The History of *Nu Rho Psi*The National Honor Society in Neuroscience *Last updated 28 June 2016*

Nu Rho Psi, the National Honor Society in Neuroscience, was founded in 2006, but its history can be traced to the early 1990s with the founding of Faculty for Undergraduate Neuroscience (FUN) (<u>Hardwick, Kerchner, Lom, Ramirez & Wiertelak, 2006</u>).

Early History of Faculty for Undergraduate Neuroscience

In the spring of 1991 conversations involving Sally Frutinger at Denison University, Stephen George at Amherst College, Dennison Smith at Oberlin College, and Julio Ramirez at Davidson College led to a proposal for a social event at the 1991 Annual Meeting of the Society for Neuroscience (SfN) in New Orleans, Louisiana, for neuroscientists interested in educating undergraduate students, particularly at predominantly undergraduate institutions. Ramirez explored the idea of creating an organization for undergraduate neuroscience faculty with Patricia Goldman-Rakic, Past President of the Society for Neuroscience, and with her encouragement, Ramirez, Frutinger, George, and Smith formed a Steering Committee. The Steering Committee mailed out invitations to individuals with interests in undergraduate neuroscience education and 67 individuals attended the social. The response to the proposal for a formal organization was very positive and those in attendance were energized to embark on the formation of this as yet unnamed organization. After considerable discussion in the spring of 1992 the name Faculty for Undergraduate Neuroscience was adopted. An Executive Committee was formed consisting of Ramirez, Frutinger, George, Smith, and Gary Dunbar from Central Michigan University. On the basis of a survey conducted in the spring, the major objectives for FUN were established by the membership:

- (1) The establishment of a Travel Award to support travel to Society for Neuroscience Annual Meetings by outstanding undergraduate neuroscience students.
- (2) The establishment of a Society for Neuroscience Award for Excellence in Undergraduate Teaching.
- (3) The establishment of a Travel Award for faculty from institutions with no travel support.
- (4) The creation of a newsletter highlighting undergraduate teaching.
- (5) The development of a mechanism for supporting regional faculty development workshops for neuroscience faculty from primarily undergraduate colleges and universities.

Early History of Nu Rho Psi

As ideas for FUN began to be discussed in 1991-92, Joe Achor of Baylor University and an advisor for *Psi Chi*, the national honor society in psychology,

suggested the formation of a national honor society in neuroscience, which would be called *Nu Rho Psi* for "neu-ro-sci(ence)." While the suggestion was well received, it was also deemed premature given the other priorities of the fledgling organization and FUN's limited financial and personnel resources. As FUN evolved, additional objectives and activities garnered attention, but a national honor society in neuroscience was not one of them.

In the mid-1990s Achor renewed his interest in the national honor society and began to slowly accumulate ideas for the founding of the national honor society. He originally planned to use the Constitution and By-Laws of *Psi Chi* as a model for the neuroscience honor society, but decided to explore the organizational materials for other honor societies. One of his first observations was that there was no clear distinction between a constitution and a set of by-laws. He found considerable diversity of written documentation in terms of (1) one versus two documents (constitution only, by-laws only, combined document, and two separate documents), (2) the sequence of "articles" of organization in the constitution and by-laws, (3) the content within each of the articles, and (4) the brevity versus thoroughness of these documents. In essence, there was no standard model and no justification for the different formats. Much of this was due to the individual history of each society in its formation, multiple *ad hoc* revisions, and the absence of any cross-society standardization efforts.

The Executive Director of the Association of College Honor Societies was contacted for advice on establishing organizational documents. The Association of College Honor Societies (ACHS), founded in 1925, is the nation's only certifying agency for college and university honor societies. ACHS sets standards for organizational excellence and for scholastic eligibility for the various categories of membership: general, specialized, leadership, freshman, and two-year honor societies. Unfortunately, ACHS did not have a standardized model to assist new organizations.

Robert's Rules of Order was consulted as an authoritative source of information, but dozens of versions of this guide existed, with substantial lack of agreement. Some "clarified" the nature of the constitution versus the by-laws, but others said there was no real difference or only referred to one as if the other did not exist. One of the more recent versions in fact said that the proper format today is to have a single document entitled "By-laws." With this in mind, a single unified document for Nu Rho Psi seemed to be a reasonable decision.

As many of the honor societies have revised their documents repeatedly over the decades since the formation of their organization, the plan was for the neuroscience honor society documents to be so thorough and well-conceived that they would serve the neuroscience community for many years with only minimal revisions. To this end Achor viewed the initial process as involving four phases. The **first phase** was to comprehensively review the constitution and/or by-laws for a large number of honor societies to ascertain (1) the common features, (2) the general structure of the documents, (3) the fine details within each section of each document, (4) the thoroughness versus brevity of each document, and (5) the strengths and weaknesses of each document. The

second phase was to create a general draft of the organizational document. The purpose of this skeleton version of the document was both to have a framework from which to work and also to avoid the chaos which might arise by trying to have a committee decide which of the dozens of "models" to follow. The **third phase** was to organize a committee to discuss the skeleton version of the document. The **fourth phase** was to have subcommittees discuss sub-areas of the skeleton document and create a working document, which would be periodically reviewed, revised, and approved by members of the committee.

Working independently and with no timetable, Achor studied the documents of various organizations, began constructing a skeleton document, and wrote drafts of the wording for various subsections. Concurrently, he worked towards the establishment of a local honor society in neuroscience at Baylor University, which was created in 2000.

Achor did not inform other members of FUN that he was working on the national honor society in neuroscience and in the summer of 2001 Jack Boitano of Fairfield University and Past President of FUN (1997-98) began the process of establishing a national honor society in neuroscience. Boitano adapted the constitution of *Psi Chi* with wording to fit neuroscience and distributed a partial draft to the members of FUN for comment. Recognizing Boitano's energetic spirit and ability to get things done, Achor provided him with the information he had gained to date, as well as generic bylaws for establishing a neuroscience honor society, a partial draft of the national bylaws and plans for two websites—one developmental and one for the final website. However, before much could be accomplished Boitano developed health problems and informed Karen Parfitt, President of FUN that he would not be continuing on this project. He also informed Parfitt of Achor's interest and on this basis she asked him to take responsibility for establishing the honor society.

From a web search in 2002 Achor discovered that two local honor societies in neuroscience had been formed prior to the honor society at Baylor University—the first at Johns Hopkins University in 1997 and the second at Emory University. The neuroscience honor society at Johns Hopkins University came up with the name *Nu Rho Psi* independently from anyone in FUN and first utilized the term publicly.

The membership requirements at Johns Hopkins were especially noteworthy, because they were so much higher than in any of the thirty national honor societies Achor had investigated. Chief among the requirements were an undergraduate research thesis in neuroscience and a research presentation each semester. As these requirements would severely limit membership at most institutions, Achor was unsure how the model at Johns Hopkins University could be compatible with a traditional honor society model based on hours in the major, overall GPA and GPA in the major (e.g. *Psi Chi*). Fortuitously, Gregory Ball, the *Nu Rho Psi* Advisor at Johns Hopkins, learned of FUN's involvement in establishing a national honor society and shared this information with two student members whose responsibility it was to expand *Nu Rho Psi* to other institutions. Jasmine Lew and Matt Vestal, the expansion coordinators, contacted Erik Wiertelak of Macalester College and President of FUN about their interest in helping with the formation of a

national honor society. Wiertelak informed Achor of their interest and he initiated an email exchange and dialogue with Matthew Vestal, Jasmine Lew, Michael Yassa, and Gregory Ball. Several members of the Baylor University honor society in neuroscience (Danielle Graham, Joaquin Lugo, and David Herrin) participated in discussions indirectly through Achor. Following a series of contacts Achor met with Yassa, Vestal, and Lew at the annual meeting of the Society for Neuroscience. The exchange of emails and direct contact were beneficial and it was decided that traditional membership requirements would accommodate a larger number of institutions, but individual chapters would be free to increase their requirements, as in the case of Johns Hopkins University.

As the national honor society was being developed under the auspices of FUN and FUN was clearly oriented towards undergraduate neuroscience, a number of people recommended that the national honor society membership be limited to undergraduates. But, a number of national honor societies, including *Psi Chi*, were found to have multiple categories of membership and so the emerging document included provision for graduate students and faculty to be members. Reflecting on the global nature of the Society for Neuroscience, Achor also sought to design a document for *Nu Rho Psi* that would accommodate chapters in foreign countries. Achor discussed with Deborah Colbern of BEEMNET the need for registering "nurhopsi.org" as the official website before anyone else could do so, which she did.

Although Achor had good intentions, the development of *Nu Rho Psi* slowed substantially, largely due to family and university matters. With very limited time to coordinate the activities of the members of a committee, he opted to work alone until he had the documents sufficiently far along for others to assume roles in the further development of the honor society documents. But, progress ground to a halt and Achor indicated to Wiertelak in the early part of the summer that he should probably turn over the leadership role to G. Andrew Mickley of Baldwin-Wallace College if progress was not made soon. Shortly thereafter Achor's daughter and her husband were displaced due to Hurricane Katrina and Achor realized the time had come to step aside.

Mickley took over in September of 2005 and discussed with Wiertelak the need for a committee to be formed. Jean Hardwick of Ithaca College worked with Mickley to establish this committee, which consisted of Mickley, Hardwick, Achor, Wiertelak, Shubhik DebBurnam of Lake Forest College, and Ilsun White of Morehead University. Mickley also sought the input and assistance of students at Baldwin-Wallace College as he coordinated the process. In November Mickley and Colbern posted drafts of the documents on the FUN website. Correspondence through e-mail to the FUN membership) enabled the membership to comment on three draft documents dated November 27, 2005: *Nu Rho Psi* Constitution and Bylaws, Model Chapter Bylaws, and Transition Plans. Unresolved issues such as an insignia, induction ritual, and some criteria for membership were posted on the FUN blog site. The committee adopted the following schedule: January 31, 2006 Prepare and post the first complete drafts of the seminal documents based on FUN membership feedback; March 1, 2006 prepare the final drafts of the seminal documents for review by the FUN Council; March 31, 2006 Solicit

approval of *Nu Rho Psi* from FUN membership; April 28, 2006 Reach decision to approve seminal documents and establish *Nu Rho Psi*.

Several announcements were made via the FUN Newsletter, and the FUN membership reviewed drafts of the proposed *Nu Rho Psi* Constitution and Bylaws, Model Chapter Bylaws, transition plans, induction ceremony, application package to be sent by prospective chapters, and designs for insignia and pins. Mickley informed Michael Kerchner, President of FUN (2005-2006) that a colleague at Baldwin-Wallace had, at his request, designed a symbol for letterhead, which could be converted into a pin. He also noted that the students at Johns Hopkins had created a crest which should also be considered by the FUN Council and FUN membership. Only a few comments on these documents were received and on February 13, 2006 the February 6, 2006 revised drafts of the documents were sent to Michael Kerchner, President of FUN (2005-2006) for review by the FUN Council. The FUN Council approved the documents soon thereafter. When later presented to the FUN general membership for review, these documents and symbols were overwhelmingly approved in the spring of 2006. *Nu Rho Psi*, The National Honor Society in Neuroscience, was established.

Launching the new Society

Several announcements were made in a FUN Fan e-mail dated October 11, 2006:

- 1. Applications to shelter a Chapter of *Nu Rho Psi*, the National Honor Society in Neuroscience, were now being accepted for the 2006-2007 Academic Year.
- 2. All those interested in the organizational aspects of *Nu Rho Psi* should attend the FUN Business meeting on Monday, October 16, 2006 at the Society for Neuroscience Annual Meeting.
- 3. During the initial period of colonization, the Executive Committee of FUN would serve as the National Council of *Nu Rho Psi* and would review all applications to shelter a *Nu Rho Psi* Chapter.
- 4. Applications for establishing a new chapter would be accepted and reviewed on a rolling basis throughout the year. However, to received feedback on the status of the application prior to the end of the spring academic semester, all materials would have to be submitted no later than March 1, 2007. Applications could be obtained at the FUN website.

At the Business Meeting of FUN Mickley was elected to the post of Executive Director of *Nu Rho Psi*. As one of his first official duties, Mickley contacted a number of individuals with an interest in the national honor society and/or leadership in undergraduate neuroscience education on October 30, 2006 to ascertain if they would consider being on a "National *Nu Rho Psi* working group." The leadership of FUN and Mickley also sought to select individuals from different regions of the country as the first set of Vice Presidents would be drawn from the four regions specified in the *Nu Rho Psi* Constitution. All of those contacted responded affirmatively. The members of the Working Group established at that time were Mickley, Achor, Wiertelak, Alan Gittis of Westminster College, Jan Thornton of Oberlin College, Jeff Smith of the University of

Portland, Jeff Wilson of Albion College, Linda Gorman of Johns Hopkins University, Ruth Grahn of Connecticut College, Sandi Brabb of Washington University, and Tim Cannon of the University of Scranton.

Mickley contacted the members of the Working Group November 7, 2006 with a list of projected tasks and an invitation to designate which of these tasks each member would like to work on. These included: publicize opportunity for charters, vet applications, correspond with applicants, establish database for membership and chapter officers, develop charter certificates, develop induction certificates, develop a registration card, develop a membership card, design pins, arrange for chapter ceremonies, arrange for induction ceremony, collect application fees, collect induction fees, produce newsletter, pursue non-profit status, and look into startup funding.

In this fledgling stage of the Society, the organization worked under the transition plan approved by FUN (June 2006):

"Phase 1: National structure – under FUN control: Nu Rho Psi will be managed by the officers of the Faculty for Undergraduate Neuroscience (FUN) for a minimum of 2 years after the establishment of the society. During this period, the FUN officers, or their designates, will conduct all of the functions that will eventually be assigned to the National Council and National Office of *Nu Rho Psi*. During this initial period the main focus of *Nu Rho Psi* will be to establish local chapters of the society. National conventions of *Nu Rho Psi* will not be held during this phase. The *Nu Rho Psi Newsletter* will not be published in paper form during this period. However, updates on the status and growth of the society will be documented on a *Nu Rho Psi* web page which shall be part of the FUN web page.

Phase 2: Regional structure: If, after at least 2 years, *Nu Rho Psi* has established enough local chapters to warrant the transition, the society will evolve into a regional structure of governance as described in the Constitution and By-Laws. A majority vote of the officers of FUN will decide on the date of transition. At this point, National Officers will be elected, National Council established, and Executive Director and appropriate National Staff hired. Following this transition, the *Nu Rho Psi Newsletter* will be published in paper form – unless deemed otherwise by National Council. Following this organizational transition, the seminal relationship between FUN and *Nu Rho Psi* will be acknowledged in communications and publications of the new honor society but the management of *Nu Rho Psi* will be independent of FUN.

Phase 3: International structure: It is the intent of the organizers of *Nu Rho Psi* to eventually offer membership to students, scientists and educators throughout the world. At the point when the society is self-sufficient and self-governing (employing the regional structure described in the Constitution and By-Laws) and there exists interest in membership extending beyond the U.S. borders, the National Council will work towards transitioning the society to an international structure of governance and participation. This would take the proposal of significant amendments to the Constitution and By-Laws – as prescribed in Article X of the Constitution."

The first chapter applications were received in 2006 from the following 3 schools:

• Baldwin-Wallace College: 16 Jun 06

Baylor University: 6 Nov 06Macalester College: 8 Dec 06

Since the Baldwin-Wallace College application arrived before the *Nu Rho Psi* working group was functional, it was reviewed by 3 members of the FUN National Council. In November 2006, the FUN National Council approved a process by which charter applications could be reviewed by members of the working group and decisions made by the Executive Director. Subsequently, each application was reviewed by three members of the Working Group. Baldwin-Wallace College received its national charter on 7 Nov 06, Baylor University received its national charter on 7 Dec 06, and Macalester College on 16 Jan 07. Each was given the notation of being the Alpha Chapter for their state. Additional national charters were granted between Jan-Aug 2007:

- Drew University
- Johns Hopkins University
- Knox College
- St. Mary's College of Maryland
- University of Scranton
- University of St. Thomas

In the formative years of the Society from 2006-2010, *Nu Rho Psi* was being managed under the auspices of the FUN Council. But as the number of chapters and members grew and the complexity of operation expanded, it became clear to Mickley that the Society should move towards the organization specified in the Constitution and By-Laws. At the 2009 FUN meeting during the Society for Neuroscience Conference (Chicago IL), Mickley offered to poll the *Nu Rho Psi* membership to evaluate the desire to make the transition to an independent organization. This survey (conducted in 2010) indicated that 87% of the responding *Nu Rho Psi* members felt that the society was ready to begin the transition to an independent governance structure.

Mickley arranged for the incorporation of *Nu Rho Psi* in the state of Ohio (the location of the National Office) and this was granted on 7 February 2011. He also applied to the U.S. Internal Revenue Service for a non-profit tax exemption as a 501(c)(3) organization. This tax-exempt status was granted on 12 May 2011. [Later, the *Nu Rho Psi* National Council would ask Treasurer, Beth Wee, to apply for Group Exemption that would allow qualifying *Nu Rho Psi* chapters to also have tax-exempt status. This was approved on 2 March 2015.]

The first *Nu Rho Psi* National Officers were elected by the *Nu Rho Psi* membership on 10 May 2011 and they took office on 1 January 2012:

President: *Joe Achor, Ph.D.*, (αTX-1) Baylor University, Associate Professor of Psychology and Neuroscience

President Elect: *Linda Gorman, Ph.D.*, (αMD-15) Johns Hopkins University, Teaching Professor, Department of Psychology and Brain Sciences/Neuroscience

Secretary: Zoë Ciambro Hesp, (γOH-8), Miami University, Undergraduate student

Treasurer: Charles C. Swart Ph.D., (αCT-37), Trinity College, Laboratory coordinator for Neuroscience and Biology.

Regional Vice President, Northeast: *Sarah Raskin, Ph.D.*, (αCT-36), Trinity College, Associate Professor, Department of Psychology and Neuroscience Program

Regional Vice President, Midwest: *Eric Wiertelak, Ph.D.*, (αMN-1), Macalester College, DeWitt Wallace Professor of Psychology.

Regional Vice President, South: *Brandon Wold, B.S.*, (αTX-44), Baylor University, Undergraduate student

Regional Vice President, West: *Andy Agazaryan,* B.S., B.A., (βCA-1) University of California, Irvine, Research Assistant/Staff Research Associate

Subsequent *Nu Rho Psi* National Council elections have been held each year.

Deborah Colbern contacted Mickley April 29, 2007 requesting information for the *Nu Rho Psi* website. Information solicited included a list of new members, pictures with captions affiliated with the actions of their organizations (e.g. induction, service, etc) and links to their department or chapter URL. On April 30, 2007 Mickley contacted the Chapter Advisors with this request. This was the start of the *Nu Rho Psi* Newsletter. The *Nu Rho Psi News*, past and current, may be found on the Society's webpage. The Newsletter is only one of the publications *Nu Rho Psi* has generated for the benefit of our members. For example, in 2013 Zoe Hesp (National Council Secretary) worked with several other Council members to prepare a useful "Guide to Graduate School".

For the November 3-7, 2007 Annual Meeting of the Society for Neuroscience Mickley organized a poster presentation for the Teaching of Neuroscience section. Mickley, Achor, Wiertelak, and Christina McKittrick of Drew University (the 4th charted chapter) co-authored the poster on *Nu Rho Psi*, describing its purpose, membership, history, and contact information. This began a series of informational Theme "H" or "J" presentations at the SfN meeting each year.

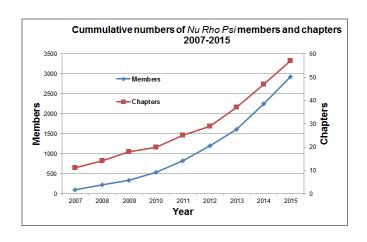
Maturing as an Honor Society

Going beyond academic recognition has always been an important goal of *Nu Rho Psi*. Starting in 2008 the Society began to offer its members various grants and awards. This began with endowing SfN Travel Grants through FUN. At this writing the Society has provided a total of 21 grants to highly qualified *Nu Rho Psi* members. In 2013 the

Society's first Chapter-of-the-Year award was granted to Lake Forest College. In 2014 the Society began to award Undergraduate Research Grants to provide direct support of research projects – including senior theses and summer research. Chapter Activity Grants were also offered to encourage community/campus education and outreach on various neuroscience topics. These annual grants and awards continue to the present day.

In 2014-15 the National Council began to announce an "Annual Theme" that would help focus the community outreach and education efforts of our chapters. The first Theme was "Drug Addiction" and this was followed (in 2015-16) by "Traumatic brain Injury" and "Autism Spectrum Disorders" (2016-17). These Annual Themes often form the basis for successful Chapter Activity Grants.

In the spring of 2016 the Journal of Undergraduate Neuroscience Education (JUNE) published a Nu Rho Psi retrospective recounting the first 10 years of the Society. On 18 February 2016, Northeastern University inducted the 3,000th member of Nu Rho Psi. Currently Nu Rho Psi has 58 chapters in all regions across the United States, ranging from small



liberal arts colleges to large public universities. The number of new chapters has grown steadily each year (see Figure), with 29 new charters granted between 2013-2015 alone.

In 2013 the *Nu Rho Psi* National Council established an Endowment Fund to "...promote neuroscience research and the reporting of that research performed by undergraduate and graduate student members of *Nu Rho Psi*." Its purpose is to support programs that enhance the professional development of our members and promote the study of neuroscience beyond the programs supported through regular Society income. The premier neurohistology company, <u>NeuroScience Associates</u>, has been a staunch supporter of *Nu Rho Psi* and donated the initial funds that allowed the establishment of the Endowment.

Andrew Mickley served as Executive Director of *Nu Rho Psi* since its very beginnings at Baldwin Wallace College (now University; α in OH). He plans to retire on 13 Nov 2016. The National Council did an extensive search and selected Mike Kerchner of Washington College as the second Executive Director of *Nu Rho Psi*. Mike served as President of the Faculty for Undergraduate Neuroscience during the time that organization helped *Nu Rho Psi* get established (see above).

Early drafts of this History were written by Joe Achor and this latest version was edited by G. Andrew Mickley on 28 June 2016.