Undergraduate Field Experiences Research Network

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.
Landscape Study of Undergraduate Field Experiences

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

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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.

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
Mailing list: bit.ly/UFERN-signup
Email: 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

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