

2024 IN REVIEW

THE ANNUAL REPORT OF THE NATIONAL ASSOCIATION OF GEOSCIENCE TEACHERS







Celebrating 10 Years of the Earth Educators' Rendezvous



2024 In Review: The Annual Report of NAGT



On the cover: (Top left) Participants hard at work at the Early Career Workshop held at Macalester College; Photo by Rory McFadden CC BY-NC-SA 3.0 • (Top right) EER Conveners checking in during the meeting: Photo by Holly Kelchner, CC BY-NC-SA 3.0 • (Middle right) Rendezvous stickers on display; Photo by Holly Kelchner, CC BY-NC-SA 3.0 • (Bottom) SERC and NAGT staff in front of the SERC building at Temple University; Photo courtesy SERC., CC BY-NC-SA 3.0.

ELECTED OFFICERS, 2023-2024 President

Reginald Archer Tennessee State University **1st Vice-President Rory McFadden** SERC at Carleton College 2nd Vice-President Katherine Ryker University of South Carolina Past-President Christy Visaggi Georgia State University Secretary/Treasurer Michael Phillips (2020-2024) Illinois Valley Community College **Councilors-at-Large** Nancy Chen (2023-2026) Harvard-Westlake School Michael Hubenthal (2022-2025) EarthScope Consortium Cody Kirkpatrick (2023-2026) Indiana University - Bloomington Lynsey LeMay (2022-2025) Virginia Peninsula Community College Alex Manda (2021-2024) East Carolina University Dana Thomas (2021-2024) University of Texas at Austin

INCOMING ELECTED OFFICERS

Brendan Hanger, Councilor-at-Large (2024-2027) Colorado School of Mines Sean Tvelia, Councilor-at-Large (2024-2027) Suffolk County Community College Lynsey LeMay, 2nd Vice-President (2024-2025) Virginia Peninsula Community College

APPOINTED OFFICERS

Executive Director Anne Egger (2019-2027) *Central Washington University* Journal of Geoscience Education Editor-in-Chief Angela Hessler (2024-2026) *Deep Time Institute* In the Trenches Editor Redina Finch (2020-2026) *Western Illinois University* Media Editor Cheryl Manning, OrbWeaver Consulting Historian Gene Pearson, University of the Pacific

STAFF

Mitchell Bender-Awalt, Project Coordinator Rebeccah Bradley, Finance Specialist Monica Bruckner, Project Specialist Amy Collette, Business Manager Brianna Douglas, Administrative Assistant

FROM THE PRESIDENT

Dear NAGT Members,

It is with immense pride and gratitude that I reflect on our journey and celebrate the milestones that have strengthened our community and paved the way for a promising future. I assumed this role with specific objectives: to fortify



our financial stability and expand our membership. While we faced numerous challenges and made difficult decisions in pursuit of these goals, we also found ways to enjoy ourselves, uplift our community, and celebrate each other. Christy Visaggi (past president) entrusted me with the crucial responsibility of embedding inclusion, equity, belonging, and accessibility in all our endeavors, particularly given the ongoing need

Reginald Archer

to understand and address global issues at the intersection of geosciences and society. We must enhance Earth education to support diverse identities, and NAGT continues to play a significant role in advancing these efforts within the geoscience community.

We have successfully promoted high-quality Earth education through various initiatives, including participation in conferences, workshops, and collaborations. Our commitment to inclusive and equitable geoscience education has been unwavering. Notably, our presence at events such as GSA, AGU, NABG, among many others, has amplified our voice within the geoscience community. As president and an active participant in conferences, it has been my pleasure to promote NAGT at various events, encourage membership and engagement, collaborate with our SERC partners, manage our booths, and enjoy some NAGTea. We celebrated our members' accomplishments and passed the gavel to Rory McFadden during our Virtual Awards ceremony. This new format allowed all our members to access the event, and it was a pleasure to participate. It was definitely one of the highlights of the year.

To address our finances, we implemented cost-saving measures such as holding virtual meetings, shifting the Rendezvous to a biennial model, and introducing paid webinars for added value. These efforts have collectively moved NAGT toward a more sustainable future. Our achievements this year reflect the hard work and dedication of our members and leadership. As we move forward, we will continue to elevate geoscience education, foster inclusivity, and secure NAGT's future. Together, we will build upon this solid foundation and strive for even greater success.

To continue this momentum, I encourage members to actively participate in our sections and divisions, volunteer for committees, and engage in our various events and conferences. Additionally, sharing your expertise through workshops, webinars, and publications can significantly contribute to the advancement of our organization. Together, we can address challenges, drive innovation, and promote high-quality geoscience education for all.

I am confident Rory will further advance NAGT by building on our recent accomplishments. While I will be here to assist, the members of NAGT play the most crucial role. I extend my best wishes to Rory and the rest of the leadership team for the coming year and know that we will make significant progress towards achieving our objectives.

Reginald Archer, President Associate Professor, Environmental Science Tennessee State University



FROM THE EXECUTIVE DIRECTOR

Dear NAGT Members,

I have spent a lot of time over the last year thinking about the value of membership in our organization. At a time when personal and institutional budgets are tight, when it is



Anne Egger

easy to find a community of likeminded colleagues on social media, when any number of other concerns are asking for your time and money: Why be an NAGT member? Why be a member in any professional society?

This is a question worth asking. Much of what professional societies do is available for free, or available to everyone for a fee. Much of what NAGT does is available to everyone: when we advocate for geoscience

education, it is to support all Earth educators, not just our members. We provide teaching resources that are available to anyone, for free, through Teach the Earth. Anyone can contribute a paper to our research journal, the Journal of Geoscience Education. We run the Earth Educators' Rendezvous and workshops that anyone can attend—though, like many such meetings, there are discounts for members.

So what does membership get you besides a discount?

You can, of course, go to our website to see all the member benefits. In addition to the personal benefits to you, however, there is a collective benefit to being part of an organization. Strong, thriving professional societies can lead



NAGT members at the 2024 EER. Photo by Mitchell Bender-Awalt, CC BY-NC-SA 3.0.

their disciplines. Who chooses what we advocate for? Our members who get involved in the advocacy committee. Who determines our meetings and professional development offerings? Our members who get involved in leading workshops. Who has the power to push our society to take on challenges, work with other societies, and get involved in projects to make change? Yep, it's our members, especially those who take on leadership roles in their sections, divisions, and in the national organization.

A professional society is more than a group of likeminded individuals in similar roles: it is a venue to make things happen. NAGT is the venue that nurtured geoscience education research and allowed it to flourish as a new discipline. We were the venue through which instructors of field courses came together in 2020 to work together to develop online field experiences. We are the venue for individuals and groups to come together and reach a broader audience through the Earth Educators' Rendezvous.

As you will see in this report, 2024 was a difficult year

for NAGT financially. In fact, the last few years have been challenging. Many professional societies are in a similar situation, but knowing that we are not alone does not make it any easier. But now is not the time for us to give up. Now is the time to promote what we can do as a professional society, to live up to and exceed our potential to drive change toward an equitable and inclusive system of geoscience education and to support Earth educators at all stages of their careers.

Over the past year and a half, I've been serving on the National Academies' Committee on Equitable and Effective Teaching in Undergraduate STEM. The committee's charge is to develop an evidence-based framework for equitable and effective teaching, and to identify the policies and practices at departmental and institutional levels that can facilitate implementation of the framework. Committee members come from a wide range of STEM disciplines, institution types, backgrounds, and expertise. As the geoscientist in the group, I've had the opportunity to bring the perspective and challenges of our discipline and to learn from others. The draft framework was released in December, 2023, and NAGT has had the opportunity to incorporate the principles in that framework into workshops and our planning process already. The committee's final report will be released in January, 2025, and we are poised to incorporate the framework and findings

into all of our professional development offerings.

This kind of work is perhaps a less tangible benefit of membership. As a disciplinary organization focused on geoscience teaching, we provide a venue for sharing the evidence for systemic

inequity and exclusion, and for sharing the evidence for strategies and approaches that address those issues. We bring the challenges and successes of our discipline to the broader STEM teaching community. We implement evidence-based practices in our work—not just in our professional development offerings, but in our awards processes, our organizational leadership, and in our communications.

If you are reading this, you likely already are a member. Maybe you are deciding if your membership is worth it for 2025. Maybe you are wondering what to tell your colleagues down the hall about NAGT and why they should join. We have lots of member benefits for individuals, and our organization is more than that. We are a force for change, and that force grows with our membership.

Anne Egger, Executive Director Professor, Geological Sciences and Science and Mathematics Education Central Washington University

COMMITTEE REPORTS

ADVOCACY

In FY24, the Advocacy Committee reviewed and updated NAGT's Position Statements and began devloping new statements. The K-12 Education Statement underwent a major revision (the statement was originally titled "High School Earth Science Instruction") and was approved by the Council in October 2023. The committee is in the process of evaluating the statement on Evolution. Two new statements (Value of Undergraduate Geoscience and Responsibility to Teach Earth Sciences) went through several rounds of discussion in the Executive Committee and Advocacy Committee, were approved by both and are now in the stage of member review and comment. They will be available for Council approval in January 2025. A new position statement on Diversity, Equity, and Inclusion is in process.

Advocacy Committee Members

Mike Phillips (Chair), Illinois Valley Community College Brendan Anderson, Paleontological Research Institute Don Haas, Paleontological Research Institute Suzanne Metlay, Western Governors University Wendi J.W. Williams, South Texas College Guang Zeng, Texas A&M University

DEVELOPMENT

The Development Committee oversees and implements fundraising strategies to support NAGT's programs, scholarships and stipends, new initiatives, and general financial health. In FY24, the committee wrote a document to share with grant writers about how to work with NAGT, compiled the information needed to maintain Candid Gold Transparency status, and wrote targeted messages for fundraising from different groups.

Development Committee Members

Mitchel Bender-Awalt, SERC, Carleton College (ex officio) Anne Egger, Executive Director (ex officio) Michael Phillips, Illinois Valley Community College Katherine Ryker, University of South Carolina Dana Thomas, University of Texas at Austin Sean Tvelia, Suffolk County Community College Karen Viskupic, Boise State University

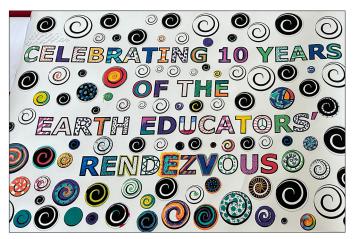
DIVERSITY, EQUITY, AND INCLUSION (DEI)

The Diversity, Equity, and Inclusion Committee facilitates NAGT's DEI efforts to build an inclusive and equitable organization and achieve its goals related to diversity of its membership, leadership, committees, award winners, and participants

Interested in helping NAGT be a force for change?

Nominate yourself for a committee!

https://nagt.org/nagt/get_involved/lead.html



10th anniversary poster. Photo by Anne Egger, CC BY-NC-SA 3.0.

in all events. In FY24, the DEI committee helped lead an initiative to review various NAGT award committees' nomination and evaluation processes with the goals of increasing transparency, expanding applicant pools and improving evaluation. Moving forward, the DEI Committee hopes to support members who are facing challenges at their educational institutions related to pursuing DEI efforts.

DEI Committee Members

Meghan Cook, Purdue University
Susan Meabh Kelly (Chair), Connecticut State Department of Education
Anika Knight, EarthScope Consortium
Ashleigh Quiroz, California State Unviersity-Fullerton
Dana Thomas, University of Texas at Austin (ex officio)

MEMBERSHIP

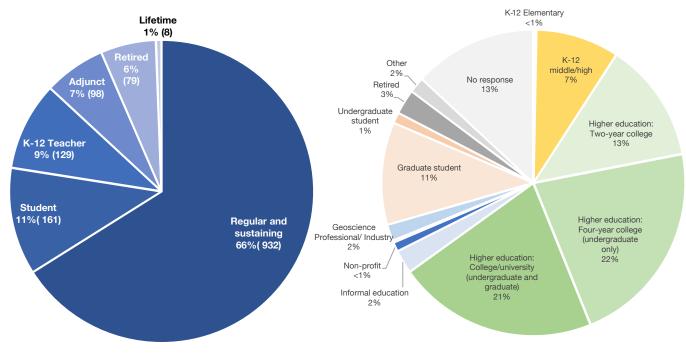
The Membership Committee is focused on developing and executing strategies for recruiting new members, re-engaging lapsed members, and retaining current members. FY24 efforts include organizing a Virtual Recruitment Event in January 2024, analyzing membership trends to identify causes for decline, and opening an invitation to the Teacher Education Division to improve representation and recruitment. The committee has been active in member engagement through virtual events, such as game nights, and is collaborating with other committees to host future events like a virtual fireside chat to foster member interaction.

Membership Committee Members

Alex Manda (Chair) *East Carolina University* Mitchell Bender-Awalt, *SERC, Carleton College* (ex officio) Kim Cheek, *University of North Florida* Steve Mattox, *Grand Valley State University* Michael Phillips, *Illinois Valley Community College* Katherine Ryker, *University of South Carolina* Dana Thomas, *University of Texas at Austin* Christy Visaggi, *Georgia State University* Becca Walker, *Mt. San Antonio Community College*

MEMBERSHIP

NAGT ended fiscal year 2024 with 1,325 members, a decrease of about 5% from 2023. The largest proportion of the membership is regular members, a category that includes 2- and 4-year college faculty, informal educators, and geoscience professionals. Sustaining members are regular members with a \$35 donation automatically added to their membership. NAGT seeks to offer professional development and resources that support all of our members throughout their careers. Data about current employment of our members allows us to gauge the extent to which we are doing so. A small majority of our members are instructors in higher education in a variety of settings.



Distribution of member types.

Employment sector of NAGT members.

Want to have an NAGT booth at a section meeting? Get in touch with the Executive Office.



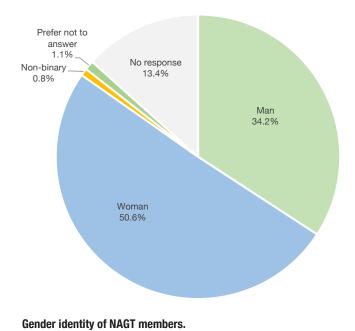
The NAGT booth at the Joint Cordilleran/Rocky Mountain GSA Section Meeting in Spokane, WA. Photo by Anne Egger, CC BY-NC-SA 3.0.

MEMBERSHIP



Partipants in the panel discussion about disruption at the Earth Educators' Rendezvous. Photo by Holly Kelchner, CC BY-NC-SA 3.0.

NAGT is committed to organizational transparency, which includes publishing data-rich reports. In 2021, we updated the profile section of our member database to include more up-to-date and inclusive selections for gender, race/ethnicity, disability status, and employment sector. We are reporting those data in aggregate here, and we encourage all members to update their member profiles so that we may more accurately describe the diversity of our membership. For all of the demographic data, the proportion of members who did not respond continues to decrease. Thank you for telling us who you are!



NAGT seeks to represent the full community of educators and education researchers interested in improving teaching and learning about the Earth. Data about gender, race/ethnicity (Table 1), and disability status (Table 2) can help us reach that goal. Note that respondents can select more than one option for race/ethnicity and disability status.

Table 1: Race/ethnicity of NAGT members.

| American Indian or Alaska Native | 1.4% |
|--|-------|
| | 4 50/ |
| Asian or Asian American | 4.5% |
| Black or African American | 2.6% |
| Hispanic, Latinx, or of Spanish origin | 4.5% |
| Middle Eastern or North African | 0.4% |
| Native Hawaiian or Pacific Islander | 0.5% |
| White | 75.2% |
| Two or more races | 7.2% |
| Prefer not to answer | 3.8% |
| No response | 14.3% |

Table 2: Disability status of NAGT members.

| Hearing impairment | 0.8% |
|---------------------------------------|-------|
| Visual impairment | 0.4% |
| Mobility/orthopedic impairment | 1.4% |
| Learning disability | 1.3% |
| A disability or impairment not listed | 2.8% |
| No disability or impairment | 70.3% |
| Prefer not to answer | 1.9% |
| No response | 21.8% |

REPORTS FROM THE SECTIONS

Members are affiliated with regional sections based on their geographic location. Our sections were reorganized in FY2024, reducing the total number to eight. The Eastern and North Central are now the largest.

EASTERN SECTION

The Eastern section held a spring 2024 meeting in Berkeley Springs, WV, May 2-4 that was attended by about 40 members. The meeting included an ambitious schedule of events including a share-a-thon of teaching materials, section business meeting, research presentations by students, and field trips. The eastern section continues to have an excellent response to the OEST recognition program as well as our own in-house eastern section awards that include the Digman, Moss, and Distinguished Service awards.

President: Steve Lindberg, University of Pittsburgh

FAR WESTERN SECTION

The Far Western Section elected new officers, though are still seeking a 2nd Vice President. In the coming year, leadership goals are to update

our by-laws, to host one or more one-day conferences in more regions of our section, to start a virtual lecture series on topics of interest to our members, and to build a stronger presence at GSA section meetings.

President: Mark Boryta, Mt. San Antonio College

NORTH CENTRAL SECTION

The North Central Section elected new officers and continues to gather interest in leadership positions. As a newly reorgnized section, North Central is seeking to encourage participation, build a social media presence, and strengthen their presence at GSA section meetings.

President: Michelle Cauley, Dakota College

PACIFIC NORTHWEST SECTION

The Pacific Northwest Section held a conference June 17-19, 2024 at Yakima Valley Community College in Yakima, WA, hosted by Zachary Schierl, Suki Smaglik and Katherine Solada. There were 19 registrants for the conference, which included a day of talks and discussions and two field trips. The section is already planning the 2025 meeting to be held June 26-28, 2025 in Portland, Oregon at the University Oregon Concordia Northeast Campus. The meeting will be hosted by Mount Hood Community College and the University of Oregon, and held alongside the Cascadia Region Earthquake Science Center (CRESCENT) annual stakeholder meetings at the University of Oregon.

President: Craig Nichol, University of British Columbia-Okanagan



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Central 249 Northeaste

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Map showing regional section membership.

ROCKY MOUNTAIN SECTION

Rocky

Mountain

90

Pacific

Northwest

130

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The Rocky Mountain Section completed its first full year of existence, successfully recruiting and awarding Outstanding Earth Science Teachers from three states within our section. The section is planning a presence at the GSA Rocky Mountain section meeting in May, 2025, in an effort to recruit additional members and encourage section leadership. **President (interim):** Emily Geraghty Ward, *CIRES*

SOUTH CENTRAL SECTION

The South Central section recently held its inaugural election, appointing a president, vice president, and secretary/treasurer. The leadership team is actively collaborating with state representatives to formulate a strategic plan for the section. As a newly established section, the leadership is focused on expanding membership and enhancing member engagement. A key priority is to increase the section's presence in K-12 education by organizing events designed to attract and involve K-12 educators and students in NAGT activities. Additionally, the leadership is in the process of evaluating the section's budget. **President:** Sabrina Ewald, *University of Texas-Austin*

REPORTS FROM THE DIVISIONS

Members can choose to pay additional dues to join one or more divisions: the Two-Year College Division (Geo2YC, begun in 2013), the Geoscience Education Research Division (GER, begun in 2014), and the Teacher Education Division (TED, begun in 2014). Membership in all of the divisions remains strong, with declines proportional to the overall decline in membership.

GEO 2YC

The Geo2YC Division started a monthly series of Zoom discussions titled "Fireside Chats" beginning in January 2024. We varied the topics, meeting dates, and times to allow participation from across the division. Participation ranged from 4-12 members sharing ideas on topics such as first day of class ideas, love/hate relationships with artificial intelligence (AI), post-pandemic experiences (how have you and your students changed?), teaching in the field, and how to make classic geoscience content relevant to today's students.

Leadership

President: Cheryl Resnick, *Illinois Central College* Vice President: Sean Tvelia, *Suffolk County Community College* Secretary/Treasurer: Angela Daneshmand, *Santiago Canyon College*

Newsletter Editor/Webmaster: Karen Layou, *Reynolds Community College*

Archivist: Pete Berquist, Virginia Peninsula Community College Past President: Becca Walker, Mt. San Antonio College

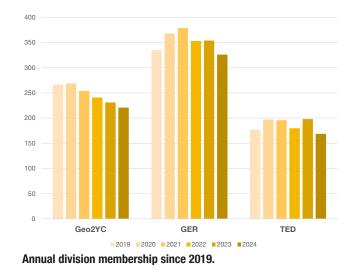
GEOSCIENCE EDUCATION RESEARCH

The Geoscience Education Research (GER) division exists to serve the needs of GER scholars within NAGT, including the desire to communicate the results from GER in support of the work of members across NAGT. Our key activities in the past year were 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. Division activity was lower than previous years. However, following positive discussions among the leadership and with division members at the annual business meeting, we have a number of good ideas for the coming year.

Leadership

President: Chris Mead, Arizona State University Vice President: Caitlin Callahan, Grand Valley State University Treasurer: Samuel Nyarko, Indiana University-Indianapolis Secretary: Katie Boyd, Cooperative Institute for Research in Environmental Sciences Media Director: vacant Graduate Student Liaison: Kristen Foley, Western Michigan University

Past President: Emily Scribner, Clemson University



TEACHER EDUCATION DIVISION

The Teacher Education Division developed a new Classroom Activity Award now has guidelines and rubric refined by division leadership and membership. The division is in need of a Media Director. TED began to post again on Facebook, highlighting tips from an interview with past Teacher Leader Award Winner Bryce Henderson. The division plans to submit pieces for In the Trenches on this and climate change resources. Next year's goals include to increase advertisement for TED-related awards, recruit a Media Director, increase social media presence, and reach out to lapsed members.

Leadership

President/Media Director (interim): Bridget Mulvey, *Kent State University*

Vice President: Daniel Capps, University of Georgia Secretary/Treasurer: Wendi J. W. Williams, South Texas College

Past President: Christopher Roemmele, *West Chester University of Pennsylvania*

ASTE Liaison: Debbie French, Wake Forest University

Contact your section and division leaders to get more involved!

Nominations for new officers open in January.

PROFESSIONAL DEVELOPMENT PROGRAMS REPORTS

PROFESSIONAL DEVELOPMENT PLANNING COMMITTEE

The PD Committee continues to work with the Executive Committee and subcommittee chairs to provide high-quality and relevant PD programs for the geoscience community. This has been a challenge over the past year, with lower-than-expected participation in the Earth Educators' Rendezvous and the Traveling Workshops Program, which negatively impacts the overall NAGT budget. The Committee has been exploring ways to increase participation to remain budget neutral or profitable.

In FY24, we piloted two virtual multi-session workshops. The first of those workshops (mentoring) was canceled due to low enrollment, but the workshop was offered by request as a Traveling Workshop and is now listed as a regular virtual offering through TWP. The second workshop (course design) ran for 11 participants. We plan to run three multi-session virtual workshops this year with a longer period of targeted advertising: Facilitating Effective Group Projects, Course Design, and Preparing for an Academic Career.

In FY25, we will be working to better coordinate across programs, and to develop processes and guidelines for offering virtual workshops, webinars, and EER programs. With over a year to prepare for the next EER at the University of South Carolina in July, 2026, we plan to use webinars and virtual workshops strategically to preview topics and attract potential participants.

Professional Development Planning Committee Members

Karen Viskupic (Chair), Boise State University Andrea Bair, Delta College Mitchell Bender-Awalt, SERC, Carleton College Anne Egger (ex officio) Brendan Hanger, Colorado School of Mines Cailin Huyck-Orr, SERC, Carleton College Rory McFadden, SERC, Carleton College Megan Plenge, University of North Carolina Beth Pratt-Sitaula, EarthScope Consortium Walt Robinson, North Carolina State University Barbra Sobhani, Colorado Space Grant Consortium Jen Wenner, University of Wisconsin-Oshkosh

EARTH EDUCATORS' RENDEZVOUS

July 15-19, 2024

Registered participants: 231 (99 first-time attendees)

The 10th Earth Educators' Rendezvous (EER) was held in Philadephia, PA, at Temple University. The number of participants and first-time attendees was consistent with the two previous years. A theme of the event in 2024 was eARTh, or Art in Earth, with many opportunities for participants to view and create art with an Earth science theme. The workshop program included annual offerings, like the Preparing for an Academic Career and Getting the Most Out of Your TA Experience, and many new workshops on topics like project management, using the Community Contribution Tool, and using games in education.Posters, oral sessions, and teaching demos provided a venue for many participants to share their research and teaching strategies with the community.

Conference Chairs

Andrea Bair, Delta College Lynsey Lemay, Virginia Peninsula Community College Barbra Sobhani, Colorado Space Grant Consortium

Contributed Program Chairs

Nancy Chen, *Harvard-Westlake School* Annie Klyce, *Vanderbilt University*

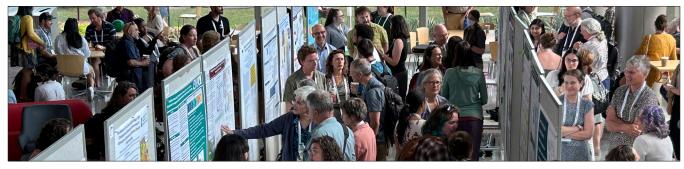
Local Hosts

Alexandra Davatzes, *Temple University* Tim Shipley, *Temple University*

Additional Planning Committee Members

Aaron Ball, University of Tulsa Callan Bentley, Piedmont Virginia Community College Monica Bruckner, SERC, Carleton College Shondricka Burrell, Morgan State University Julie Ferguson, University of California-Irvine Ginny Isava, California State University-Fullerton Fred Marton, Bergen Community College Samuel Nyarko, Indiana University-Indianapolis Disha Okhai, Purdue University Adam Papendieck, The University of Texas at Austin

Poster session in the atrium at the 2024 EER. Photo by Anne Egger, CC BY-NC-SA 3.0.





Participants in the Preparing for an Academic Career in the Geosciences workshop at the 2024 EER. Photo by Holly Kelchner, CC BY-NC-SA 3.0.

PREPARING FOR AN ACADEMIC CAREER IN THE GEOSCIENCES WORKSHOP

July 15-17, 2024 Participants: 21 graduate students and postdoctoral fellows

The Preparing for an Academic Career Workshop is held in conjunction with the EER. This workshop is designed specifically for graduate students, post-doctoral fellows, and others who are interested in pursuing academic careers in the geosciences. The main goals are for participants to improve their application and interview skills for academic jobs, become more effective at goal-setting and time management, and broaden their network of colleagues and resources to help jump-start their teaching and research as a faculty member. Each participant develops or revises a plan for the next stage in their career and cultivates ideas that they can immediately implement. As in previous years, the program included presentations, discussions, small group activities including elevator pitch practice, and periods of informal Q&A with co-conveners and fellow participants. Lunchtime conversations build camaraderie among the participants.

Workshop Leaders

Rebecca Beadling, *Temple University* Brendan Hanger, *Colorado School of Mines* Lynsey LeMay, *Virginia Peninsula Community College* Christy Visaggi, *Georgia State University*

WORKSHOP FOR EARLY CAREER GEOSCIENCE FACULTY June 24-27, 2024, with an optional virtual visit to NSF July 28 Participants: 51

The aim of the Early Career workshop is to develop skills and a lasting network of peers to support geoscience faculty in their early years of their teaching and research responsibilities. The workshop includes sessions on effective teaching strategies, course design, establishing a research program in a new setting, working with research students, balancing professional and personal responsibilities, strategies for broadening participation in geosciences, and planning for a successful career.

Lead Facilitators

Jennifer Anderson, *Minnesota State University-Winona* Gretchen Miller, *Wake Technical Community College* Martin Wong, *Colgate University*

Additional Facilitators

Clara Chan, University of Delaware Mea Cook, Williams College Wendi Flynn, University of Northern Colorado Scott Giorgis, SUNY Geneseo Rory McFadden, SERC, Carleton College Anna Pfeiffer-Herbert, Stockton University Jeremy Shakun, Boston College Myriam Telus, University of California, Santa Cruz Christy Till, Arizona State University

TRAVELING WORKSHOPS PROGRAM

Participants: 3 workshops,42 individuals

The Traveling Workshops Program (TWP) brings national leaders in environmental, sustainability, and geoscience education to departments, programs, and conferences. In FY 2024, we published an article about the TWP in Eos, entitled <u>Geoscience</u> <u>departments can "phone a friend" for support</u>, which highlighted the long history and success of the program and the modifications we've made to support departments into the future. In FY 2024, the following workshops were held:

Location: University of Tulsa, *Nov. 6-7, 2023* **Leaders:** Karen Viskupic and Anne Egger **Theme:** Building Stronger Geoscience Programs

Location: East Carolina University, *Nov. 16-17, 2023* **Leaders:** Julie Bartley and David Gosselin **Theme:** Environmental and Sustainability Programs

Location: Illinois State Geological Survey, *May, 2024* **Leaders:** Anne Egger and Stefany Sit **Theme:** Becoming an Inclusive Mentor

Management Team

Walt Robinson (Chair), North Carolina State University Reginald Archer, Tennessee State University David Blockstein, Bard College Edith Davis, Florida A & M University Diane Doser, University of Texas at El Paso Catherine Riihimaki, 2NDNATURE Software Inc. Cindy Shellito, University of Northern Colorado Rachel Teasdale, California State University – Chico Gary Weissmann, University of New Mexico

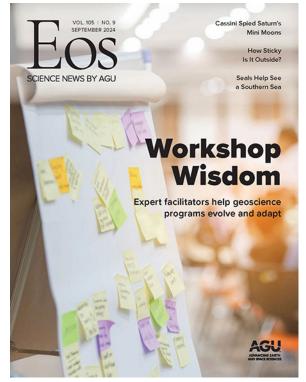
WEBINARS

Participants: 1061 registrants, 274 attendees

NAGT offered 12 webinars during the 2023-24 academic year. Themes included bringing IT skills into the classroom, new curricular materials, assessing the NGSS, and ways to get involved in NAGT. Multiple webinars focused on strategies and resources to increase equity and inclusion in the geoscience community. In addition, the Geo2YC Division led several webinars that would be helpful to all educators, but especially focused on two-year college instructors. For the 2024-25 academic year, we have four webinars scheduled and are in the process of discussing how we can utilize our webinar series to help increase interest in other NAGT programs.

Webinar Planning Committee

Julie Fergusen (Co-chair), University of California-Irvine Beth Pratt-Sitaula (Co-chair), EarthScope Consortium Aida Awad, American Intercontinental University Ashley Carlson, SERC, Carleton College Debbie French, Wake Forest University Cailin Huyck Orr, SERC, Carleton College Margie Turrin, Columbia University



Cover image from Eos article about NAGT's Traveling Workshops Program.

TEACH THE EARTH WEBSITE AND ACTIVITY REVIEW

Over the FY24, the Teach the Earth (TTE) Website committee continued to work with the COMPASS project to fine-tune the search process and improve discoverability of resources. In addition, the committee reviewed and considered a new model for the activity review process that allows for ongoing, rapid review as activities are submitted rather than once a year.

Teach the Earth Website Committee

Jennifer Wenner (Chair), University of Wisconsin – Oshkosh Chris Berg, Orange Coast College Andy Bobyarchick, University of North Carolina at Charlotte Sean Fox, SERC, Carleton College Kyle Fredrick, Pennsylvania Western University Laura Guertin, Penn State Brandywine Disha Okhai, Purdue University Ander Sundell, College of Western Idaho Becca Walker, Mt. San Antonio College

The TTE Activity Review takes place in coordination with the EER, although all reviews are completed prior to the meeting and a social event takes place at the EER. In 2024, 23 reviewers were assigned a total of 229 activities; about 30% were new activities that had not previously been reviewed, and 70% were "old" activities from the Exemplary collection that were re-reviewed to ensure they still meet the Exemplary collection standards. Eighty-two activities (~35%) met the criteria for Exemplary status.

SUPPORTING GEOSCIENCE STUDENTS

NAGT has three programs that support students' growth as geoscientists and educators by helping them participate in research in the field and the lab and supporting their attendance at the EER.



Pictures of NAGT/USGS Fellows (left to right) Laura Sugano, Marcel Peliks, and Kelly Sanks. Reflections by these and other participants who have benefitted from the USGS/NAGT program over the years can be found on the program website at <u>https://nagt.org/nagt/students/reflections.html</u>. Photos offered under CC BY-NC-SA 3.0.

SCHOLARSHIPS FOR FIELD STUDIES

Each year, NAGT makes several \$750 awards to undergraduate students to facilitate their study of field geoscience. The NAGT Field Camp Scholarship committee had 56 complete applications to review; the same number as previous years. Eighteen scholarships were awarded, two of which were funded by the Association for Women Geoscientists (AWG). Many field camps are shortening the length of their courses to accommodate students' schedules and financial constraints. The minimum length in previous years was 4 weeks; the requirement going forward is that the course be at least 3 weeks of work primarily in the field.

Scholarship for Field Studies Committee

Lydia Fox (Chair), University of the Pacific Claire McLeod, Miami University Ander Sundell, College of Western Idaho

CAREER PREP WORKSHOP GRANTS

Thanks to generous donations from NAGT members and donors, a Student Career Preparation Fund was established to support students attending the Preparing for an Academic Career workshop at the Earth Educators' Rendezvous. In 2024, six graduate students were awarded \$300 stipends to partially support travel costs to attend the workshop at the EER.

NAGT/USGS COOPERATIVE SUMMER FELLOWSHIP

FY24 marked the implementation of a new nomination process for the NAGT/USGS Cooperative Summer Fellowship Program to bring it into alignment with the needs of USGS scientists and to expand access to the program to include students who are well-prepared but did not attend a traditional field camp. The new process broadens the range of capstone experiences that qualify students for nomination and emphasizes the nomination of promising individuals for whom the internship experience would be transformative. In the 2022-23 cycle, 51 students were nominated by field camp directors, and 38 of those students completed an application for the program. Ths USGS leaders received 28 proposals from USGS scientists, and a total of 25 students were placed.

In 2023, 56 students were nominated and 36 of those students completed an application for the program. A total of 24 students were placed with USGS science projects. Ten students applied for the newly-established Gary Fuis and Stacy Andrews Scholarship, and six students were supported with awards.

Executive Secretary, NAGT

Kurtis Burmeister, California State University, Sacramento

U.S. Geological Survey Leaders

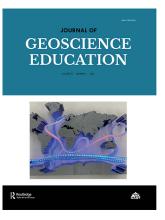
Eleanour Snow, Youth and Education in Science Manager Laura Corey, Education Program Analyst

NAGT PUBLICATIONS

JOURNAL OF GEOSCIENCE EDUCATION

This year marked an Editorin-Chief transition as Kim Hannula completed and Angela Hessler began their respective terms.

A total of 35 articles were published in four issues of the Journal of Geoscience Education in in 2024, including one guest-edited theme issue (Lessons learned, enduring ideas, and online resources created during the COVID-19 pandemic) and three unofficial theme issues



around representation, personal connections, and flexible thinking in geoscience.

Submissions for 2024 are on track to increase somewhat over 2023, in line with 2022 numbers. Submissions continue to originate mostly in the U.S., although in 2023 the proportion of non-U.S. submissions reached its highest level (~37%) since the move to T&F in 2018. Our two new associate editors are both based in Europe, reflecting the increasingly international scope of the journal.

Editor-in-Chief

Angela Hessler, Deep Time Institute

Curriculum & Instruction Editor

Karen Kortz, Community College of Rhode Island

Research Editor

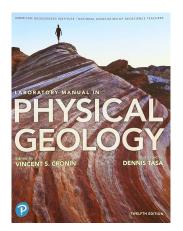
Alison Jolley, University of Waikato, Te Puna Ako

Associate Editors

Kelsey Bitting, Elon University Alexandra Davatzes, Temple University Andrea Gerbaudo, University of Turin Michael Hubenthal, EarthScope Consortium Charles R. Kerton, Iowa State University Elizabeth Lewis, University of Nebraska-Lincoln Samuel Nyarko, Indiana University-Indianapolis Heather Petcovic, Western Michigan University Ilyse Resnick, University of Canberra Emily Scribner, Clemson University Nicholas Soltis, University of Indianapolis Clara Vasconcelos, Porto University

LABORATORY MANUAL IN PHYSICAL GEOLOGY

The Laboratory Manual in Physical Geology is a collaborative effort between NAGT and the American Geosciences Institute (AGI), published by Pearson. Proceeds from the sale of the manual are shared by the two sponsoring organizations. The 12th edition was launched in 2019 with a new chapter on climate change and significant revisions to other chapters. The lab manual can be customized with selected



chapters and purchased as a print or eBook. The editor has also produced a large set of short <u>YouTube videos</u>, particularly of rocks and minerals and word pronunciation, that are freely available and can be used in conjunction with the lab manual.

Lab Manual Editor

Vince Cronin, Baylor University (emeritus)

IN THE TRENCHES

In the Trenches is the members-only publication of NAGT. Issues in 2024 focused on teaching planetary geology and

engaging in citizen science. The July 2024 issue (see cover at right) marked our last issue formatted as a multipage publication, and we have since transitioned to a digitalnative publication to allow for more interactive discussion.

Editor

Redina Finch, *Western Illinois University*



Got an idea you want to share with the NAGT community?

Submit to the new In the Trenches!

https://nagt.org/nagt/publications/trenches/ submit_article.html

COMING IN 2025 AND 2026



PLAN AHEAD! JOIN US IN <u>South Carolina in 2026</u> for the Earth Educators' Rendezvous

Save the date for the eleventh Earth Educators' Rendezvous that will be held July 20-24, 2026, at the University of South Carolina. Visit the website to sign up for updates, including deadlines for submitting workshop proposals, program updates, and more.

NOMINATE SOMEONE FOR AN AWARD

Website: https://nagt.org/nagt/awards/index.html

- Know an amazing K-12 teacher? Nominations for the Outstanding Earth Science Teacher Award are due March 1.
- How about an outstanding K-12 teacher leader? Nominations for the Teacher Education Division's Earth Science Teacher Leader Award are due April 1.
- Did you have a fantastic undergraduate or graduate TA? Nominations for the Outstanding Teaching Assistant Awards are reviewed twice a year: December 15 and June 15.
- Want to recognize an adjunct for their work? Nominations for the 2YC Division's Outstanding Adjunct Faculty Award are reviewed quarterly.
- Know an outstanding geoscience education researcher? The Geoscience Education Research Division has several awards with nomination deadlines of June 15.

All other awards have an April 15 deadline:

- Want to recognize someone for their outstanding writing or editing? Nominate them for the Excellence in Earth Science Writing and Editing (the James H. Shea Award).
- Do you know a champion of justice, equity, diversity, and inclusion in geoscience education? Nominate them for the Excellence in JEDI Award.
- That person everyone says is the reason they got into the geosciences? Nominate them for the Stimulation of Interest in the Earth Sciences Award (the Neil Miner Award).
- Do you know a colleague who has gone above and beyond for NAGT? Nominate them for Distinguished Service (Robert Christman Award).

Visit the awards website for details about eligibility, the nomination process, and what to submit.

ONLINE WORKSHOPS IN 2025!

FACILITATING EFFECTIVE GROUP PROJECTS

Dates: Wednesday, January 22, 29, and February 5, 2025, 10 am -12 pm PT / 11 am - 1 pm MT / 12 - 2 pm CT / 1 - 3 pm ET This workshop will explore effective ways to facilitate group projects to promote the development of workforce skills for students. We will focus on how to integrate skill development within the course structure, including project planning, management, communication and leadership. Participants will come away with tools to use in their existing group project teaching or outline new implementations for their own courses.

Registration deadline: January 15, 2025 Fee: \$120 NAGT members/\$175 non-members

COURSE DESIGN

Dates: Wednesdays, June 4, 11, and 18, 2025, 9 am - 11:30 am PT / 10 am - 12:30 pm MT / 11 am - 1:30 pm CT / 12 - 2:30 pm ET Are you developing a new course or revising a course you have taught before? This workshop will help you use backwards design to generate assessments and instructional activities that meet both content and skills-based objectives. This highly interactive, synchronous online workshop will provide time for you to build foundational knowledge of best practices for course design, share strategies and exchange ideas with colleagues, work on developing your course, and provide and receive feedback from peers.

Registration deadline: May 28, 2025 Fee: \$120 NAGT members/\$175 non-members

PREPARING FOR AN ACADEMIC CAREER

Dates: August 4-8, exact times to be determined

THE FINANCIAL REPORT

National Association of Geoscience Teachers

Statement of Financial Position as of August 31, 2024 (with comparative totals as of August 31, 2023)

| | 8/31/24 | 8/31/23 | | |
|----------------------------------|--------------|--------------|--|--|
| ASSETS | | | | |
| Cash | 55,925 | 104,229 | | |
| Investments | 1,472,299 | 1,316,509 | | |
| Prepaid Expenses | 7,527 | 8,760 | | |
| Accounts Receivable | 2,268 | 52,405 | | |
| Total Assets | \$ 1,538,019 | \$ 1,481,903 | | |
| LIABILITIES AND NET ASSETS | | | | |
| LIABILITIES | | | | |
| Accounts Payable | 113,006 | 126,116 | | |
| Accrued Expenses | 119,740 | 138,171 | | |
| Deferred Revenue | 29,724 37,98 | | | |
| Total Liabilities | 262,470 | 302,275 | | |
| NET ASSETS | | | | |
| Without Donor Restrictions | 937,042 | 890,868 | | |
| With Donor Restrictions | 338,507 | 288,760 | | |
| Total Net Assets | 1,275,549 | | | |
| Total Liabilities and Net Assets | \$ 1,538,019 | \$ 1,481,903 | | |

Statement of Activities and Change in Net Assets for the Year Ending August 31, 2024 (with comparative totals as of August 31, 2023)

| , | Without Donor | With Donor | For the Year | For the Year |
|---|------------------|--------------|----------------|----------------|
| | Restrictions | Restrictions | Ending 8/31/24 | Ending 8/31/23 |
| REVENUE & SUPPORT Membership Dues | 99,604 | | 99,604 | 93,539 |
| Royalties | 99,604 25,262 | - | , | |
| , | , | - | 25,262 | 28,696 |
| Advertising | 2,265 | - | 2,265 | 4,495 |
| On the Cutting Edge PD Program In the Trenches | 199,087 | - | 199,087 | 203,874 |
| | 139 | - | 139 | 12 |
| Journal of Geoscience Education | 73,750 | - | 73,750 | 80,529 |
| Miscellaneous Income | 3,500 | - | 3,500 | 3,500 |
| Contributions | - | 34,800 | 34,800 | 87,624 |
| Net Assets Released from Restriction | 54,345 | (54,345) | - | - |
| Total Revenue & Support | 457,952 | (19,545) | 438,407 | 502,259 |
| EXPENSES | | | | |
| Program Services | | | | |
| On the Cutting Edge PD Program | 108,310 | - | 108,310 | 129,043 |
| Journal of Geoscience Education | 2,750 | - | 2,750 | 5,295 |
| In the Trenches | 25,287 | - | 25,287 | 19,326 |
| Field Camp Scholarships | 13,500 | - | 13,500 | 13,500 |
| Awards | 3,825 | - | 3,825 | 4,908 |
| Section/Division Payments | 10,481 | - | 10,481 | 8,701 |
| Other Program Expenses | 5,479 | - | 5,479 | 4,274 |
| Total program services | 169,632 | | 169,632 | 185,047 |
| Supporting Services | | | | |
| General & Administrative | 410,983 | - | 410,983 | 418,387 |
| Fundraising | - | - | - | - |
| Total Supporting services | 410,983 | | 410,983 | 418,387 |
| Total Expenses | 580,615 | | 580,615 | 603,434 |
| Change in Net Assets from Operations | (122,663) | (19,545) | (142,208) | (101,175) |
| NONOPERATING ACTIVITIES | | | | |
| Investment Income | 45,591 | 18,231 | 63,822 | 35,961 |
| Investment Gain/Loss | 123,247 | 51,060 | 174,307 | 64,878 |
| Change in Net Assets | 46,175 | 49,746 | 95,921 | (336) |
| Net assets at beginning of year | 890,868 | 288,760 | 1,179,628 | 1,179,964 |
| Net assets at end of year | \$ 937,043 | \$ 338,506 | \$ 1,275,549 | \$ 1,179,628 |

2024 DONOR RECOGNITION

Donations made from September 1, 2023, to August 31, 2024.

We deeply appreciate the organizations and individuals that have contributed to NAGT during the 2024 fiscal year.

LEGACY LEVEL (\$2,500 OR MORE)

William and Maria Luisa Crawford Kris and Steve Egger Ruth Ludwin

STEWARD LEVEL (\$1,000-\$2,499)

Robert Blodgett Anne Egger* Kathryn Schmidt

PARTNER LEVEL (\$500-\$999)

Edward J. Tarbuck*

FRIEND LEVEL (\$100-\$499)

Anonymous Pranoti Asher Meg Blome Scott Burns Nancy Chen Michael Cummings Timothy Diedesch Richard Ford Lydia Fox Laurel Goodell Kristine Harper Kim Kastens Kerry Keen Lawrence Krissek David Love* Tum Lutz Randy Richardson Jocelyn Sessa Edward Stoever Edward Tarbuck Suzanne Traub-Metlay David Voorhees

CONTRIBUTOR LEVEL (UP TO \$99)

Dawn Ackerman Gerald Adams* Amadi Afua Sefah-Twerefour Alec Aitken Richelle Allen-King Anne Armstrong Nina Baghai Riding

William Ball* Emilie Beaudon Bret Bennington* Christopher Berg Jon Berry Andy Bobyarchick Lanna Bradshaw Susan Conrad Michele Cooke Margaret Crowder* Angela Daneshmand Nigel Davies William Elliott Lisa Elv Katherine Farnsworth* Miriam Fuhrman Andrew Goodliffe* Kyle Gray Laura Guertin Brendan Hanger Steven Hauck Joanna Hodge Ryan Hollister* Michael Hudak* Daniel Hummer Glenn Jolly Leah Joseph Aurora Kagawa-Viviani Ryan Kerrigan Richard Landers* Naomi Levin* Jonathan Lewis Kyger Lohmann* Jessica Lueders-Dumont Frederick Lutgens* Cathryn Manduca* Cheryl Manning Michelle Markley* Stephen Marshak L. Lynn Marquez* Julie Maxson* Gregory Mead Melany McFadden Bridget Mulvey

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* Sustaining member



Early Career Workshop leader team. Photo courtesy Martin Wong. CC BY-NC-SA 3.0.

B3% of your donations go directly to programming.



NAGT c/o Carleton College, B-SERC One North College Street Northfield, MN 55057

Help NAGT Make a Difference: Make a Year-end Donation

Want to support us where it is most needed?

You give us the most flexibility by donating to our unrestricted funds. To put your dollars to work right away, donate to the **Program Fund**.

Want to support participation in professional development?

To provide support for our professional development program, donate to the **Professional Development Fund**

To support initiatives that broaden access to our professional development, donate to the **Broadening Access Fund**

To support K-12 and community college instructors in professional development, donate to the **Dorothy LaLonde Stout Fund**

Want to support students in their Earth education?

To support graduate students participation in professional development, donate to the **Academic Career Preparation Fund**.

To support undergraduate students in attending field courses, donate to the **Field Course Scholarship Endowed Fund**.

To support NAGT-USGS interns in participating in their internships, donate to the Gary Fuis and Stacey Andrews Scholarship Endowed Fund

Want to help us build our capacity for the future?

Endowed funds generate income and provide an opportunity for long-term investment in our future. To help us build our capacity, donate to the **Endowment Fund**.

Learn more and donate today:

https://nagt.org/nagt/get_involved/donate/index.html

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