

SFN Chapters Grant Proposal Application Form

1. Name of Chapter:

Chicago Chapter Society for Neuroscience

2. Chapter Representative contact information (name/address/phone/fax/e-mail):

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4. Checks Payable to:

Chicago Neuroscience Meeting

5. Mailing address for checks:

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6. Attach a brief summary of the proposal (not more than 150-200 words).

The Chicago Chapter of the Society for Neuroscience represents all six major medical centers in the Chicago area that serve the largest population center in the Midwest. We propose to continue to reach out to that population from the level of Professor to postdoctoral student to graduate student and including high school students. In this

proposal we ask for continued funding to support and enhance our outreach activities to high school, undergraduate, graduate and postdoctoral students in the Chicago area through (1) continuation of the highly successful Annual Chicago High School Brain Bee; and (2) continuation and expansion of our annual Undergraduate Research Symposium. We also propose to use some of the funding to utilize and organize the enthusiasm of the graduate students in the Chicago area Neuroscience programs and guide them toward taking a leadership role in these community outreach and educational activities. Finally we will continue to expand and develop the capabilities of our new web site.

7. Specific Goals of the proposal and how it relates to the SFN strategic plan, BAW activities, or otherwise promotes increased Chapter membership and activity (750 words/1 page limit).

The goal of the proposal is to continue to effectively reach out to the Chicago area neuroscience programs which are housed in the six major medical centers. We will also reach out to the undergraduates with an interest in neuroscience and to stimulate interest in neuroscience in the local high schools via the Brain Bee program. These six major medical centers, each affiliated with a major academic institution, have come together as the Chicago Chapter of the Society for Neuroscience. Since Chicago is the largest population center in the Midwest, we as Neuroscientists have a wealth of opportunity to offer our educational resources to these institutions as well as others in the Chicago area.

The Chicago Chapter of the SFN has continued to reach out to the Chicago community via 4 mechanisms: (1) our annual meeting (tentative schedule for 2009 included with this request); (2) the Chicago High School Brain Bee, and (3) the Chicago regional Undergraduate Neuroscience Symposium held in conjunction with our annual meeting. and (4) a newly developed web site. All 4 activities have been well received and have been highly successful and very popular- last year we had a record attendance at the meeting of almost 300 individuals. The focus of this proposal is to request funding to continue these activities for two reasons: to enhance public awareness in Neuroscience research in general and secondly to reach out to the large population of underrepresented minorities who are served in large part by the high schools and undergraduate institutions in our area. A major continuing activity of the Chapter is to develop a Chapter website which can inform and attract new neuroscientists to the Chicago Chapter of SFN. We continue to recruit students from minority institutions (such as Chicago State University) who joined the Chicago Chapter last year. We plan to continue to utilize the resources of our graduate student membership of the Chicago Chapter to reach out to local high schools and enroll students in the Brain Bee program. As a result the human resources necessary to perform these activities will be increased and as an added bonus the graduate students will be granted a life-long lesson in public service.

Thus, the Specific Goals to be accomplished with support of this Chapter Grant include:

1. Develop an education program for the local high school teachers to allow more high school students to participate in the Brain Bee program. We have found that a major impediment to having more students participate is that the high school teachers do not feel qualified to coach the students. To address this need in conjunction with Janet M. Dubinsky at the University of

Minnesota, a program is being developed to specifically educate high school teachers. This program will be implemented by senior graduate students with the help of a faculty advisor. The program will then be utilized in the local high school which should enhance the number of student participants considerably. The program will be developed in conjunction with the Graduate Student Section of the Chicago Chapter of SFN. In this regard we will continue to have two graduate student representatives serve on the council of the Chapter.

2. Continue the very successful Chicago Public High School Brain Bee. Graduate students will serve to direct the Brain Bee and act as tutors for students and teachers (via the program mentioned above) at Chicago area public high schools.

3. Continue our Undergraduate Research Symposium (poster competition), graduate student competition (oral presentations) postdoctoral poster competition and expand our outreach activities to local undergraduate institutions. In 2008 close to 30 undergraduates representing 10 institutions as far away as Waverly, Iowa (Wartburg College) and Greencastle, Indiana (DePauw University) participated in the Chapter's meeting. In 2008 we held a very successful student-speaker breakfast with our keynote speaker (Derek Van Der Kooy from Toronto, Canada) which we will continue with our keynote speaker this year (Dr. Huda Akil from the University of Michigan). We plan to continue and expand this to include a speaker/graduate student luncheon with the speaker as well. Dr. Dorothy Kozlowski from the Biology Department at DePaul University in Chicago will direct the poster competition in 2008. Each major medical center in the Chicago area delegate's one graduate student to orally present their work at the annual meeting and the presentations are judged and awards given. In addition there is a postdoctoral poster competition at the annual meeting which is judged and awards are given.

4. Continue to develop and expand the capabilities of our new web site. The web site will eventually include job opportunities, grant opportunities and a unified calendar listing all the events of interest to neuroscientists in the Chicago area.

8. Budget: Explanation and Justification. Travel may be allowed only for visits to promote chapter membership and if part of a formal program. Requests for travel funds must be accompanied by a compelling justification.

Awards for winners of High School Brain Bee <i>(\$300, \$200 and \$100 incentives for first, second and third place winners.)</i>	\$600
Prizes for all high school participants <i>(We have traditionally provided gift packets including small items available for BAW to all student participants in the Brain Bee.)</i>	\$250
Awards for winners of Undergraduate Student Research Symposium <i>(\$300, \$200 and \$100 incentives for first, second and third place winners.)</i>	\$600
Breakfast for participants with keynote speaker at Annual Meeting	\$100
Lunch for participants with keynote speaker at Annual Meeting	\$150
Rental of poster boards for undergraduate competition	\$200
Publication costs (letterhead, posters) for outreach to high school and colleges	\$100
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	Total Request \$2000

9. Number of current chapter members. (Please indicate the number of faculty, staff, postdoctoral trainees, graduate students and undergraduate students).

Total Number of Registrants in 2007

Faculty	100
Post-doctoral trainees	50
Graduate Students	80
Support Staff	25
Undergraduate Students	28

Participating Graduate Institutions:

Abbott Laboratories
Biotronic
Chicago State University
Children's Memorial Research Center
DePaul University
Governors State University
Hines VA
Illinois State University
Indiana University School of Medicine Northwest Campus
Lake Forest College
Loyola University Chicago
Marquette University
Northwestern University
Rosalind Franklin University
Rush University
Saint Xavier University
University of Chicago
University of Illinois at Chicago
Western Illinois University

Participating Undergraduate Programs: Beloit College, Chicago State University, DePaul University, DePauw University, Lake Forest College, Loyola University of Chicago, Northwestern University, University of Illinois Champaign Urbana, University of Wisconsin Madison, Wartburg College

10. List of Chapter-sponsored events during the past 3 years. Please include event dates and titles.

2008 Annual Meeting (Derek Van Der Kooy, Keynote address) March 27, 2008
2007 Annual Meeting (David Amaral, Keynote Address) March 23, 2007
2006 Annual Meeting (Tomas Hokfelt, Keynote Address) March 3, 2006

Undergraduate/Postdoctoral poster competition- 2007, 2008
Graduate student oral presentation competition- 2007-2008
Brain Bee- 2006-2008

8:00-10:00^{AM} Registration/Continental Breakfast

1st floor hallway

8:00-9:00 Posters setup

New!! POSTERS WILL BE UP ALL DAY UNTIL 4:30 PM!!!

Presidential Symposium

SAC 154

Challenges for Neuroscientists in the 21st century-

Chaired by Dr. George H. DeVries, Hines VA Hospital/University of Illinois at Chicago

9:00-9:15 Welcoming remarks

9:15-9:45 Funding Challenges- NIH Program Officer

9:45-10:15 Ethical Challenges- Dr. R. DeVries, University of Michigan

10:15-10:45 Publication Challenges- Dr. G. Lees,- founding editor and publisher *The Scientific World*

Keynote Grass Lecture

SAC 154

11:00-12:00 *"Circuit Neuromics: The New Path to Understanding the Genetics and Neural Causes of Mood Disorders"*
Dr. Huda Akil, University of Michigan

Lunch 1st floor hallway.

12:00-1:30 Lunch and Poster , Viewing/Judging

Room 120 A/B

Graduate Student Symposium

Room 314 A/B

1:30-1:45 Welcome/Introduction Comments by Dr. Evan Stubbs, Loyola University/ Hines VA Hospital

1:45-3:00 Graduate Student Talks

Symposium 1

Room 314 A

Neuronal Aspects of Chronic Pain: from Periphery to Brain. Chaired by Dr. Marco Martina

3:00-3:25 *"Pro-Nociceptive Actions of Chemokine Signaling in Models of Chronic Pain"*

Dr. Fletcher White, Loyola University.

3:30-3:55 *"Cellular reorganization of medial prefrontal cortex in a rat model of neuropathic pain"*

Dr. Marco Martina, Northwestern University

4:00-4:25 *"Cortical pathophysiology of chronic back pain: from representation to reorganization"*

Dr. Marwan Baliki, Northwestern University.

Symposium 2

Room 314 B

Visual neuroscience: from retina to behavior. Chaired by Dr. Joshua Singer

3:00-3:25 *"Retinal pathways for parallel processing"*

Dr. Steven DeVries, Northwestern University

3:30-3:55 *"Subcortical representation of complex image features"*

Dr. Naoum P. Issa, University of Chicago

4:00-4:25 *"Combining rod and cone signals in visual pathways"*

Dr. Dingcai Cao, University of Chicago

Symposium 3

TBA

Drug Addiction. Chaired by Dr. Xiu-Ti Hu

3:00-3:25 *"The dark side of cognitive enhancers"*

Dr. Heinz Steiner, Dept. of Cellular and Molecular Pharmacology, Rosalind Franklin University of Medicine and Science/Chicago Medical School

3:30-3:55 *"The cAMP pathway in reward-dependent learning"*

Dr. Xiaoxi Zhuang, Dept. of Psychiatry, the University of Chicago,

4:00-4:25 *"The critical role of hippocampal neurotrophic factor TrkB and glutamatergic NMDA receptors in amphetamine reward-mediated behavior"*

Dr. T. Celeste Napier, Dept. of Pharmacology, Center for Compulsive Behaviors & Addiction, Rush University Med Center,

8:00-4:30 **Poster Presentations & Exhibitors**

Room 120 A/B

5:00-6:00 **Reception**

Room 314 A/B