



# SOCIETY OF PHYSICS STUDENTS

An organization of the American Institute of Physics

## Future Faces of Physics Award Report

*Instructions: Please complete each section after reading the purple text describing what should be in that section. Then delete the purple text.*

Project Proposal Title	Women In Physics
Name of School	University at Buffalo
SPS Chapter Number	745
Project Lead (name and email address)	Sam Powers <a href="mailto:samueljohnpowers@gmail.com">samueljohnpowers@gmail.com</a>
Total Amount Received from SPS	\$237.50 of \$475.00
Total Amount Expended from SPS	\$210.00

### Summary of Award Activity

The University at Buffalo's SPS chapter "Women in Physics" program consisted of a marketing campaign, a talk given by a female physicist, and several follow up meetings. Posters and flyers were produced to advertise the club and department, with a focus on reaching women currently enrolled in introductory physics courses. A talk was given by Dr. Wackerroth, who spoke about her experience as a woman in physics. Finally, biweekly meetings were held in an effort to keep those interested in physics engaged with the club and the department.

## Statement of Activity

### Overview of Award Activity

The University at Buffalo's SPS chapter "Women in Physics" program consisted of an advertising campaign, a talk given by a female physicist, and several follow up meetings. The objective of this program was increases enrollment in our SPS chapter, with a focus on female participants, to help improve the gender enrollment imbalance that currently exists within the department. The strategy was to focus marketing efforts on freshmen and juniors already enrolled in introductory physics courses, which are a general requirement for most science majors. This program also offered a useful vehicle to improve overall enrollment in our SPS chapter.

The first step taken to achieve this objective was an advertising campaign early in the semester. This took the form of posters and flyers, as well as in person introductions in all freshmen level courses. One of the tools we used to draw the attention of possible participants was the promise of food at our meetings and the talk given by Dr. Wackeroth.

The talk given by Dr. Wackeroth, a female high energy physicist, contained a mixture of topics that ranged from her personal experiences as a physicist, to her scientific interest. The event was attended by 15 students including 6 women, 3 of whom were not SPS members. Dr. Wackeroth took questions from the students and was open and honest about all of her experiences. The new students were encouraged to return to our future meetings and their names and emails were collected on our sign-in sheet.

In the weeks leading up to, and following the talk by Dr. Wackeroth, biweekly meetings were held which included pizza. During these meetings, the contact information of new attendees was collected. The attendance of the meetings was strong compared to previous semesters (8-12), with attendance peaking at around the midpoint of the semester which coincided with Dr. Wackeroth's talk. Over the course of the semester, 4-5 female students showed a new interest in the club. These individuals will be included in future communications and invited to the fall meetings. The hope was to establish formal mentor mentee relationships for these new attendees, but it became clear the informal relationships created at these meetings would be sufficient to ensure future engagement.

While the total number of new female physics majors won't be known until the fall semester begins, the SPS meeting attendance was up considerably over the previous semester. We are hopeful that the activities our SPS chapter this semester will help improve the 30% gender enrollment gap that currently exists within the physics department.

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

The goals of this program were to increase female enrollment in the physics major here at UB, increase awareness of SPS overall, and increase participation in SPS among female students. While the number of new female physics majors will not be known until the Fall, general attendance to SPS meetings improved nicely when compared to previous semesters (50% early in the semester and 25% later in the semester), and female participation was also up in same proportion. The data used to inform these assessments was collected from our SPS meeting sign-in sheets, which was also used during Dr. Wackeroth's talk.

### Impact Assessment: How the Project/Activity/Event Influenced your Chapter

The SPS members that took part in this program were exposed to two important experiences. First, several members were tasked with reaching out to professors and requesting their participation in our advertising efforts. Upon agreement, these students then addressed the professors' class and introduced the SPS chapter, our various meeting and tutoring times, as well as our Women in Physics program. This was an opportunity for these students to gain experience speaking in front of very large groups of people. Second, SPS members had the opportunity to speak with Dr. Wackerath in a very candid discussion on her personal experiences surrounding physics. She revealed her thoughts regarding the role of gender in the field of physics, as well as the factors that pushed her into her current field of high energy physics.

## Key Metrics and Reflection

Please answer the questions below. Please indicate if a question is not applicable to your project.

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.)	<b>Women interested in physics</b>
How many attendees/participants were directly impacted by your project? Please describe them (for example “50 third grade students” or “10 high school volunteers”).	<b>25 individuals over the course of the semester with 5 new female participants over that time.</b>
How many students from your SPS chapter were involved in the activity, and in what capacity?	<b>5 students participated in the advertising campaign, while 8-10 members attended the meetings and the talk.</b>
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?	<b>The amount of money was sufficient. There are remaining funds to help continue the program into the fall semester.</b>
Do you anticipate repeating this project/activity/event in the future, or having a follow-up project/activity/event? If yes, please describe.	<b>We plan to make female involvement a focus of our activities in the fall semester as well.</b>
What new relationships did you build through this project?	<b>Several new individuals became regular SPS participants as a result of this program.</b>
If you were to do your project again, what would you do differently?	<b>Place less emphasis on the formal mentor mentee relationship and simply promote friendships that cross freshmen and sophomores with juniors and seniors.</b>

# Expenditures

## Expenditure Table

Item	Please explain how this expense relates to your project as outlined in your proposal.	Cost
Printing Services	Posters and fliers for ad campaign.	\$10.00
Food	\$40.00 for 4 biweekly meetings and \$40.00 for Dr. Wackerath's talk.	\$200.00
<b>Total of Expenses</b>		<b>\$210.00</b>

## Activity Photos





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