

APRIL 2018



THE GER EXCHANGE

Promoting high-quality scholarly research in geoscience education.

Going to the Rendezvous this summer?

The GER Division is hosting a working group to discuss GER-focused workshops and leaders who we'd like to learn from at future EERs. This group will meet twice during the 2018 EER to come up with a shared vision and identify funding opportunities that would support this vision. For those interested in continuing the discussion, our goal will be to write a conference proposal to support efforts for the 2019 Rendezvous.

All group members are eligible for a \$20/paid day registration benefit. **If interested in participating, please e-mail Katherine Ryker (kryker@seoe.sc.edu) by April 20th.**

April 2018 Spotlight: Kim Cheek

The April 2018 [GER Spotlight](#) is Dr. Kim Cheek, Associate Professor of Science Education in the College of Education and Human Services at the University of North Florida. She is a former elementary and middle school teacher who currently teaches courses for preservice and in-service

elementary and early childhood teachers. Her early research focused on students' understanding of geologic time, but she has since branched out to consider students' understanding of scale more broadly. Check out the full [April 2018 Spotlight here!](#)



Featured Article

Creation and Assessment of an Active e-Learning Introductory Geology Course

"The recent emphasis in higher education on both student engagement and online learning encouraged the authors to develop an active e-learning environment for an introductory geohazards course, which enrolls 70+ undergraduate students per semester. Instructors focused on replicating the achievements and addressing the challenges within an already established face-to-face student-centered class (Brudzinski and Sikorski 2010; Sit 2013). Through the use of a learning management system (LMS) and other available technologies, a wide range of course components were developed including online homework assignments with automatic grading and tailored feedback, video tutorials of software programs like Google Earth and Microsoft Excel, and more realistic scientific investigations using authentic and freely available data downloaded

from the internet. The different course components designed to engage students and improve overall student learning and development were evaluated using student surveys and instructor reflection. Each component can be used independently and intertwined into a face-to-face course. Results suggest that significant opportunities are available in an online environment including the potential for improved student performance and new datasets for educational research. Specifically, results from pre and post-semester Geoscience Concept Inventory (GCI) testing in an active e-learning course show enhanced student learning gains compared to face-to-face lecture-based and student-centered courses."

Sit, S. M., & Brudzinski, M. R. (2017). [Creation and assessment of an active e-learning introductory geology course](#). *Journal of Science Education and Technology*, 26(6), 629-645.

Job and Internship Opportunities

● [Post Doctoral Fellow](#), Learning Environments, Leibniz Institute for Educational Trajectories (deadline **April 12**)

● [Professional Research Associate \(Postdoc or Early Career\)](#), Inclusive Simulation Research in STEM Education, PhET Interactive Simulations Project, University of Colorado, Boulder

● Post-doctoral Fellow, "A Partnership to Adapt, Implement and Study aPractice-based Professional Learning Model and Build District Capacity to Meet the Challenges of NGSS," Stanford Graduate School of education (review begins **April 10**; contact hildab@stanford.edu for details)

Grant, Award, and Scholarship Deadlines

● NAGT [Dorothy Stout Professional Development Awards](#) (for faculty and students at two-year colleges and K-12 teachers) deadline **April 15**

● Geological Society of America and the Geology & Society Division [E-an Zen Fund Geoscience Outreach Grant](#) deadline **June 1**

● Association for Women Geoscientists [Minority Scholarship](#) deadline **June 30**

● Association for Women Geoscientists [Sand](#) and [Takken](#) Student Research Presentation Travel Awards deadline **August 10**

● Association for Women Geoscientists [Professional Excellence Awards](#) deadline **August 15**

● National Science Foundation [Improving Undergraduate STEM Education: Education and Human Resources](#) (Exploration and Design Tier for Engaged Student Learning & Institution and Community Transformation) Submission Window **October 1, 2017-October 2, 2018**

Summer Conference Opportunities

[Earth Educators Rendezvous 2018](#), July 16-20, University of Kansas, Lawrence, KS

- Travel stipend application deadline **April 8**
- Early registration deadline **May 1**
- Sunday Activity Review Camp application deadline **May 1**
- Late poster/Share-a-thon submission deadline **May 15**

[Goldschmidt Conference](#) on 21st Century Geoscience Education: Building Digital Curricula, August 12-17, Boston University, Boston, MA

[2018 Summer Institutes on Scientific Teaching](#)

- July 9-13, Evergreen State College, application deadline **June 9**
- July 16-20, Louisiana State University, application deadline **June 10**
- July 22-26, University of Connecticut, application deadline **May 1**

Submit to the GER Exchange

NAGT-GER provides monthly updates on professional opportunities, funding, articles of note, researcher profiles, and other content of interest to our membership. Please consider [contributing items](#) of interest for inclusion in future editions of the Exchange!

For questions, or to join the GER Communications Committee, contact Communications Committee Chair [Kelsey Bittling](#).



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This monthly email goes out to all GER Division members to share opportunities and ideas relevant to the community.