



Both virtual and in-person field trip opportunities are available (select preference when completing application). 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.

IN-PERSON: In-person experiences will take at the Discovery Building teaching labs located on the research floors, staffed with scientists committed to bringing cutting-edge science experiences to students of all ages. Max capacity 50 students.

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).

Fall 2022 (In-Person: October-December)

Choose two topics from below offerings when completing application.

Sustainability of Energy

The U.S. uses 99,578,000,000,000 BTU of energy each year, but less than 10% of that energy comes from renewable sources. In this lab experience, students will explore energy usage and production by conducting a mock energy audit to model home and school energy use, and by optimizing a windmill energy production system. Students will be introduced to the research goals of the WI Energy Institute on UW-Madison campus and their efforts to transition towards new, clean energy systems and solutions.

Size and Scale: Nanotechnology and a World too Small to See

Materials Science is all about building the world from the atom up, which means working with objects that are too small to see. How do scientists work with what they can't see? We'll use hands-on models to better understand tools that allow scientists to explore, manipulate, and understand the nanoscale.

Robotics, Automation, and Plant Research

Learn about techniques used by the UW-Madison Botany Labs that combine robotics, supercomputers, and engineering for their research on plants, crop systems, and growing plants in space. Activities will focus on interdisciplinary (a mix of botany, computer science, engineering, math, etc.) applications to study plants. Small group activities that combine ideas of robotics, automation, and plant research will be part of the experience.

Stem Cells: Directed Differentiation and Cryopreservation

Pluripotent stem cells have the remarkable ability to become any type of cell found in the human body. Through hands-on lab activities, students will conduct an experiment to learn how scientists turn pluripotent stem cells into specialized cells and store them in low temperatures using cryopreservation. Note: Students must be wearing closed-toe shoes and long pants to fully participate in the activities.



Fall 2022 (Virtual: October-December)

Science Explorers

Scientists who study nature often explore connections between living things like mosquitos, ticks and humans. In this field trip experience, you'll get to explore nature with the scientist and learn how to use science to explore the world around you.

Finding Buried Treasure

Have you ever wondered how scientists find fossils and use them to learn about life on Earth many, many years ago? In this experience, you'll see how scientists find and unearth bones, carefully clean them, and figure out how to fit them into a larger skeleton. After learning about this process, you'll get to chat with scientists who study geology, fossils and more!

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Creating Art with Polarized Light

Create your very own work of art that's only visible when viewed between two polarizing filters!