

Quantitative Biology Initiative

Executive Committee Meeting Notes

March 30, 2009

Attendees: Bob Hausinger, Peter Bates, David Arnosti, Christina Chan, Wenjiang Fu, Helen Geiger, Claire Vieille, Bill Wedemeyer

Not able to attend: Robin Buell, Bob Cukier, Shelagh Ferguson-Miller, Leslie Kuhn, David Weliky

Agenda:

1. Announcements. (1) The Colleges of Engineering and Human Medicine are exploring the possibility of establishing an Institute of Engineering and Health. Dr. Martin Yarmush (Harvard) has been visiting campus to help plan this major initiative that could involve a new building, 20-45 faculty lines, and possibly a Bioengineering graduate program along with other educational programs. He envisions six Research Centers, some of which overlap the interests of QBI. Peter Bates, Bob Hausinger, and Kris Chan met with Dr. Yarmush to discuss explore how this Institute could interact with QBI in a synergistic manner. (2) In mid-April, Robert Elston (a pioneer in linkage analysis at Case Western) will be presenting a seminar in Epidemiology that should interest QBI scientists working in the area of Bioinformatics and Genomics. (3) A Hannah Chair candidate indicated that Cornell University plans to develop a Quantitative Biology program and was very interested in QBI as a model.
2. Summer workshop on QB courses (Bob Hausinger). QBI will sponsor a one-day summer workshop to discuss our current QB courses (QB 826, 827, 828, and 829) and how to improve them. Information on the course contents will be made available on the web, and student input will be solicited to assess whether the courses are meeting their needs. Additional instructors will be sought for teaching of new or existing modules. All QBI members will be invited to attend, but selected individuals will be recruited for participation. Lunch will be provided as an incentive to generate good attendance by interested faculty and students.
3. Bioelectronics Research Area (Mark Worden). Guest Mark Worden (Chem Eng) presented a summary of interdisciplinary campus efforts in the area of bioelectronics for consideration as a possible new research emphasis of QBI. This research theme could enhance QBI interactions with faculty and students in Engineering, and some aspects of this topic are clearly quantitative in focus. On the other hand, the title was viewed as perhaps too narrow, and topics with a broader scope (e.g., molecular bioengineering, biotechnology) were discussed as alternative potential themes. Other considerations included concern about whether our courses would meet the needs of students in this area, whether QBI should emphasize an emphasis on translational research, and whether this area fits the mission of QBI. For now, QBI will continue to partner with the bioelectronics group where appropriate (e.g., Bob Hausinger provided a letter of support for a GAANN proposal), and the topic of research focus areas will be revisited in the future.
4. External Advisory Board (Peter Bates). Using names suggested by the EC, Peter Bates create a poll to query the Executive Committee members regarding preferences for inviting scientists to serve as EAB members. On the basis of that poll, Peter will contact the appropriate individuals to gauge their interest and create an EAB with about 5

members. He will then organize a set of documents that provide an overview of QBI and the QB program, and coordinate a conference call to get some feedback on our efforts. One possible topic for consideration is the research focus areas as mentioned above.

5. QBI-related proposal activities. NIH T32 proposals are moving forward in the areas of Molecular Biophysics (with Bob Hausinger as PI) and Cell and Molecular Biology (with David Arnosti as PI) with a May 26 deadline. Wenjiang Fu organized an SPG pre-proposal in the area of Genomics; although this was not successful it can serve as a nexus for future efforts to develop this area.
6. Nominees of new EC members (Bob Hausinger). Due to the need to elect four new EC members during the next election cycle, several names were discussed for directed invitation to run for this committee. A general invitation to all QBI members will be sent out later this semester.
7. Graduate Recruiting Committee (Wenjiang Fu). Since the last Executive Committee meeting, 12 requests/applications were received (2 subsequently withdrew and three were incomplete) and 7 were reviewed. Three students were admitted, three denied, and one is still pending. Of the three admits, one was awarded a summer 2010 research fellowship and the other two were provided \$2K QBI supplements. The committee suggested that future efforts should target undergraduate students at MSU and other universities, perhaps by offering a one- or two-week QBI camp supported by the conference funds.