

## Project Report Printer Friendly Version

[Click here to print](#)

### Preview of Award 0926241 - Final Project Report

[Cover](#) | [Accomplishments](#) | [Products](#) | [Participants/Organizations](#) | [Impacts](#) | [Changes/Problems](#)

#### Cover

Federal Agency and Organization	<b>4900</b>
Element to Which Report is Submitted:	
Federal Grant or Other Identifying Number Assigned by Agency:	<b>0926241</b>
Project Title:	<b>Continuation and enhancement of the MPOWIR program</b>
PD/PI Name:	<b>Susan Lozier, Principal Investigator</b>
Recipient Organization:	<b>Duke University</b>
Project/Grant Period:	<b>10/01/2009 - 09/30/2014</b>
Reporting Period:	<b>10/01/2013 - 09/30/2014</b>
Submitting Official (if other than PD\PI):	<b>Susan Lozier Principal Investigator</b>
Submission Date:	<b>10/21/2014</b>
Signature of Submitting Official (signature shall be submitted in accordance with agency specific instructions)	<b>Susan Lozier</b>

[Back to the top](#)

---

#### Accomplishments

##### \* What are the major goals of the project?

MPOWIR is a community-based program that provides mentoring to physical oceanographers from late graduate school through their early careers. The overall goal of MPOWIR is to make mentoring opportunities for junior physical oceanographers universally available and of higher quality by expanding the reach of mentoring opportunities beyond individual home institutions. The aim is to reduce the barriers to career development for all junior scientists in the field, with a particular focus on improving the retention of junior women.

The MPOWIR effort includes a website, [mentor groups](#), a [blog](#), forums at major meetings and the [Pattullo Conference](#) for female early career scientists. Additionally, MPOWIR is engaged in collecting statistics and interviews from past and present U.S. Ph.D. graduates to assess retention rates in the field, as well as to document the success of this effort.

**\* What was accomplished under these goals (you must provide information for at least one of the 4 categories below)?**

Major Activities:

1. We successfully planned and conducted the fourth Pattullo Conference held October 6-9, 2013 in Warrenton, VA.
  - a. In total 25 junior scientists and 14 senior scientists attended the event.
  - b. The agenda included research talks, professional development sessions, small group activities, and a question and answer session about early career and retention issues from the junior scientists to the senior participants.
  - c. Pattullo Conference participants were surveyed about their experience. This survey asked participants to rate their opinion on specific topics and allowed for comments. Of the junior participants, 92% rated the conference as "extremely valuable" overall, with a particular value placed on networking and professional development opportunities.
2. Planning for the fifth Pattullo Conference began. In 2015 the conference will be October 4-7 in Warrenton, VA.
3. MPOWIR hosted a town hall event at the Ocean Sciences Meeting in Honolulu, Hawaii. Dr. Kelly Ward presented on the topic: *Dual Careers: challenges and opportunities*. Following the talk, a panel of physical oceanographers with first-hand experience with dual careers facilitated a discussion on the issue. In addition to the Town Hall, MPOWIR Program Coordinator Sarah Clem gave an oral presentation on MPOWIR's efforts, challenges, and successes as a community based mentoring program. MPOWIR events such as this also provide mentor groups and past Pattullo participants the opportunity to meet in person.
4. The mentor groups, which were established in the fall of 2008, continue to grow and gain momentum. Groups comprise 6-9 junior women, and 2 senior facilitators who combine both mentoring and coaching roles. Eight mentor groups (50 total junior participants) are currently enrolled, combining both Pattullo attendees, and other individuals who have expressed interest. The mentor groups are intended to support both peer and traditional mentoring on a smaller more intimate basis. As a new initiative to provide continuity in

mentoring, the three new groups that started in 2014 have one senior facilitator and one early career facilitator chosen from MPOWIR "graduates" who have been involved as participants in mentor groups and Pattullo conferences.

5. The NASA MPOWIR Speaker Series is in its fifth year. The program was initiated in 2009 in order to raise the awareness of MPOWIR within the NASA Labs and to familiarize junior women in the field with the research conducted at the NASA Labs. This winter, MPOWIR received four highly qualified applicants and two junior women were selected. Feedback from the junior participants and senior hosts at NASA continues to be extremely positive.

6. The NOAA MPOWIR Internship is in its fifth year. The goal of the NOAA MPOWIR internship program is to familiarize junior women in the field of physical oceanography with the research conducted at the NOAA labs and to afford NOAA scientists the opportunity to work with a graduate student on a project of joint interest. Each year, two junior scientists are chosen for an internship at either AOML, GFDL or PMEL. The students are integrated into an ongoing program of mutual interest for a period of 8 to 10 weeks. The students are supervised and mentored by a designated NOAA researcher and 9 NOAA scientists volunteered to host an intern. This summer one intern was hosted at GFDL and one at AOML. Participants continually remark about the positive long term effect of meeting collaborators early in their career.

7. We continue to update and improve the MPOWIR website. The MPOWIR website ([www.mpowir.org](http://www.mpowir.org)) has provided a space for the distribution of MPOWIR surveys, profiles of female physical oceanographers and information on all MPOWIR activities. The MPOWIR blog also enhances our web presence. The site has received over 50,000 visitors since August 2010, and averages 36 visits a day.

Specific Objectives:

The primary objective of the MPOWIR program in order to meet the overall program goals are: (1) providing continuity of mentoring from a young woman's graduate career, through her postdoctoral years to the early years of her permanent job, (2) establishing a collective rather than an individual responsibility within the physical oceanography community for the mentoring of junior women, (3) providing a variety of mentoring resources and mentors for a range of issues, (4) casting a wide net to avoid exclusiveness and (5) opening this program to all those who self-identify as a physical oceanographer. Each of these goals is intended to make mentoring opportunities universally available and of higher quality by expanding the reach of mentoring opportunities beyond individual home institutions.

Significant

Results:

Key  
outcomes  
or  
Other  
achievements:

**\* What opportunities for training and professional development has the project provided?**

MPOWIR, through the Pattullo conferences and through the mentoring groups, offers professional development to young women in physical oceanography in these areas: proposal writing, proposal review, oral presentations, giving and receiving feedback, mentoring training and negotiations.

**\* How have the results been disseminated to communities of interest?**

Results of MPOWIR surveys, conference reports, articles, and mentoring resources are accessible through the MPOWIR website. Pertinent results are emailed periodically to MPOWIR contacts.

[Back to the top](#)

---

## Products

### Books

#### Book Chapters

Lozier, M.S. and S. Clem (). Mentoring Physical Oceanography Women to Increase Retention. *Best Practices towards Gender Parity in the Academic Science Departments* Mary Anne Holmes and Suzanne O'Connell,. AGU. . Status = AWAITING\_PUBLICATION; Acknowledgement of Federal Support = Yes ; Peer Reviewed = Yes

### Inventions

### Journals or Juried Conference Papers

Sarah Clem, Sonya Legg, Susan Lozier, Colleen Mouw (2014). The impact of MPOWIR – A decade of investing in mentoring women in physical oceanography. *Oceanography*. . Status = SUBMITTED; Acknowledgment of Federal Support = Yes ; Peer Reviewed = Yes

## Licenses

### Other Conference Presentations / Papers

### Other Products

### Other Publications

### Patents

### Technologies or Techniques

### Thesis/Dissertations

### Websites

#### *MPOWIR*

<http://mpowir.org/>

The MPOWIR website ([www.mpowir.org](http://www.mpowir.org)) has provided a space for the distribution of MPOWIR surveys, profiles of female physical oceanographers and information on all MPOWIR activities. The MPOWIR blog also enhances our web presence.

[Back to the top](#)

---

## Participants/Organizations

### What individuals have worked on the project?

Name	Most Senior Project Role	Nearest Person Month Worked
<a href="#">Clem, Sarah</a>	Technician	6
<a href="#">Lozier, Susan</a>	PD/PI	1

### Full details of individuals who have worked on the project:

<b>Sarah Clem</b> <b>Email:</b> sarah.clem@duke.edu <b>Most Senior Project Role:</b> Technician <b>Nearest Person Month Worked:</b> 6 <b>Contribution to the Project:</b> Sarah Clem serves as the MPOWIR Program Coordinator. Her principal responsibilities are the coordination of the Pattullo Conference and mentor groups as well as maintenance of the MPOWIR website and blog. She functions as the primary point person for all MPOWIR activities. <b>Funding Support:</b> NSF <b>International Collaboration:</b> No <b>International Travel:</b> No
<b>Susan Lozier</b> <b>Email:</b> s.lozier@duke.edu <b>Most Senior Project Role:</b> PD/PI <b>Nearest Person Month Worked:</b> 1 <b>Contribution to the Project:</b> Susan Lozier is the PI for this grant, and as such has full responsibility for the planning and execution of all MPOWIR program elements. She is also the supervisor for Ms. Sarah Clem, the MPOWIR Program Coordinator. <b>Funding Support:</b> National Science Foundation <b>International Collaboration:</b> No <b>International Travel:</b> No

### What other organizations have been involved as partners?

Name	Type of Partner Organization	Location
<a href="#">NASA</a>	Other Organizations (foreign or domestic)	Greenbelt, MD
<a href="#">NOAA</a>	Other Organizations (foreign or domestic)	Silver Spring, MD
<a href="#">ONR</a>	Other Organizations (foreign or domestic)	Arlington, VA
<a href="#">DOE</a>	Other Organizations (foreign or domestic)	Washington, D.C.

### Full details of organizations that have been involved as partners:

<b>NASA</b> <b>Organization Type:</b> Other Organizations (foreign or domestic) <b>Organization Location:</b> Greenbelt, MD <b>Partner's Contribution to the Project:</b> Other: NASA funds the annual MPOWIR speaker series. <b>More Detail on Partner and Contribution:</b>
<b>NOAA</b> <b>Organization Type:</b> Other Organizations (foreign or domestic) <b>Organization Location:</b> Silver Spring, MD <b>Partner's Contribution to the Project:</b> Other: NOAA funds the MPOWIR summer internship program. <b>More Detail on Partner and Contribution:</b>
<b>ONR</b> <b>Organization Type:</b> Other Organizations (foreign or domestic) <b>Organization Location:</b> Arlington, VA <b>Partner's Contribution to the Project:</b> Other: ONR has fully or partially supported past Pattullo conferences. <b>More Detail on Partner and Contribution:</b>

**DOE**

**Organization Type:** Other Organizations (foreign or domestic)

**Organization Location:** Washington, D.C.

**Partner's Contribution to the Project:**

Other: DOE has provided some financial support in the past for MPOWIR activities.

**More Detail on Partner and Contribution:**

**What other collaborators or contacts have been involved?**

NO

[Back to the top](#)

---

## Impacts

**What is the impact on the development of the principal discipline(s) of the project?**

By retaining women trained in the field, this project will impact physical oceanography by conserving intellectual capital and yielding higher returns on the financial investment of graduate education.

**What is the impact on other disciplines?**

The successes of MPOWIR can be extended to other disciplines within oceanography and even to the broader geosciences or science community.

**What is the impact on the development of human resources?**

By creating a mentoring network that facilitates the retention of women in the field of physical oceanography, this program is advancing the goal of creating a more diverse workforce in STEM fields.

**What is the impact on physical resources that form infrastructure?**

Nothing to report.

**What is the impact on institutional resources that form infrastructure?**

Nothing to report.

**What is the impact on information resources that form infrastructure?**

Nothing to report.

**What is the impact on technology transfer?**

Nothing to report.

## **What is the impact on society beyond science and technology?**

Working to improve retention of women in Physical Oceanography, MPOWIR's efforts can be broadly generalized to inform and engage different academic fields, industry, business practice, and, society at large about issues facing women in the workplace.

[Back to the top](#)

---

## **Changes/Problems**

### **Changes in approach and reason for change**

Nothing to report.

### **Actual or Anticipated problems or delays and actions or plans to resolve them**

Nothing to report.

### **Changes that have a significant impact on expenditures**

Nothing to report.

### **Significant changes in use or care of human subjects**

Nothing to report.

### **Significant changes in use or care of vertebrate animals**

Nothing to report.

### **Significant changes in use or care of biohazards**

Nothing to report.

[Back to the top](#)