

MnSTA Newsletter

Volume 77 No.4 A Quarterly Publication of the Minnesota Science Teachers Association Inc. Summer 2026

MnSTA Conference on Science Education (MnCOSE) 2026 in Mankato!

On November 20-21, 2026, we're teaming up with Minnesota State University, Mankato as the site of our annual conference! MSUMankato has much to share, a beautiful facility and talented staff to welcome us in. And we all win, as we have continued our reduced conference rates and introduced Early Bird pricing! We'll start the event Thursday night with an informal reception. Come when you can and relax with friends new and old. On Friday and Saturday, MnCOSE26 all takes place at the Centennial Student Union at MSU, just a short trip from our conference hotels. Easy, close parking on campus is included in your registration. All of our sessions, exhibitors and meals will take place in this one convenient location.

After a spectacular showing from all of you at NSTA-Minneapolis in 2025, we took in some feedback and are bringing you a phenomenal Keynote Speaker to start off your conference. Our keynote speaker, Dr. Tiffany Neill, will highlight ways that we can all evaluate science learning. Following the keynote speaker, we'll offer FIVE presentation sessions on Friday and another THREE sessions on Saturday morning. You'll be able to engage in this mix of eight general sessions on a variety of science topics as well as several local field trip opportunities on Saturday.

We already have great exhibitors lining up to join us and share their expertise. Our vendors include both commercial providers of educational tools and non-profit organizations to serve you. Educators across Minnesota are now seeing the first round of assessment results from implementing the 2019 standards. Our focus this year will be on Evaluating Science Learning, analyzing where we

have come from and where we are headed. Come to learn and come to share what the process looks like in your world. We'll dedicate particular sessions for sharing by grade and/or content area.

Friday night - don't miss the party! What happens when science educators take over the Bullpen at MSU's Centennial Student Union? Come join us for a fun night of celebration and science. Food and fun await as we spend time looking back on where we've been and look ahead to where we are going. We hope you'll reserve your PD funds and mark your calendars NOW for Nov 20 - Nov 21 for MnCOSE 2026! Watch www.mnsta.org and our socials for all the latest updates! [Registration is now OPEN](#)



President's Message- Haley Kalina



your professional learning and networking!

Lastly, I want to thank you for your support of me in this presidential role. It has been a joy to hold this position, to work with a passionate board of directors, and to get to be a part of the rich ecosystem of science education advocates across Minnesota! I am so proud of the work we have done together as an organization and recognize we can continue to grow. We have many professional learning opportunities offered, we just hosted the national NSTA meeting in our state and we have been building partnerships and support systems for Minnesota educators and we have more exciting options in the works for the coming year. In June I will transition into the role of Past President for the final year of my term. Dr. Missie Olson was elected last year and has been part of the presidential team this past year. She is an excellent and dedicated leader and our organization will continue to be a place for you to find your community and support. Thank you for the opportunity to work alongside and with you in service to science education in Minnesota!

Thank you for the work you do!

Haley Kalina
MnSTA President

Greetings MnSTA Members,

Some of us are winding down to summer while others are gearing up for summer sessions and programs!

After 10 years of being served by our previous strategic plan, this year, MnSTA is starting work on our next strategic plan. Our previous plan has served us from 2018 through 2026. Our current plan helped us navigate supporting science educators through so many events from shifting our Minnesota Standards to offering different professional learning opportunities, to navigating education during a pandemic and social justice events as well as advocacy for strong science teaching and learning in Minnesota.

One of our strategic goals is engaging in advocacy for science education in Minnesota. Please read the separate article for further information on potential changes in science licensure and stay tuned to give your feedback as the board looks forward in advocating to maintain high quality science education.

I invite you to stay engaged with MnSTA this summer--check out our ESTEP offerings and consider presenting and attending MnCOSE 2026 in Mankato on November 20-21, 2026! We'll have a special focus on evaluating and assessing three dimensional science learning, but there will be something for everyone! Register early to secure

Bringing Science Supplies and Living Specimens Directly to You Since 1936!

Trans-Mississippi Biological Supply



Amoeba



101 Isanti Parkway NE
Suite F, PO Box 511
Isanti, MN 55040

763-444-9673
www.tmbs.com
Email: tmbs@tmbs.com

Contact Us Today!

Opportunities-MnCOSE 2026



Minnesota State University - Mankato

Save the Date!
November 20-21, 2026

Join us for an inspiring gathering!



EINSTEIN project

Program Evaluation
Curriculum Leasing & Sales
Professional Learning
Instructional Coaching

Helping Teachers Achieve High-Quality Science Education

mySci OpenSciEd
Smithsonian SCIENCE for the classroom

Email us to set up a conversation einstein@einsteinproject.org

MnCOSE26 Call for Presenters

May 15, 2026 - Aug 22, 2026

MnSTA's premier professional development event, MnCOSE, can only occur because of the talented professionals that choose to present their work at our conferences. Please consider sharing your specialty with your colleagues.

MnCOSE26 presenters must be MnSTA members or MnCOSE Exhibitors at the time you register for the conference--and we welcome you to join MnSTA if you haven't already!

In exchange for your presentation as a conference participant, we'll provide a **SPECIALLY DISCOUNTED** conference presenter registration rate for the entire conference of \$80 for up to two presenters by sharing a personal discount code for you to use once we approve your presentation in our system.

Each presentation session will be 50 minutes and happen on Friday, Nov 20th or Saturday morning, Nov 21st. Please aim for up to a 45-minute presentation and time for a few minutes of questions.

MnCOSE26 session proposals will be reviewed by our program committee. Our first deadline is August 22 and our second is Oct 9. They will confirm your proposal once they have reviewed submissions.

MnSTA board members will be available to you to be sure you're set to present! You'll present in person in a conference room setup classroom style at the Centennial Student Union at Minnesota State University, Mankato.

We use a conference app called "PheedLoop" that will largely take the place of our traditional conference program. It will provide a place where you as a presenter can share resources digitally with participants.

We'll ask you to choose from several session identifiers during the proposal process. Here is further info on the identifiers.

By submitting this proposal, you agree to abide by our MnCOSE Norms for the event and all MnCOSE Presenter Guidelines.

Once your proposal is approved, we will provide you with presenter access to PheedLoop - where you can upload additional information about your session as well as resources to share. You will be able to edit this information right up until the time of the conference.

Instructions

Please follow these steps:

1. Look at the session proposal form and plan your presentation. We suggest that your session description for the program include information about the presentation style (lecture, discussion, simulation, sample lesson, etc.) and major activities.
2. Submit your proposal by our initial deadline of August 22. [We'll run a second round of proposals with a deadline of Oct 9.]
3. We will evaluate your proposal based on its fit with the conference's needs by Sept 1. We will send you a discount code for you to register for the conference if your proposal is accepted.
4. Register for the conference from this page using the discount code
5. You will be able to edit the description before the conference if accepted. You'll be invited to update your session information and upload any resources you want to provide to participants in the PheedLoop conference app. You will be able to edit this information right up until the time of the conference. (We will send you more information about this process.)



ESTEP: A Reflection as We Begin Our Last Year

As I am sending out emails for ESTEP this chilly spring evening, I find myself thinking about our project and reflecting on its challenges and celebrations. I think to myself, "Wow! Seven years have gone by so fast! I can't believe we are in our last summer of ESTEP!". I think back to our humble beginnings, and how ESTEP has changed and adapted to the needs of Minnesota science teachers.

ESTEP, Earth Science Teachers Education Project, was born out of the demand for professional development in content and 3D pedagogy for teachers moving to 6th grade to teach the new 2019 MN science standards, and a need for more earth and space science teachers in Minnesota high schools. A crazy but passionate group of teachers and university professors got together and planned a week long earth science "boot camp" for 6th grade teachers that focused on earth and space science content and the (then) new, three dimensional teaching and learning strategies. It was bare bones back then! We pillaged our own classrooms and labs, adapted our best lessons and units and hoped that people would show up! After that summer, we were on a mission!

We didn't like the idea of teachers having to pay for registration and graduate credit, so we applied for, and received a grant from the Environmental and Natural Resources Trust Fund, money from lottery sales set aside to fund projects like ESTEP. This meant that ESTEP participants could now earn free graduate credit or a stipend for participating in ESTEP summer workshops, and we could keep registration costs down, and purchase supplies. Game changer!

Additionally, the legislature amended the science graduation requirements to require one credit of earth and space science, one credit of biology, and one credit of chemistry or physics. We wanted to support teachers and districts statewide in response to this change, so we also started offering high school level summer workshops so practicing teachers could work toward earning additional licensure in Earth and Space science.

COVID pushed us to get creative, and participants told us they loved the summer workshops, but needed content courses and training in three dimensional strategies, as well. ESTEP online courses were developed to answer that call. Since then, we have expanded our offerings, and brought in more dynamic and engaging college professors to share their expertise and experiences. As the grant cycle ended, we asked ourselves if we should continue this for another grant cycle? Will teachers come? Are we giving them what they need?

We asked LCCMR to extend the ENTRF grant for another three years. We asked for even more funding to offer more summer programming, expand our online course offerings, create short courses and Saturday seminars, and develop an online repository of ESTEP participant created resources. The grant extension was approved! We had until Summer 2027 to do our best to meet the needs of Minnesota science teachers. We called it ESTEP 2.0 and expanded our focus to include multidisciplinary Minnesota phenomena, current natural resource issues affecting Minnesota, and adding even more online course offerings. Our goal was to adapt and adjust to what ESTEP veterans and those new to our project were telling us they needed.

Fast forward to summer 2026. This is our last summer of ESTEP workshops; our last year of ESTEP programming. The feeling is bittersweet, for sure. Will we meet our goals? We want to help 6th grade science teachers learn and deepen their earth science content. We want to help MN science teachers move from 'sage on the stage' teaching about science, to facilitators of student sensemaking using science practices and cross-cutting concepts. We want to create a way for high school teachers to learn the content and pedagogy at a high level to become licensed in Earth and Space science. We want to offer opportunities for MN science teachers to grow and adapt to the new science standards. I think we will get pretty close to those goals!

By June 30, 2027, ESTEP will have served nearly 1,000 Minnesota science teachers. To those teachers: thank you. Thank you for doing this hard work. Thank you for being brave and trying new things. Thank you for helping your students BE scientists. Thank you for telling your colleagues about ESTEP, and sharing your knowledge and expertise with them. Thank you for your leadership and initiative in bringing your schools and districts forward in best practice science education. To the ESTEP lifers (those participants that just keep coming back for more), thank you for helping us grow this project into what it has become, and for your trust, encouragement, suggestions and collaboration - I hope it was worth the super cool T-shirt!

We have one more year! Let's make it the best one yet! On behalf of the ESTEP team, we are looking forward to spending this last year with you! We hope to see you at a summer workshop, or online during the 2026-27 school year. Maybe we will catch you at a Saturday seminar or a virtual short course. We are excited to continue our collaboration and partnership with Minnesota science teachers for one last year!



Why ESTEP?

- ✓ Low cost
- ✓ Content and pedagogy based on MN Science Standards
- ✓ Participants earn graduate credit OR stipend
- ✓ Workshops facilitated by MN professors and K12 teachers

ESTEP 2.0 SUMMER 2026 WORKSHOPS

5 day workshops	2 day workshops
June 22-26, 2026 Geology and Resources of Central Minnesota: A Field Course St Cloud Area, TBD	June 24-25, 2026 Schoolyard MN Phenomena for All Students Bemidji, MN
July 6-10, 2026 Geologic History and Resources of Southwest Minnesota: A Field Course St Peter, MN	July 14-15, 2026 Environmental Physics: Bringing MN Phenomena into the Physics Lab Mankato, MN
July 20-24, 2026 Astronomy Winona, MN	July 22-23, 2026 Geologic Phenomena of the Metro Area St Paul, MN
	August 4-5, 2026 How to Facilitate Authentic Investigations Metro Area, TBD

Registration opens soon!

Go to https://www.mnsta.org/ESTEP_SUMMER_2026_.html to learn more!

Questions? Email estep@mnsta.org

ESTEP is funded through 2027 through generous grant funding provided by the Minnesota Environment and Natural Resources Trust Fund as recommended by the Legislative-Citizen Commission on Minnesota Resources (LCCMR).

PELSB is considering changes to science licenses

The Professional Education Licensing and Standards Board (PELSB) is reviewing the license categories for secondary science teachers. At their May board meeting, they passed a motion to establish a working group to develop rules (standards) for up to two secondary science licenses and report back to the board on their progress. During the board discussions, members discussed having either a general science 5-12 license or a combination of a physical science 5-12 and a life sciences 5-12 license.

Any change in the license structure would take several years to implement. Teachers who have a current science license will retain that license and will not have to make any changes.

Background: Last fall, PELSB convened a working group to research issues related to science licenses and to make recommendations. The working group of 15 people included teachers, administrators, and higher education. At least six were MnSTA members. They developed a pros-and-cons document for PELSB, considering several licensure options. For high school, they examined keeping the same 4 license areas, reducing them to 2, or adopting a general science license. The working group recommended keeping the same license categories. For middle school, the working group recommended:

- Extending science licensure to Grades 5-12
- Adding 6th grade to all existing 7-12 Earth & Space Science licenses
- Adding 9th grade Earth Science to all current 5-8 general science licenses
- Allowing 7-12 and 9-12 licensed science teachers to test into the 5-8 general science license.

So far, the PELSB board has not acted on the Middle School recommendations.

The science working group report and slides from the April and May board meetings are available on the PELSB board meetings site. Send comments to pelsb@state.mn.us. Send questions and suggestions for MnSTA leadership actions to president@mnsta.org.

MN Science Teachers!

Minnesota North College and MnSTA invite you to the Summer Science Conference on Careers and Experiential Learning for Teachers! Come join us in the North Woods of Ely June 26-28 to learn about and experience new, high-demand science careers through hands-on field experiences. Then, work collaboratively to bring what you've experienced into your own classrooms!

Registration fee is only \$50, and limited, optional lodging in on-site cabin housing right on the lake for \$75. After scheduled programming, enjoy the beautiful lake - fishing, canoeing, swimming, or head into nearby Ely for fantastic restaurants, the International Wolf Center, North American Bear Center, hiking, shopping and more!

Space is limited, registration deadline is June 12. This conference is open to all MN science teachers, but is most suited to high school teachers, and educators that work with students who are exploring college and careers. Please share out to those who may be interested in this wonderful opportunity!

See flyer on page 8





Signs of spring. Can you identify this bird? Send to jerry.wenzel@mnsta.org

SUMMER SCIENCE CONFERENCE

Careers and Experiential Learning for Teachers

June 26–28, 2026

Agenda

Friday, June 26


- 10:00 AM – Check-in and Outdoor Learning Center Tour
- 11:00 AM – Lunch
- 12:00–4:00 PM – Field and Career Experiences

Saturday, June 27


- 8:00 AM – 12:00 PM – Field and Career Experiences
- 12:00 PM – Lunch
- 1:00 PM – MnSTA: Bringing Phenomena into the Classroom

Sunday, June 28

- 9:00 AM – Vermilion Campus Exploration
- 11:00 AM – Check-out



Experience high-demand science careers through hands-on field experiences you can bring back to your classroom.



After scheduled programming, enjoy optional activities such as hiking, swimming, fishing, and exploring—all on-site.

Registration

- Registration: \$50
- Outdoor Learning Center Lodging: \$75
Lodging includes both nights in a single-occupancy room within a shared cabin. Space is limited. Off-campus lodging is available at local hotels—mention you are attending a college event for possible discounted rates.
- Registration deadline: June 12
- Register online at: growsforagrow.com

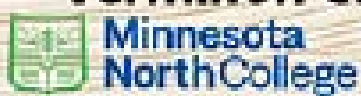

What to Bring

- Outdoor clothing and gear suitable for field experiences.
- If staying on campus, bring toiletries, a pillow, and a blanket (sheets are provided).
- Cabin-style housing includes shared kitchen areas.
- Bring additional outdoor gear for late and woodland activities during free time.

What's Included

- Breakfast and lunch (dinner on your own)
- Access to outdoor equipment
- Fire pits, hiking trails, and lakeside beach access
- A collaborative, hands-on learning community

Vermilion Campus Outdoor Learning Center
10804 Berky Ridge Rd
Fly, MN 55731

Now! Earn College Credit for Jeffers Institutes

Jeffers Foundation Education Certificate

Earn a *Team Teaching with Minnesota's Natural Environment* certificate by completing 5 institutes (10 semester credits) offered as co-sponsored courses with the Jeffers Foundation and Hamline University Continuing Studies.

Jeffers Foundation Institutes provide educators with experiences that raise their content knowledge while modeling practices that promote science and literacy instruction. Institutes will focus on outdoor investigations and journaling experiences. Educators will discover how outdoor instruction heightens engagement and achievement in science and all subject areas. Science-focused institutes will embed multidisciplinary experiences that promote connections of science concepts and practices to all subject areas, leading to real-world teaching and learning.

Minnesota's natural environment is a partner (team teacher) that can help educators reach ALL students. Educators will learn techniques, activities, and resources in each institute that can be readily implemented on their school grounds. There, they will notice the positive impact outdoor learning will have on their science instruction, the writing and communication skills of their students, and the positive attitude and stewardship students will develop for their school grounds and surrounding natural environment.

1 Certificate Program: Option for College Credits

10 semester credits from the co-sponsored institutes lead to a Jeffers Foundation "Team Teaching with Minnesota's Natural Environment" certificate awarded by Hamline University Continuing Studies.

Each co-sponsored Institute = 2 semester credits (equals 48 contact/instructional hours)
Reduced rate for co-sponsored Institutes = \$200/credit (\$400/institute)

OR

2 Jeffers Foundation Institutes: Option for FREE CEUs

Educators can register for any Jeffers Foundation Institute for FREE and earn CEUs awarded by the Jeffers Foundation as has been customary for Jeffers Institutes and Workshops for 15+ years. Institutes are offered (simultaneously) for Teacher Continuing Education Units (CEUs) and Credits. Registration for co-sponsored Institutes will be completed through Hamline University Continuing Studies <https://elearn.hamline.edu/>


With this new model, educators can continue to register and participate for free in Jeffers Content Institutes (now with expanded topic options) or they can register for the credit option and apply the institutes toward a Jeffers Foundation *Team Teaching with Minnesota's Natural Environment* certificate awarded by Hamline University Continuing Studies.

The Jeffers Foundation continues to provide professional development that promotes environmental stewardship and outdoor learning opportunities for educators and their students on their school grounds, and beyond. We look forward to working with and supporting educators in this mission as they join us for one or more institutes, or possibly to complete the 10 credit certificate.


Questions: Contact David Grack, EdD at david.grack@jeffersfoundation.org




JeffersFoundation.org



Jeffers Foundation Education Certificate





Team Teaching with Minnesota's Natural Environment

Upcoming Institutes

SPRING	WINTER
Birding Institute - April 11 & 18, 2026 (Offered annually)	The Outdoor Classroom: Winter* January 2027 (Dates TBD, offered annually)
SUMMER	SUMMER / FALL 2027
Patterns in Nature Institute - June 16-18, 2026 (Offered every-other-year) The Outdoor Classroom* - July 13-15, 2026 (Offered annually) Earth Science Outdoors - July 27-29, 2026 (Offered every-other-year)	Insect Institute - Summer 2027 (Offered every-other-year) Ecology Institute - Summer or Fall 2027 (Offered every-other-year) ELA Outdoors - Summer or Fall 2027 (Offered every-other-year)
FALL	
Nature Journaling Institute - September 19-20, 2026 (Offered every-other-year)	

*Educators must complete at least one of these two institutes in order to earn a certificate.



Questions: Contact David Grack, EdD at david.grack@jeffersfoundation.org

JeffersFoundation.org

PATTERNS IN NATURE INSTITUTE

Explore nature to identify patterns in the structure and function of plants and animals


Experience activities indoors and outdoors to observe and identify **natural patterns in plants and animals** in our environment. Plants and animals have adapted in many ways to survive, and this course is designed to **provide opportunities to explore and investigate** them. Be introduced to: forest and tree structure, bird body structure and adaptations, animal signs and tracks, insect and plant interactions, and more. Activities will include **nature journaling, nature photography, indoor and outdoor labs**, and more.

Who: Teacher Institute for K-12 educators
What: Professional development by David Grack, EdD. Sponsored by Jeffers Foundation.
When: Tuesday - Thursday, June 16-18, 2026 8:00am - 4:00pm Lunch Included
Where: Jeffers Lodge, Prior Lake, MN
CEU's & Credit: **NEW - 2 Options**

- 2 Semester Credits: Reduced rate of \$200/credit thru Hamline University Continuing Studies
- 27 CEU's: CEU certificate granted by the Jeffers Foundation



Registration: Online at <https://elearn.hamline.edu/> through Tuesday, June 11. Select the option you prefer (credits or CEUs) and complete registration.

Jeffers Lodge
 3884 Fountain Hills Dr. NW
 Prior Lake, MN



South on Hwy. 169 (cross MN River) exit on County 21. Follow County 21 3.8 miles to Fountain Hills Drive. Take an immediate right at LIF Explorers Childcare.

Questions:
 Contact David Grack, EdD at: david.grack@jeffersfoundation.org

JeffersFoundation.org

OUTDOOR CLASSROOM INSTITUTE

Incorporating Multidisciplinary Lessons on YOUR School Grounds



Who: Teacher Institute for K-12 educators

What: Professional development by David Grack, EdD. Sponsored by Jeffers Foundation.

When: Monday - Wednesday, July 13-15, 2026 8:30am - 3:30pm Lunch Included

Where: Jeffers Lodge, Prior Lake, MN

CEU's & Credit: NEW - 2 Options

- 2 Semester Credits: Reduced rate of \$200/credit thru Hamline University Continuing Studies
- 23 CEU's: CEU certificate granted by the Jeffers Foundation

Registration: Online at <https://elearn.hamline.edu/> through Tuesday, July 7.

Select the option you prefer (credits or CEUs) and complete registration.

Join the Jeffers Foundation to participate in outdoor lessons that apply to multiple subject areas with a science focus, and gain and share tips to become more confident leading outdoor lessons with your students. This teacher institute will focus on outdoor instruction and the application of Jeffers Foundation teaching resources that have been designed by Minnesota teachers. Multidisciplinary lessons centered on science concepts will include: general observation skills, reading the landscape of your school grounds, Phenology, plants and animals, weather, and designing and conducting investigations to develop science and inquiry skills while working outside using science journals.

Jeffers Lodge
3884 Fountain Hills Dr. NW
Prior Lake, MN

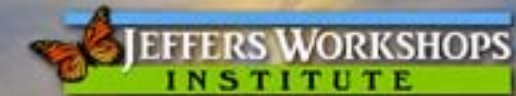
South on Hwy. 169 (cross MN River)
exit on County 21. Follow County 21
3.8 miles to Fountain Hills Drive.
Take an immediate right at
Lil' Explorers Childcare.



Questions:
Contact David Grack, EdD at:
david.grack@jeffersfoundation.org



JeffersFoundation.org



Earth Science OUTDOORS

Expand your Horizons: Reach for the Stars and Dig into Earth Science



Join the Jeffers Foundation to uncover Earth and Space Science core ideas while teaching and learning outdoors. This three-day institute focuses on the core ideas of: **weather, sun/stars/moon, Minnesota Geology, water and watersheds, erosion, and human impacts** on the environment. Educators will be engaged in science practices as they **conduct field investigations**, collect and present data while using journals, design and discuss solutions to minimize human impacts on the environment while **working on engineering challenges**, and more. Instruction will also include crosscutting concepts that focus on **developing and using models** while capitalizing on using one's school grounds as an essential extension of the Earth Science classroom.

Who: Teacher Institute for K-12 educators

What: Professional development by David Grack, EdD. Sponsored by Jeffers Foundation.

When: Monday - Wednesday, July 27 - 29, 2026 8:30am - 3:30pm Lunch Included

Where: Jeffers Lodge, Prior Lake, MN

CEU's & Credit: NEW - 2 Options

- 2 Semester Credits: Reduced rate of \$200/credit thru Hamline University Continuing Studies
- 23 CEU's: CEU certificate granted by the Jeffers Foundation

Registration: Online at <https://elearn.hamline.edu/> through Tuesday, July 21.

Select the option you prefer (credits or CEUs) and complete registration.

Jeffers Lodge
3884 Fountain Hills Dr. NW
Prior Lake, MN

South on Hwy. 169 (cross MN River)
exit on County 21. Follow County 21
3.8 miles to Fountain Hills Drive.
Take an immediate right at
Lil' Explorers Childcare.

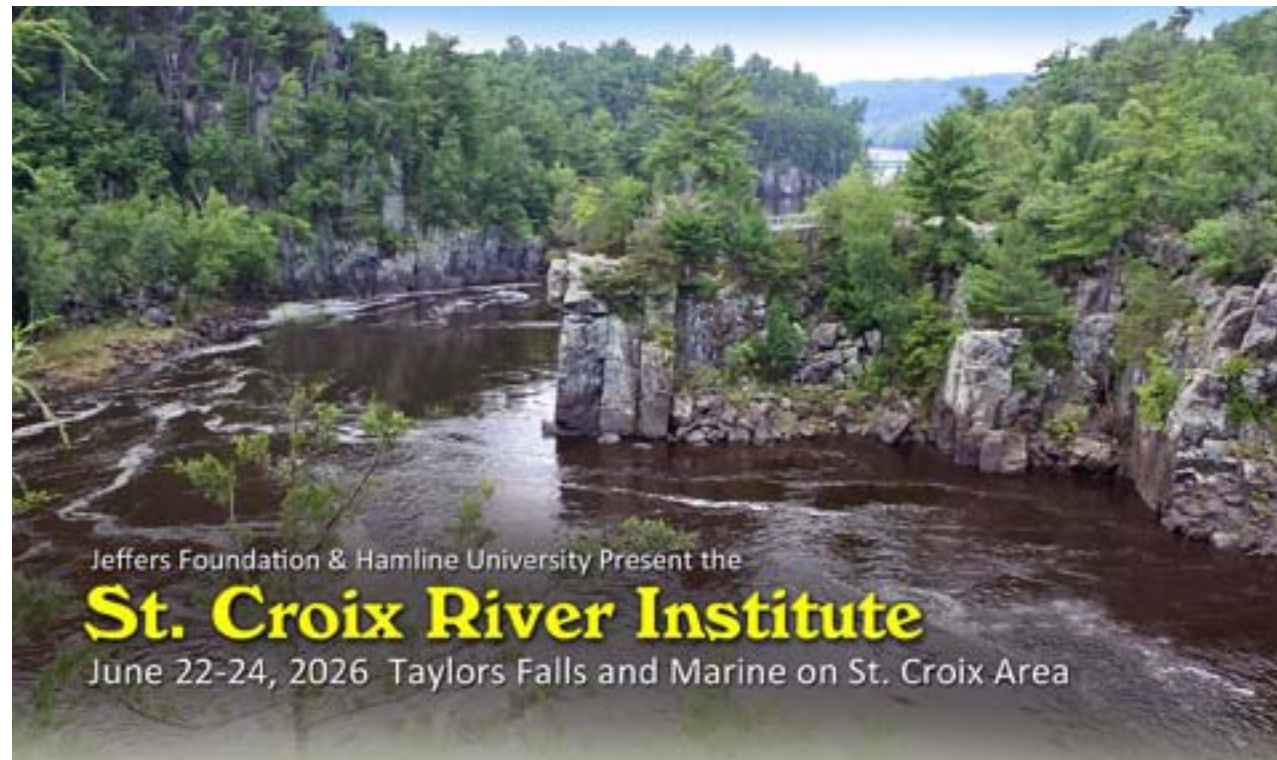


Questions:
Contact David Grack, EdD at:
david.grack@jeffersfoundation.org



JeffersFoundation.org





Jeffers Foundation & Hamline University Present the
St. Croix River Institute
 June 22-24, 2026 Taylors Falls and Marine on St. Croix Area

Join us FACE-TO-FACE this summer as Hamline University's Center for Global Environmental Education (CGEE) and the Jeffers Foundation present the St. Croix River Institute, a free, three-day, field-based professional development opportunity for educators.

The St. Croix Institute is designed to increase teachers' science content knowledge and investigation skills and help area educators translate their professional experiences into meaningful, engaging classroom investigations. The focus for the institute is on elementary through high school classroom teachers as well as teams of teachers, but all are welcome to apply!

- Three full days of experiential instruction and lunches
- The *Waters to the Sea*® multimedia tool
- 24 continuing education units (CEUs)
- The option to purchase two graduate credits at a reduced rate of \$200/credit

Monday, June 22	Tuesday, June 23	Wednesday, June 24
Location: Interstate State Park	Location: William O'Brien State Park	Location: William O'Brien State Park
The Institute will begin at Interstate State Park. Participating educators will be introduced to the geology of the St. Croix River Valley and develop a sense of place and a connection with the water. The day includes exploration at the Glacial Potholes Area and a canoe experience from Interstate State Park to Osceola Landing. Instructors will guide the group through a seven-mile stretch of river during which participants will observe the landscape and wildlife of the St. Croix River. Lunch will be provided at Eagles Nest Picnic area about halfway along the canoe journey. Journaling and instructional experiences will take place at three locations along the journey. This common field experience will set the stage for investigations throughout the rest of the institute.	Day two will begin with a reflection on the experiences from day one as captured by participating educators in their journals. The river will be explored today through the lenses of water quality and riparian forest habitat. Participants will investigate stream life and identify forest types in William O'Brien State Park. Short walks and guided investigations will engage students as they build their understanding of the natural environment of the St. Croix River.	On the final day participants will be engaged in a mixture of hands-on investigations and history/culture experiences that focus on William O'Brien State Park and the larger St. Croix Valley and watershed. Citizen science projects and engineering projects aim to connect participants to their local watersheds as well as the St. Croix River. A series of journaling activities embedded throughout the 3-day institute aim to engage participating educators as students and engage in conversations about how they can transfer the ideas, techniques, and resources for learning about the St. Croix River and put them into practice with their students.

Register at: <https://cgee.hamline.edu/cornerstone-programs/professional-development-and-graduate-programs/teacher-institutes>

Questions: Contact David Grack, EdD at: david.grack@jeffersfoundation.org



Center for Global Environmental Education JeffersFoundation.org



JEFFERS GRANTS

2026 Grants currently available for outdoor environmental education

Check out the Jeffers Grants page on our website

Environmental Experience Transportation Grants

The high cost of transportation is keeping many teachers from bringing their classes to the state's many environmental learning experiences. Jeffers is here to help with transportation costs. This can include travel to local nature centers, SNA's, regional parks, Residential Environmental Learning Centers (RELCS), etc. Travel must be within Minnesota and completed during calendar year 2026. Up to \$2,000 per event.

Outdoor Classroom Construction Grants

Schools that dedicate a part of the school grounds to outdoor education will reap powerful benefits. Having a dedicated space to stage outdoor learning events makes this process easier for teachers and more stimulating for students. Such a space can range from simple benches in a semicircle, to landscaped places with boulders and bird feeders... to roofed shelters with picnic tables... and more. Jeffers Foundation is offering a limited number of up to \$5,000.00 matching grants to schools or other 501c3 organizations throughout the state that would like to begin or enhance outdoor learning spaces.

Schoolyard Garden Grants

Our popular schoolyard garden grants are back! Nearly 100 schoolyard gardens have been started or improved with these grants over the years. Check out our Garden 4 Every School page on our website and watch a few videos. We support any kind of garden as long as it is used as an educational resource for your students. Grants are now available up to \$2,000 and need to be completed within two years.



Innovation in Environmental Education Grants

We believe students who receive powerful experiences with nature-based lessons will grow to love and care for our beautiful planet. We also believe these experiences can last a lifetime. Jeffers Foundation is offering a limited number of up to \$5,000.00 grants to schools or 501c3 organizations in Minnesota that have new, 'out-of-the-box' ideas or programs that support these ideals. Jeffers is all about innovation! If your request results in a grant, we plan to share your experience with other educators throughout the state. Must be completed within two years.

Environmental Stewardship Through Education

JeffersFoundation.org



Wetland Conservation Workshop and student conservation action project



Professional Development for K-5 Teachers



When:	June 23-25, 2026 9 am - 3 pm
Where:	Minnesota Zoo 13000 Zoo Boulevard Apple Valley, MN 55124
Cost:	\$75 - Includes light breakfast and lunch each day *Teachers will also receive 18 clockhours

Explore Local Wetlands with Students to Save Wildlife

With its 10,000+ lakes and variety of wetlands, Minnesota is a paradise for freshwater turtles and many other wetland wildlife species. Unfortunately, freshwater turtles and their wetland ecosystems today face a variety of threats that are putting their future in Minnesota at risk.

Join Minnesota Zoo naturalists to learn strategies for how to guide your students outdoors in exploring their local wetland and take on a real conservation action project centered on helping MN freshwater turtles and wetland wildlife, engaging their community, raise awareness, and preserve their wetland.

In this training, teachers will also participate in hands on activities focused on wetland and turtle conservation science, using nature journaling as a tool to explore and gather data about wetland phenomena, and guiding a student-driven culminating conservation project near school. The Minnesota Zoo's Turtle and Mussel Conservation Biologists will also share about the work being done to protect and save these threatened wetland species. All participants have access to a collection of digital wetland and turtle education resources.



To learn more or register visit: <https://mnzoo.org/professional-dev/>



stem@mnzoo.org

Borchert Map Library Teacher Fellowship

The Borchert Map Library Summer Teacher Fellowship Program is an opportunity for teachers to explore resources at the Library, learn new technology and build engaging learning activities for their students.

[Learn more and apply!](#)







**2026 - 2027
Ecology Professional
Development Workshops**

VISIT
[z.umn.edu/
PIMS](https://z.umn.edu/PIMS)





Phenology Investigations in Minnesota Schools (PIMS)

Highlights

- Grades 6-12 MN science/ag classroom teachers
- June 13-14, 2026 | October 10-11, 2026 | January 30-31, 2027 | May 1-2, 2027
- Location: Prairie Woods Environmental Learning Center, Spicer, MN - focus on Minnesota's prairie biome
- Free room & board available for all participants at Green Lake Lutheran Ministries retreat facility
- Free UMN graduate credit offered
- Driven to Discover: Phenology & Nature's Notebook curriculum




Questions? Contact Jess Paulson, UMN Program Director, at PaulsonJ@umn.edu



ATTENTION: SCIENCE TEACHERS GRADES 4-12!

Student scholarship opportunity for outdoor learning on the North Shore.

Thanks to funding partners, Wolf Ridge Environmental Learning Center, located in Finland, Minnesota, is offering scholarships to schools.

DOES YOUR SCHOOL QUALIFY?

Your school may qualify for scholarships at either the school-wide or individual student level. Scholarships can be used for tuition, lodging, and meals for 3 days/2 nights or 5 days/4 nights for students in grades 4-12, for groups from 15 to 350 people. School year and summer programming is available.

ABOUT WOLF RIDGE

Wolf Ridge is an accredited residential environmental school located on the North Shore featuring a nationally recognized curriculum that aligns with state academic standards, Common Core, and Next Generation Science Standards. Instructors involve students in the direct observation, inquiry, and exploration of wild forests, wetlands, lakes, and streams.

Features include:

- 2,000-acre classroom on the North Shore
- 68-acre field station on Lake Superior
- 18 miles of hiking and ski trails
- Multiple lakes and streams
- Dining hall with produce from our organic farm
- Indoor rock-climbing walls and outdoor ropes courses



INTERESTED?

Please reach out to Wolf Ridge K-12 Program Coordinator Emily Pavlisich (scheduling@wolf-ridge.org or 218-353-7414, ext. 107) with questions or to find out if your school is eligible for scholarships. Learn more at wolf-ridge.org/programs/educators/k-12-class-trips.

ARE YOU TIRED OF...

- endless online searching for classroom resources?
- never-ending PDF "lesson plans"?
- materials that look good but hard to use?
- instructional materials that do not align with student needs?

JOIN THE WONDRUS EDUCATORS COUNCIL.

www.surveymonkey.com/r/WondrusEducators



Get paid to give feedback to science museums and research institutions on their classroom resources!



MnSTA The Minnesota Science Teachers Association

It is our mission to: stimulate, coordinate, and improve science teaching and learning for all.

Why Join MnSTA?

- Keep up with the latest developments in science education
- Network with peers from around the state
- Help us advocate for science education at the district and state level



Join at mnsta.org





Follow Us on Social Media

Follow us for PD, ESTEP updates, NSTA news, and more!

-  on BlueSky @mnsta.bsky.social
-  on Instagram @mnsclenceteachers
-  on Twitter @mnsta1
-  **Public page:** Minnesota Science Teachers Association - MnSTA
Members-only: Minnesota Science Teachers Association members

Keep Your MnSTA Profile Up-To-Date

MnSTA does its best to keep you abreast of everything happening in science education in Minnesota. We do this via several outlets including:

- MnSTA Website www.mnsta.org
- Instagram @mnsclenceteachers
- MnSTA Facebook and Twitter pages (@MnSTA1)
- Weekly Digest of postings (sent via email)
- Updates from MDE Science Specialist Angela Kolonich (newsletter)
- Quarterly Newsletter (availability announced via email)
- Occasional email messages to all members

The best way to make sure you are receiving email notices and all of the above information, please make sure that MnSTA has your correct email address, mailing address, and your permission to send this information to you. Your profile also contains information about your school, disciplines you teach, and the grade levels you work with. These can all be updated at any time.

You can update your MnSTA profile by going to the MnSTA website (www.mnsta.org) and logging in. Click on the My Profile link. You will then see links to Update Profile, Update Addresses, Update Photo, and Change Password. If you have any questions about this, please feel free to contact MnSTA.

MnSTA, Inc. is an IRS 501 (c) (3) Charitable Educational Corporation, incorporated as a tax exempt, non-profit organization with the Minnesota Secretary of State. Donations and dues are tax deductible charitable contributions for itemized deductions on IRS form 1040 Schedule A. The newsletter is an exempt program service provided to the membership. A membership form is found on the last page

Contacts and Resources

Free resources for teaching how science works

[Decoding Science](#) is a free interactive resource from the National Academies of Sciences, Engineering and medicine. It's all vetted by experts and ready to use in your classroom.

A 90-second video on how science works
Clear answers to challenging questions
Stories from real-life scientists
And more...

PLT "Explore Your Environment" K-8 Activity Guide Released

Project Learning Tree (PLT) released a new curriculum guide to engage kindergarten through grade 8 students in exploring their environment. Fifty field-tested, hands-on activities integrate investigations of nature with science, math, English language arts, and social studies.

Educators can obtain a copy of PLT's Explore Your Environment: K-8 [Activity Guide](#) directly from [PLT's Shop](#), from Amazon and other places where books are sold, or by attending a local PLT professional development workshop conducted by PLT's 50-state network of 75 coordinators and 1,000 facilitators across the country. [Minnesota PLT site](#)

Student Programs, Awards and Competitions

Science and Engineering Competitions

- [Science Bowl](#) – middle and high school
- [Minnesota Science Olympiad](#) – middle and high school
- [Science and Engineering Fair](#) – middle and high school
- [FIRST Lego League](#), [FIRST Tech Challenge](#), [FIRST Robotics](#)- All grades
- [Supermileage Challenge](#) - High school
- [Real World Design Challenge](#) - High school
- [Toshiba/NSTA ExploraVision](#) - Classroom based for all grades
- [NSTA Angela Award](#) – girls grades 5 – 8
- [MN Scholars of Distinction](#) – high school
- [National Youth Science Camp](#) – two high school seniors are selected as MN delegates

Minnesota Programs and Competitions

Many competitions, out-of-school programs and field trip opportunities are listed in the [Reach for the Stars Catalog of Programs and Activities](#).

MDE Science Contacts:

Angela Kolonich, Science Content Specialist
angela.kolonich@state.mn.us

Jim Wood, Science Assessment Specialist

jim.wood@state.mn.us

Judi Iverson, Science Assessment Specialist

judi.iverson@state.mn.us

Sarah Carter, STEM and Computer Science Specialist
sarah.carter@state.mn.us

Send submissions for the Science Update to Angela Kolonich angela.kolonich@state.mn.us

Other Minnesota Links:

Minn. Dept. of Education [Science Page](#)

Minn. Science Teachers Association mnsta.org

[Frameworks](#) for MN Science and Mathematics Standards

Get – [STEM](#) Connections between schools and businesses

Mn-STEM STEM programs and [resources](#) for families, schools and community
Sharing Environmental Education Knowledge environmental education [resources](#)

[Minnesota Academy of Science](#): Science Fair, Science Bowl and other competitions
Mn DNR Education website: [Curriculum, professional development, posters, etc.](#)

[Youth Eco Solutions \(YES!\)](#) – Statewide, youth-led program for hands-on eco related projects

MnSTA Board

Executive Board



Dr. Tom Meagher
Executive Secretary



Haley Kalina
MnSTA President



Dr. Missle Olson
President-Elect



John Olson
Treasurer



Dr. Angela Kolonich
MDE Science Specialist
-ex officio member

Auxiliary Board



Kristin Caquelin
Web Content Curator



Eric Koser
Webmaster



Dr. Dan Voss
Social Media Coordinator



Jerry Wenzel
Newsletter Editor

MnSTA Board Discipline Directors



Dana Smith
Earth Sci



Kim Benton
Metro Elem.



Dr. Jeff Pribyl
Higher Ed.



Jason Hall
Physics



Jillian Harvalis
Chemistry



Felicia
Leammukda
Informal Ed.



Mark Peterson
Private Schools



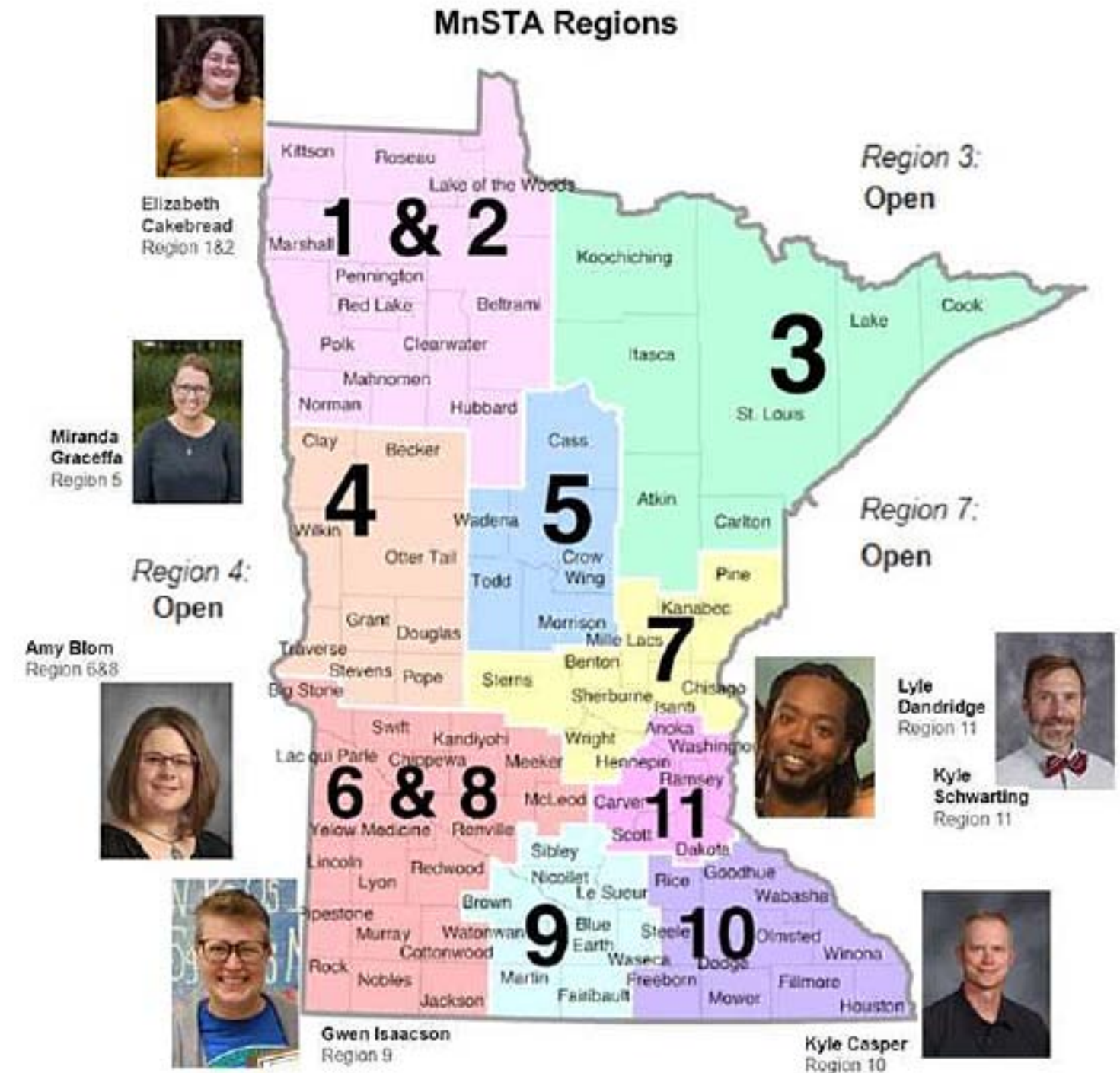
Jess Paulson
Alt/Charter Ed.



Dr. Hillary
Barron
Indigenous Sci

Please engage
and connect with
them throughout
the year!

MnSTA Board Region Representatives



MnSTA Board Directory

Below, you will find information about your MnSTA Board Members. The listing includes the board member's school (or organization), mailing address, work phone, FAX number, and e-mail address. The board wishes to make itself as accessible as possible for our members. Please feel free to contact your discipline representative, regional representative, or executive board members if you have ideas, concerns, or wish to help with the mission or operation of MnSTA. We are always looking for members who wish to serve MnSTA as Board Members, Non-Board Service Chairs or Members, and as Committee Chairs or Members.

Executive Board:

Exec. Secretary/Database	Tom Meagher	Owatonna Public Schools	
	507-210-4143	tmeagher@isd761.org	
President	Haley Kalina	Alexandria Public Schools	510 McKay Ave N. Alexandria, MN 56308
	320-762-7900	president@mnsta.org	
Past President	Jill Jensen	Scott Highlands Middle School	4011 Pilot Knob Rd. Apple Valley, MN 55124
	952-423-7581	jill.jensen@district196.org	
President-elect	Missie Olson	Becker High School	12000 Hancock St. Becker, MN 55308
	320-274-3341	molson@isd726.org	
Treasurer	John Olson	Metropolitan State Univ.	700 E. 7th St. St. Paul, MN 55107
		treasurer@mnsta.org	
DOE Science Specialist	Angela Kolonich		angela.kolonich@state.mn.us

Discipline Directors:

Biology	Open		
Earth Science	Dana Smith	Bemidji Middle School	1910 Middle School Ave. NW Bemidji, MN 56601
	218-333-3215	dana_smith@isd31.net	
Chemistry	Jillian Harvalls	St. Thomas Academy	949 Mendota Heights Rd. Mendota Heights . MN 55120
	651-683-1345	jharvalis@cadets.com	
Elementary/Greater MN	Open		
Elementary/Metro	Kim Benton	Garlough Environmental Magnet	1740 Chariton St. West St. Paul 55118
	651-403-8172	kimberly.benton@isd197.org	
Higher Ed	Jeff Pribyl	Minnesota State University, Mankato	143 Ford Hall Mankato, MN 56001
	507-389-6024		
Informal Ed	Felicia Leammukda	St. Cloud State University	
		felicia.leammukda@stcloudstate.edu	
Alternative Ed.	Jess Paulson	Sciences Academy	8008 83rd St. NW Maple Lake, Mn 55358
	952-852-0129	jpaulson@jgesa.org	
Physics	Jason Hall	Mound Westonka High School	5905 Sunnyfield Rd. E. Minnetrista 55364
	jhall@ahastars.org		
Indigenous Science	Hillary Barron	Bemidji State University	1500 Birchmont Dr. Bemidji, 56601
	218-428-2689	hillary.barron@bemidjistate.edu	
Private Schools	Mark Peterson	Benilde-St. Margaret's School	2501 Hwy 100 S. St. Louis Park MN 55416
	320-420-5246	mpeterson@bsmschool.org	

Region Representatives:

Region 1&2: North	Elizabeth Cakebread	Ada-Borup-West School	604 W. Thorup Ave. Ada, MN 56510
	218-784-5300	elizabethc@ada.k12.mn.us	
Region 3: Northeast	Open		
Region 4: Westcentral	Open		

MnSTA Board Directory

Region 5: Northcentral	Miranda Graceffa	Crosslake Community School	36972 Cty Rd 66 Crosslake, MN 56442
	218-330-6154	mgraceffa@crosslakekids.org	
Region 6&8 Southcent	Amy Blom	Edgerton Public	423 1st Ave. W. Edgerton, MN 56128
	507-442-7881	ablom@edgertonpublic.com	
Region 7: Eastcentral	Open		
Region 9: South	Gwen Isaacson	Loyola Catholic School	145 Good Counsel Dr. Mankato, MN 56001
		gisaacson@loyolacatholicschool.org	
Region 10: Southeast	Kyle Casper	Rochester Public Schools	615 7th St. SW Rochester MN 55902
Region 11: Metro	Lyle Dandridge	Washington Tech Middle School	1495 Rice St. St. Paul 55117
		lyle.dandridge.jr@gmail.com	
Region 11: Metro	Kyle Schwarting	ISD 196	3455 153rd St. W Rosemount, MN 55068
	651-423-7740	kyle.schwarting@district196.org	

Ancillary Positions:

Database	Tom Meagher	Owatonna Public Schools	
	507-210-4143	tmeagher@isd761.org	
Web Content Curator	Kristin Caquelin	Minneapolis Public Schools	250 W. Broadway Ave. Minneapolis 55411
		kristin.caquelin@mpls.k12.mn.us	
Webmaster	Eric Koser	Mankato Area Public Schools	10 Civic Center Plaza Mankato, MN 56001
		e: ekphys@gmail.com	
		Mankato Area Public Schools	10 Civic Center Plaza Mankato, MN 56001
		W: 507-387-3461 x 322	F: 507-345-1502
			webmaster@mnsta.org
Newsletter	Jerry Wenzel		jerrywenzel@brainerd.net
Social Media Coord.	Dan Voss		dcvoss1@gmail.com
NSTA Dist. IX Director	Ashley Armstrong	South Dakota, North Dakkota, Minnesota	
		ashleynarmstrong7@gmail.com	
Conference Coordinator	Eric Koser	Mankato Area Public Schools	10 Civic Center Plaza Mankato, MN 56001
		e: ekphys@gmail.com	

MnSTA Strategic Plan 2018-2026



Goal 1: Strengthen science teaching and learning in Minnesota

Goal 2: Strengthen Leadership in Science Education in Minnesota

Goal 3: Promote equity, inclusion and accessibility in science education

Goal 4: Enhance MnSTA as a Professional Science Education Organization

Membership Application Form

MnSTA Membership Application Form

Join the Minnesota Science Teachers Association (MnSTA), the professional organization whose primary goal is the advancement of science education. Mail this form along with your check to:
MnSTA Treasurer, 24405 Iceland Path, Lakeville, MN 55044

Home

Name (First, MI, Last)

Address

City

State

Zip code

Phone number

Preferred email address

Second email address

School/Organization

Name

Address

City

State

Zip code

Phone number

School district #
(enter "P" if Private, "A" if Alternative, "C" if Charter)

Rates

- Basic Membership \$25
- First Year Teacher \$15
- Retired Teacher \$15
- Pre-service Student..... \$10
- Elementary School Building \$75
Includes all teachers in the building
- Life Membership: to age 35 \$400
age 36-50 \$300
over 50 \$200

- New Member Renewing/Past Member

A joint MnSTA - NSTA membership is available through NSTA (<https://www.nsta.org>)

Discipline and Grade Level

- Biology
- Chemistry
- Earth Science
- Environmental Sci
- Life Science
- Physical Science
- Physics
- Elementary (PreK-2)
- Elementary (3-6)
- Middle/Jr. High School (6-9)
- High School (9-12)
- College/University
- Informal Ed

MnSTA Photo Release Statement

By becoming a member of the Minnesota Science Teachers Association (MnSTA) or by attending any MnSTA-sponsored event, you are granting permission for the use of your image for MnSTA promotional purposes without compensation. If you have questions regarding this policy, please contact membership@mnsta.org

Privacy Information

Who can view your School/Organization Profile? Members Administration only

MnSTA keeps you informed about the events and issues impacting science education in Minnesota through its website and an email Digest of those website postings, and periodic informational emails.

Do you consent to receive email communications from us? Yes No

Teacher Leadership

Please contact me regarding additional involvement and/or potential leadership opportunities with MnSTA