MIT/ Woods Hole Joint Program in Oceanography and Applied Ocean Science and Engineering

The Joint Program of the Woods Hole Oceanographic Institution (WHOI) and the Massachusetts Institute of Technology offers advanced degrees in oceanography and applied ocean science and engineering. Graduate study encompasses virtually all of the basic sciences as they apply to the marine environment: physics, chemistry, geology, geophysics, and biology. Students who choose applied ocean science and engineering may concentrate in the major fields (civil, environmental, mechanical and ocean, and electrical engineering). More than 170 scientists and faculty from the two institutions participate in the joint program. There are currently 127 students enrolled in the five areas of study offered: biological, chemical, or physical oceanography; marine geology and geophysics; and oceanographic engineering.

Since all MIT faculty involved in the joint program are members of an academic department, their individual accomplishments and awards are reported through those departments. These include the departments of Civil and Environmental Engineering, Mechanical Engineering, Electrical Engineering and Computer Science, Biology, and Earth, Atmospheric, and Planetary Sciences.

Joint Faculty Retreat and Research Presentations

On November 13, 2014, an all-day joint faculty meeting was held at the Marriott Hotel in Kendall Square, Cambridge. This annual event features presentations on current oceanographic research carried out by scientists at each institution and also serves as an opportunity to introduce new members of the faculty and scientific staff. Approximately 45 faculty and staff attended the meeting, which featured more than a dozen research talks. Midway through the meeting, Professor Edward Boyle and James Yoder, vice president for academic programs and dean at WHOI, conducted a short forum on issues relevant to the upcoming External Review.

External Review of the Joint Program

An External Review of the Joint Program was conducted from December 2–4, 2014. The members of the External Review Committee were asked to review the Joint Program in general and to address the following points in particular:

- Content, breadth and quality of the curriculum
- Inclusion in the curriculum of new advances in ocean science, e.g., the role of the oceans in the Earth system
- Quality of the student research program and its products
- Opportunity for student interdisciplinary research across the fields of ocean science
- Preparation of Joint Program students for post-graduation opportunities, including adequacy of student mentoring activities
- Quality of teaching and advising (student input and review of teaching evaluations)

- Adequacy of student financial support
- Quality of student life, including housing, logistical support, and the climate for women, international students, and members of minority groups
- Health of the MIT and WHOI partnership, and opportunities for growth, such as inclusion of additional MIT departments and the possibilities of adding external partners (e.g., closer relations with Harvard)
- Management of the program including institutional commitments, committee structure, and the contribution of each institution

The committee's report was issued on February 20, 2015, and their comments and recommendations were sent to Professor Maria Zuber, MIT's vice president for research. A response will be formulated once the document has been carefully reviewed by both institutions, and will be summarized in the Joint Program's next report to the president.

Edward Boyle
Director
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