## Example of Expectations Regarding Advising

## From the Biomedical Engineering Graduate Interdisciplinary Program

Prior to the start of the first year, the Ph.D. Committee will assign all incoming students a preliminary advisor. In the first year, because incoming students have often not fully developed their research ideas, this advisor serves primarily as a mentor. These mentors provide advice and guidance to the students with a priority on helping the students to settle in to the program as they begin their graduate studies. Given that student research interests are likely to change through the course of the first year, it is possible for students to request a change in advisor at the end of the first year. Any such changes will first be agreed upon by the student, the old and new advisors in question, and the Ph.D. Committee. It is the responsibility of the student to maintain frequent contact with their advisor. Moreover, students are strongly advised to cultivate relationships with one or more of the faculty in the period between the 1st year and candidacy; this is especially important for the development and writing of the 2nd year research paper. Students should avail themselves of opportunities to meet with professors during their office hours, or contact them via email to arrange an appointment at a mutually convenient time. Generally speaking, "cultivating a relationship" means staying in good touch with a professor about how the student is progressing on his or her research project(s).

## Professional Interactions with Faculty

Faculty are dedicated to the training of Ph.D. students. For us, this is one of the most rewarding aspects of our academic positions. Students can anticipate being able to meet on a fairly regular basis with their advisors—perhaps two to four times a month. Naturally, though, faculty have very busy schedules. In order to maximize the benefit that students receive from faculty, therefore, it is important that they prepare thoroughly ahead of scheduled advisory meetings. Students should plan on emailing drafts of papers and outlines of ideas to faculty ahead of their meetings in order to ensure that the meeting time itself is spent focusing upon making progress rather than simply catching faculty up.

A BME GIDP faculty member and a student will be assigned as preceptors for each first year student. It is expected that both preceptors be available to guide the first year student through the processes of selecting classes and lab rotations appropriate to the student's research interests, and to answer questions the student may have regarding the program. Preceptors are required to attend the BME Student Orientation, in August, as well as the Welcome Back Event.

It is recommended that the faculty preceptor meet with the student at least once a semester, and that the student preceptor and the first year student communicate during monthly student meetings. E-mail is strongly recommended for additional communication and when face-to-face meetings cannot be organized. Both student and faculty preceptors should read through the BME Student Handbook to ensure that they are up-to-date on policies and procedures.

Each student should select a mentor no later than the end of the second semester in the program. A mentor is a BME GIDP (Graduate Interdisciplinary Program) faculty member who will serve as an advisor, supporter, tutor, and role model. A mentor is expected to interact with the student on a regular basis providing guidance, advice, and the intellectual challenge necessary for the student to complete the degree program. Except in the case of self-funded Master's students, the student is expected to work with the mentor and the BME Program to identify the source of the student's financial support after the initial year.

The BME GIDP major advisor (mentor) cannot serve as the student's advisor for a non-BME minor.

The following suggestions may be of assistance to graduate students in choosing a mentor. There are two broad areas that come into play when choosing a mentor. The first area has a professional basis and the second a personal basis. The choice of a mentor may be the single most important decision made during graduate training. When considering the professional aspects of your selection of a mentor, the following questions may prove helpful:

- 1. What is this individual's reputation outside the University? Remember, when you have completed your dissertation and you are looking for a position, your mentor's reputation will initially be your reputation.
- 2. Does your prospective mentor have the funding available to support your research and stipend for at least four years? This area is probably the most problematic for graduate students. The money needed to fund your research project will most likely come from your mentor's laboratory. Therefore, you will need to know not only the amount of money available but also the stability of funding.
- 3. How does your prospective mentor's lab operate? You should critically evaluate the day-to-day operations of the lab and understand the goals of the lab and where you will "fit in". You should also understand the role of your mentor in those operations. Some principal investigators have lab managers or research assistants who run the laboratory. You should know almost as much about these individuals as about your prospective mentor.
- 4. What are the professional requirements of the prospective mentor on such issues as work habits, ethics, sharing of ideas, lab meetings, journal clubs, and authorship on papers?
- 5. What is this individual's reputation outside the University? Remember, when you have completed your dissertation and you are looking for a position, your mentor's reputation will initially be your reputation.
- 6. Does your prospective mentor have the funding available to support your research and stipend for at least four years? This area is probably the most problematic for graduate students. The money needed to fund your research project will most likely come from your mentor's laboratory. Therefore, you will need to know not only the amount of money available but also the stability of funding.

- 7. How does your prospective mentor's lab operate? You should critically evaluate the day-to-day operations of the lab and understand the goals of the lab and where you will "fit in". You should also understand the role of your mentor in those operations. Some principal investigators have lab managers or research assistants who run the laboratory. You should know almost as much about these individuals as about your prospective mentor.
- 8. What are the professional requirements of the prospective mentor on such issues as work habits, ethics, sharing of ideas, lab meetings, journal clubs, and authorship on papers?

On the personal side, the answers to the following questions may be extremely helpful:

- 1. Is the personality of my prospective mentor compatible with my own?
- 2. Is this individual going to be responsive to my needs and, just as important, am I going to be responsive to his or her needs? When you join a lab, your mentor will have certain expectations of you, and these should be identified when evaluating a prospective mentor. By the same token, what are your expectations of a mentor?
- 3. What do other students and faculty think about your prospective mentor? The collegial relationship of your prospective mentor with others will influence your interaction with other laboratories.

Do not forget the importance of the choice of a mentor, and do not make that choice without a great deal of thought. Talk to other people (including the mentor's previous students and alumni of the program) about your prospective mentor and ask probing, but not inflammatory, questions. Provide yourself with honest answers to both the professional and personal aspects of your decision. Laboratory rotations are an excellent way to learn more about prospective mentors and labs, and can provide opportunities to answer these questions before choosing a mentor.

Once you have identified a mentor, you and your mentor should inform the BME GIDP Program of this selection in writing. The letter should indicate that the professor has agreed to serve as your advisor for your graduate studies; they will endeavor to ensure that you have financial support during your tenure as a graduate student and that you complete the requirements for the Master's or Doctoral degree in a timely fashion. It should be signed by both the student and faculty member and submitted to the BME Program Coordinator (See Appendix for sample letter).

## From the GIDP in Statistics

By the beginning of the second semester in residence the student must choose an advisor from among the Regular faculty of the GIDP in Statistics (see Appendix 1). Until such time as the student has chosen an advisor, the chair of the GIDP Recruiting & Admissions (R&A) Committee, or another GIDP faculty member designated by the GIDP Chair, serves as the student's temporary advisor.