



**MINNESOTA
ACADEMY
OF SCIENCE**



2021

**Minnesota Regional High School
Virtual Science Bowl
January 23, 2021**

SPONSORED BY

Minnesota Department of Education

U.S. Department of Energy

Ecolab General Mills Hardenbergh Foundation

General Dynamics Diasorin

SPECIAL THANKS

Founded in 1873, the **Minnesota Academy of Science** is a statewide 501(c)3 nonprofit organization dedicated to providing opportunities for Minnesotans of all backgrounds to engage in STEM-related learning, inquiry, research, and networking. We serve K-12 and undergraduate students, educators, and schools as well as STEM graduates and professionals seeking to network and volunteer.

MAS seeks to expand opportunities and open the door to STEM majors and careers for *all* Minnesota students. We could not do so without our sponsors, donors, volunteers, and YOU!

MAS BOARD OF DIRECTORS

Dr. Stephanie Yancey (President), *Beckman Coulter*
Dr. Jessica Bell (Vice President), *Century College*
Ms. Mary Frantz (Treasurer), *Enterprise Knowledge Partners, LLC*
Dr. Tanya Shipkowitz (Secretary), *Independent Consultant*
Dr. Felicia DeSantos, *General Mills*
Dr. Lifeng Dong, *Hamline University*
Ms. Sarah Grazul, *3M*
Dr. Joanna Klein, *University of Northwestern*
Dr. Jeff Lande, *Medtronic*
Mr. Rob Meyer, *Breakthrough Prize Foundation*
Dr. John Olson (ex-officio), *MN Department of Education*
Dr. Melanie Reap, *Winona State University*
Dr. David Rowe, *3M*
Dr. Nikki Shaffer, *Seagate Technology*
Dr. Cindy Ward-Thompson (ex-officio), *MN Department of Education*
Dr. Xu Zou, *University of Minnesota*

MAS STAFF

Lara Maupin, *Executive Director*
Kristine Fowler, *Science Bowl Manager*
Alex Berg, *Science Bowl Scoring Administrator*
Sara Gomez, *Program Director*
Marcella McClain, *Data Manager / IT Support*
Ally Milenkovic, *Asst. Program Director / Volunteer Coordinator*
Emily Shepard, *Communications Specialist*
Kris Zierman, *Administrative Manager*

HSSB QUESTION PROOFREADERS

Adam Cantor (Lead), Felicia De Santos, Jeff Lande, Melanie Reap, Tanya Shipkowitz, Bradford Wright

HSSB VOLUNTEER TRAINERS

Ally Milenkovic, Joseph Touchet

HSSB VOLUNTEERS

MAS remains grateful for companies like **Seagate Technology, 3M, General Mills, Medtronic, the University of Minnesota, Beckman Coulter, and Diasorin** for supporting the involvement of their employees in MAS STEM education programs as volunteers.

2021 Volunteers: Alex Anderson, Martin Blaber, Lindy Bowen, Megan Brennan, Adam Cantor, Sudheer Chava, Kin Chow, Kruthica Dama, Rajiv Dama, Kaylia Davidow, Mark Davis, Felicia De Santos, Paul Ebert, Erica Elwell, Jeanie Everson, Cara Fragomeni, Judith Franklin, Lisa Gentile, Katie Gibney, Aayush Gupta, Jennifer Hanson, Tiffany Held, Julia Heneghan, Betsy Hughes, Quentin Hughes, Vaughn Hughes, Meghana Iyer, William Jadcowski, Janice Jaguszewski, Carol Johnson, Jeff Johnson, Greg Kimball, Adarsh Kodandapani, Emily Kruger, Meghan Lafferty, Jeff Lande, Robbie Langenfeld, Allison Langham-Putrow, Ken Latham, Denise Levitan, David Li, Barbara Lunde, Pete Malamen, Zoe Maxwell, Jenny Mcaab, Don Merritt, Kara Meyers, Shannon Negaard-Paper, Peyton Nosbusch, Sam Olson, McKenzie Opse, Farrah Osman, Raghu Padiyath, Sophie Perron, Madhu Rajulapati, Melanie Reap, Carl Rye, Joseph Sawyer, Bruce Schaepe, Tanya Shipkowitz, Ryan Smith, William Smith, Arianna Stancari, Vivien Talghader, Matt Thell, Aisha Thomas, Joseph Touchet, David Tweeten, Stacey Wakeham, Kelly Wallin, Michelle Walter, Ben Weiner, Paige Wendland, Todd Williams, Jim Wolfe Wood, Henry Wong, Bradford Wright, Bin Xu, Caroline Zeng, Orien Zeng, and William Zeng

T-SHIRTS donated by Alma Alaniz & Mark Fritz at **Lakeshirts**, Detroit Lakes, MN

Minnesota Regional Science Bowl for High School Students

COMPETITION DAY SCHEDULE

Saturday, January 23, 2021

8:30 a.m. **Announcement Session via Zoom: Welcome**

8:45 a.m. Last-minute questions via Zoom

9:00 a.m. Preliminary Rounds

- Prelim Rd 1A 9:00 AM
- Prelim Rd 1B 9:35 AM
- Prelim Rd 2A 10:10 AM
- Prelim Rd 2B 10:45 AM
- Prelim Rd 3A 11:20 AM
- Prelim Rd 3B 11:55 AM

12:15 p.m. Scoring Break *The top 16 teams move on to the Elimination rounds.*

PLEASE COMPLETE YOUR ONLINE SURVEY!

[Student survey](https://bit.ly/35XkKRM) (bit.ly/35XkKRM) | [Coach survey](https://bit.ly/3pgHlv3) (bit.ly/3pgHlv3) | [Volunteer survey](https://bit.ly/2Y2pm4A) (bit.ly/2Y2pm4A)

1:00 p.m. **Announcement Session via Zoom: Advancing Teams**

1:30 p.m. Elimination Rounds

- Elim Rd 16 1:30 PM
- Elim Rd 8 2:20 PM
- Elim Rd 4 3:10 PM
- Elim Rd 2 3:40 PM Championship Round

4:00 p.m. **Announcement Session via Zoom: Awards Presentation**

2021 PARTICIPATING SCHOOLS

Academy of Holy Angels, *Richfield*, Coaches: Andrew Vitek, Malia Lahr

The Blake School, *Hopkins*, Coaches: Kjirsten Walt-Anderson, Janet Williams

Breck School, *Golden Valley*, Coach: Brian Trussell

Burnsville Senior High, *Burnsville*, Coach: Mike Huemoeller

Carlton Secondary, *Carlton*, Coach: Tracy Bockbrader

Century Senior High, *Rochester*, Coach: Cheryl Moertel

Chanhassen High School, *Chanhassen*, Coaches: James Allan Lund, Anca Moisei

Chaska High School, *Chaska*, Coach: Kelly Dreier

East Ridge High School, *Woodbury*, Coach: Amanda Gavin

Edina Senior High, *Edina*, Coaches: Michael Roddy, Elizabeth Houtz

Maple Grove Senior High, *Maple Grove*, Coaches: Justin Passmore, Elizabeth Schoeller

Mnetonka High School, *Mnetonka*, Coaches: Alison Peterson, Bhuvana Nandakumar

Rock Ridge Public School, *Virginia*, Coaches: Lisa Marie Rudstrom, Todd Ufford

St. Francis High School, *Saint Francis*, Coach: Bethany Stiles

St. Paul Academy - Summit, *Saint Paul*, Coaches: Cathleen Drilling, Steve Heilig

Wayzata High, *Plymouth*, Coaches: Amanda Marie Laden, Jill Holz

Woodbury Senior High, *Woodbury*, Coaches: Kaarin Schumacher, Chaodi Li

☆☆☆

Welcome, New Schools! Welcome, Returning Schools!

MAS is glad you are here.

Thank you, coaches and co-coaches, for all you do.

☆☆☆

[2021 Virtual National Science Bowl Rules Simplified](#) , [2021 Official Virtual National Science Bowl Rules](#)

CONNECT

TO THE MINNESOTA ACADEMY OF SCIENCE (MAS) AND STEM EDUCATION IN MN

We value your feedback! Help us improve Science Bowl -
please complete our survey:

[Student survey](https://bit.ly/35XkKRM) (bit.ly/35XkKRM)

[Coach survey](https://bit.ly/3pgHlv3) (bit.ly/3pgHlv3)

[Volunteer survey](https://bit.ly/2Y2pm4A) (bit.ly/2Y2pm4A)

Share your experiences and follow MAS

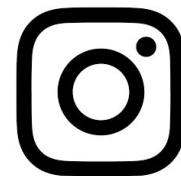
#MNScienceBowl



[@MNAScience](https://www.facebook.com/MNAScience)



[@MNACadSci](https://twitter.com/MNACadSci)



[@MinnesotaAcademyofScience](https://www.instagram.com/MinnesotaAcademyofScience)

mnmas.org

- DONATE
- VOLUNTEER
- REGISTER
- LEARN MORE

[Subscribe](#) to our monthly Minnesota STEM
news and events e-newsletter

Science Bowl Activities

We'd like to invite you to participate in a few *totally optional* activities - perhaps something to keep you occupied in between rounds or while waiting for the award ceremony to begin? Please contact emilyshepard@mnmas.org with any questions.

Science Bowl Coloring Contest

Instructions

Print out the coloring page attached to this program, and get creative! If you don't have access to a printer, no problem - email emilyshepard@mnmas.org and I'll give you instructions for coloring the page digitally. Submit a picture of your masterpiece via either social media, or email (emilyshepard@mnmas.org). If you use one of our social platforms, mention/tag the Minnesota Academy of Science so that we're sure to see your post. Feel free to use #MNScienceBowl to give your post added visibility.

 @MNAScience

 @MNAcadSci

 @minnesotaacademyofscience

Prize

The contest prize is a shipment of quality art supplies (worth approximately \$40) sent directly to your home. One winner will be randomly selected. Each completed coloring page counts as one entry (maximum three entries per student). Your art will also be featured on the mnmas.org website, our newsletter and our social media platforms.

Rules

- Only student participants are eligible for the prize. Coaches and volunteers, we'd love to see your art - but you'll have to be satisfied with the knowledge of a job well done :).
- Contest ends January 25th, 2021.
- Winner will be selected at random. Winner will be notified via email or a direct message (if entry is submitted through a social media platform). If the winner cannot be contacted within a week from the time award notification was sent, an alternate winner will be selected.
- All completed coloring sheet images become property of the Minnesota Academy of Science and may be used in the future.

Saving Atlantis Film

Saving Atlantis is a 75-minute feature documentary focusing on the dramatic loss of coral reef ecosystems around the world, the impact of that decline on the human communities that depend on them and those who are fighting to uncover the causes and find solutions before it's too late. Watch the preview:

corals.oregonstate.edu/saving-atlantis

The film will be accessible until noon on Sunday, January 24. *Please only login to watch once, when you're ready to watch the movie, as we do not have unlimited access.* Here is the access link:

<https://collectiveeyefilms.vhx.tv/screeners/4e2d5df9>

