SOCIETY OF PHYSICS STUDENTS
An organization of the American Institute of Physics

Future Faces of Physics Award Report

Project Proposal Title	MINORITY GROUPS IN STEM
Name of School	Ithaca College
SPS Chapter Number	3183
Project Lead (name and email address)	Stavrini Tsangrai
Total Amount Received from SPS	$370
Total Amount Expended from SPS	$370

Summary of Award Activity

The Ithaca College SPS chapter organized a panel to showcase both the importance of diversity in STEM fields, and the different experiences that those scientists had while being a part of minority groups. The faculty guests for the panel were Dr.Kétévi Assamagan, who is a research scientist with Brookhaven National Laboratory and Dr. Kelley Sullivan, who is a physics professor at Ithaca College. We had three students from Ithaca College that are part of minorities groups. During this event we were able to connect students from minority groups and showcase the importance that their different backgrounds had in their fields.

Overview of Award Activity

Brief Description

We invited four panelists to our campus to answer questions about and discuss their experiences as members of underrepresented groups in STEM fields amongst the Ithaca College campus community members. On the panel was a Thy Lee, female IC physics major from Vietnam, Iyayi Aiyevbomwanan, African American male IC computer science major, Jelani Williams, male IC biochemistry major from Jamaica, Dr. Kelly Sullivan, female IC professor of physics, and Kétevi Assamagan, African American male physicist at Brookhaven National Laboratory.

Outcome

The project brought to light firsthand experiences of minorities in STEM. It was able to show how social injustice has trickled into STEM fields in subtle ways, and made more people aware of those injustices. Further, it helped our department gain insight into how it can be more accommodating and attractive to underrepresented students. A common theme was support, the need for professors to be willing to establish positive student-teacher relationships that give all students a place to go for help, guidance, and advice.

Audience

The target audience was the entire campus community, especially those in STEM fields. About 30 people were present at the event.

Project Context

Our SPS Chapter has always participated in volunteering opportunities, chapter-run events, physics conferences, fundraisers, and meetings, however, we have done little relating to any social justice movements, which are a huge part of our college experience at IC. Our goal was to something a bit different this year than has been done in the past. We wanted to hone in on a serious, relevant issue with the hope of making a difference, even if that difference is just making people more aware of experiences other than their own. Though this event is somewhat different than our typical activities, it still shares the same goal of making physics more available to all people like previous SPS events we have put on.

Highlights

A memorable part of this event was the fact that people were able to share very personal stories about hardships they have faced regarding racism and sexism as well as how they overcame those. One statement which stood out that many attendees came to an agreement on was that STEM must be made more available to all students prior to undergraduate education. Young people need to see themselves represented in STEM fields prior to choosing a major in order to promote a sense of belonging early on.

Impact Assement: How the Project/Activity/Event Promoted Physics across Cultures

The event's main goals were to raise awareness about the importance of inclusion of Minority groups in STEM fields. It was for students who are part of minorities groups to come together and share their experiences and be able to inspire each other to use their diverse backgrounds as an advantage in their different careers and fields in STEM.

The way our event was opened by an opening speaker Ketevi Assamagan, African American male physicist at Brookhaven National Laboratory who presented his experiences working with students of minorities groups in STEM and his efforts to provide multiple opportunities to students that tend to usually be underestimated and disadvantaged in the STEM fields. The event followed by a panel whose panelists included a faculty member and students from multiple different STEM fields in our school that are identified as part of disadvantaged groups who were asked open questions for them to come together and share their different experiences in their fields, obstacles that they faces and the ways they used to overcome them.

The last part of the event was an activity including the panelists, as well as, the audience to make sure that every single person in the room had the opportunity to share their thoughts and experiences during our event. The events main focus is for people who are not usually heard to be heard and recognized and to be able to be inspired and help each other through sharing their experiences and different perspectives.

The event was successfully conducted as planned with although less people showing up than expected, successfully. The audience was participating through the whole event time and almost everyone got to share their thoughts and experiences on the importance of diversity in STEM fields, ways for better inclusion of minority groups in STEM , as well as, personal experiences.

Impact Assement: How the Project/Activity/Event Influenced your Chapter

There is no doubt that this event had a positive impact to all our SPS members participating in the event, to the SPS members organizing the event, but also to our SPS chapter as an overall. It was an incredible and fascinating experience to make this event happen, as although all the outstanding efforts of our Chapter for outreach events through many years, that was the first event organized from our chapter regarding the a social issue as the raise of awareness of the importance that minority groups have in STEM. It was definitely challenging l, as there are many things you need to worry about when talking about a sensitive issue and this . For that reason we have collaborated with different departments that are more aware of the appropriate ways those discussions need to be made to ensure the success of our event. Our SPS e-board became extremely closer through the process of organization of this event and we took a big risk by challenging our capabilities as individuals, as a team and as a chapter for this brand new idea and event but it was undoubtedly a risk worth taking! We have developed multiple skills including problem solving, leadership, communication but also negotiation. The organization of this event definitely played a crucial role in all our personal growth and development as SPS members and representatives of the Ithaca College Chapter. Based on our reflection surveys received it seemed that our SPS members who attended the event have also felt that the event helped them evolve, be educated, grow through discussing and learning about other people's experiences and be more aware and conscious individuals in the futures. They have also stated that it helped them personally to be able to approach obstacles that they may face in their personal STEM fields in new ways. Lastly, the activity successfully helped them to develop skills like communicating sensitive issues and thoughtfully coming up with solutions to problems that minority groups in STEM usually face in multiple STEM fields.

Key Metrics and Reflection

The Future Faces of Physics Award is designed to promote projects that cross cultures. What cultures did your project attempt to bring together? (Please be as specific as possible.)	**Our project attempted to bring together cultures which are overrepresented in STEM and underrepresented in STEM fields including women, African Americans, Asian Americans, Caribbean Americans, etc.**
How many attendees/participants were directly impacted by your project? Please describe them (for example "50 third grade students" or "10 high school volunteers").	**At the event were 5 panelists. One panelist worked in industry, one worked in academia, and three were undergraduates in STEM majors. Thirty undergraduate students attended the panel.**
How many students from your SPS chapter were involved in the activity, and in what capacity?	**The four officers took on a huge role in implementing this project because it is a**

	sensitive topic that needed to be planned with great care. One of the panelists was an SPS member. About 10 other SPS members assisted in advertising the event. Those same members attended the event.
Was the amount of money you received from SPS sufficient to carry out the activities outlined in your proposal? Could you have used additional funding? If yes, how much would you have liked? How would the additional funding have augmented your activity?	**The money we received was sufficient. We used it towards providing refreshments for those who attended the event.**
Do you anticipate repeating this project/activity/event in the future, or having a follow-up project/activity/event? If yes, please describe.	**We think that we would definitely do another event relating to social justice in STEM, however, we are considering a different format such as group discussion rather than a panel event.**
What new relationships did you build through this project?	**Our SPS chapter reached out to several people in other departments such as those of education and gender studies in order to ensure that the questions which would be asked of the panelists were appropriate and would promote healthy, productive discussion. Being that we are not experts, we were able to establish relationships with professors in those departments which we can utilize in the future for other events, and who can utilize SPS members in their projects. Further, the guest speaker shared his work on establishing the African School of Physics with our chapter and we were able to put him in contact with our professors to discuss supporting this establishment through sponsorships.**

If you were to do your project again, what would you do differently?	**We provided a brief survey at the end of the event for attendees to provide us with suggestions about how we can improve this event if we were to do it again. The surveys showed that we should have better advertised the event and even broadened our target audience to the off-campus community. Another suggestion was to have a greater variety of STEM majors on the panel since 3/5 were in the physics field. A third suggestion was to have less structured questioning with more time for the panelists to talk freely. These are easy changes that we would definitley consdier making.**

Expenditures

Upon developing the proposal budget, it was unknown as to whether the location of this event would be a monetary burden. Finding out that it would actually be quite costly to host this event as originally intended, we sacrificed the number of cookies and drinks available to ensure enough resources available for those helping make this event possible. This clear up the deviation of the Cookies and Drinks in the below table from that of the proposed budget, along with the additional items of Audio Fees and Room Set-up. The chapter raised $200 in support of the events speaker, Ketevi, as a thank you for sharing his insights and experiences, along with being willing to travel up to Ithaca NY from the great NYC.

Expenditure Table

Item	Please explain how this expense relates to your project as outlined in your proposal.	Cost
Veggie Platter	Food helps attract students for participation	$65
Cookies	Food helps attract students for participation	$93
Coffee, Tea, Water	Drink helps attract students for participation	$64
Room Reservation and Set-up	Cost for event space	$25
Audio Fees	Audio services as provided by college	$108
Posters	Publicity	$15
Travel Compensation	Compensation provided to speaker for travel	$200

	Total of Expenses	$570

Activity Photos

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If you have any questions, please contact the SPS National Office Staff
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