



Annual report of the Outstanding Teaching Assistant Committee for FY25

Submitted by Katherine Ryker, Committee Chair

Committee members:

Katherine Ryker (Chair), *University of South Carolina* (2021-2025)

Dana Thomas, *City of Austin Watershed Protection Department* (2021-2025)

Rick Ford, *Weber State University (Retired)* (2021-2025)

Executive summary

The Outstanding TA (OTA) Committee received 23 high quality nominations and was able to provide 22 awards to TAs from across the country. Nominations and awardees typically come from departments with graduate programs; however, multiple undergraduate TAs were recognized, including from two community colleges. New schools with nominations are noted as the New Mexico Institute of Mining and Technology, Vanderbilt University, Furman University, and Central Michigan University. Committee members worked with nominators to help them celebrate the recognition on their home campuses through departmental awards ceremonies, social media posts, and university-level articles. A celebratory and social networking call was organized for the OTAs separate from the NAGT Awards Ceremony. A group of seven OTAs presented their work at GSA Connects 2025, with another group planning to share at the 2026 Earth Educators' Rendezvous. Also in 2025, all three current committee members end their second two-year term. We invite others to join this rewarding committee.

Detailed report

Promotional activities

Committee members circulated a flyer at GSA, AGU, and through departmental seminar visits, as well as through the Heads & Chairs Listserv and NAGT's social media to encourage the community to nominate deserving TAs. We also incorporated the 2024 and 2025 OTAs in preparing and presenting a poster with their teaching advice at the 2025 GSA Connects. Seven OTAs collaborated to present their work at the meeting and used it as an opportunity to encourage others to participate in the program. In 2026, the committee should continue to promote the program at conferences, through listservs, and through social media.



Field Notes from the Geoscience Classroom: Insight from NAGT's 2024/2025 Outstanding Teaching Assistants



Sophia Bautista, Wilnelly Ventura-Valentin, Trevor Brooks, Jacqueline Giblin, Erica Scarpitti, Roger Riggan, Ashley Scott

Introductory Course Notes

- Communicate clearly.** Meet students where they are with reminders and clear instructions to reduce anxiety and keep them engaged.
- Build skills step by step.** Scaffold from simple observations to complex analysis over the semester.
- Assess often, reward reasoning.** Use low-stakes quizzes and praise effort and careful thinking, not just correct answers.
- Embrace uncertainty.** Have students explore multiple interpretations before reaching conclusions.
- Grow citizen scientists.** Connect lab work to real-world issues so students can make informed decisions beyond the classroom.

General Course Notes

- Spark curiosity.** Offer topic choice and outdoor observations to prompt fresh insights.
- Teach transferable skills.** Emphasize data management, teamwork, and analysis with real-world value.
- Mix modes, add resets.** Use visuals, discussion, and brief "wake-up" talks to re-energize labs.
- Model resourcefulness.** Show how to find answers when you don't know them.
- Be clear on expectations.** Explain why skills matter and set boundaries for tools like AI.
- Grade as feedback.** Use assessments to guide improvement, not just scorekeeping.

Upper-Level Course Notes

- Mentor scientists-in-training.** Balance independence with teamwork—real science is collaborative.
- Build field confidence.** Hike last, pep talk often, and frame challenges as shared wins.
- Prioritize communication.** Assign writing for both expert and public audiences; reward clarity and sustained effort.
- Share your story.** Normalize struggle so students—especially marginalized or non-traditional—see they belong.
- Grade for growth.** Value reasoning, persistence, and progress over flawless answers.
- Foster democracy.** Use surveys and shared choices to give students ownership of the classroom.

Seeking Inspiration for In-Class Activities?

Design a scavenger hunt where students use maps, clues, and questions to discover geologically significant spots on campus—from stone planters and building materials to museum exhibits. This hands-on exploration sparks curiosity and helps students connect geology to their everyday environment.

Murder Mystery KRD Lab
Students prepare samples, run analyses, and watch 3RD patterns to identify the "killer".

"Living" sand box for topography lessons

Weather balloon launch for upper-air data collection

M&M Magma Chamber: Fractional Crystallization Activity

Off The Couch Activity
with students wapping surface temperatures for extra credit!

Lego Kit Atmospheric Dynamics

Scan here for more tips and resources from the authors.

Life-Size Timeline of Geologic History

Use foam or 3D-printed cubes to show mineral cleavage, or cardstock to model invisible planes

Semester-long projects measuring campus environmental change

Huge thank you to NAGT!

Sophia Bautista
UT Austin
Teaching Philosophy: Teaching students about the environment and using their skills to explore allows them to understand how and why things work, bringing a sense of purpose and desire to preserve.
Study Area: Paleoclimate geoscience
TA for: Intro to Geology, Intro to Environmental Science, Field Seminar for Sustainability

Wilnelly Ventura-Valentin
University of Southern Indiana
Teaching Philosophy: Create a classroom that values students as whole people. Fosters open-minded discussion and cross-boundary understanding across disciplines.
Study Area: Sedimentology & Geoscience Ed
TA for: Intro to Geology, Hydrogeology & Structural Geology

Trevor Brooks
UT Austin
Teaching Philosophy: To make the geology community a place where no one has to leave just to start identifying all the gear, and where everyone is safe, valued, and can contribute great science.
Study Area: Urban Climatology & Sustainability
TA for: Earth in 360, Sustaining a Planet, Geosocial, and more

Jacqueline Giblin
Arizona State University
Teaching Philosophy: Emphasize connection over perfection, deal with compassion, and default to trust.
Study Area: Geochronology & Tectonics
TA for: Intro to Geology

Erica Scarpitti
Vanderbilt University
Teaching Philosophy: Earth Science should be accessible and inclusive for all students.
Study Area: Geomorphology & Glacial Geology
TA for: Intro to Geology & Glacial Geology

Roger Riggan
University of North Carolina, Charlotte
Teaching Philosophy: Everyone is capable of success when provided with an engaging, inclusive, and supportive learning environment.
Study Area: Severe Storms Hazards & Evolution
TA for: Atmospheric Dynamics I-II, Meteorological Computer Programming, Intro to Meteorology

Ashley Scott
Western Michigan University
Teaching Philosophy: Teaching is a shared journey of learning, building confidence, sparking curiosity, and fostering critical thinking.
Study Area: Carbonate Petrology
TA for: Physical Geology, Historical Geology, Intro to Earth Hazards, Earth Systems Science and Sedimentology & Stratigraphy

Bautista et al., 2025. Poster presented at the 2025 GSA Connects.

Nominations and selection process

23 nominations were received and 22 recognitions were made. Each application is reviewed according to holistic criteria posted publicly to the Outstanding TA website for nominators to see. Following each round of nominations, the committee reviews these asynchronously, then meets over Zoom (two meetings/year) to discuss and evaluate how the nominations rank according to the rubric. Suggested updates to the rubric are made and discussions had about how to encourage nominations in the coming year. Additional discussion is had about what appears to be working (or not) in the nomination, review, and honoring process.

Awardee(s)

June Award

- Sophia Bautista, University of Texas, Austin
- Tessa Czech, University of Utah
- Olivia Dzomba, University of Montana
- Jacqueline (Jackie) Epperson, University of Texas, Austin
- Kyle Gallant, New Mexico Institute of Mining and Technology
- Kirsten Gehl, University of Montana
- Kailee Gokey, Miami University, Ohio
- Soren Gray, University of Montana
- Jasmine Kidwell, Baylor University
- Abigale O'Connor, Miami University, Ohio



- Erica Scarpitti, Vanderbilt University
- Logan Twohey, University of North Carolina, Charlotte

January Award

- Marcus Burgher, Furman University
- William Cummings, Clemson University
- Jordan Deane, University of Regina
- James Genero, Central Washington University
- Jacqueline Giblin, Arizona State University
- Kaitlyn Ponce, Cabrillo College
- America Sanchez, Cabrillo College
- Taylor Slyker, Central Michigan University
- Brooke Vander Pas, Indiana University, Indianapolis
- Wilnelly Ventura-Valentín, Miami University

Recipients are notified by the OTA Committee Chair and asked to provide their mailing information to receive a certificate and promotional materials from NAGT.

Reflection and looking forward

The Outstanding TA Awards have grown in recent years in the number of nominations received, the opportunities for recognition (e.g. social networking call with “NAGT Notables”, posters presented at GSA Connects and the Earth Educators’ Rendezvous). The current committee has worked diligently to create a timeline and process that can be followed and updated by future members. Of note, all three committee members end their term in 2025, so new committee members need to be identified.