

## THE GER EXCHANGE

*Promoting high quality scholarly research in geoscience education.*

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### Earth Educators' Rendezvous

**July 18-22, 2016 | University of Wisconsin, Madison**

Designed to appeal to everyone from instructors attending their first Earth-education-themed meeting to experienced STEM education researchers to administrators who want to better support students. Among many options, participants can learn about:

- New teaching approaches
- Research opportunities
- Overcoming teaching & learning challenges
- Preparing for an academic career



### Featured Article



#### **Characterizing pedagogical practices of university physics students in informal learning environments**

Introductory STEM courses are often both a recruitment tool and advertisement for the discipline. Hinko and colleagues (2016) examined the pedagogical practices of physics undergraduates, graduate students, and postdocs teaching in a weekly afterschool program using an activity theoretic framework. From *Physical Review Physics Education Research*, 12: 010111-1 – 010111-15.

This could be useful for those of us working in informal education and training students to do the same.

## GSA Sessions for GER Abstract Submissions

The upcoming 2016 GSA meeting (Sept. 25-28, Denver, CO) will feature several sessions of interest to GER section members. Please note the earlier abstract submission deadline this year: July 12, 11:59pm PDT

### ***T81. Increasing Engagement and Improving Learning Outcomes for Geology Students: Using Cognitive Science to Inform Geoscience Teaching and Learning***

([Shondricka Burrell](#) & Allison J. Jaeger)

Research findings in cognitive science can inform the development of effective teaching and learning strategies in the geosciences in three key areas fundamental to the discipline: evidence-based reasoning, conceptual change, and spatial visualization.

[Submit an abstract.](#)

### ***T82. Methodological Decision Making in Geoscience Education Research***

([Katherine Ryker](#), Nicole LaDue, Todd D. Ellis, & Kim A. Cheek)

Geoscience education research uses quantitative, qualitative, and mixed-methods approaches. Presenters are encouraged to highlight the rationale for methodological decisions and how decisions about research methods impact conclusions that can be drawn from their results. [Submit an abstract.](#)

## Webinar

### **Results from the Geoscience Education Research (GER) Survey: Data for Setting Priorities in the GER Community**

Monday, June 13, 2016

12:00pm PDT | 1:00pm MDT | 2:00pm CDT | 3:00pm EDT

The results from the Spring 2016 GER community needs survey will be discussed. This can be used to help set priorities for the GER community regarding career navigation, professional development, publication needs, access to GER data to support meta-analyses and other studies, and access and development of geoscience education research instruments and tools.



**Registration Deadline: Friday, June 10, 2016**

[Register](#)

## Virtual Field Experience Resources

A geoscience education research team at the University of Calgary seeks literature concerning the development, implementation, and/or evaluation of virtual field experiences (web-based investigations that approximate field experiences via inquiry-based exploration of geoscientific principles) at other institutions. If you have related information, please forward to [Glenn Dolphin](#). We appreciate your help.

## Upcoming Award Deadlines

- NAGT Outstanding Teaching Assistants Awards. Both undergraduate and graduate TAs are eligible. **Nominations** due **June 15, 2016**.
- Association for Women Geoscientists' Professional Excellence Awards. **Nominations** due **August 15, 2016**.

## Geoscience Blog

**GeoEd Trek** is a blog by Laura Guertin of Penn State Brandywine. Laura offers really helpful suggestions for integrating a variety of geoscience ed strategies into the classroom. She also blogs summaries of the workshops she attends.

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NAGT-GER provides bimonthly updates on professional opportunities, funding, articles of note, researcher profiles, and other content of interest to our membership. Contributions and suggestions are welcome! For questions, contact Communications Committee Chair Kelsey Bitting.