Saluting the Geoscience Education Education Stars of 2023
The NAGT, Geo-CUR, and GSA Education Division Awards for 2023

Outstanding Teaching Assistants Awards for 2023

Outstanding Earth Science Teacher Awards for 2023

FROM THE EDITOR

The October issue of *ITT* is here! It’s time to celebrate! All of our award winners are truly incredible. We have awardees from a wide range of backgrounds, including those in education and research, K12 through college, and informal education practitioners. We also have awards for early, middle, and late stages of careers. Our newest award is the Earth Science Teacher Leader Award for those who go beyond being a teacher to those who influence the foundation of geoscience education. More information on the Earth Science Teacher Leader Award can be found at [https://nagt.org/nagt/divisions/ted/leader_award.html](https://nagt.org/nagt/divisions/ted/leader_award.html).

NAGT turns 85 this year. Looking back on all of the NAGT contributions to geoscience education, just wow! It’s pretty obvious that this is a labor of love for all of the members. Yet another reason to celebrate! So, without further ado, here are our awardees!—Redina
The NAGT, Geo-CUR, and GSA Education Division Awards for 2023

For details, visit https://nagt.org/nagt/awards/index.html.

NEIL MINER AWARD
For contributions to the stimulation of interest in the Earth sciences
Sharon K. Cooper
Columbia University, New York City, NY
Sharon Katz Cooper is one of the leaders of Education, Outreach and Science Communication for the U.S. Science Support Office of International Ocean Discovery Program (IODP). She learned of IODP while working for the Smithsonian on developing the Sant Ocean Hall, during which she sailed on the very first School of Rock in 2005 and became permanently hooked. Now a full-fledged accidental geologist, she creates and implements programs around the world to encourage students, educators and the general public to fall in love with STEM. She is passionate about increasing diversity in the geosciences and providing entryway opportunities for students from all walks of life. A children’s book author, wife, mom, and cook, she holds a bachelor’s degree in ecology and evolutionary biology from Princeton University and a master’s degree in environmental studies from Yale University.

JAMES SHEA AWARD
Honoring individuals for exceptional writing or editing of Earth science materials of interest to the general public and/or teachers of Earth science
Heather Goss
American Geophysical Union (AGU), Washington, D.C.
For decades Eos, the news magazine of the American Geophysical Union (AGU), served a largely internal purpose of sharing discoveries, opinions, and opportunities to members of the world’s largest professional and scientific society in the Earth and space sciences. When Heather Goss became its editor-in-chief in 2019, she saw the potential of the publication to serve a much broader role. In her first year, Eos was transformed into a colorful and engaging outlet for Earth science news accessible to the general public. Under her leadership, the Eos website won an EXCEL Award for Editorial Excellence every year, and seven feature articles won awards.

ANITA MARSHALL
University of Florida, Gainesville, FL, and the International Association for Geoscience Diversity, Cincinnati, OH
Anita Marshall is a lecturer in the Department of Geological Sciences at the University of Florida and the executive director of the International Association for Geoscience Diversity (theIGD.org). Her efforts towards making the geosciences a more welcoming discipline are informed by her own experiences as a disabled geoscientist, as a member of the Choctaw Nation of Oklahoma, and her non-traditional academic path. Her projects include the GeoSPACE program, an inclusive field course for students with disabilities and other marginalized identities; the ASCEND research coordination network; and a project exploring the experiences of d/Dis enabled geoscience career professionals. She thanks her fellow IAGD volunteers and the project teams and amazing students who make these programs possible.

GEO-CUR AWARD
Recognizing outstanding undergraduate research mentoring
Christopher Kim
Chapman University, Orange, CA
In his 19 years at Chapman, Christopher Kim,
an environmental geochemist and professor, has mentored more than 100 undergraduate, community college, post-baccalaureate, and high school students in his Kim Environmental Geochemistry (KEG) Lab, leading to dozens of student research presentations at (inter)national scientific conferences, student (co-)authored publications, and continuations of students’ research careers through acceptances to PhD programs. As director of Chapman’s Office of Undergraduate Research (2011–2015), he built and scaled initiatives that significantly increased undergraduate student research and creative activities, including launching Chapman’s summer undergraduate research fellowship (SURF) program, which served as a template for summer research opportunities across campus that collectively facilitate 50+ paid summer fellowships each year for undergraduate students. Kim began the first NSF-REU program in the Division of Earth Sciences to draw exclusively from the community college student population; this year the Summer Undergraduate Research Fellowship in Earth and Environmental Sciences (SURFEES) program celebrated its 10th anniversary and surpassed 100 SURFEES fellows since its launch.

Kim has served as a GeoCUR councilor from 2010–2016, attended CUR programming events and conferences, and chaired or co-chaired CUR’s Annual Business Meeting, Undergraduate Research Program Directors Conference, and Biennial Conference. He is honored and humbled by this award.

BIGGS AWARD
Awarded by the Geological Society of America (GSA) for excellence in Earth science teaching by undergraduate faculty who have been teaching full-time for 10 years or fewer

GLENN DOLPHIN
University of Calgary, Calgary, Alberta, Canada

Glenn Dolphin started his formal post-secondary education as a geology major, receiving both a bachelor’s and a master’s degree in geology. After graduating, he worked for a groundwater consulting firm in New Jersey. He then, after earning an MAT in geology, spent 13 years teaching 9th grade Earth science in New York State public schools. During this time, he was director at large for Earth science of STANYS (Science Teachers Association of New York State). He became involved in teacher professional development, giving presentations on the use of models, the history of science, and drawing as part of the teaching repertoire.

He later earned a PhD in science education, strengthening his skills as an educational researcher. He also became interested in how metaphors influence learning and teaching. He became Tamaratt Teaching Professor in Geoscience at the University of Calgary in 2013. He has been involved with the development and implementation of virtual outcrop models (VOMs) as teaching tools in undergraduate geology courses and recently has been researching how the public understands earthquake magnitude and intensity in preparation for Canada’s implementation of a new earthquake early warning system.

GER (GEOSCIENCE EDUCATION RESEARCH) TRANSFORMATION AWARD
Recognizing outstanding contributions to GER

KAREN KORTZ
Community College of Rhode Island, Warwick, Rhode Island

Karen Kortz has shaped the GER (Geoscience Education Research) community as an instructor, Honors program director, and former co-ordinator of the Teaching and Learning Collaborative at the Community College of Rhode Island. She is committed to improving student equity, development, and learning outcomes through evidence-based teaching and the writing of textbooks. These themes carry over into her research, which spans topics such as student conceptions, career pathways, textbook portrayals, and gamification. She has published her work in Journal of Geoscience Education (JGE) and other STEM education journals, and she regularly presents her work at GSA, AGU, EER, and other meetings.

Kortz builds capacity in GER and STEM education through mentorship; much of her work involves student collaborators. She also partners with faculty to help them undertake Scholarship of Teaching and Learning work. As the curriculum and instruction editor of JGE, she maintains an encouraging and rigorous peer review process that helps ensure work in our community is grounded in evidence. She has had a transformative impact on our field.

GER (GEOSCIENCE EDUCATION RESEARCH) EARLY CAREER AWARD
Honoring colleagues in their first 10 years post-dissertation who have made significant contributions to the development of geoscience education research

LAURA LUKES
University of British Columbia, Vancouver, British Columbia, Canada

Laura Lukes is a geoscience education researcher and assistant professor in the Earth, Ocean and Atmospheric Sciences Department at the University of British Columbia (Canada). Previously, she was the assistant director for teaching excellence in the Stearns Center for Teaching and Learning at George Mason University. She completed her PhD at North Carolina State University, her MEd at Ohio State University, and her MS at Virginia Tech. Her professional contributions range from research to community capacity building. Her paper, “Creating a Community of Practice Around Geoscience Education Research: NAGT-GER,” helped set a new course for GER community structure and support. Her concept diagram of GER as a nexus of geoscience, education, and social science has evolved to be a foundational visualization, aiding how we communicate about GER to those outside this interdisciplinary field. At UBC, she is lead PI for an initiative working to reimagine field-based science courses and study models of faculty and curricular development and instructor-Indigenous community partnerships. Lukes was the first president of NAGT GER Division and a NSF Albert Einstein Distinguished Educator Fellow. She is currently AGU Education Section President-Elect.

TOTTEN AWARDS
Recognizing outstanding faculty and student research emerging from the geoscience education, geocognition, or related fields.

FACULTY AWARD
BAILEY ZO KREAGER
Elgin Community College, Elgin, IL

Bailey Zo Kreager is an assistant professor at
Kirk Benson—focused on Geoscience

Elgin Community College in Elgin, Illinois. She previously taught in the Department of Earth and Atmospheric Sciences at SUNY Oneonta. Kreager earned her Ph.D. at Northern Illinois University, M.S. from the University of Nebraska-Lincoln, and B.S. from Marietta College. All three degrees are awarded from geoscience departments. Both Kreager's M.S. and Ph.D. focused on Geoscience Education Research. Kreager's research focuses on spatial visualization and creation and assessment of classroom pedagogies. Her research on spatial visualization has looked at the use of frame of reference thinking amongst novice, intermediate, and expert geologists. Her more recent work is on characterizing the expert and novice needs for sequence stratigraphic concepts and to test spatial visualization skills needed for student sequence stratigraphic interpretation.

**Student Awardee**

**STEPHANIE SABATINI**
North Carolina State University, Raleigh, NC

Stephanie Sabatini, a PhD candidate at North Carolina State University, has also served as an adjunct lecturer at UNC Chapel-Hill and has been an engaged NAGT member since 2018. Her research focuses on one of the Grand Challenges in geoscience education: spatial thinking among undergraduate geology students. Through a mixed methods approach, she investigates how spatial thinking develops and evolves in undergraduate geology courses. Her work has involved extensive observation of geology lectures, totaling over 170 hours, aimed at understanding how changes are coming about in classrooms and promoting spatial thinking development. Additionally, she has developed a comprehensive spatial thinking assessment and helped to develop a spatial thinking training course at NC State. Her contributions aim to provide practical strategies for enhancing spatial thinking skills in undergraduate geology students.

**The National Association of Geoscience Teachers (NAGT) Teacher Education Division (TED)** is pleased to recognize teacher Bryce Henderson as an exemplary K-12 Earth sciences teacher leader and as the inaugural recipient of the TED’s Earth Science Teacher Leader Award. Henderson has distinguished himself as an outstanding Earth sciences educator through service to the professional community, distinction in the classroom, and dedication to the advancement of geosciences pedagogy.

Henderson has spent his career using his passion for teaching to help others discover a love of learning. As a leader at Wichita Falls (TX) ISD, he works to empower others to make an impact on the world beyond the classroom. While his focus is on teaching, he also specializes in curriculum development and works closely with the OnRamps program at the University of Texas at Austin to serve over 41,000 geoscience students in 195 districts across the state. He is committed to improving the art of teaching and focuses his action research efforts on closing STEM achievement gaps while increasing representation in the field of geoscience.

Henderson received his education at Angelo State University with a master’s degree in curriculum and instruction. Additionally, he holds a bachelor’s degree in biology from Midwestern State University. An educational technology specialist and a Google for Education certified trainer who frequently presents at local, state, and national conferences, he is the math/science curriculum specialist in Wichita Falls, TX, where he lives with his wife and two children.

The National Association of Geoscience Teachers works to raise the quality of and emphasis on teaching geosciences at all levels. We count among our members K-12 teachers and college/university faculty as well as educators working with the public through outlets such as museums and science centers. NAGT seeks to: foster improvement in Earth sciences education at all levels of formal and informal instruction, emphasize the cultural significance of Earth sciences, and disseminate knowledge to the public. NAGT’s Teacher Education Division provides practical guidance to Earth sciences teachers and their educators.

For more on the Earth Science Teacher Leader Award, see https://nagt.org/nagt/divisions/ted/leader_award.html.

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**IN THE TRENCHES — 3**
Linnea Delucchi
Becket Academy
Denver, CO

Linnea Delucchi is an Outdoor Instructor for New 'Treks' Environmental and Outdoor Education Elective Course at Title I Schools in the Denver area. In this course, she works with middle school and high school students to combine outdoor recreation with Earth science curriculum. The students come from low-income backgrounds and have had little access to the outdoors and hands-on education prior to this class. They get credit for learning about the environment, while also going on field trips to rock climb, paddle, and hike (often for the first time) in areas local to Colorado. This scholarship will support these field trips for her classes so that students get to experience outdoor recreation, while also applying Earth Science lessons learned in the classroom.

JAMES NG
Maywood Center for Enriched Studies, Los Angeles, CA

James Ng is a teacher-librarian at Maywood Center for Enriched Studies, a 6th-12th magnet school within the Los Angeles Unified School District. A 15-year veteran, he is a dedicated educator passionate about inspiring and empowering students. His district awarded him the 2022-23 Teacher of the Year for his service, commitment, and innovative practices. “Learning by doing” is a hallmark as he engages his classes through project-based activities. The impact of the grant will enable his students to learn about environmental science through a “hands-on, minds-on” solar energy project.

OUTSTANDING TEACHING ASSISTANTS AWARDS FOR 2023

NAGT recognizes outstanding undergraduate and graduate teaching assistants in geoscience. Winners receive a one-year NAGT membership, which includes an online subscription to the Journal of Geoscience Education and In The Trenches. The undergraduate awards are the gift of Thomas Hendrix, Grand Valley State University. The graduate student awards are funded by NAGT.

MANDY ABEL
Central Washington University

SYDNEY BELTRAN
Tennessee Tech University

KAYLA BICKNELL
Clemson University

CARSON BROADDUS
University of Montana

GABRIELLE BURKE
Tennessee Tech University

KIERSTEN CRYE
Georgia State University

LAUREN DECKER
University of North Carolina, Charlotte

GABRIEL FRANCO
University of South Carolina

SCARLETTE HSIA
University of Texas

HUNTER P. HUGHES
University of North Carolina, Chapel Hill

KATHRYN JOSTEN
Central Washington University

ASHLESHA (ASH)
Khatiwada

University of Montana

CLEMENCE LAFFAILLE
Clemson University

EMMA MCCULLY
Boise State University

MCKENNA IVES
Eastern Washington University

LEVI MCKERCHER
University of South Carolina

WILL QUANRUD
University of South Carolina

HANNAH RICHARDSON
Boise State University

ELYSSA RIVERA
Auburn University

ALEX SCHWEITZER
Miami University

AMADI AFUA
Sefa-Twerefour

University of South Carolina

KAITLYN TRUSS
University of Wisconsin, Milwaukee

JOURNAL OF GEO SCIENCE EDUCATION

OUTSTANDING REVIEWER

BAILEY ZO KREAGER
Elgin Community College, Elgin, IL

OUTSTANDING PAPER

“Worldbuilding from tectonic first principles: Integrating and challenging undergraduate knowledge through a course project”

LINDSAY M. SCHOENBOHM
University of Toronto

Mississauga, Ontario, Canada

MITCHELL MCMILLAN
Georgia Institute of Technology, Atlanta, Georgia
about lake pollution and loss of biodiversity from human activity. Collaborating closely with Trout Unlimited and the Waukegan Park District, students monitor and raise rainbow trout eggs and, in the spring, release the trout fry into the local waterways. She also spearheaded the design of an outdoor classroom, a living laboratory to integrate environmental education into the broader school curriculum.

Krischke-Grobart recruited students to work with local experts, environmental naturalists, and research scientists to develop stewardship projects and travel to Yellowstone National Park each summer. Under a grant awarded by the Illinois Biodiversity Field Trip, her students have identified and removed invasive species and visited a local forest preserve.

Founder and sponsor of the school’s Environmental Club, she organizes extracurricular activities for students and their parents to learn more about local environmental issues, sustainable and socially just environmental practices, and how to take action at the local level.

David Amidon has been teaching middle school science and high school courses in LaFayette since 1999. He is active in the school as the adviser for National Junior Honor Society, Science Olympiad, and the ECOS Environmental Club and as a coach of many sports. A Teacher Ambassador for the National Center for Science Education Data Network Project this past spring, Amidon has also earned the Empire State Excellence in Teaching Award, received the American Geoscience Institute (AGI) Edward C. Roy Jr. Award for Excellence in K-8 Earth Science Teaching, as well as the Paul DeHart Hurd Award from the National Middle Level Science Teacher Association. He has twice been awarded the Presidential Innovation Award for Environmental Educators from the Environmental Protection Agency and earned the Excellence in Teaching award from the Science Teachers Association of New York State for the intermediate level.

Sarah Faulkner, an educator for 24 years, has taught 8th grade science for the past eight years. Previous experience includes teaching grades 6-12 in Canton and West Hartford, as a K-12 STEAM administrator in Enfield, and as a secondary science curriculum administrator at the Capitol Region.
Education Council in Hartford. In 2015, her love of students took her back to the classroom, where she finds her joy. She holds degrees from Wellesley College, Southern Connecticut State University, and the University of Hartford.

Faulkner strives to bring the wonder and inquiry inherent in science to life in her classroom. She is particularly passionate about connecting students with the natural world. She integrates current events, engineering, and career opportunities, and skepticism in her lessons. She has written many engaging student activities such as her Hope for the World project about climate change and Letter to a Young Rock and has presented at national NSTA and CT Science Teacher conferences.

She runs the school greenhouse, teaching students how to grow plants both indoors and in the outdoor bird/butterfly garden. She helps students raise salmon and trout and holds an annual fish release field trip. She runs the after-school Greenhouse Club, Invention Convention Club, and Rocketry Club, leads international trips during vacations, and organizes annual charitable school events such as the Top Turkey food drive. Her classroom abounds with rocks, books, globes, beaver sticks, bird nests, posters, creating a welcoming, energizing, and inspirational learning space.

NORTH CENTRAL SECTION
NO AWARD IN 2023
PACIFIC NORTHWEST SECTION
HILLARY BROWN
Ida B. Wells High School, Portland, OR
Growing up in the Pacific Northwest with volcanoes, fossils, and gorges, Hillary Brown always knew she wanted to study Earth science. Her educational path led her to the University of Arizona, where she earned a bachelor’s degree in geoscience, to the USGS in Menlo Park as a NAGT intern, to Los Alamos National Lab in New Mexico, and eventually to the University of Wyoming to earn a Ph.D. She had assumed her science career would be one in research or industry. However, after moving to Houston to work in oil exploration, she realized she could have a much larger impact on the world by working to end educational inequity. She shifted careers, joining Teach for America’s Houston Corps in 2010 as a teacher in a Title 1 high school.

Today, Brown works at Ida B. Wells High School in her hometown of Portland, Oregon, teaching geology and 9th grade physics. Students arrive in her geology classes with a variety of different levels of experience in science, but she finds that, whatever their background, all students benefit from using manipulatives and creating models to simulate complex geologic phenomena. Her students can often be seen acting out geologic processes through kinesthetic activities in the school hallways or building 3D models of faults and mineral crystals to improve their spatial skills. To synthesize a year’s worth of learning, she leads her students in a hands-on field experience at the end of the course, applying what they’ve learned in the classroom to the rocks, faults, and features of the Columbia River Gorge.

Brown has fostered relationships with scientists and graduate students, working in both research and industry, that have given her students a well-rounded look at the possible geoscience career paths. She is particularly grateful for her relationship with the Geology Department at Portland State University, which has allowed her students to have experiences, usually reserved for undergraduates, such as operating the SEM to perform chemical analysis on rock samples, and learning how to use petrographic microscopes to identify minerals in thin section.

SOUTHEASTERN AND MISSISSIPPI

TAMMIE HODNETT MARLOW
Cleveland Central Middle School, Cleveland, MS
Tammie Hodnett Marlow has earned degrees from Delta State University and Mississippi Valley State University and attended additional teacher programs: TANS at Mississippi State University; ExxonMobil Teacher Academy in Texas; Mississippi Science Teacher Academy at Jackson State University; and MAST at Southern University of Mississippi Gulf Coast Research Laboratory.

Marlow has taught for 24 years and has won Service Awards, Teacher of the Month, Teacher of the Year, and Outstanding Middle School Teacher for Mississippi. She is an active member of Mississippi Science Teacher Association, where she shares hands-on labs that she has developed and incorporated from other programs. A lifelong learner, she seeks out opportunities during summers that will equip her to better teach her students. Her family has helped her establish an after school program, the Home-Science-Garden Club. Club members invite guest speakers who are experts in their fields, plant seasonal gardens, paying attention to soil/water management, and create fossil gardens with Mississippi gravel. Students also utilize Internet resources to identify rocks and fossils for the fossil gardens.

Marlow designs science lab experiences with all of her students in mind, making learning relevant. She believes advanced learning takes place when students
have fun and feel like valued members of their class.

**SOUTHWEST SECTION**

**NO AWARDS IN 2023**

**TEXAS SECTION**

**NO AWARD IN 2023**

**STATE WINNERS**

**ALABAMA**

SCOTT COONFARE
Sparkman High School, Harvest, AL

Scott Coonfare, who has been teaching for more than 15 years, has been his school’s Teacher of the Year three times and the Technology Teacher of the Year. Early in his career he created and secured all funding for a program that sent student science experiments to the International Space Station. He supervised the district competition that resulted in student experiments being launched into space. He also made contacts with the Jet Propulsion Lab and began a long partnership which, among other things, allowed his students to take control of the telescope located in California to record real-time data on black holes. He has students work with

The University of Alabama Huntsville to participate in a weather project that sends weather balloons to space. Students record data to author a scientific paper. Students also monitor volcanoes & earthquakes as well focusing on local projects affecting the environment. Coonfare achieves student buy-in with these authentic projects and partnerships and helps students see real, meaningful science. They can’t help but soar. Coonfare has degrees from the Johnson & Wales University and the College of Wooster.

**FLORIDA**

KATHERINE STOLTZ
Alonso High School, Tampa, FL

Katherine Stoltz, an environmental science teacher with seven years of teaching experience in Hillsborough County, holds degrees from the University of South Florida in education and in global sustainability, specializing in climate mitigation and adaptation.

Stoltz’s teaching objective is to go beyond grades and encourage students to apply their understanding to the world around them. She fosters critical thinking and real-world application. To achieve this, she introduced creative and relational summaries, an approach developed by Dr. Thomas Culhan that empowers students to explore the intersection between their own lives and the course content, fostering personal connections to their learning and enhancing their comprehension of scientific principles.

Her philosophy centers around inspiring the next generation of thinkers to be helpers of both humanity and the environment. Through her passion for education and dedication to environmental science, she aims to shape young minds and empower them to become stewards of their communities and the natural world.

**GEORGIA**

NICOLE MARTE
Trickum Middle School, Lilburn, GA

Nicole Marte has been teaching for seven years and was named Teacher of the Year in the 2022-23 school year. She received her degree in psychology and took an alternative approach to becoming a geoscience teacher. She believes in holding her students to high expectations while also building strong relationships with them. Making science come alive is so rewarding for her!

**IOWA**

MALLORY WILLS-HOWE
George Washington High School, Cedar Rapids, IA

Mallory Wills-Howe teaches Earth science in Cedar Rapids. She earned her undergraduate degree in middle/jr high school science with high school science endorsements in Earth science and biology at the University of Northern Iowa and is currently pursuing her master’s degree in science education there.

Wills-Howe has been an instrumental part of a team in her building that redesigned the Earth science curriculum to be more hands-on, inquiry-focused, and standards-based. This has led to a huge positive shift in student success and higher levels of engagement.

She has been dedicated to her students in and outside of school. Over the last five years, she has sponsored students to compete in science fairs, World Food Prize, and attend HOBY Leadership Seminars and has organized quarry field trips. During the summers she works to design and implement science camps for elementary and middle school.
students to get them excited about STEM. She has also been the recipient of a Science for Society STEM Research Grant.

LOUISIANA
LACEY HOOSIER
Buckeye High School, Buckeye, LA

Lacey Hoosier is a 17-year public high school science teacher. Her philosophy is to instill a passion for the environment and a love of being inquisitive in all of her students so she can create stewards of the environment and science professionals across the world. She is currently building an outdoor classroom area where her students can learn field techniques while studying native Louisiana flora and fauna. In addition, her STEM classes compete at the state and national level and have won many titles through innovative engineering practices and unique problem-solving. Hoosier received her bachelor’s in biology from Louisiana State University at Alexandria and her master’s in physiology from Nova Southeastern University. She has traveled to the Amazon rainforest and many different states out west to improve her teaching practices and develop innovative lessons for her rural students. Her teaching honors include: Presidential Award of Excellence in Mathematics and Science Teaching LA State Finalist, National Science Teaching Association SeaWorld Parks & Entertainment Educator of the Year, National Association of Biology Teachers Outstanding Biology Teacher of the Year, Buckeye High School Teacher of the Year, VOYA Unsung Hero, Golden Apple Award recipient, and has been the recipient of more than $55,000 in grants and educational awards.

MINNESOTA
MELISSA (MISSIE) OLSON
Becker High School, Becker, MN

Melissa (Missie) Olson, an Earth space science teacher, has been teaching for 17 years. In addition to Earth science, Olson teaches astronomy and dual credit courses in environmental science and human biology in conjunction with St. Cloud State University. In her classroom, she focuses on developing and incorporating three-dimensional lessons that challenge students to create and use models, analyze data, and apply concepts to real-world situations while developing relationships and supporting all students.

Olson is a Ph.D. candidate focused on STEM curriculum and instruction at Texas Tech University. Her dissertation explores middle school students’ content knowledge, identity, and perceptions in Earth science using iterative modeling. Olson is dedicated to supporting young Earth science teachers through presenting at professional conferences, hosting student teachers, and teaching Earth science concepts for elementary education majors at Bethel University. Outside of the classroom, she enjoys exploring the outdoors with her family. She also enjoys nature photography and has had images shared on Earth Science Picture of the Day website.

MICHIGAN
ANDY EPTON
Henry Ford Academy, Dearborn, MI

Andy Epton teaches Earth science, environmental science, and

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▶ Preparing for a program review?
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▶ Improving support for all students?
Students high school. Hampshire, and current to teach in Salem, New England native of Connecticut, she returned to New England has earned degrees from Dominion University. A has earned degrees from George Mason University where he earned a BS in geology.

Epton is a Teacher Ambassador for the National Center for Science Education and has been instrumental in creating lessons on climate change and the nature of science that are accessible to everyone. While teaching in Virginia, he participated in the Virginia Initiative for Science Teaching and Achievement (VIS TA) program through George Mason University and Virginia Tech. He strives to incorporate project-based learning in his curriculum as it gives him and his students the opportunity to learn from each other.

NEW HAMPSHIRE
MICHELE CUSACK
Salem High School, Salem, NH

Michele Cusack began teaching in 2000 in Manassas, Virginia. She has earned degrees from Union College and Old Dominion University. A native of Connecticut, she returned to New England to teach in Salem, New Hampshire, and currently is an Earth and space science teacher at the high school.

CUSACK’S teaching philosophy stems from her experiences as a student and those teachers who made a difference. She believes every student can achieve what they need to with the correct strategies. Teaching specific content, such as science, is not the entire picture. It is holding students accountable, setting expectations for them, and leading by example so they can become critical thinkers and great citizens. She loves both the content she teaches as well as the students she teaches.

CUSACK’S enjoyment of adventure connects her students with a real-life. Her experiences have taken her to many places and have helped her students understand Earth’s spheres and their connections. She uses her students’ interests as an integral part in the curriculum.

NEW YORK
JOSEPH C. PERRY
Palmyra-Macedon High School, Palmyra, NY

A graduate of SUNY Fredonia, and SUNY Brockport, Joseph Perry originally was going to be a teacher at the elementary level. He got “his foot caught in the door” at Palmyra-Macedon (Pal-Mac) High School, found his passion for teaching Earth and space science, and has been doing so for the last 25 years.

Perry has attended the programs of HESA 2018, CERN ITW 2022, and Shipboard Science 2023. He was a national finalist for AGI’s Edward C. Roy Jr. Award (2019), obtained Nat-Geo certification (2018), is a New York State Master Teacher Emeriti, and has received special recognition from Pal-Mac’s BOE (2008)—and the seniors of ’08 and ’21 dedicated yearbooks to him. Beyond the classroom, Perry has been a part of his union’s executive team for 22 years and is an assistant scoutmaster.

Perry is passionate about getting students outside of the classroom to experience science, he coordinates field experiences with many NY state parks for not only his classes but many others in his school district. He has advised or co-advised trips to Europe and US national parks of the Southwest.

NORTH CAROLINA
CHARLENE HORTON
Ashe County Middle School, Warrensville, NC

Charlene Horton, a middle school science teacher has been teaching for four years. She has an elementary education degree from Appalachian State University. Horton believes that before a teacher can tell you their philosophy they need to ask themselves the fundamental question of Why are you a teacher? Horton’s why is the invisible child or the child that says that they don’t like science. She says challenge accepted! From her why, her philosophy was born. She cannot change the content that she teaches but she can change the way she teaches it. She found that in order to see willingness in students, you have to create that spark yourself. In a time where there appears to be no hope, as a teacher we have to be the igniters. Teaching outside of the box and making content real-world, relatable to them. Learning can be research-based and student-led. Horton has done a state-wide Project-Based Learning project on tree farms, enabling students to connect with a school in Africa while learning about water quality. Students raised money to have a well installed! She is also a NC NASA Education Ambassador and partners with SpaceX in her classroom regularly.

SOUTH CAROLINA
AMY UMBERGER
Dutch Fork Elementary School Academy of Environmental Sciences, Irmo, SC

As the resident scientist at DFES Academy of Environmental Sciences, Amy Umberger helps teachers with environmental projects at the school. She loves nature and enjoys getting small and tall learners outside as much as possible to help them connect to their community. She also works to develop a community of environmentally responsible citizens and endeavor to teach sustainability through her daily actions.

TENNESSEE
GREG SMITH
John Overton High School, Nashville, TN

Greg Smith has been teaching the interdisciplinary science and research program at John Overton High School for four years. There he teaches student to be scientists through inquiry-based projects, experiential learning at field sites, and mentoring independent student research projects. Smith earned his doctorate in Earth and environmental sciences from Vanderbilt University in 2019, where he studied the paleoecology of mammal, mastodons, and gomphotheres in North America. In his free time, Smith enjoys hiking, kayaking, climbing, and exploring the beautiful hills and rivers of Middle Tennessee with his family.
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