

Quantitative Biology Initiative
Executive Committee Meeting Notes
December 12, 2007

Attendees: Bob Hausinger, Claire Vieille, David Arnosti, Wolfgang Bauer, Kris Chan, Bob Cukier, Shelagh Ferguson-Miller, Wenjiang Fu via Skype connection from China, Marianne Huebner, Leslie Kuhn, , Bill Wedemeyer, David Weliky, Maria Zavodszky, and Helen Geiger

1. Status of QBI within the University—C. Vieille and B. Hausinger

- CNS Dean Kirkpatrick approved the co-directors, which implies acceptance of the Bylaws.
- Thanks to S. Ferguson-Miller's efforts, seminar/symposia funds were made available from MAES (\$35K split 50:50 with GEDD) for each of the next 5 years.
- Thanks to the Tom Sharkey (BMB) negotiations and S. Ferguson-Miller's efforts, QBI has commitments from CNS, MAES, CHM, COM for Administrative help (½ Helen) and 1 month summer salaries for two co-directors.
- We have a very small level of funding for office supplies from IDC
- 4 fellowships from the Grad School will continue at least in 07-08; S. Ferguson-Miller is attempting to resolve the confusion at higher levels about the previously promised continuing support of these fellowships by the Provost. (This confusion was subsequently resolved and the 4 fellowships will continue.)
- A big “**thank you**” goes to the former QBMI co-directors for their efforts in making QBI a reality: B. Cukier, S. Ferguson-Miller, and L. Kuhn.

2. Assignment of Committee Chairs and Charges of the Committees—C. Vieille and B. Hausinger

- For all committees, the committee chairs should plan to work with the QBI co-directors and EC to identify additional members (some of whom have indicated their interest already) and further define what needs to be done.
- Graduate Recruiting: This committee needs to get the word out to current and prospective students, and must define procedures for admittance into the program. Wenjiang Fu was selected as Chair.
- Grad Fellowship: This committee is responsible for advertising and administering support of the fellowships. Claire Vieille was selected as Chair.
- Grad Curriculum: This committee is responsible for overseeing development of QB courses and facilitating coordination with other units. Bill Wedemeyer was selected as Chair.
- Seminar: Plan SATE and other seminars. David Weliky was selected as Chair.
- Conference: Plan QBI conferences. David Arnosti was selected as Chair.

- Public Relations: Plan updates to web site and advertising literature, organize open house activities. Maria Zavodszky was selected as Chair.
- Development: Identify new internal and external grant funding opportunities as well as private funding. Kris Chan was selected as Chair.
- Infrastructure: Interface with computer and other facilities on campus. Bob Cukier was selected as Chair.

3. QB Grad Program update—C. Vieille and B. Hausinger

- New affiliated departments and programs: Paperwork to add CMB, Genetics, Epidemiology, and Mechanical Engineering is now going through the University authorization channels. Claire will follow up to check on ZOL and Neuroscience.
- QB Course Schedules and instructors
 - QB826: Started in Summer 2007 and led by C. Vieille and M. Zavodszky. Excellent feedback was obtained from the 10 students from 10 different programs. The course has been reduced from 2 credits to 1 credit. Beginning in August 2008, the timing of the course (the week before orientation week in August) will allow students to sign up for this course as a Fall class to save on costs for students who are put on student payroll during the summer. The number of computers with Linux in the Biochemistry building currently limits the course to 11 students, so computer lab options in Chemistry, 1240 BPS, and Engineering may need to be explored.
 - QB827: Start Fall 2008. C. Vieille assembled a preliminary list of possible people/topics. The Curriculum committee was charged with further developing the list of potential people/topics, beginning to contact possible speakers, and identifying an organizer of the 2-credit course.
 - QB828: A planning meeting (8/2/07) was held for all of those interested. The 3-credit course will start Spring 2009, taught by Lisa Lapidus/Guowei Wei.
 - QB829: A planning meeting (8/1/07) was held for all of those interested. The 3-credit course will start Spring 2008, taught by Bill Wedemeyer with assistance by Yair Shachar-Hill. Three students are currently interested, which was viewed as adequate for the dry run of the course. QBI members should encourage their students to participate.
- Seminar courses: Linda Stafford (Asst. Provost for Acad. Sci. and Univ. Registrar) sent a message (1/17/2006) outlining a new policy about course cross-listing. The message indicated that listing of two courses in the same room at the same time with the same instructor is against university policy. QBI could institute a new QB seminar course and find a way around this policy; however, the alternative is that QBI focus on serving as a mechanism to get the word out about interdisciplinary courses by providing a web site for listing of available courses. The Curriculum Committee was charged with studying this issue further.

- Potential QB-organized MS program in Bioinformatics: Shin-han Shiu (PBL) and Titus Brown (MMG/CSE) have indicated interest in the development of a MS program in the area of Bioinformatics. QBI would appear to be a reasonable organizer of this effort. This topic is for possible future consideration.

4. Funding situation—C. Vieille and B. Hausinger

- SPG funds end soon: spending deadline of June 30, 2008
- Current financial commitments from MSU (see above)
- Oren Fellowship support (a letter of thanks was sent, along with an update of QBI changes). We have been receiving \$2,500 from the Oren's every year and saving the money to offer a summer research fellowship to one of our outstanding students.
- IGERT proposal status: expect to hear in March, 2008
- NIH T32 in Structural Biology in 2008? (only if no IGERT?)
- NIH T32 in systems biology in 2008 (David Arnosti, Kris Chan, Lee Kroos); due May 25 with a focus on transcription-related systems biology

5. Conferences and Workshops—C. Vieille and B. Hausinger

- Piotr Piecuch approached QBI about possible contributions to a conference entitled: Quantum Systems in Chemistry and Physics (July 6-12, 2008). After discussion of relevance to QBI, the EC voted to provide \$3,000 support with the provisos that QBI contributions be highlighted and that some of the speakers be targeted to biology-related areas. The funds must be expended prior to June 30, 2008.
- David Arnosti proposed that funding be provided for the Midwest Summer Symposium on Transcription and Systems Biology (July 18-20, 2008). The EC approved this request in vague terms to use up most of the SPG workshop funding (with some also going to office supplies).

6. Michigan Center for the Interface of Mathematics and Biological Sciences

- S. Ferguson-Miller discussed a preproposal (to NSF/USDA/Homeland Security) from Univ. Michigan which is to include MSU's participation, especially with regard to QBI serving as the educational arm of the center at MSU. The preproposal is due Dec. 2007; MSU has had modest input thus far, but more input will be possible in the full proposal so those interested should alert S. Ferguson-Miller of your interest. The QB program would be an excellent training system for students involved in this center.

7. BOINC project proposal from business student—B. Hausinger

- Business student Jonathon Brier, a representative of a group of students interested in the Berkeley Open Infrastructure for Network Computing (BOINC), has approached QBI and

independently spoke with Bill Punch, of the High Performance Computing center, and M. Feig. They are interested in MSU donating its computer resources in MSU classrooms and computing centers during down times to research projects. QBI projects could benefit.

8. Updating of new/recent chairs about QB (MTH, STT, Mech Eng, others?)—B. Hausinger

- B. Hausinger and C. Vieille, and other selected individuals (course instructors or faculty from the appropriate department) will meet with recently hired chairs to provide background and information on QBI.

9. Web site updates—B. Hausinger

- Matrix has been asked to create QBI.msu.edu as an access option. The leadership and banner are updated. The Public Relations Chair (M. Zavodszky) should be notified of other needed changes of the web site.
- We need to add David Arnosti's 2008 Midwest Symposium on Transcription Regulation and Systems Biology to our QBMI-sponsored conference page.

10. Other?

- Wenjiang Fu reported on the ZheJiang University initiative: The grad school and VP of ZU is willing to fund visiting students at MSU @ \$1000/month plus health insurance for up to 4 years. MSU faculty would need to cover tuition. QBI could function to help place these students in the best department, and they could join the QB program. The Recruiting Committee was charged with developing a plan to move forward on this opportunity and to answer questions regarding the specifics of how this would work.
- General meeting of QBI voting faculty? Discussion was tabled due to lack of time.
- External Advisory Board: The EC tabled discussion of this topic due to time constraints. New or repeating members would obtain a 3 year (renewable) terms. The current group includes:
 - Chris Adami, Caltech/Keck Graduate Institute
 - Jayanth Banavar, Penn State, Dept. of Physics
 - Ronald Levy, Rutgers Univ., Dept. of Chemistry/Chemical Biology
 - Gerald Maggiora, U of Arizona College of Pharmacy, Dept. of Pharmacology & Toxicology
 - Fengzhu Sun, USC, Dept. of Biological Sciences

The suggestion was made to approach possible new EAB members (e.g., David States) at MSU's 2008 Midwest Symposium on Transcription Regulation and Systems Biology.

- The next EC meeting likely will be scheduled for some time in January.