

SOCIETY FOR INTEGRATIVE AND COMPARATIVE BIOLOGY

**Minutes of the Educational Council meeting, 2009 SICB annual meeting, Boston MA
Monday, January 5, 2009, Douglas Room, Westin Boston Waterfront**

Submitted by Bob Podolsky, chair-elect, SICB Educational Council

Council members present: Robin Cooper (chair), Bob Podolsky (chair-elect)

Council members absent: Dee Silverthorn, Bill Hoese, Warren Burggren, Mary Pat Wenderoth

SICB-DL subcommittee members present: Trish Morse, Steve Vogel, Rachel Merz

Also present: David Tapley, Duane McPherson, Bob Mauck, Mark Haussmann, Don Mykles,
Nancy Staub, John Pearse, Sara Hiebert Burch, John Pilger, Jan Pechenik, Linda Walters,
Sue Cox, Rich Satterlie, Ron Dimock

Recording interest but could not attend: Sandra Gilchrist, Itzick Vatnick, Joe Williams, Jaclyn
Reeves-Pepin

The Educational Council and other SICB members interested in educational issues met on Monday, January 5th at the Westin Waterfront in Boston, MA. Robin Cooper, chair, called the meeting to order at noon with a discussion of his efforts while chair toward bringing local high school students to the annual meeting. There was general agreement that high school student participation was positive for the society and that the effort should be continued in the future.

Robin initiated a discussion of the status of the SICB digital library (DL). Steve Vogel reported that the library is providing high quality, peer reviewed materials, though only in biomechanics. The DL subcommittee has found it difficult both to encourage submissions outside of biomechanics and to solicit individuals to become subject editors in areas beyond biomechanics. It was agreed that new approaches are necessary. Rich Satterlie recommended trying to push the effort to recruit materials by posing it as challenge associated with the Year of Science. Bob Podolsky suggested that use of digital materials as a resource for teaching was not yet part of the SICB culture, and offered the idea of folding SICB's digital library submissions into a larger collection, for example as offered through BEN (the AAAS-sponsored portal), as a way to get SICB members into the culture of using and ultimately submitting materials. The consensus was to continue efforts to build the SICB-DL before merging our material with outside sources.

Bob Podolsky presented a list of 10 possible goals and 23 possible actions (appended to these minutes) that the society could take toward supporting education, particularly involving undergraduates. These goals and actions were generated from discussions among Bob, Rich Satterlie, Ron Dimock, Brett Burke, and Dee Silverthorn during a conference in November sponsored by AAAS/HHMI on the role of professional societies in undergraduate education. The first item discussed (list item 4b) involved the role symposia could play in focusing on educational issues and in generating materials for the digital library. For example, as part of the application process symposia could be required to have a "broader impacts" statement, where broader impacts could include one education-oriented talk, parts of research talks, or a round-table discussion, demonstrating how core principles discussed in the symposium could be taught. Linda Walters pointed out the challenge of asking symposium organizers to devote an entire portion of a constrained symposium schedule to education. It was agreed that a change in culture might be necessary to have educational issues recognized as an essential part of research-oriented symposia. Symposia could also be asked to generate educational materials for the

digital library. Because many individuals within symposia or symposia themselves are supported by NSF, an educational component could become a regular part of satisfying the broader impacts criteria for funding.

The group then discussed initiation of an annual workshop series on “Teaching and Learning X” (list item 4a), where “X” refers to different disciplines (e.g., Invertebrate Biology, Comparative Physiology, Vertebrate Morphology, etc.) or course goals (e.g., large introductory courses). There was general support but some question about where in the busy program a workshop could be included. The best time seemed to be in the afternoon on the day of arrival. The workshops would stress recent active teaching and learning methods in different disciplines on a rotating basis. The group agreed that some incentive, as well as some product, would be desirable. The society should consider treating these workshops like symposia in that participants could have registration costs reimbursed and contributions to the digital library would be expected, thus priming the culture of contributing to the digital library.

The discussion next turned to goal 2, rewarding undergraduate presenters and mentors. The idea of a competitive session for mentors and undergraduate students to present papers together (list item 2a) did not generate much discussion or enthusiasm. Most present were in favor of some kind of social gathering for undergraduates toward the beginning of the meeting. Rachel Merz described a model where undergraduates could invite to the social a few big name scientists they had wanted to meet. The idea of having a poster display for undergraduates at the start of the meeting (list item 2c), however, had mixed support. Some felt it would be a good idea, as this model has been used successfully at meetings of other societies as a way for undergraduates to learn about each other’s work and to practice receiving questions while having an opportunity to circulate and meet other students. Others felt that undergraduates should be as integrated into the meeting as possible, and that a separate session would stigmatize or marginalize them. Podolsky pointed out that their posters would remain part of the regular sessions. Similarly, there were divergent opinions on whether undergraduates should have a special logo or designation on badges or posters (list item 2b) or whether there should be a special undergraduate presentation award separate from the general student paper awards. Bob Podolsky suggested that it would be worthwhile to gain feedback from undergraduate attendees about the value of these ideas.

The meeting time was over before other issues on the list could be discussed. Podolsky collected a list of names and email addresses and will plan to solicit feedback on other educational issues during the year.

To: SICB Educational Council members and others interested in education issues
From: Bob Podolsky, incoming chair, SICB Educational Council
Re: possible goals and actions for the Educational Council to consider, 2009 meeting

Within SICB

- 1) To increase participation of undergraduates in the annual meeting
 - a) discuss possible reallocation of funds for student support
 - b) discuss pursuing new sources of support for undergraduate students
- 2) To reward undergraduate presenters and mentors
 - a) competition for undergraduates/mentors to present papers together in special session
 - b) special designation/logo for undergraduate poster presenters
 - c) special undergraduate poster session/social at start of annual meeting
- 3) To promote teaching that contributes to goals of comparative and integrative biology
 - a) award that recognizes outstanding faculty contributions to education
- 4) To increase focus on undergraduate education
 - a) initiate annual workshop series on “Teaching and Learning X”
 - b) promote inclusion of one education oriented talk or panel discussion of teaching per symposium, to emphasize core concepts and their teaching
 - c) add “broader impacts” statement to symposium abstracts
 - d) identify cadre of “innovative educators”
- 5) To increase access to resources for improving undergraduate education
 - a) increase content of digital library (SICB-DL)
 - i. recruit subject editors from different SICB divisions
 - ii. encourage symposium organizers to generate materials
 - b) create page of links to course webpages for different disciplines
- 6) To promote discussion of undergraduate teaching/learning issues across institutions
 - a) organize education-oriented social for department chairs/undergrad program directors
 - b) identify and facilitate networking among mentors from PUI institutions
- 7) To increase the scientific awareness of high school students
 - a) recruit high school students local to the meeting to come for a day (free of charge) to see what a scientific meeting is like
- 8) To increase public awareness of integrative biology
 - a) write statement of core concepts and principles; explore SICB-DL portal
 - b) contribute to production of promotional video for society

Collaborations with other societies

- 9) To contribute to education of teachers in principles of integrative and comparative biology
 - a) explore providing regular symposium at NABT
 - iii. could be based on teaching/learning workshop from previous SICB meeting
 - iv. revisit, update, distill principles in SAWOK series for NABT presentation
 - b) collaborate with BSA in “PlantingScience” (see <http://www.plantingscience.org>)
- 10) To contribute to cross-society presentation of digital library (BEN or future version)
 - a) recruit members specifically to develop exercises and other materials that focus on comparative and integrative biology as a unifying theme of intro bio
 - b) exploring collaboration with APS in storage/interface for our DL materials