



SOCIETY OF PHYSICS STUDENTS

An organization of the American Institute of Physics

Future Faces of Physics Award Proposal

Project Proposal Title	From Every Nation – Physics Mentoring for All
Name of School	Calvin University
SPS Chapter Number	0951
Total Amount Requested	\$500.00

Abstract

Calvin University SPS is helping first year physics students integrate into the department and university level physics by offering a mentorship program that pairs first year students with upperclassmen mentors who are on the path they are interested in, as well as providing opportunities to start building relationships with professors.

Proposal Statement

Overview of Proposed Project/Activity/Event

This project seeks to pair first and second year students (underclassmen) with upperclassmen. The pairings will be made intentionally, e.g. underclassmen interested in astronomy will be paired with upper level students who are also interested in astronomy. This way first year students get more than just a relationship with an upper level student, they also can be more effectively mentored in the area they are most interested in. In terms of exact looks, the ongoing coronavirus pandemic has put a lot of uncertainty in planning events. However, given Calvin's plans to continue face-to-face instruction into the second semester, one can forecast with some confidence that we will be able to have in-person mentoring and social gatherings (that follow all published health guidelines, of course). If such gatherings are not possible, then we will switch to virtual gatherings. The goal of this project is to create a strong departmental bond between the incoming and upper level students. Additionally, this program hopes to increase the first-year retention rate of physics majors and be an incentive to prospective physics students to choose physics at Calvin University. The intended audience are first- and second-year students at Calvin. This program seeks to impact every student in the department, either be receiving mentoring or giving mentoring. Studying physics is no easy task. This program seeks to help students from high school acclimate to collegiate level physics, which can be difficult. Additionally, there is a stark transformation between high school and college in many other ways. This program seeks to help students find mentors among their peers and professors.

How Proposed Activity Promotes Physics Across Cultures

This project will promote physics across cultures by providing the chance for students of all backgrounds to thrive at Calvin University. The transition to university and university physics is particularly challenging for students who find themselves also having to make a cultural jump. This project seeks to help students who are not culturally American integrate and thrive at Calvin. Additionally, a side benefit of this project is the ability for it to increase the cultural awareness of all the students in the physics department. Often times, we seek to reach out to others, but rarely do we let others reach out to us – we

have in some sense a superiority complex. This project aims to combat this with relationships so that students from other cultures can share their perspectives and physics journeys as well.

Plan for Carrying Out Proposed Project/Activity/Event

Willem Hoogendam, SPS President, will be oversee planning and execution for this program and monitoring it. He will be in touch with participants about their experiences and evaluating feedback to help improve this program for future years. This project will be marketed several ways: first, emails will be sent out to the email-list. Secondly, posters will be hung in common rooms (Calvin University is still holding in-person classes, so students are still on campus). Third, individual students will be emailed individually about this project. Finally, professors will mention it in their courses. The goal is to have every student in the department participate in this program. The goal is to have all SPS members at Calvin University, and all non-SPS members as well, participate. One alumna volunteer may be recruited due to her special expertise in promoting physics across cultures.

Project/Activity/Event Timeline

The timeline of this project will focus on the second semester of the academic year. Mentorship pairings will be determined during Interim, a month-long term between semesters. From there, mentorship pairings will meet regularly during the semester. Group social events will be held throughout the semester, approximately one per month.

Activity Evaluation Plan

The success of this event will be measured by how many students choose to participate, and also their feedback on the program via a survey. After receiving the results, we will evaluate the effectiveness of the program in terms of responses indicating how well incoming students feel they have been integrated into the department. Extra attention will be paid to students who come from different cultures and how they felt that they were able to acclimate to American culture, but also still be able to share their unique culture and perspectives.

Budget Justification

The two items on the budget are Peet's Vouchers and Quarter Zip Subsidies. The first are vouchers to the on-campus coffee shop. Meeting over coffee is a classic way to have a one-on-one meeting. These vouchers will help offset the cost of purchasing beverages from Peets. Each voucher is enough to cover one meeting between mentor and mentee. We have budgeted 20 meetings, which should allow each pairing to meet approximately two to three times. This aids the project because the chance for free or discounted coffee is appealing to many students. Secondly, there is the quarter zip subsidy. Quarter zips are more professional than a T-shirt and would help build unity in the department. In a sense, it is a physical item that signifies membership in the department. The higher quality would increase this pride in being a part of the department. Having quarter zips would create a sense of community within the department, and this subsidy will help them be affordable, since they are more costly than T-shirts. In short, the quarter zips would help with the goal of this task by helping everyone integrate by having the "Calvin Physics" quarter zip.