

## 2018 PROFESSIONAL DEVELOPMENT FUND APPLICATION

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Amount Requested: \$2125

Short Title of Proposal: 3D Imaging Presentation at SFS

Abstract (2-3 sentence description of proposal):

3D Imaging Presentation at SFS is a proposal to request funding to attend the 2018 Society for Freshwater Science Annual Meeting (Detroit, MI) to present research on developing new laboratory equipment for imaging aquatic insect museum collections. At this meeting I am also a co-author on a mentored undergraduate research project on caddisflies and a coordinating member for the SFS Instars program, a diversity program designed to support travel to conferences by undergraduate students from diversity backgrounds.

### CHECK LIST for PDF Applications for 2018

Have you remembered to include the following documents with you letter of application?

**Application**, including all supporting documentation.

**Budget breakdown**. Please round up to the nearest dollar amount, and indicate any other sources of funding for the proposed project. Please list items in terms of importance for funding. Note: travel costs will be reimbursed and cannot be distributed prior to the trip.

**Letter(s) of Support** (Recommended, not required). If you choose to provide letters of support, include them in your application .pdf. If you are applying for course relief, you must include a letter of support from your department chair.

**An updated CV**.

Dear Professional Development Funding Committee,

I am pleased to apply to the Professional Development Fund grant program for Lecturers. I am a 9th year Continuing Lecturer and am currently under my first Merit Review after my Continuing Lecturer appointment in 2015. I teach the Senior Seminar in Environmental Sciences (ESPM 175A & 175B), a two-semester senior thesis course sequence where students deeply investigate a research question, learn to synthesize literature, present in a public symposium, and write in the style of a scientific publication. I am requesting Professional Development Funds to attend the Society for Freshwater Science Annual Meeting conference in early summer of 2018 to present recent research.

The Society for Freshwater Science (SFS) unites professionals and researchers studying diverse aspects of freshwater aquatic ecology. At this year's meeting, I will give an oral presentation in the Taxonomy & Systematics session, "Imaging Fluid-stored Arthropod Collections using 3D Print Technology." This presentation communicates laboratory equipment and a technique I developed for imaging museum collections of aquatic insects and other freshwater organisms. Research for this project has involved 6 undergraduate researchers at Berkeley and their work on the project is a contribution to imaging collections for UC Berkeley's Essig Museum of Entomology.

Attending SFS supports my scholarly activities and international collaborations, but also links to my teaching at Berkeley. At this conference, I will also be attending a workshop on "Inclusive and Accurate Approaches for Teaching Sex and Gender in Biology," as well as two special sessions on college level teaching for STEM courses in ecology and environmental sciences in addition to other presentations in my research field. I have attended this meeting every other year since 2001, however I have been unable to attend the last year because of limited funds and travel embargoes to states with discriminatory policies.

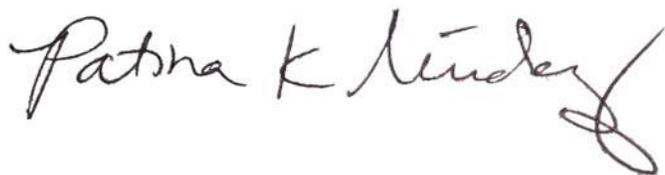
As a Continuing Lecturer, I am not funded to research; however, the course I teach is a senior-level year-long research and writing course that mirrors the scientific research and publication process. I find that being able to discuss my research activities and my own challenges with academic writing and publication during lecture, adds a dimension of credibility to my teaching about "being a scientist". In addition, I am the "Natural Sciences" faculty member of the teaching team, which means that I am expected to support both experimental design and statistical analysis for projects. I find that by attending meetings where I observe a diversity of research questions, I am better able to support student projects in my course. In many cases I serve as the primary faculty mentor students my course on research questions in my field.

At SFS, I will also be a co-author on a poster presentation by my undergraduate research student Jessica Garcia-Reyes (CNR SPUR), who will also be participating in the SFS Instars Program. Ms. Garcia-Reyes will be presenting, "*Neophylax rickeri* Case and Larvae Measurements Used To Observe Case Building Strategies within One Stream." As one of the few caddisfly specialists in North America, my participation in the meeting is critical to supporting our science.

My involvement at SFS goes beyond this presentation. At this conference, I participate on a number of society committees. I'm a founding member of the SFS Instars Program, a diversity program to bring undergraduate students from traditionally under-represented groups to our meeting to encourage the pursuit of advanced degrees and careers in freshwater STEM fields. I am a member of the Education & Diversity Committee and a member of the Public Information & Publicity Committee.

For this conference, I request \$2125. Attending this meeting will support my career development as a teacher and scholar at UC Berkeley.

Respectfully,

A handwritten signature in black ink that reads "Patina K. Mendez". The signature is written in a cursive style with a large, stylized flourish at the end of the name.

Patina K. Mendez, Ph.D.

## MENDEZ BUDGET REQUEST

Society for Freshwater Science Annual Meeting, May 20-25th, 2018 Detroit, MI

Total Amount Requested: \$ 2125

### Budget Breakdown (in priority for funding):

Early Registration member rate: \$455

Flight: \$550 (\$500 ticket + \$50 baggage fees) from SFO to DTW

Hotel: \$850, single occupancy for 5 nights (could be funded a half)

Per-Diem food & incidentals: \$270 (5 days @ \$54/day) CONUS Rates for Detroit