

Quantitative Biology Initiative
Executive Committee Meeting Notes
March 19, 2008

Attendees: Bob Hausinger, Claire Vieille, Helen Geiger, David Arnosti, Wolfgang Bauer, Shelagh Ferguson-Miller, Maria Zavodszky, Marianne Huebner, and Wengjiang Fu.

Unable to attend: Leslie Kuhn, David Weliky, Bill Wedemeyer, and Kris Chan.

Agenda:

1. QBI's potential role in the Center at the Interface of Mathematical and Biological Sciences (CIMBS), a proposal being developed by UMich, MSU, and WSU: Shelagh Ferguson-Miller.

The six-page preproposal (distributed at the EC meeting) was extremely well received by the NSF review panel, and this project is among ten allowed to move forward to submission of a full proposal. The fifteen-page proposal is due on April 2. Three proposals will get site visits. Only one project will be funded, for ~\$4 million/year for 5 years. The content of the preproposal was mostly organizational and did not describe the science or provide any details.

The MSU administration is very interested in this project and will commit matching funds and meeting facilities. MSU could potentially benefit from this project by the grant's ability to help attract high quality students, postdocs, and faculty, and it could be an asset for other research and training grant proposals.

Proposed functioning of the *National Center*: CIMBS would put out a call to government agencies (Homeland Security, Centers for Disease Control, etc.) and the scientific community for math-biology problems that are currently unsolved. Once a set of problems are selected, the center will organize and support the workforce of scientists to solve the problems. The plan is to spend a lot of the budget on sabbaticals/summer salaries for visitors to one of UMich, MSU, and WSU. The center would provide a few summer salaries for faculty involved in grant administration and it would fund some postdoc salaries (where the postdocs would be connected to the problems and not to individual faculty), but no funding is expected for graduate students—except for summer workshops that bring in graduate students from around the nation (or world) to learn about a specific math-biology research topic (with a different topic for each workshop).

UMich has one of the best Math programs in the country. WSU is notable in computer sciences. MSU is strong in food safety, toxicology, agricultural, and veterinary sciences. The combination of UMich, WSU, and MSU (with teams that can address very practical, real-life problems, e.g., water quality, or animal and plant diseases) is a strong point of the project.

One way QBI can participate is in the education component of the project, which should be strongly emphasized since the funding agency is NSF. Kay Gross (Director of KBS) was suggested as a possible Associate Director of Education & Outreach (ADEO), since she has been leading an Ecology Modeling educational program at KBS. The EC meeting suggested that the ADEO oversee two assistant directors, one for Education (possibly from QBI) and one for Outreach. Details concerning the precise roles of the assistant directors and how QBI would participate have not been worked out, and many questions remain to be addressed:

Can summer workshops be done on the main MSU campus? Can we participate in KBS's program by video conferencing? Can we use MSU's PROM/SE (Promoting Rigorous Outcomes in Mathematics and Science Education) project as a tool for the outreach component (it was suggested to contact Peter Bates, George Leroy, or William Schmidt – the lead PI - about this). Perhaps the Frontiers program run by Merle Heidemann could be used for reaching K-12 teachers?

2. Update on the QB Recruiting Committee efforts: Wenjiang Fu.

The Recruiting Committee initially accepted two Chinese students into the QB program and offered them recruiting fellowships. These two students accepted recruitment offers from other universities. More recently, the Recruiting Committee accepted two students (Nick McPherson and Yalu Wen) into the QB program and offered them \$14,750 fellowships plus \$2,000 cash incentive that can be spent on a new laptop or books. Both students are expected to join MSU this fall, Yalu Wen in Epidemiology and Nick McPherson in Genetics. An email was distributed to Grad Directors in associated programs requesting that they inform new recruits of the QB program. Maria Zavodszky, chair of the Public Relations committee, will work with the recruiting committee to improve the web site from a potential recruit perspective.

To increase recruitment into the QB program (the goal is to recruit five students this year), the Recruiting Committee is organizing a QB night targeting current first-year graduate students. Keyur Desai, graduate student and QBI Fellowship recipient, is working on the first draft of a flier to advertise this event. This QB night will take place April 9th from 5:15 to 7:30 pm. It will start with a 10-min presentation of the QB program by Bob Hausinger, followed by short presentations (three slides format) by students currently engaged in interdisciplinary research (most likely our one current QB student and recipients of QBI fellowships). These presentations will be followed by discussions and questions & answers involving current students and QBI faculty.

3. Revisions to the bylaws: Claire Vieille and Bob Hausinger.

Proposed revisions to simplify and clarify the Bylaws were discussed. The changes agreed to by the EC will be distributed electronically to the voting members.

4. Training grant updates: Bob Hausinger and David Arnosti.

Our 2007 IGERT full proposal was not funded by NSF. We submitted an IGERT preproposal for internal competition at MSU, but it was not selected for submission to NSF. One major argument was that we already had two chances, and that other teams should be given a chance as well.

Instead of an IGERT proposal, we will submit a T32 proposal to the Molecular Biophysics section of NIGMS. Deadline is May 25. A first brainstorming meeting is scheduled for March 20.

David Arnosti is heading a team that will submit a T32 proposal to the Cell and Molecular Biology section of NIGMS. Fifteen people are involved, with a good balance of senior and young investigators. Nine have NIH funding. The others have other sources of funding. The graduate school has committed two fellowships to GEDD for 5 years that will be used as

matching funds. David plans to use the QB program as the main interdisciplinary training conduit for his T32 program.

Bob Hausinger suggested that the two T32 proposals organize their budgets in similar fashions and request similar amounts of matching funds. The two proposals will benefit from the efforts of the Center for Toxicology, which is completing the departmental tables for their T32 renewal.

5. Other items: Bob Hausinger, Claire Vieille, and Wolfgang Bauer.

- A. Wolfgang Bauer is leading a Cyber-Visioning Committee that is collecting information on the computing needs of faculty members and departments on campus. He has sent a survey to the different departments (chairs and directors) and is asking for answers next week. He is considering the QBI as a stand-alone entity and asks that we submit a QBI survey. The Cyber-Visioning Committee is organizing a one-day symposium on April 5, and Wolfgang would like one QBI member to give a talk on QBI's uses of computing technology.
- B. Present EC members agreed that the Oren's annual money gift would be well spent as travel awards for deserving students who plan to attend a high-caliber national or international conference.