Department of Bioengineering Graduate Program Review - Response to the Review Committee Report April 15, 2011

The Department of Bioengineering would like to thank the Graduate Program Review Committee for their detailed analysis of our programs. We appreciate their constructive feedback and have prepared this document in response to their report. Like the self-analysis document, this memo was written by members of the executive committee, and reviewed by me in my role as Chair. We have grouped our responses under eight sub-heading that address the major recommendations of the Committee.

Develop a Strategic Planning Process:

We accept this recommendation as an action item and agree to work toward the formulation of a plan that will consider short- and long-term strategic goals and their implementation. Many of the items noted below will be considered in that planning process. We see as the outcome of the process a living document that will incorporate suggestions of BIOE faculty and will be revisited every other year at our annual departmental retreat.

Establish an Industrial Partners (Affiliates) Program:

The BIOE Affiliates Program (BIOE-AP), which was in the works at the time of the review, was launched in late March. We initially referred to this as a "corporate affiliates program" but realized that some of the most promising connections we would hope to foster would be with individuals interested in new biomedical technologies, and with nonprofit organizations. As a consequence, the new organization is called an Affiliates Program, and is also open to individuals (whether they are alumni, entrepreneurs, executives or engineering between companies, or individuals interested in expanding their horizons) and nonprofit organizations as well. A key aim of the BioE-AP is to find internships and jobs for our students, although it should also be a mechanism for brainstorming with the corporate sector, and, through gifts, a source of revenue for departmental operations. It is now advertised in various venues, including on our web site. The new BIOE-AP was designed to complement, rather than compete with, other affiliate programs such as UWEB-21 and MoIES affiliate programs; the fee structure is adjusted for dual membership.

Educate and Mobilize Alumni:

This recommendation is one of the goals of the department's communication strategy. As a first step, we recently released a survey that collects alumni demographics and occupations, identifies the alumni's preferred communication tools, obtains feedback about existing content (web site and eNews), determines how alumni currently engage with the department, and assesses interest in new activities/events. Preliminary survey results have been collected and will be analyzed by the communications team in late April. The results will also inform other areas of strategic planning.

Faculty hiring in new growth areas:

As described in the self-study document, the department completed a very successful recruiting campaign last year that resulted in three new tenure-track positions and one 0% joint position with Pediatrics. Additionally, we have grown the ranks of research faculty with four new hires. That said, we

agree that we need to build a strategic plan to guide future decisions. While hiring in this year is already tracked into imaging, new faculty hiring will be based on the strategic plan to fill identified gaps in core areas. One area of opportunity that we will consider is the potential to partner with other departments through the new Institute for Molecular Engineering and Science (MolES).

Department communicating student success stories:

The department's communications plan was updated to incorporate this recommendation. Over the next few months we will revise the website to increase visibility of existing student profiles and also write new profiles representing a cross-section of students and programs, featuring themes of research, humanitarian activities and lifestyles. The profiles will be located in a new section under "people" and "profiles". For initial content, we will use existing student profiles (now under education) and convert eNews features into profiles. New profiles will be written to provide a balanced view of degree programs and research themes.

Establish External Advisory Board:

The department has, for a decade, had an External Advisory Board; it met last summer. This board has traditionally focused on our academic programs. Last summer the Board recommended changes to the membership and meeting schedule: create a subcommittee of industrial partners and convene annual meetings to advise the department on academic and operational issues. Their reports would be shared with the full Board that would meet every three years. The meetings would be lengthened to a full day. With the creation of the BioE-AP, we are taking a step toward creating the industrial subcommittee. The subcommittee would provide advice about changes in the field that impact curriculum and research, and also would be consulted in the development of new programs such as the planned non-research MS track.

No increase in UG enrollments without additional resources

The quality of our undergraduate program is of paramount importance, and the current class size of ~50 is as large as we can support without adding instructors, laboratories and other funding-intensive resources. We will not increase in the size of the UG enrollment without prior availability of new resources from the College of Engineering or the UW central administration. Given reduced state funds, continuing the program at the current size, without restoration of the high demand funding, is not sustainable in the long run.

Faculty development

Formal Mentoring program. The department currently has a collegial atmosphere, but no formal structure for senior members of the department to mentor junior and new faculty. Junior faculty need assistance in grant writing, scholarly effort, networking, teaching, and general management of responsibilities and time. The department will convene a small group of senior and junior faculty to decide on the kind of formal mentoring process to make available. For example, one could arrange monthly lunch meetings to develop an informal relationship between mentor and junior faculty followed by regular working lunches or other meetings to discuss the workings of the department, potential collaboration, career development, scientific, teaching, and service obligations. In addition to

these more general mentoring activities, junior and mid-junior faculty will be provided with leadership roles in various aspects of the department as a prelude to promotion to senior positions and more substantive leadership responsibilities.

Establish awards committee: Retention of productive faculty through recognition by awards helps develop a cohesive, dedicated and loyal faculty. Not only do awards recognize individual accomplishment, they also raise the national and international profile of a department. The department has just established an awards committee of senior and retired faculty whose sole purpose is to identify potential award opportunities, to match awards to possible awardees, and to make the necessary nominations.