## **Attaining Goals Through Partnerships**

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"To make interesting scientific discoveries, you should acquire as many good friends as possible, who are as energetic, intelligent, and knowledgeable as they can be."

Herbert A. Simpson, Nobel Laureate

Models of My Life 1996

Popular science fiction novels and movies frequently portray scientists as solitary eccentrics conducting experiments in laboratories hidden behind revolving bookcases. Although a few scientists might deny a delightful eccentricity or two, a successful scientist would more accurately be described as someone who can work collaboratively within settings defined by collective action. Indeed, individuals who are the very antithesis of the scientist stereotype may be in the best position to make "interesting scientific discoveries." About two decades ago, the biomedical scientific community recognized that for the good of science and humanity, this spirit of community needed to extend to interactions with Congress and the federal agencies appointed to facilitate biomedical research and education. The successful building of partnerships with Congress and federal agencies led to initiatives such as the Congressional declaration of the "Decade of the Brain" in the 1990s and to the recent doubling of the budget supporting the National Institutes of Health.

For the community of undergraduate neuroscience educators, a similar awakening to the possibilities inherent in community efforts occurred in 1991 when the Faculty for Undergraduate Neuroscience (FUN) was formed. Professors committed to educating undergraduate students of neuroscience realized that by working together our community could create mechanisms that honor teaching, nurture research collaborations between faculty and students, and provide support for faculty invested in education. Within a short time of FUN's founding, relationships were established with the Society for Neuroscience and the Association of Neuroscience Departments and Programs to solidify FUN's position as the organization representing the interests of undergraduate neuroscience educators and to explore how our organizations could work together to promote undergraduate neuroscience education. A particularly fruitful relationship was established with Project Kaleidoscope (PKAL) in 1994. Working in partnership with PKAL, FUN has been able to offer three national conferences on undergraduate neuroscience education that produced a set of blueprints to guide institutions developing undergraduate neuroscience programs and provided opportunities to share pedagogical innovations in the classroom and the laboratory.

With respect to establishing working relationships, the 2001 FUN/PKAL conference (titled "Undergraduate

Neuroscience: From the Enchanted Loom to the World Wide Web") is noteworthy. One of the major goals of that conference was to explore ways in which FUN could better serve the needs of our community by developing FUN's interactions with other professional organizations and federal agencies. Among the issues that were explored was the nature of support the National Institutes of Health provides biomedical scientists conducting research at primarily undergraduate institutions. The consensus of the conference participants was that the Academic Research Enhancement Award (AREA) program at the National Institutes of Health is a pivotal mechanism for supporting research in undergraduate settings. The recent changes made to the program, which include three review cycles per year and the possibility for competitive renewal, were uniformly viewed by the conference participants as tremendously helpful program enhancements. The major shortcoming of the AREA program was the \$100K cap placed on the size of the awards that could be made. The participants concluded that increasing the cap to \$150K would enable AREA-supported institutions to have the possibility of hiring technical help throughout a three-year grant period, which would significantly strengthen the research capacity at primarily undergraduate institutions. With this target cap identified, FUN launched its first effort to promote research at primarily undergraduate institutions by improving the federal mechanism designated to support that research. Over the ensuing two years, FUN partnered with the Society for Neuroscience and the Council on Undergraduate Research to persuade the National Institutes of Health to raise the AREA cap to \$150K. In January of 2003, the program announcement on the AREA program indicated that the cap on the AREA program was increased to \$150K (http://grants2.nih.gov/grants/guide/pafiles/PA-03-053.html). This outcome marks the first initiative at FUN to successfully enhance the research enterprise not only for faculty and students who study neuroscience, but also for biomedical researchers of all stripes who work at AREA-supported institutions. FUN enthusiastically expressed its gratitude to Dr. Elias Zerhouni, the Director of the National Institutes of Health, and to his colleagues for supporting this critical initiative.

This editorial is most certainly a celebration of FUN's successful efforts to establish organizational networks that have produced tangible improvements in the ways in which faculty educate undergraduate neuroscience students and conduct scientific explorations of the nervous system. Most importantly, however, the successes that FUN has enjoyed since its founding also serve as an exhortation to get involved. These successes were based on the dedication and investment of numerous individuals to help FUN realize the goals that the membership had established. If FUN is to continue offering opportunities to

enhance undergraduate neuroscience, FUN's members will be the agents by which these opportunities become available. Serving on committees, running for office, and volunteering time to support FUN's mission will ultimately benefit the entire community of undergraduate neuroscience educators. Extending your service to committees at the Society for Neuroscience, the Council on Undergraduate Research, Project Kaleidoscope, the National Institutes of Health, and the National Science Foundation, to name but a few crucial organizations and agencies, ensures that our community will continue to provide excellent educational opportunities to our students as well as sound teaching and research infrastructures to our faculty well into this century.