



# SIGMA PI SIGMA

The physics honor society

## Sigma Pi Sigma Chapter Project Award Proposal

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| Project Proposal Title        | [Sigma Pi Sigma: Celebrating Diversity in Physics] |
| Name of School                | [University of the Sciences]                       |
| Sigma Pi Sigma Chapter Number | [619]  |
| Total Amount Requested        | [\$500.00.]  |

### Abstract

We propose to celebrate diversity in the community of physics through an Induction Ceremony-Banquet that brings together students, alumni, faculty, administrators, “hidden” physicists, and girls and minorities from K-12 outreach. We will promote the culture of physics and its diverse career opportunities in a school historically tied to pharmacy.

# Proposal Statement

## Overview of Proposed Project

The USciences SPS chapter has been very active in promoting physics to under-represented groups. With the help of two Future Faces of Physics grants, our chapter has done physics outreach at Mighty Writers Afterschool Mentoring Program and a local high school – both populated with largely minority youth. SPS members also formed the Camp Crew of the Physics Wonder Girls Camp, a weeklong summer physics camp for girls (mostly from minorities) led by our SPS Advisor. These activities with groups under-represented in the physical sciences has broadened both experiences and perspectives among SPS members and USciences students – which, compared to the surrounding diverse community of West Philadelphia, is far from diverse. We propose to celebrate, in an Induction Ceremony, both the academic achievements of our physics students and their service with under-represented groups.

Through the Induction Ceremony, we also want to celebrate the diversity of career possibilities open to physics students. For speakers, we will invite physics graduates who went to traditional, and non-traditional fields where they work as “hidden physicists”: industrial physicists, financial analysts, medical physicists, etc. This experience will encourage physics majors to explore options, particularly in the private sector, other than teaching. It will enhance networking opportunities – which is not as many in a small university such as ours. This convergence of academia, private sector, and community might catalyze discussions about the role of physicists in society. With university administrators in attendance, we hope the event to help broaden their appreciation of physics as a viable career option compared to traditional professions in the pharmaceutical and medical fields.

We anticipate induction of 5-7 physics majors, 1-2 physics alumni, and will invite physics majors from neighboring institutions without a Sigma Pi Sigma chapter. In addition, we will invite and honor 1-2 middle school girls who participated in the 2017 Physics Girls Camp, 1-2 high school students from the largely minority high school visited by SPS, and 1-2 youths from the Mighty Writers Afterschool Program. The purpose is to further encourage these outstanding K-12 students in considering physics as a viable career path. Physics faculty, high-level administrators will also be invited to participate.

## How Proposed Project Meets the Purpose of the Award

By conducting the induction-banquet, the university community and the surrounding community will learn of the outreach activities, work with diverse and under-represented groups, and the vibrant, diverse career possibilities of physics majors, as embodied through testimonies by guests and speakers. An opportunity to network will naturally be available between students and alumni and area industrial physicists and community leaders who might be instrumental in facilitating job-opportunities in the area for physics graduates.

## Plan for Carrying Out Proposed Project

Personnel – Because all the Sigma Pi Sigma student inductees have graduated, Alyssa Petroski – current SPS President, will implement this effort and will be assisted by SPS Advisor Dr. Roberto Ramos, who is a Sigma Pi Sigma member. These efforts will be supported by the SPS crew and the Physics department.

Marketing – The project will be marketed to the campus community and outside community through emails to outstanding physics students, as determined by physics faculty. The SPS President will contact the K-12 guests and honorees, and the SPS Advisor will contact the prospective alumni speakers, industrial/hidden physicists, community leaders and invite them to participate.

Activities – Prior to the ceremony, an array of high-impact, interactive, hands-on physics demonstrations – acquired through the Future Faces of Physics grants, will be made available to attendees to “break the ice” and also to relive the excitement of “experiencing physics”. During the ceremony, the SPS Advisor Dr. Ramos will first describe the history and context of Sigma Pi Sigma, followed by presentations of current SPS officers of the outreach activities performed during the year. Speakers and guests will be introduced, followed by the formal induction ceremony and banquet.

## Project Timeline

January 2017 – The SPS President Alyssa Petroski and SPS Advisor Dr. Roberto Ramos, assisted by SPS members, will produce and send an invitation to guest speakers, nominations of students, and a program.

February 2017 – The SPS President Advisor and SPS Advisor will finalize the program and activities, and make arrangements for the location and food arrangements.

April 2017 – After acceptances, the Induction and Banquet is conducted.

## Project Evaluation Plan

To assess the event, a short blind survey will be given to all inductees before leaving the ceremony. The SPS President will conduct a debriefing with assisting SPS members after the ceremony.

## Budget Justification

The requested Budget of \$500 will go mainly to modest food arrangements for 30-35 attendees, with some going to certificates and plaques. Any remaining cost will be absorbed by the Department and College.