

Chapter Grant Awards

Application

1.) Name of Chapter: Central Missouri2.) Number of Current Chapter Members 52Faculty Members: 22 Staff Members: 1 Postdoctoral Trainees: 3
Graduate Students: 26 Undergraduate Students: 0

3.) Chapter Representative Contact Information:

Name: Dr. Dennis K MillerAddress: Department of Psychological Sciences, McAlester Hall,
University of Missouri, Columbia MO 65211Phone: 573-884-8141 Fax: 573-882-7710E-mail: millerden@missouri.edu

4.) Chapter Treasurer Contact Information

Name: Dr. Matthew WillAddress: Life Sciences Center, University of Missouri,
1201 Rollins St, Columbia MO 65211Phone: 573-884-2570 Fax: 573-884-9676E-mail: willm@missouri.edu5.) Checks Payable to: Curators of the University of Missouri6.) Mailing Address for Checks: Mail to Dr. Will at the above
address

Please attach responses to the following questions in 10 point font or larger:

- 1.) A brief summary of the proposal (no more than 150-200 words).
- 2.) Specific goals of the proposal and how it relates to the SfN Strategic Plan, Brain Awareness Week activities, or otherwise promotes increased chapter membership and activity (please do not exceed 750 words to 1 page). Please be sure to include an approximate date of the proposed activity or event.
- 3.) Budget: explanation and justification. Travel may be allowed only for visits to promote chapter membership, if part of a formal program. Please note: requests for travel funds must be accompanied by a compelling justification.
- 4.) Please list any chapter-sponsored events held during the past three years (please include event dates and titles).
- 5.) Chapter web-page address, if applicable

Important note:

All Chapter awardees are required to submit a final report including detailed budget expenditures within 30 days after the funded event or activity. Any unused funds must be returned to SfN.

1. Summary

During the past year we have worked to reinvigorate the Central Missouri Chapter (CMC) of the Society for Neuroscience. CMC events have enhanced neuroscience training at the University of Missouri (MU) and promoted research to the people of central Missouri. More is needed, however, to achieve our goals, and we request an award to develop CMC activities and bring more information about neuroscience to our community. The award will be used to support CMC's Brain Awareness Week (BAW) on "The Lifespan of the Mind" in spring 2009. (1) CMC members will give scientific presentations focused on aging changes on the brain to local senior citizen centers. (2) CMC members will introduce film clips and lead discussions on the adolescent brain at a local theater. (3) Experts will lead a public colloquium on neuroimaging techniques to view developmental brain changes. (4) Young neuroscientists will present their research at our poster session. (5) Graduate students will compete for two merit-based awards and give the keynote presentations to the CMC BAW session. We believe these programs will give vigor to the CMC, educate the general public on neuroscience research and the mind/brain, and improve the scope of neuroscience research in central Missouri.

2. Specific Goals

The award will be used to support the CMC's BAW activities on the "The Lifespan of the Mind", and centered on the Society's international BAW (March 16-22, 2009). CMC will have activities on the MU campus and in the Boone County (population of ~155,000) area that focus on the changes in the brain and mind throughout life. Brain and behavior changes across the lifespan are a topic of general interest to the community and complements strength of MU neuroscience research in development.

Goal 1. Older members of our community have many questions about the changes in cognition and personality that occur later in life. In March and April **CMC members will give presentations at senior citizen centers and retirement homes** about the "basics" of the brain, how the brain changes across the lifespan, causes of neurodegenerative disorders, and novel treatments. This is a novel initiative for CMC, and is led by a graduate student who has already been giving successful scientific outreach presentations. We are also coordinating to have a CMC member speak on a local daytime television talk show on the topic. Overall, this goal will educate and promote the benefits neuroscience research to the general public.

Goal 2. Parents observe the behavioral transformations that occur during adolescence and are interested in the processes responsible for this process. **CMC faculty members will present film clips and lead a discussion on the neuroscience of adolescence at a local casual movie theater** (Ragtag Cinematique, Columbia MO). This innovative approach to educate and inform the public will be advertised to the general community, and will be held on a weeknight in late-March. A similar event on drug addiction in 2008 was attended by 200 people. The goal of the event is to educate and promote the benefits neuroscience research to the general public.

Goal 3. Imaging research is becoming an important tool for clinicians with its use to diagnose brain pathology and its research capabilities for neuroscientists. Three **CMC faculty members will lead a colloquium on neuroimaging**, with a focus on its application to brain development. This event will be advertised to the general public, as well as the research community, and held on March 3 at the MU Life Sciences Center. This goal will educate the public about neuroscience research directly, as well as enhance research collaboration across disciplines.

Goal 4. Many undergraduate and graduate students work in research laboratories and need an opportunity to present their findings. **Students will present their research at the BAW poster session** on March 20 at the MU Life Sciences Center. We anticipate strong attendance and participation (>30 posters) from MU researchers and have extended invitations to nearby colleges. This goal will promote neuroscience training and increase contact between students and faculty.

Goal 5. The CMC is proud of our graduate student's accomplishments and would like to establish a new tradition to honor students annually. Junior (Years 1 and 2) and senior (> Year 2) **graduate students will compete for a merit-based CMC Outstanding Neuroscience Graduate Student Award**. Two students will receive an award and give the keynote presentation following the BAW poster session. Awardees will be nominated by faculty and selected by the CMC Executive Committee. This goal will promote training and encourage outstanding students to continue to develop their career in neuroscience.

3. Budget

Item	Amount Requested
Advertising	\$500
Graduate student awards	\$200
Tangible items for outreach activities	\$250
Food for poster session	\$250
Total	\$1200

Budget Justification

Advertising. Funds are requested to announce our activities to the general public, to neuroscientists across central Missouri, and to the MU research community. Importantly, we want to be sure the public is aware of our events in senior centers (Goal 1), at the movie theater (Goal 2), and on neuroimaging (Goal 3), as we believe these will be of greatest interest to a general (i.e., non-neuroscientists) audience. Advertising will focus on our local newspapers and university-owned television station.

Graduate student awards. To encourage participation in the competition and reward our outstanding students, the junior and senior winner of the CMC Outstanding Neuroscience Graduate Student Award (Goal 5) will receive a gift certificate (\$100 each) to a local store (e.g., Barnes & Noble or Target). Funds are requested to purchase the awards.

Tangible items for outreach activities. Funds are requested to support our outreach efforts to senior centers (Goal 1), at the movie theater (Goal 2), and on neuroimaging (Goal 3). We will put together packets that include items such as brain facts and brain associated paraphernalia to help increase interest and excitement about the brain. We also will buy equipment (e.g., brain models and other visual aides) to help our presentations. The equipment will become part of our permanent supplies and will be used in future outreach endeavors.

Food for poster session. For better social engagement we would like to provide snacks and beverages at the evening presentation on neuroimaging (Goal 3) and the BAW poster session (Goals 4 and 5).

Matching Funds

Due to a severe budget crisis for the state of Missouri and cutbacks at MU, the CMC has received significantly less funding from academic departments than in the previous year. Through the 2008-2009 academic year, the CMC has received \$200 in matching funds for activities from the MU Life Sciences Center, Department of Psychological Sciences and the Department of Pathology. We have raised money to support activities through CMC membership dues.

The Life Sciences Center has agreed to host the evening presentation on neuroimaging (Goal 3) and BAW poster session (Goals 4 and 5). The Ragtag Cinemateque has generously agreed to provide a theater for the movie theater/pub (Goal 2) event *gratis*.

4. Chapter-Sponsored Events (During the Past Three Years)

Annual Chapter reports were submitted in May 2006, 2007 and 2008.

March 17, 2006

1) The CMC and the Department of Psychological Sciences co-sponsored a seminar during BAW 2006. The speaker was Dr. David Van Essen from Washington University who spoke on "Mapping the Cerebral Cortex in Health and Disease".

2) The CMC co-sponsored a research symposium with the MU Interdisciplinary Neuroscience Program on March 17, 2006. Thirty five posters were presented by faculty, staff, and students. Dr. Van Essen participated in the poster session prior to his seminar.

March 16, 2007

1) The annual CMC meeting was held in conjunction with BAW 2007 activities. The CMC sponsored two faculty seminars. The speakers were Dr. Chris Lorson and Dr. Cheryl Heesch of MU.

2) The CMC co-sponsored a research symposium with the MU Interdisciplinary Neuroscience Program on March 16, 2007. Thirty seven posters were presented by faculty, staff, and students.

October 23, 2007

The CMC hosted and co-sponsored the Grass Foundation lecture by Dr. Don Cleveland (University of California, San Diego) titled "From Charcot to Lou Gehring: Motor neuron growth and death".

March 8-14, 2008

1) As part of BAW 2008 the CMC sponsored "Addicted to the Brain: Movie night" (March 10, 2008) in collaboration with the Ragtag Cinematique. This event was attended by 200 people and an open forum was held after movie clips on addiction. The event featured a panel of experts to discuss matters ranging from the science of addiction to recovery.

2) "Brain Day" was held at the Youzeum in Columbia, MO (March 12, 2008). It featured interactive displays and games for children to help them learn about neuroscience in a fun and inventive manner.

3) The CMC co-sponsored a research symposium with the MU Interdisciplinary Neuroscience Program (March 14, 2008). Thirty seven posters were presented by faculty, staff, and students.

September 16, 2008

The CMC and Department of Psychological Sciences sponsored an evening discussion on the "Neuroscience of Learning and Memory" at the Forge & Vine restaurant (Columbia MO). The event featured presentations by Dr. Grace Sun, Dr. Nelson Cowan and Ms. Divya Sitaraman (graduate student) followed by discussions led by Dr. David Beversdorf, all of MU. The event was free to all, and open to the public.

Sunday Afternoons, Fall 2008

The CMC initiated a series of Sunday afternoon soccer games at a local playground for members of the neuroscience community. The games were attended by 6-20 people and were held six times. The series will resume in spring 2009.

November 4, 2008

The CMC and Department of Pathology sponsored a poster session for graduate students and postdoctoral scientists preparing to go to the annual Society for Neuroscience meeting. Fifteen posters were presented and the event was attended by 40 people. Two outstanding posters were awarded gift certificate prizes, and the poster session was followed by a presentation by Dr. Andrew McClellan of MU.

5. Chapter Web-Page Address

The CMC does not, yet, have a web page.