at one of the participating/collaborating clinical sites, primarily Massachusetts General Hospital and/or Spaulding Rehabilitation Hospital. These sites have committed to providing this type of flexible part-time employment to provide an income/stipend to defray students’ living expenses (estimated at \$30,000 – \$40,000 per year) during the first two years of their program while they are completing program coursework.

Projected Enrollment

The projected enrollment is 4-6 students per year. MGH-IHP expects a high retention rate because of the quality of the students being admitted and the level of attention each will receive.

PROGRAM ENROLLMENT PROJECTION

| | # of Students Year 1 | # of Students Year 2 | # of Students Year 3 | # of Students Year 4* |
|----------------------|-----------------------------|-----------------------------|-----------------------------|------------------------------|
| New Full Time | 4-6 | 4-6 | 4-6 | 4-6 |
| Continuing Full Time | n/a | 4-6 | 8-12 | 12-18 |
| New Part Time | n/a | n/a | n/a | n/a |
| Continuing Part Time | n/a | n/a | n/a | n/a |
| Totals | 4-6 | 8-12 | 12-18 | 16-24 |

RESOURCES AND BUDGET (Attachment B)

Administration and Faculty

The proposed Ph.D. Program in Rehabilitation Sciences will be housed within the Center for Interprofessional Studies and Innovation (CIPSI) at the MGH Institute of Health Professions. There are currently 24 members of the MGH Institute Faculty (21 full-time and 3 part-time) who hold primary academic appointments in either the School of Health and Rehabilitation Sciences or School of Nursing, and who are eligible to participate in the new Ph.D. program. The Institute has planned for costs associated with the hiring of additional adjunct faculty, and one half time administrative assistant for the program, and is committed to hiring two senior researchers for the proposed program.

Library and Information Technology

MGH-IHP provides students, faculty, and staff access to a universal set of learning, information, and technology resources in addition to resources specific to each academic program. Treadwell Library provides resources and services to the Institute community. Its collection covers a broad range of clinical and research areas, and most of the collection is easily accessible online from any location. Access includes all but two of the library's online databases and 99% of 1,400 periodical titles to which the library subscribes. The library also offers access to several thousand more electronic journals through database subscriptions. Interlibrary loan for journal articles is available to all students and faculty regardless of location and is available for book loan to onsite students and faculty. Access to other libraries, such as the medical library of Spaulding Rehabilitation Hospital and Harvard Medical School's Countway Library, is also available. In addition, students, faculty, and staff who are Massachusetts residents have access to the Boston Public Library.

Financial Resources

The budget for the proposed program is provided in Attachment B.

PROGRAM EFFECTIVENESS

The program curriculum, policies and procedures related to the proposed program will undergo annual internal review (and modification if required) by the program committee comprised of all of the MGH Institute and adjunct faculty that are associated with the proposed Ph.D. program.

All academic programs at the MGH Institute of Health Professions are scheduled for periodic review by external committees comprised of experts in each of the disciplines being evaluated. Under this system, the proposed program would be evaluated by an external committee of experts in rehabilitation research every 5 years.

Additionally, formative assessment of student performance will be achieved through performance in course work, through an annual written review by students' advisors with attention to student progress toward completion, and the comprehensive examination process.

EXTERNAL REVIEW AND INSTITUTIONAL RESPONSE

External Review

The proposed program was reviewed by the visiting committee of Dr. Robert Burkard, State University of New York at Buffalo, Dr. Susan Smith, Drexel University, Dr. Scott Ward, University of Utah, and Dr. Kathy Yorkston, University of Washington-Seattle. The evaluation included the team's review of the written proposal submitted to the Massachusetts Department of Higher Education (MA-DHE) by MGH-IHP to offer the *Doctor of Philosophy in Rehabilitation Sciences* degree, and the site visit conducted from December 4-6, 2011. During the site visit additional documents were provided by the college, and information was also obtained from various faculty, staff, students and alumni. The committee toured the main campus, new space currently under construction, student space, and faculty offices.

The visiting committee believed the proposed program was consistent with the mission and vision of MGH-IHP and described it as a creative and innovative Ph.D. program that brings an interdisciplinary approach to the education and research training of clinicians. The Committee felt strongly that the clinical placements in regional hospitals will not only aid in the financial support of the Ph.D. students, but will also provide a ready source of experimental subjects for their research efforts. Moreover, it was believed that mentorship from a group of experienced faculty (including adjunct faculty) will enrich the students' research experience.

Overall the visiting committee's impressions were very favorable with only a few exceptions in the area of planning, faculty, and the academic program and structure, reflected in the following recommendations:

- Expand the description of the role and constituency of the program's Executive Committee in the management and oversight of the program and its students.
- Create a tool for students to evaluate the non-structured learning experiences (such as quality of mentorship, success of the research and teaching experiences).
- Change the current course evaluation process to assure a substantial student response rate in the evaluation process.
- Describe, in writing, the process of matching a student to possible mentors as well as appropriate clinical placements.
- Specify a time limit of years to degree completion, including an appeals process for an extension.
- Clarify the role of adjunct faculty on Ph.D. student committees (including dissertation committees).

Institutional Response

In response, the MGH-IHP articulated the role of the Executive Committee and the process of matching a student to possible mentors as well as appropriate clinical placements. Likewise, the institution developed an evaluation plan to collect student outcome data, data regarding non-structured learning experiences, such as the advising prior to the qualifying examination and the quality of mentoring during the dissertation, student self-assessments (to be collected annually) and student evaluations for each course. The institution has established seven years as the maximum amount of time in which a student must complete the degree unless the time limit is successfully appealed in writing. The institution clarified that adjunct faculty may serve on Ph.D. committees, including academic advising, qualifying examination and dissertation with approval from the Executive Committee. However, all student committees must be chaired by regular IHP faculty to better ensure quality control. The institution clarified that junior faculty members are all mentored through the Institute's performance review process, which is managed by the academic deans. All faculty members can also take advantage of services and offerings provided by the Office for Research Career Development at the Massachusetts General Hospital (e.g., career counseling, grant writing workshops, workshops on giving scientific presentations, etc.) which is particularly committed to early career development. The Visiting Committee indicated that the MGH-IHP responded favorably to all of its recommendations.

PUBLIC HEARING

The required public hearing was held in the Board of Higher Education office on February 14, 2012. No comments were offered in opposition to the proposed program.

STAFF ANALYSIS AND RECOMMENDATION

After a thorough evaluation of all documentation submitted, staff is satisfied that the proposal of MGH Institute of Health Professions to award the **Doctor of Philosophy in Rehabilitation Sciences** degree meets the requirements for NEASC-accredited institutions outlined in 610 CMR 2.08. Recommendation is for approval.

ATTACHMENT A: CURRICULUM OUTLINE

| Major Required (Core) Courses (Total # of courses required = 11) | | |
|--|---|--------------|
| Course Number | Course Title | Credit Hours |
| RS910 | Introduction to Concepts and Research in Rehabilitation Sciences | 3 |
| RS920 | Research Design in Health and Rehabilitation Science | 3 |
| RS930 | Health and Rehabilitation Sciences Statistics I | 3 |
| RS940 | Health and Rehabilitation Sciences Statistics II | 3 |
| RS950 | Advanced Measurement Theory for the Health and Rehabilitation Sciences | 3 |
| RS960 | Interdisciplinary Seminar in Rehabilitation Science | 6 |
| RS970 | Mentored Experiences in Research | 6 |
| HP712 | Foundations of Teaching and Learning | 3 |
| HP714 | Teaching Practicum | 3 |
| | | |
| | | |
| | SubTotal # Core Credits Required | 33 |
| Elective Course Choices (Total courses required = 0) (attach list of choices if needed) | | |
| HP999 | Independent Study | 0 - 9 |
| | Supplemental Coursework (could be taken at outside institutions and accepted as transfer credits) | 0 - 9 |
| | | |
| | | |
| | | |
| | | |
| | | |
| | SubTotal # Elective Credits Required | 9 |
| Curriculum Summary | | |
| Total number of courses required for the degree | | 12 |
| Total credit hours required for degree | | 42 |
| Prerequisite, Concentration, Dissertation or Other Requirements: | | |
| Qualifying Examination | | |
| Dissertation | | |

ATTACHMENT B: BUDGET PROJECTION

| One Time/ Start Up Costs | Cost Categories | Annual Expenses | | | |
|--|--|--|---------------|---------------|---------------|
| | | Year 1 | Year 2 | Year 3 | Year 4 |
| \$40,260 | Full Time Faculty (Salary & Fringe) | \$193,156 | \$257,311 | \$267,007 | \$277,056 |
| | Part Time/Adjunct Faculty (Salary & Fringe) | \$15,000 | \$20,000 | \$20,600 | \$21,218 |
| | Staff | \$34,248 | \$35,541 | \$36,879 | \$38,268 |
| | General Administrative Costs | \$178,825 | \$226,208 | \$234,562 | \$243,230 |
| \$2,000 | Instructional Materials, Library Acquisitions | \$2,060 | \$2,122 | \$2,186 | \$2,252 |
| | Facilities/Space/Equipment | \$16,583 | \$17,080 | \$17,593 | \$18,121 |
| | Field & Clinical Resources | | | | |
| \$5,000 | Marketing | \$5,000 | \$2,000 | \$2,060 | \$2,122 |
| MA Board of Higher Education Processing Fee: \$4,500 | Other (Specify) | Support for students to attend professional meetings : \$6,000 | \$6,180 | \$6,365 | \$6,556 |
| \$51,760 | TOTALS | \$450,872 | \$566,442 | \$587,243 | \$608,823 |

| One Time/Start-Up Support | Revenue Sources | Annual Income | | | |
|----------------------------------|------------------------|----------------------|---------------|---------------|---------------|
| | | Year 1 | Year 2 | Year 3 | Year 4 |
| | Grants | | \$150,000 | \$150,000 | \$150,000 |
| | Tuition | | | | |
| | Fees | | | | |
| | Departmental | | | | |
| \$51,760 | Reallocated Funds | \$450,872 | \$416,442 | \$437,243 | \$458,823 |
| | Other (specify) | | | | |
| \$51,760 | TOTALS | \$450,872 | \$566,442 | \$587,243 | \$608,823 |