

#### **Student Participation in Research and Scholarship Activities**

Participation in extracurricular research/scholarly activities is a beneficial and rewarding aspect of medical education. Understanding what constitutes research excellence and enabling physicians, whether they actively engage in research, to appreciate the importance of and recognize good research is critical to the future health of our nation. Throughout all physicians' careers, they must recognize and employ evidence-based scientific advances to provide the very best available care for the populations they serve.

Participation in research/scholarly activities is essential for the professional development of students, representing an important mechanism for students to witness the challenging processes of scientific discovery and the manner in which subsequent advances in knowledge are translated into advanced medicine and patient care. Understanding and applying good science in one's practice is critical to the health of our state, our nation, and our world. Participation in research/scholarship activities allows students to develop analytic and critical reasoning skills, and the abilities to study medical literature and appraise the quality of published findings. By acquiring the capacity to keep up to date with scientific discovery, coupled with the clinical perspective, our students will be able to understand health and disease, and to practice true evidence-based patient care and effective management of patients.

At the Hackensack Meridian School of Medicine, student participation in research and scholarship activities must be consistent with, and documented in, their Individualized Learning Plans (ILP). ILPs fall under the purview of the Office of Student Affairs and Wellbeing. Further, before the student participates in such extracurricular activities, they must be deemed to be in "good academic standing" and not be classified as "at risk." These important designations are also determined by the Office of Student Affairs and Wellbeing. Once such decisions are made, the information is conveyed to the Associate Dean of Research and Graduate Studies. As an "honest broker" in this circumstance, the Associate Dean forwards appropriate information regarding student status to the Director of Student Research and Scholarship Programs.

It is the policy of the Office of Research and Graduate Studies that all students of good academic standing - that is, who have earned "passing" grades - are encouraged to pursue a research/scholarship project under the mentorship of an experienced faculty member, scientist, clinician, or community researcher. Ideally, the mentor is a member of the Hackensack Meridian School of Medicine, but can also be an established researcher/leader/faculty member from another institute/research enterprise.

At the Hackensack Meridian School of Medicine, the undergraduate medical curriculum has three distinguishing phases: Phase 1 with a focus on integrated preclinical science and community-based immersive education; Phase 2 with a focus on clerkships and related training; and Phase 3, the highly individualized and self-directed 4<sup>th</sup> year, in which students may pursue several scholarly activities - including dual degrees/certificates, research/scholarship, community-based projects, specialty immersion, or entry into residency. In addition, students may elect to accelerate entry into Phase 3 after taking their USMLE Step 1 examination during the clerkship portion (but before the advanced clerkship

segment) of Phase 2. It is important to note that although research/scholarship activities conducted during Phase 1 and 2 may serve as an entry point for the work performed in Phase 3 Research Electives, they may not be used to receive academic credit.

## How to find research/scholarship opportunities?

The Office of Research and Graduate Studies maintains and makes available a list of researchers and research/scholarship opportunities for student participation. The list contains names and contact information of individuals, and a description of the potentially available research/scholarship projects. Students are encouraged to contact the individuals on the list and ask in detail about possible research/scholarship opportunities and mentorship.

It is essential that students understand the expectations of potential mentors and be clear about their time commitment and intentions. If time is an issue, it is recommended that students investigate clinical, retrospective, and epidemiological studies that have more flexible scheduling requirements. It is further suggested that individual students not become involved in more than one project at any given time to ensure that they do not overly commit their time and effort to the project and potentially interfere with formally scheduled course studies and related activities. Finally, students should discuss the projects with a member of the Office of Student Affairs and Wellbeing and the Director of Student Research and Scholarship Programs to seek further advice and guidance and complete the Individual Student Research form.

The Office of Research and Graduate Studies is committed to helping guide students towards specific research and scholarship opportunities and committed to their success. The Director of Student Research and Scholarship Programs position has been created to facilitate the identification of research opportunities, clarify student and mentor expectations, and monitor overall progress of students and the program. Dr. Zhiyong Han, from the Hackensack Meridian School of Medicine Department of Medical Sciences currently serves in this role.

Through the Dean's Award small grants program, the Hackensack Meridian School of Medicine has three types of research funding available for students, administered by the Office of the Dean and the Office of Research and Graduate Studies:

### Small grants (up to \$5,000 each):

Such funding is available on a competitive basis in the second half of Phase 1 to groups of students (with a priority on interdisciplinary groups), pending satisfactory academic performance in required courses. Students must apply in groups, with a clear explanation as to the roles of all in the research group; interdisciplinary groups receive priority.

#### Scholarship/research grants (up to \$10,000 each):

This funding will be available to students who elect to remain for the fourth year (Phase 3) to conduct research. It will not be restricted to groups of students, although students will be encouraged to collaborate across disciplines and a formal research grant application (modeled on NIH RO3 awards) will be required. Grant applications may be submitted at any time.

# Travel funds (up to \$2,000 each):

Students may apply for partial funding for travel and meetings fees to present research findings from projects in which they served in a leadership role. In addition, students will be strongly encouraged and supported to apply for travel awards from the organizations that host their presentations, and to inquire of their mentors if travel funds are available either through their grants or through their respective departments.