The Faculty for Undergraduate Neuroscience: Learning lessons since 1991

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In many ways the establishment and growth of the Faculty for Undergraduate Neuroscience (FUN) provides a mirror from which the goals of Project Kaleidoscope are reflected. From its inception, PKAL has sought the transformation of STEM disciplines and education in them, to help STEM educators and their institutions initiate change in the pursuit of not only greater educational gains for all students enrolled in such coursework (not just majors and minors, but particularly students in introductory and courses and general education programs), but to motivate students further, toward STEM-related careers. In pursuit of these goals, PKAL, in both explicit and implicit ways—calls for the development of a new and organized generation of STEM leaders and a vibrant, self-renewing matrix for communications advancing STEM education experience and outcome across institutions and disciplines.

The creation of FUN by a small group of neuroscience educators in 1991 held the potential of achieving such goals for undergraduate neuroscience. Spearheaded by Julio Ramirez (Davidson College), Steven George (Amherst College), Dennison Smith (Oberlin College), and Sally Frutiger (now at the University of Kansas), FUN was established to represent the interests of faculty dedicated to teaching neuroscience at the undergraduate level in an era that provided no organized opportunities for such. Indeed, at that time, the Society for Neuroscience (SfN) provided no resources focused on undergraduate education and offered little in the way of relevant opportunities for this sector of their membership. The group immediately went about the task of integrating FUN into the neuroscience community, announcing the establishment of FUN to the Association of Neuroscience Departments and Programs (ANDP) and SfN. In short order, working through the executives of both SfN and ANDP, FUN accomplished this task, and was given a permanent liaison position on the ANDP Executive Committee.

The very early days of FUN centered on development of an organizational structure and on core aspects of the fledgling society’s mission: to provide undergraduates with greater access to the national SfN meeting, and advancing undergraduate neuroscience faculty development. Personal investment by core members and seed money provided to FUN by the Grass Foundation enabled these activities to take shape, and in late 1994, with the drafting of organizational bylaws completed by Jack Boitano (Fairfield University) and adopted by the membership, founding FUN president Julio Ramirez began talks with Jeanne Narum to discuss the possibility of a partnership between FUN and PKAL, setting the stage for what would be the first FUN/PKAL workshop at Davidson College in 1995.

The new partnership provided FUN with a number of key opportunities. Partnering with PKAL brought funding, structure and staff support to the workshop project. Further, PKAL brought to the project a successful model that was ideally matched to the goals FUN had for the workshop — the “what works” model and team approach that asks for meeting participants to make commitments to bring innovations discussed at the workshop back to their own institutions. The 1995 workshop sent participants back to their campuses with blueprints for undergraduate neuroscience programs and experience from hands-on workshops in mounting new laboratory experiences for their courses.
The next few years brought further structural development of the society organization and elaboration of the core mission. FUN learned early that the value of a new professional organization to its constituents is owed much to the flexibility and timeliness of its efforts in meeting the changing requirements brought by increasing membership rolls. FUN began requiring modest dues from its membership in these years, which primarily allowed for the growth and maintenance of the travel award program, which provided undergraduate students with needed support for attending the SfN meetings. FUN developed and launched both a member newsletter and through the efforts of Jeff Wilson (Albion College) and Steve Siviy (Gettysburg College), a listserv hosted by Gettysburg College allowing for rapid communication among the FUN membership. FUN also began hosting an annual poster session for undergraduate neuroscience research that featured not only the work of students who had journeyed to the SfN meeting with the help of FUN travel awards but also students who had not received such support and had chosen to participate in the FUN poster session as their venue to share their work with the greater neuroscience community. This tradition has grown in strength and attendance each year since the program was expanded by Alan Gittis (Westminster College) in the late 1990s.

FUN also learned not merely to respond to the needs of the undergraduate neuroscience education community in these years, but also to take the lead in key pursuits at the national level. Strong examples here can be found in the activities of two of the standing committees of the society. The Education committee, in continuing the work began at the 1995 Davidson workshop, also worked to further develop the partnership with PKAL. Through the funding and organizational support of PKAL, the partnership produced subsequent workshops at Oberlin College (1998), Trinity College (2001), and Macalester College (2005). In 2008, FUN offered its first financially independent workshop at Macalester College, though PKAL provided essential organizational support. The Public Policy and Governmental Affairs Committee, led by chair Julio Ramirez, spearheaded a successful effort in partnership between 2001 and 2003 with the Council on Undergraduate Research and SfN to persuade the National Institutes of Health to increase Academic Research Enrichment Award (AREA) funding from $100k to $150k.

Leadership activities by individual FUN members highlights the fact that such work was not restricted to the executive or standing committees of FUN, but accomplished across the society roles. Using the successful regional meeting N.E.U.R.O.N. (1997; North East Undergraduate Research Organization for Neuroscience) as a model, Cheryl Frye (SUNY-Albany) shared her experiences in establishing N.E.U.R.O.N. with other budding regional networks in conversations at the FUN/PKAL workshop at Trinity College. The success of the N.E.U.R.O.N. concept inspired other FUN members, leading to the establishment of S.Y.N.A.P.S.E. (Society of Young Neuroscientists and Professors of the South East) and MidBrains (the regional undergraduate neuroscience conference of the upper Midwest), each of which mount annual conferences. The conferences will no doubt continue to inspire the development of further regional meetings, as evidenced by the recent addition of mGluRs (the Midwest/Great Lakes Undergraduate Research Symposium; for the “states touching Ohio”), a new day-long meeting hosted by FUN past-president Jennifer Yates at Ohio Wesleyan University.

A further lesson FUN has learned in the years it has been operating is that sustainability and programming comes at a cost. In the early years of FUN’s history, 1994-95 FUN President Gary Dunbar recognized this, and initiated a dues schedule for FUN members that allowed an annual travel awards for undergraduates to be maintained. As FUN grew, so did the need for further programming, and with it, funding. Eric Wiertelak (Macalester College; FUN president 2001-04) expanded the presence of FUN at the SfN meeting, developing a booth and FUN-branded product line, which created a revenue stream enabling not only expansion of the student travel awards, but introduction of the Faculty Awards recognition program, and launch of the flagship journal,
the Journal of Undergraduate Neuroscience Education (JUNE) in 2002. Since that time, the dues structure has remained truly modest but has also been modified, allowing institutional and corporate sponsoring memberships, helping to ensure the long-term financial stability of FUN-based programming.

Today, with a firm organizational structure and broad membership base, FUN self-funds and offers an array of consultative, educational, outreach, public action and recognition programs to its membership and the greater undergraduate neuroscience education community. Besides JUNE and the ongoing FUN/PKAL workshop series (the next workshop is scheduled for the summer of 2011 at Pomona College), FUN offers a consultation service (FUN PDCS; Program and Department Consulting Service) for institutions and faculty seeking assistance in such matters as: external program review, curriculum development, or facilities planning. FUN is also the sponsoring organization for the national honor society in neuroscience, Nu Rho Psi and has partnered with the SOMAS-URM (Support of Mentors and their Students from Underrepresented Minority Groups — www.somasprogram.org) Program to offer summer research funding to junior faculty members to conduct research with their undergraduate students.

Through its long partnership with PKAL, FUN’s many efforts – its student travel awards, journal publishing, outreach programs and workshops – have far surpassed any expectations early members had for this organization. Best of all, it was indeed FUN!

Visit FUN at funfaculty.org for further information on all its activities, including the 2011 FUN Workshop to be held at Pomona College, July 29-31, 2011.