



Only virtual field trip opportunities are available for grades 9-12 (select preference of topic when completing application):

VIRTUAL: Virtual experiences will take place online using preferred approved platforms. Each workshop is designed to accommodate classrooms participating on individual devices or collectively as a classroom (preferably no more than 50 students per session).

Please note that these will be scheduled on a first-come, first-served basis. The Discovery Connections team will follow up as timely as possible to confirm status and logistics.

Fall 2022 (Virtual: October-December)

Meet the Lab Collection

Did you know that scientists work together in teams to discover answers to unique questions? Meet diverse scientists and explore science with them in a set of online learning experiences the scientists helped to create. The project is a Discovery Building partnership with PBS Wisconsin Education as part of the Timothy William Trout Education Fund, a gift of Monroe and Sandra Trout. These learning opportunities show how diverse groups of people work together across disciplines to pursue answers to questions about our world. The students complete the activities based on your teaching schedule prior to the event and the field trip will be an online conversation with scientists to learn more about them and their work. **Selecting this option when applying will prompt you to indicate your preference of the following lab/topics:**

- 1. Meet the Lab: Data Decoders: Superpowered by Computers** - The Solis-Lemus lab develops math models to answer biological questions. The lab deals with modern big data in living systems and uses math to better understand life.
- 2. Meet the Lab: Virus Investigators: Superpowered by Electron Microscopes** - The Virology Research Team at the Morgridge Institute uses multiple approaches to accelerate understanding of virus replication including super amazing technologies that can see itsy bitsy viruses in great detail.
- 3. Meet the Lab: Nervous System Engineers Superpowered by Stem Cells** - The Stem Cell Bioprocessing and Regenerative Biomaterials Lab bioengineers neural tissue to study the nervous system. Brains, spines, nerves, oh my!
- 4. Meet the Lab: Cancer Detectives Superpowered by Laser Microscopes** - The Optical Microscopy in Medicine Lab uses high-powered laser microscopes to research cancer cell growth!
- 5. Meet the Lab: Antibiotic Hunters Superpowered by Students** - The Tiny Earth Network discovers new antibiotics through the soil; and students do the hunting!



Fall 2022 (Virtual: continued)

A Day in the Life of a Stem Cell Scientist

Have you ever wondered what a science lab actually looks like and who works in a science lab? In this experience you'll get to take a behind-the-scenes tour of a stem cell research lab at UW-Madison - with a scientist as the tour guide! After the tour of the lab, you'll get to chat with scientists about what it's like to be a scientist. It's a perfect opportunity to hear more about how they knew they wanted to be a scientist, what their science career pathway was like and what a day in the life of scientist looks like.

My Story in Science So Far: From Voices Underrepresented in Science

Join Graduate Research Scholars (GRS) for an engaging and interactive discussion with scientists and researchers who are underrepresented in science, engineering, technology and math careers. Engage with UW-Madison students and learn about their journey in STEM. How might your journey be similar or different from theirs?

Renewable Energy with Everyday Materials

Did you know it's possible to make a device using common household materials that harnesses static electricity to light up an LED? In this experience, you will learn what a triboelectric nanogenerator is and then get to build one! After participating in the activity, you'll get to chat with scientists who study materials and how they can improve our lives. PLEASE NOTE: Teachers will receive a package of materials to mail or distribute to the students in the class.