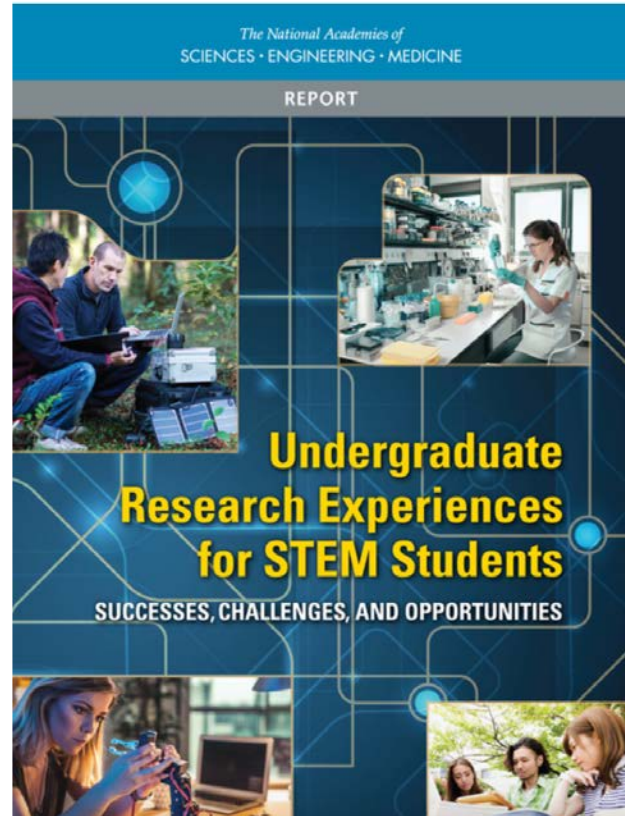
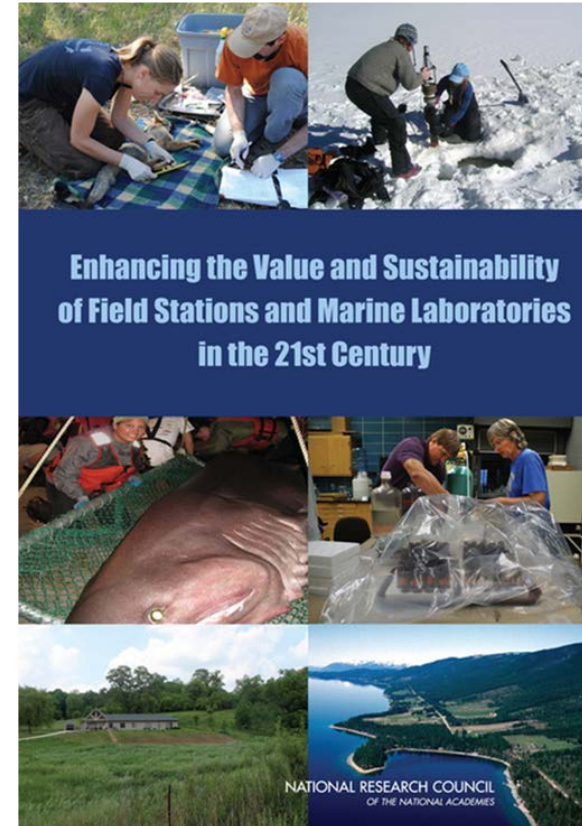


# Undergraduate Field Experiences Research Network





National Research Council. (2017)



National Research Council. (2014)

# Who are we?

Field-based educators, scientists and social scientists collaborating across disciplines to build a network and **foster effective undergraduate field learning experiences.**

# UFERN Project Team

**PI:** Kari O'Connell, Oregon State University (OSU), Center for Research on Lifelong STEM Learning

## **Co-PIs:**

- Alan R. Berkowitz, Cary Institute of Ecosystem Studies
- Ian Billick, Rocky Mountain Biological Laboratory
- Gillian Bowser, Colorado State University
- Janet Branchaw, University of Wisconsin-Madison

## **Steering Committee**

- Paulinus Chigbu, University of Maryland Eastern Shore
- Mike DeLuca, Rutgers University
- Jan Hodder, University of Oregon
- Jimmy Lee, East Los Angeles Community College

## **Evaluator**

Cathlyn Stylinski, University of Maryland Center for Environmental Sciences

## U-FERN Project Goals:

1. Identify and share **evidence-based models and practices**
2. Identify, modify, develop, and share **assessment tools**
3. Investigate how undergraduate field experiences may help **broaden the participation and retention** of students
4. Harness the power of a network to **do research on student learning.**

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# Landscape Study of Undergraduate Field Experiences

Report from the Field on the Benefits, and Barriers to  
Undergraduate Field Experiences

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Prepared by:  
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# Key findings from the landscape analysis

- Landscape is varied
- Majority of students UD STEM majors
- NSF defined minority participation is low – 9.9%
- Significant independent research (e.g REUs) and course embedded projects (CURES)
- Need for evidence of outcomes – persistence, professional skills, affective domain, careers
- Need for PD for faculty and educators particularly in evidence based practices for engaging ALL students

## **Participation Working Group**

- Investigate how to improve inclusivity of recruitment & application process.

## **Evidence and Program Design Working Group**

- Create a framework of program dimensions
- Connect framework to the existing evidence about undergraduate learning



## **Assessment Working Group**

- Study field vs. non-field REU learning experiences
- Develop pilot test field learning assessment
- Adapt Entering Mentoring Training for field-based mentoring

# Where are we going next?

## Year Two

- Mentor training at LTER All Scientists Meeting
- Webinar series
- Define and begin working group projects
- Build collaborations with Geosciences community

# UFERN Webinar Series

every 2nd Wednesday of the month at 10 am Pacific time.

ARCHIVED

“Undergraduate field experiences:  
Challenges and opportunities”

Susan Singer, Provost and VP

Academic Affairs at Rollins College

Upcoming speakers:

**Dr. Alison Jolley**, December 12, 2018. Geoscience education researcher with a focus on field education.

**Dr. Alison Stokes**, Her body of research includes inclusive science education, thinking and learning in the geosciences (geocognition), and fieldwork pedagogy.

**Dr. Alicia Farmer, Dr. Stephanie Shaulsky**, Transforming Learning Program at University of Michigan Biological Station

**Dr. Diana Dalbotten**, Director of Diversity and Broader Impacts for the National Center for Earth-surface Dynamics and the St. Anthony Falls Laboratory, University of Minnesota; and for the Geoscience Alliance, a national alliance for broadening participation of Native Americans in the Geosciences

# Get Involved

**Website:** [ufern.net](http://ufern.net)

**Mailing list:** [bit.ly/UFERN-signup](http://bit.ly/UFERN-signup)

**Email:** [ufern.staff@gmail.com](mailto:ufern.staff@gmail.com)

## Coming soon:

- Webinars starting December, 2018
- Interactive Find a Collaborator Database

## NAML ALL EDUCATORS MEETINGS

- Virtual meeting quarterly
- Use Zoom
- [naml-educators@googlegroups.com](mailto:naml-educators@googlegroups.com)

### **2018 topics**

- Individual member introductions/updates
- Art/Science collaborations
- UFERN
- Updates on regional NAML meetings
- The national education landscape – Joel Widder
- Development of NAML lab education and outreach highlights – potential use on NAML web site

# Housekeeping

Update the list of who should be invited to the all NAML educators calls from WAML labs

New WAML education representative for the NAML Ed Leadership Team

- Organized
- Well connected in the education community
- PI status preferred