

**Chabot-Las Positas Association of Retired Employees  
CARE Fund Special Projects Grant Program  
2015-2016 Application Form**

**Please mail completed form to:**  
CARE Grants, c/o Bill Threlfall  
11 Woodside Glen Court  
Oakland, CA 94602

**Deadline: November 16, 2015**  
Award announcement: December 1, 2015

**Applicant Information**

Name Michal Shuldman Site:  Chabot  LPC  District Office  
Campus e-mail address mshuldman@laspositascollege.edu Campus phone number 925-424-1000  
(or home phone if no campus phone is available)  
Division or Department Biology Name of Mgr/Supervisor Dr. Everett

**Project Information**

Name of project Research Supplies for Plant Water Use Experiments  
Amount of grant requested (max: \$1,500) 400 Expected completion date for project Spring 16  
Who will be responsible for completion of the project? Michal Shuldman

Description - Provide a brief overview of project plan:

**Instructional materials for Bio1A - Botany Lab at Las Positas College**  
- Fans, lamps and lights to be used in a student experiment on plant water use.  
The requested supplies will make a class set of 12 experimental set-ups.

Outcome - Clearly state the outcome to be attained by the project. Be specific.

Increasing student engagement and hands-on participation in experiments is critical to student success. One of Bio 1A's course objectives is to apply scientific methodology through experimentation. Designing and completing the plant water use lab is part of the process of building these scientific skills. Currently, all students in the class share 1 fan and 3 lamps. Providing each lab pair with their own fan and light will improve student learning by (1) allowing groups to design and control their own variables in the experiment and (2) improving the accuracy of the experiment so that the results are easier to interpret.

Budget - Expenditures must conform to this budget. Total budget should equal award request.

List each planned expenditure, showing: \$ amount, (to) payee, (for) description.

Example: \$56 to AcroScientific for laser pointer (Provide additional narrative if desired.)

\$220 to Amazon.com for 11 Voranado Personal fans  
\$135 to Amazon.com for 9 clamp lamps (8.5in diameter)  
\$45 to Amazon.com for 9 150W light bulbs

Benefits - Please briefly explain how the project will **improve service to the colleges** in your area of work responsibility.

Describe what problem the project will solve, and how long the benefits will last. Be Specific.  
Supplies purchased with the support of a CARE grant will make the plant water use experiment more meaningful to students and this will improve student learning. Currently, all students in the lab share one 1 fan and 3 lamps. These supplies are not sufficient for students to run a high quality experiment. New fans and lamps will last for many years and hundreds of students will use them.

**Agreements:** I agree to complete the project as described above and then provide a one-paragraph outcome report including a digital photograph to CARE. (due: June 20, 2016 or by the above completion date.)

I understand that grants will be payable to the College/District and grant purchases will become CLPCCD property.

Applicant's Signature Michal Shuldman Date 11/11/15

I agree to provide fiscal oversight:  
Mgr. / Supervisor's Signature [Signature] Date 11/11/15