

# Annual Report of the Geoscience Education Research Division for FY25

Submitted by Caitlin Callahan, GER Division President 24-25

**Current Division Officers** 

Past President: Chris Mead President: Caitlin Callahan Vice President: Larry Collins Treasurer: Samuel Nyarko Secretary: Katie Boyd Media Director: vacant

Graduate Student Liaison: Nina Morris
Division Officer terms beginning in October 2025
Past President: Caitlin Callahan (1-year team)

President: Larry Collins (1-year team) Vice President: Zo Kreager (1-year team)

Treasurer: vacant

Secretary: Katie Boyd (3<sup>rd</sup> year of 3-year term)

Media Director: Casey Davenport (1<sup>st</sup> year of 2-year term) Graduate Student Liaison: Nina Morris (2<sup>nd</sup> year of 2-year term)

### **EXECUTIVE SUMMARY**

The Geoscience Education Research (GER) division within NAGT exists to serve the needs of GER scholars. We have continued our practice of convening a session at the annual GSA meeting entitled, "Making Sense of Methodologies and Theoretical Frameworks in Geoscience Education Research," and conducting the nomination and selection process for our division awards. We have also sponsored other GER-focused sessions at the GSA Annual meeting including *Current Advances in Geoscience Education Research* and the *Iris Moreno Totten Award session*. In addition, we developed a partnership with the Geoscience Education Research (GER) Working Group that is part of the American Geophysical Union Education Section. A key outcome of this partnership was the formation of a monthly online meeting entitled the *GER Knowledge Exchange*. These meetings bring together those interested in sharing and learning about different experiences and aspects of geoscience education research. The collaboration with the GER Working Group also included co-convening a session at the annual American Geophysical Union meeting entitled "Education Research in the Earth, Ocean, Atmospheric, and Space Sciences: Theoretical Foundations, Methods, and Results".



#### **DETAILED REPORT**

Division membership: report on the makeup of the Division membership, reflection on changes in the number of members, and description of activity related to recruitment of members

As of September 2025, the Division has 315 members. Our current membership demographics are summarized below:

#### Gender:

Men	Women	Non-binary	Undisclosed
30%	54%	2%	14%

#### Race:

American	Asian or	Black or	Hispanic	White	Other Race or	Undisclosed
Indian or	Asian	African	Latinx or of		Ethnicity	
Alaskan	American	American	Spanish			
Native			Origin			
<1%	3%	2%	4%	71%	3%	17%

### Disability:

Learning	Hearing	Visual	Mobility	Other disability	No disability or	Undisclosed
				or impairment	impairment	
1%	2%	<1%	2%	3%	70%	21%

We recognize that 315 members is a decrease from the two previous years, in which there were 327 members in 2024 and 356 members in 2023. One of the goals we set last year was to consider and implement new ways to support members, especially in years without the Earth Educators' Rendezvous. This year we pursued this goal through a partnership with the Geoscience Education Research (GER) Working Group that is part of the American Geophysical Union Education Section. This partnership provides a way to engage a wider range of GER scholars; we hope, in time, this will also result in drawing in more members to the Division. More information on the outcome of the partnership thus far is detailed below.

Progress towards goals: reflection on the goals defined in last year's annual report and progress towards those goals

Goal 1. Implement strategies to build and support the GER community

Continuing from the previous year, a theme in our conversations and work this year was the question of ways to build and support the GER community. We interrogated our approach to previous endeavors such as newsletters. We considered new approaches such as an online GER mini conference. From these discussions, we recognized the need for more opportunities for GER members to share their research experiences and results. We considered, too, the need to create spaces for learning and for accessing knowledge of others in the community.



In tandem with this internal communication, we had conversations with Dr. Laura Lukes and Dr. Silvia Jessica Mostacedo Marasovic, who form the Geoscience Education Research (GER) Working Group, that is part of the American Geophysical Union Education Section. The result was the development of a monthly Zoom meeting entitled the "GER Knowledge Exchange". The concept of the meeting is simple: each month, a community member proposes a topic of interest and volunteers to lead a discussion. An announcement that states the topic and link to the meeting is disseminated through the NAGT and AGU newsletters as well as the GER listsery. The discussion leader will bring questions or thoughts about the topic as prompts for those in attendance. There is no formal presentation, nor is there an expectation of attendees to prepare or read anything in advance. Indeed, the goal is for the meeting to be a casual, interactive space to share resources, ideas, and experiences.

The meetings started in February of 2025. There have been a total of seven meetings between February and September; for several reasons, the meeting in April was cancelled. Session leaders and topics for the remainder of 2025 are already confirmed. The number of participants in the meetings has varied and has generally been between 6-9 attendees; while some come regularly, there are new faces each month. The number of participants may be modest, but those numbers have supported the casual nature of the conversations. The meetings are not recorded on video. However, there is a notetaker at each meeting. Notes have been disseminated informally, too. After seven months, we now have a collection and a sense of the types of notes to emerge from the meetings.

Looking ahead, we intend to continue supporting the GER Knowledge Exchange. We will work to build the monthly notes into a new resource on the GER webpage that provides another way for members to access the information. The current meeting has been scheduled for a workday, in the morning for those on the west coast and midday for east coast. Recognizing the schedule may limit some who would like to participate, we are also looking to expand the GER Knowledge Exchange with a second session on a different day and time.

### Goal 2. Maintain practice of leadership in GER sessions at GSA and AGU

This year, the Division continued in its leadership role for GER-focused conference sessions at national conferences, including those hosted by the Geological Society of America (GSA) and the American Geophysical Union (AGU).

Since 2015, the Division has hosted a GER-focused topical session at GSA entitled "Making Sense of Methodologies and Theoretical Frameworks in Geoscience Education Research". This has become a reliable venue for GER scholars to share their research, network with colleagues, and identify potential collaborators for future projects. The GER Division will chair this topical session at the Fall 2025 "GSA Connects" meeting to occur in October.

The soon-to-be-held GSA 2025 meeting will take place in San Antonio, TX. This year, the Division's session was merged with the session of presentations to be considered for the Iris Moreno Totten Award. The merged session is scheduled to include two poster presentations and 16 oral presentations. There will be two invited talks: one by Dr. Jessica Duke entitled, "Development and Validation of the Acceptance of Climate Change Scale", and one by Dr. Anna Stepanova entitled, "Advancing Micropaleontology Education: Study Design and Evaluation of FossilSketch application, Student and Instructor Interfaces". Caitlin Callahan and Elizabeth



Kenderes, chair of the GSA Geoscience Education Division, will serve as co-chairs for the session.

To support the communication and dissemination of information about GER methods and theoretical frameworks, the Division archives past presentations and presenter contact information when granted permission. The presenter information and approved presentations will be available at the following webpage, "GER Presentations at GSA": https://nagt.org/nagt/divisions/geoed/GSApresentations.html.

As another aspect of our collaboration with Geoscience Education Research (GER) Working Group that is part of the American Geophysical Union Education Section, we are serving as co-conveners of the session "Education Research in the Earth, Ocean, Atmospheric, and Space Sciences: Theoretical Foundations, Methods, and Results (ED015)". The session received 10 abstracts, with a total of six oral presentations and four assigned to posters. Chris Mead and Heather Ann Fischer will serve as co-chairs for the session.

# Goal 3. Refine role of Media Director and recruit GER member to run for position

We continued discussions from the previous year about the role and form of a division newsletter. These conversations yielded a plan to refine the design of the Media Director position to allow for flexibility and several means of communicating with division members. We are delighted that Dr. Casey Davenport agreed to run and has been elected to the position of Media Director for the coming year.

## Goal 4. Recognize accomplishments of members with division awards

We continued the use of the revised awards process that was developed by Leilani Arthurs, Peggy McNeal, Emily Scribner, and Emily Ward.

This year, the Early Career Award received two new nominations. The Early Career Award went to Dr. Larry Collins at Longwood University. The Transformation Award also received two new nominations. The Transformation Award went to Dr. Cory Forbes at the University of Texas at Arlington. The Growth and Collaboration Award did not receive any nominations this year.

### Goal 5. Maintain finances

As established in 2018, the GER Division account is nested under the NAGT main account. The treasurer submits expenses to the NAGT executive office for payment. As noted in the previous year's annual report, we awarded a stipend of \$1000 to each invited speaker at the 2024 GSA Connects conference in Anaheim, CA. Thus, the division expenses were a total of \$2000 for the fiscal year. However, one speaker did not seek the stipend; thus, only \$1000 was disbursed. As of 10/1/2025, the Division had an account balance of \$11,900.91.

#### Goals for future Division work

One of the first priorities for the year will be to recruit a new treasurer. After a successful tenure, Dr. Samuel Nyarko completed his time as treasurer for the division in 2025. We made a number efforts to secure a candidate for the position but did not succeed before



the division election. In the meantime, the other board members will collaborate to complete the necessary tasks.

We recognize, too, the need and opportunity to revise the division website. In addition to updating and reviewing fundamental details, we also want to consider how to use the website to share resources with the GER community (e.g., outcomes of the GER Knowledge Exchange meetings).

Coupled with this, we want to expand the Knowledge Exchange programming and pursue plans for other programming as well as forms of communication with membership. This includes resuming a division newsletter and developing ideas for the summer of 2027, the next year without an Earth Educators' Rendezvous.

### Thank you and Welcome

As Chris Mead acknowledged last year, the GER board has been in a time of reflection and reexamination about how to serve the GER community. I am grateful and humbled by the insights, patience, and dedication of the other board members, Chris, Larry, Sammy, Katie, and Nina. I appreciate so much the leadership and support of Past President of Chris Mead. This annual report marks the formal transition to the next leadership group. I am pleased to welcome both Zo Kreager (former Graduate Student Liaison) who returns now as Vice President and Casey Davenport who assumes the role of Media Director. As the next division president, Larry Collins brings a wealth of experiences to the position. I look forward to collaborating with Larry and the rest of the board in the year ahead.

- Caitlin Callahan, on behalf of the 2024-25 NAGT-GER Executive Board

President Caitlin Callahan, Grand Valley State University
Past President Chris Mead, Arizona State University
Vice President Larry Collins, Longwood University
Treasurer Samuel Nyarko, Indiana University Indianapolis
Secretary Katie Boyd, University of Washington
Graduate Student Liaison Nina Morris, Western Michigan University