

**2017 PROFESSIONAL DEVELOPMENT FUND  
APPLICATION**

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**Name:** Robin Ball

**Department:** Molecular and Cell Biology

**Phone Number:** (510) 759-7021

**Email Address:** rwb@berkeley.edu

**Amount Requested:** \$970

**Short Title of Proposal:** Undergraduate Neuroscience Education Conference Expenses

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\* The "Short Title" for your proposal should be a unique way that the Committee can refer to your project. For example: "Nigeria Travel Grant Primary Schools Second Language" would be helpful, "Boston Conference Expenses" would not.

**Abstract (2-3 sentence description of proposal):**

I will be attending a 3-day conference near Chicago this summer called the Undergraduate Neuroscience Education Workshop. I will present a poster about my UC Berkeley course, Neurobiology of Disease, and I will gather information about neuroscience laboratory exercises that we can use in our Neuroscience lab courses.

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Robin Ball, PhD  
142 Life Sciences Addition  
Berkeley, CA 94720-3200

3 April, 2017

Dear Professional Development Funding Committee,

I am applying for a Professional Development Fund grant to cover the cost of attending the Faculty for Undergraduate Neuroscience Education Workshop July 28-30, 2017 at Dominican University in River Forest, IL (<https://funfaculty.org/conference>). I will be presenting a poster about a course I developed at UC Berkeley, as well as getting ideas for our neuroscience lab courses, which I am redeveloping.

Last year I helped to develop and teach a new course, MCB 165: Neurobiology of Disease. This is one of the most advanced courses in our division, so we wanted to challenge the students to read, analyze and discuss recent journal articles about these topics. Most of our students have not read primary scientific literature in depth in their previous classes. We designed discussion sections so students could talk to each other about the paper before presenting the figures to the class. We found this worked well, even for a large lecture course. At the conference, I will share information about the course and present survey data from our students, which assesses our intended learning goals.

The greatest benefit of attending this conference, though, will be the information I gather about new laboratory exercises that I can bring back to my classes at UC Berkeley. Last year I redeveloped MCB 163L: Neuroanatomy lab, turning it from a tedious lecture course into a 6 hours/week lab course. I borrowed lab exercises from other courses, designed experiments with other faculty, and wrote new labs. Some of these labs were great successes and others flopped, but I have a better idea now of what students want from the course and how we can make a better course. One thing we need to do is have more interactive, thought-provoking and failure-proof lab activities. It will be helpful for me to learn about what works from lab instructors at other universities and to discuss potential new lab exercises. This will have a direct impact on the 100 students who take MCB 163L and will likely affect all of our neuroscience students in the future since we plan on completely revamping our other neuroscience lab course two years from now.

My department has been very supportive and is relying on me to improve these neuroscience lab courses. I have included a letter of support from Marla Feller, the head of the Neurobiology Division in the MCB Department. I am requesting \$970 to cover my travel, room and board for the three-day conference as detailed below.



Budget

Conference (includes registration, on-campus housing and meals) \$515

Flight (Oakland-Chicago) \$405

Transportation in Chicago (train and cab): \$30

Transportation to/from Oakland airport: \$20

Total: \$970

Thank you for considering my application.

Sincerely,

A handwritten signature in cursive script that reads "Robin Ball".

Robin Ball

Molecular and Cell Biology

[rwb@berkeley.edu](mailto:rwb@berkeley.edu)

510-759-7021