

Center for Molecular Signaling

Graduate Student Research Fellowship Application

I. General Guidelines

Purpose: The purpose of these fellowships is to support graduate students with research projects in the area of Molecular Signaling. Students must be conducting their thesis or dissertation research in the laboratory of one of the CMS faculty and performing a research project linked to center research objectives. Applications for funding will be reviewed on the basis of student progress, consistency with the scientific focus of the CMS on intra and inter-cellular signaling, and potential for collaborative interdisciplinary research with other CMS associated researchers.

Eligibility

- Graduate students (MS or PhD) who are working in the labs of WFU Reynolda Campus faculty who are members of the Center for Molecular Signaling
- PhD students working in labs of WFUHS faculty who are CMS members who collaborate with WFU Reynolda Campus CMS members (but with lower priority)
- All fellowship applications must be accompanied by a letter from the graduate student's research advisor supporting the student's request for the fellowship

Topics: Topics must be related to molecular signaling, broadly defined to cover the study of signaling at multiple levels, including long distance signaling to coordinate organismal physiology and behavior (e.g. neurotransmitters and hormones), intracellular signaling molecules and events (e.g. secondary messengers and protein modification including phosphorylation and oxidation), and intra-molecular conformational changes in proteins for regulation of the activity of enzymes, transcription factors, and other molecular motors. The three primary research foci of the CMS are: redox signaling, computational modeling of signaling networks, imaging of signaling events, and bioactive signaling molecules.

Aspects of the project that will positively contribute to its suitability for funding:

- Evidence for graduate applicant's productivity
- Relevance to the Center's focus on cellular and molecular signaling
- Clarity and significance of study question
- Collaboration between two or more different researchers, departments, schools, or centers
- Development of new directions or approaches for research projects

Deadlines: Applications are due by March 15, 2017. The proposals should be sent to: Susan Tague, CMS administrative assistant: taguesc@wfu.edu. If you have questions as you prepare the proposal, please contact Gloria Muday at muday@wfu.edu.

Amount: Students may request funds to cover their stipends for either one semester or a full year, although the probability of full year support is extremely low. They may also

request costs for supplies and reagents, but the total may not exceed \$25,000 for a full year or \$15,000 for a half year.

Reporting: Final reports are required at the end of each fellowship, within 90 days of fellowship completion. The final report should include scientific findings, abstracts or publications resulting from the project, a brief description of how the funding was spent, and whether the funding was instrumental in the preparation and/or funding of extramural grant applications.

II. Instructions for Proposal

- A. General guidelines. Use standard fonts and margins (11 point font or larger and 1 inch margins). The header should include the graduate student's name formatted as follows: Last Name, First Name, with page numbers included. A PDF or Word document of the proposal must be submitted electronically to Susan Tague, CMS administrative assistant (taguesc@wfu.edu), by March 15, 2017.
- B. The proposal should contain a one-page *cover page* which includes:
- Graduate student name, department, year in program
 - Graduate advisor's name and signature
 - List of graduate committee members
 - Signature of all investigators' department graduate committee chair (or e-mail noting their support of this project and that the student is in good standing).
- C. The *research plan*, will use the format of a National Science Foundation graduate research fellowship application and contain two sections, with a total length of 4 pages for both sections. This page count does not include references, citations, charts, figures, and images:
- Personal Statement and Previous Research Experience
 - Proposed Plan of Research
- D. Student CV that contains research and teaching experience including a list of presentations and publications.
- E. Letter of support and summary of current and pending support of student's graduate advisor (SENT SEPARATELY). This letter should contain information on the graduate applicant's progress (has s/he advanced to candidacy and/or a timeline for doing so), status of publication, how the project fits center priorities, and how s/he has been supported previously and how this fellowship fits into the other support options in the PIs laboratory.
- F. **Budget:** Include a brief but descriptive budget and budget justification. Indicate the standard graduate stipend in your program on the semester or yearly level (whichever you are requesting) and any supplies and reagents needed to support your project.