FRIDAY, APRIL 3, 2020

WATER SCIENCE AND ENGINEERING WAVE FLUME | BASEMENT LEVEL, WATER SCIENCE AND ENGINEERING LABORATORY | 12:00 - 5:00 PM
Civil and Environmental Engineering

Come and check out the newly refurbished long wave flume and water channel that will feature demonstrations of different types of water waves!

TOUR ALDO LEOPOLD ARCHIVES | UNIVERSITY OF WISCONSIN ARCHIVES, 425 STEENBOCK LIBRARY, 550 BABCOCK | 1:30 - 3:00 PM
University of Wisconsin Archives

The Aldo Leopold Archives house a remarkable collection of documents and artifacts that trace the life and career of the UW professor who is rightly considered to be one of the most important individuals in the history of conservation. The session will focus on his pioneering research and how it continues to inform environmental science today.

UW MADISON DAIRY CATTLE CENTER | UW MADISON DAIRY CATTLE CENTER 1815 LINDEN DR | 9:00 AM - 3:00 PM
UW Madison DCC

Guided tours go out at the top of every hour. Come meet and learn about the girls behind Wisconsin’s Dairyland. This 45 min guided tour through the Dairy Cattle Center will give participants the chance to learn more about the Wisconsin Dairy Industry, learn about the cows and the people that are at the heart of the farm. Also learn about other research and learning opportunities held here on the UW Madison campus.

SCIENCE HALL - OPEN HOUSE | SCIENCE HALL | 5:00 - 7:00 PM
Department of Geography and Nelson Institute for Environmental Studies

Join the Department of Geography and the Nelson Institute for Environmental Studies at the Science Hall Open House! Nelson Institute staff and students will be present to showcase interesting applications of satellite imagery and remote sensing information in environmental research. In the Geography Dept there will be a special exhibit showcasing our newly renovated Grand Canyon plaster relief model. Staff from the Map Library, History of Cartography Project, and the UW Cartography Lab will be on hand to answer questions and provide information alongside a map display inside the Robinson Map Library.
OPEN HOUSE AT WASHBURN OBSERVATORY | WASHBURN OBSERVATORY | 7:00 - 10:00 PM
Astronomy Department & UW Space Place

The observatory will be open regardless of weather for visitors to see our famous 140-year-old telescope. If the sky is clear we will observe the first-quarter moon and perhaps other celestial objects.
SUNDAY, APRIL 5, 2020

HOW DO CHILDREN LEARN ABOUT THE PEOPLE AROUND THEM?
Social Kids Lab

Children will participate in several activities related to how children learn about the social world around them. There will be activities related to learning language, emotions, food choices, and many more!

WISCONSIN ENERGY INSTITUTE | 1:00 - 4:00 PM
Wisconsin Energy Institute

The Wisconsin Energy Institute will host a wide variety of exploration stations in the atrium from 1:00 PM - 4:00 PM. Come meet scientists, design a wind turbine, learn about making gas from grass, and more. Meet by the sign in the atrium for guided building tours at 2:00 PM and 3:00 PM.

HOW WELL DO YOU KNOW REPTILES!?
Madison Area Herpetological Society

Think you know reptiles and amphibians!? Come learn all about them, where they come from, what they eat, how they avoid being eaten, and how to care for them, plus lots more!!!

SCIENCE IS FUN IN THE LAB OF SHAKHASHIRI
WISL at UW-Madison Chemistry

Enjoy hands-on/minds-on experiments featuring color changes, floating and sinking, liquids and solids, and more!

EXPLORE ICECUBE!
WIPAC/IceCube @ UW-Madison

Experience the world of the neutrino, often called the weirdest particle in nature. Learn about the unique properties of the so-called ghost particle that can pass through the Earth undetected and exist in three identities at the same time. Learn about how despite being born with a single identity, they can mutate into another neutrino identity when they are detected by experiments such as IceCube, the cubic-kilometer neutrino detector at the South Pole.

Saturday Exploration Stations are at The Discovery Building 10:00 AM - 2:00 PM
Our station will focus on Wisconsin’s native pollinators: Who are they? What are their favorite flowers? And how can we help them? Play a matching game and take home a packet of native plant seeds.

Wisconsin is the home to a wealth of rocks, minerals, and fossils with incredible variety and beauty found throughout the state. Take a close look and ask our geologists about the Dazzling Display of Wisconsin Rocks, Minerals and Fossils.

Unique to the world and open to the public only during Science Expeditions, come see the rooftop greenhouse at Leopold Residence Hall!

Join us to learn about weather satellites and observing the Earth at UW-Madison’s Space Science and Engineering Center (SSEC). You may not know, but SSEC is one of the largest research centers at UW-Madison. We have a long history of research and instrument development, and even one of the very first weather satellites was built here! Our scientists focus on observing the Earth from the ground, from air, and from outer space. At this Destination for Exploration, enjoy many science activities, including learning about ice drilling in the Arctic and Antarctic, getting hands-on experience with weather and climate apps, viewing satellite imagery on the 3D Globe projection, and taking a tour of the roof to see satellite receiving dishes in person (not to mention the best views of Madison). See you at SSEC!
FLOOD SIMULATION TANK
Civil and Environmental Engineering, Nelson Institute

Have you noticed that Madison, Houston, and other places seem to be flooding frequently? While there are many reasons why, how we develop our community and landscape are important factors. This will be a hands-on demonstration to understand how quickly or slowly rainfall runs off of various landscapes (parking lots, wetlands), what this means for river flows and homes downstream, and some options for improvement. Come ready to set up a flood tank, take measurements, and just maybe get a little bit wet.

WHAT CAN WE FIND IN THE SOIL?
Department of Soil Science

Come join us as we dive into the vast and fascinating world of soils! We will have several activities where you can experience the diversity of microfauna and the ways of life in the world beneath our feet. You will have the chance to look at bacteria, fungi, and nematodes underneath a microscope, see how to extract small organisms from soil using a Berlese-Tullgren funnel, and more! There is much to learn at this hands-on soil safari and critter quest.

DIY LAVA LAMPS
UW-Madison Biocore

How do we make lava lamps! Do oil and water come together well? Come explore the principles of density and miscibility (the mixing of two solutions) and create your very own mini-lava lamp!

ALUMNI PARK OPEN HOUSE, SCAVENGER HUNT AND SCIENCE THEMED TOUR! | ALUMNI PARK | 11:00 AM - 3:00 PM
Wisconsin Alumni Association

Explore Alumni Park a green space on the shores of Lake Mendota that pays tribute to UW Madison alumni with exhibits. Science themed tour at 1:30 pm.
**TOX ADVENTURES**  
Molecular and Environmental Toxicology Graduate Program

Hands on toxicology principles

**AQUAPONICS - GROWING PLANTS WITHOUT SOIL**  
Civil and Environmental Engineering

Aquaponics is a promising food production technology, which closes nutrient loops, through combining hydroponics and aquaculture. Learn about aquaponics and try building your own floating raft to take home.

**LIGHTS, CAMERA, BACTERIA!**  
Medical Microbiology and Immunology

Did you know that some bacteria naturally glow in the dark? One in particular, *Vibrio fischeri* uses this light to help camouflage the nocturnal Hawaiian bobtail squid. But how does this work? Come learn how bacteria talk to one another to make light. You can even draw your own art with this neat bacteria and see your drawing light up the night like glow in the dark stars. If you’re lucky, you may even spot a squid swimming around!

**EXPLORING SUSTAINABLE NANOTECHNOLOGY**  
Center for Sustainable Nanotechnology

The Center for Sustainable Nanotechnology studies the interactions of nanomaterials with the environment. One demonstration will show how we use light-emitting nanomaterials to understand where they go in organisms and complicated environments. Another demonstration will look at how nanoparticles interact with plants, and the natural nanostructures that plants have. The final demonstration will show the audience how scientists make gold nanoparticles in real time.

**MARMOSETS IN OUR MIDST | WISCONSIN NATIONAL PRIMATE RESEARCH CENTER | 12:00 - 4:00 PM**  
Primate Center

Join us at the Wisconsin National Primate Research Center to learn about life-saving research and humane animal care. Our family of common marmosets in the lobby inspires curiosity among all ages. We will also have a variety of hands-on activities for visitors to enjoy as they learn about Primate Center research and animal care.

Saturday Exploration Stations are at The Discovery Building 10:00 AM - 2:00 PM
HOW CAN WE BUILD A 5 CENT BATTERY?
UW-Madison Chemistry Department

Participants will learn about the basic components of a battery (two metals + conductive solution) by building batteries from lemons and pennies to make an LED light up.

WHAT MAKES PROTEINS FOLD?
UW-Madison Chemistry Department

Come learn why protein folding is vital for life and human health and what makes proteins fold and unfold. At this station, participants will start with a solution containing the protein bovine serum albumin (BSA) and the small molecule ANS. This solution shows blue fluorescence when BSA is folded but no fluorescence when the protein is unfolded. Then, participants will add the base NaOH and the acid HCl to the solution and watch how the fluorescence changes to learn how pH affects protein folding.

THE MAGIC OF MILK
Department of Dairy Science

The Magic of Milk will cover how cows make milk, the benefits milk can provide to the body and describe how milk travels from farm to table. Participants can view an udder model showing the anatomy of the mammary gland and look under microscopes to see the cells that produce milk.

WISCONSIN STATE HERBARIUM, BOTANY | BIRGE HALL LOBBY | 10:00 AM - 2:00 PM
Department of Botany

Behind the scenes tour of one of the world’s finest collections of preserved plants, lichens, and fungi consisting of >1.3 million botanical research specimens in historic Birge Hall

* Saturday Exploration Stations are at the Discovery Building 10 am - 2 pm
THE UNIVERSITY OF WISCONSIN MISSING IN ACTION RECOVERY AND IDENTIFICATION PROJECT | UW BIOTECHNOLOGY CENTER | 9:00 AM - 5:00 PM
The University of Wisconsin Mission in Action Recovery and Identification Project
An interdisciplinary academic immersion including the applications of historical military research, archaeology, forensic anthropology, genealogy, and genetic analysis to locate, recover, and identify the remains of missing in action (MIA) American military service personnel. Participants will be able to view military artifacts, archival research methods, and data analytics culminating to advance the recovery of MIA American service members.

CLIMATE SOLUTIONS ROLE-PLAYING GAME | WISCONSIN ENERGY INSTITUTE | 1:30 - 3:00 PM
Wisconsin Energy Institute
Do you have what it takes to limit global warming to 2 degrees C or less? Join us as we simulate a United Nations summit tasked with creating a plan to limit warming to internationally-agreed targets. We will explore climate change solutions in an engaging, role-playing format and see what it would take to address this global challenge. All are welcome, but this activity is best for ages 10+.

YOU BELONG AT UW-MADISON. WE’LL HELP YOU GET THERE.
Office of Financial Student Aid
The Office of Student Financial Aid is excited to share the powerful force of compound interest and information on how to access higher education. Pro Tip: There’s candy, basketball, and a spinning wheel involved— you won’t want to miss it!

BEE DECLINE AND CONSERVATION
USDA-ARS VCRU - Brunet Lab
What are the differences between social and solitary bees? How can you distinguish a bee from a wasp? What is the role of bees in agriculture? Why are bees in decline? What can you do to help preserve bees?

Saturday Exploration Stations are at The Discovery Building 10:00 AM - 2:00 PM
WHERE THE WILD THINGS GROW
UDSA-ARS and Department of Horticulture

Can you imagine a time when an ear of corn could only feed a field mouse, or when Italians had never heard of tomato sauce? Can you picture Szechwan without hot peppers, Belgium without chocolate, Germany without beer, or Georgia without peaches? It wasn’t long ago that the culinary world was very different from what it is today. Most of the fruits and vegetables that we enjoy were unknown or didn’t exist! For centuries people around the world have used genetics to develop crops from wild plants, often making dramatic changes to taste, texture and appearance in the process. Find out where the wild ancestors of our fruits and vegetables are found, and discover how their domesticated descendants traveled throughout the globe to enrich our lives. Explore with us the fascinating origin of the food you eat and how scientific advancements ensure a never-ending supply of healthy fruits and vegetables for your dinner table.

LEARN ABOUT YOUR BRAIN WITH THE UW CHILD EMOTION LAB
UW Child Emotion Lab

Explore the parts of your brain with the UW Child Emotion Lab! Make a model of your brain out of air-dry clay that you can take home with you.

LASER STATION!
Graduate Women in Science (GWIS)

We showcase the science behind lasers and light!

DC SMITH GREENHOUSE | DC SMITH GREENHOUSE | 10:00 AM - 2:00 PM
College of Agricultural and Life Sciences

Explore the world of plants and the DC Smith Greenhouse and Conservatory. Hands-on activities and demonstrations of plant science.

CAN YOU BELIEVE YOUR EYES?
McPherson Eye Research Institute

The experience of visual illusions may occur when perception differs from reality, when the brain may be “tricked” into interpreting the data provided by the eye in ways that are not “true.” This exploration station examines physiological illusions and cognitive illusions to help visitors learn about visual perception and the brain.

Saturday Exploration Stations are at The Discovery Building 10:00 AM - 2:00 PM
WHAT DO PIXAR MOVIES AND AUTONOMOUS VEHICLES HAVE IN COMMON? (THEY BOTH USE COMPUTER SIMULATION!)
Simulation Based Engineering Lab (SBEL)

Ever wondered how autonomous vehicle models are tested before you see them on the road? How we know buildings won’t collapse during a landslide? How a robotic eel can learn to wiggle itself through water? The Simulation Based Engineering Lab (SBEL) works to answer these questions and more with advanced computers and graphical simulations. We focus on how computers can accurately describe the behavior of real-world physics. Come see videos and demonstrations of how we use computers to solve complex real world problems that range from particle simulation to fluid flow to traffic modelling.

BE WISE, SHADE YOUR EYES
McPherson Eye Research Institute

This exploration station educates visitors about damaging ultraviolet light, which is beyond the visible light spectrum, and promotes use of sunglasses to combat ultraviolet light exposure in the eye. Complementary bookmarks display the Ultraviolet Light Index and have the URL of the online Ultraviolet Light Index Forecast. Visitors will receive a few ultraviolet-light-detecting beads, and will see how the beads produce color when lighted by a UV-emitting-flashlight.

BOTANY GARDEN AND GREENHOUSE | BIRGE HALL
GREENHOUSES | MORNING
Department of Botany

This 8,000 square foot growth space and 1.3 acre of land houses the Department of Botany’s extensive collection of more than 1,500 unique species of plants and 210 plant families. Come and visit each of the 8 greenhouse rooms that take you through a journey of the tropics, desert, bog, and fern forest. This collection of aquatics, succulents, bryophytes, ferns, orchids, herbs, and woody plants are used for teaching general botany, systematics, taxonomy, plant ecology, and plant anatomy to name a few. These houses also provide a space for the students and faculty of the Department of Botany to carry out research on a diverse array of species with extensive morphological variation. The Botany Greenhouses and Garden become an integral part of the student’s experience here on campus, as well as provide public tours throughout the year.

Weather permitting, the Botany Garden is just a small walk down the hill (also reachable by University and Mills) where our collection continues and showcases over 100 different plant families.

Saturday Exploration Stations are at The Discovery Building 10:00 AM - 2:00 PM
HAVE FUN WITH THE INFECTION PREVENTIONISTS ON HOW TO AVOID GETTING SICK FROM GERMS BY HAVING CLEAN HANDS
Association for Professionals in Infection Control and Epidemiology (APIC), Badger APIC Chapter Infection Preventionists

Association for Professionals in Infection Control and Epidemiology (APIC), Badger APIC Chapter is partnering with UW Health to educate the community on how to practice proper hand hygiene to avoid getting and spreading germs to family, friends, and others in the community. We will provide hands-on activities that shows how easily germs can transfer from hands to surfaces by using glow powder. Then we will give free hand-sanitizer products to educate visitors on how to clean their hands effectively. Importantly, visitors can learn how infection preventionists in healthcare organizations work to control and prevent infectious diseases.

CHASING THE GHOST PARTICLE | BIOTECHNOLOGY CENTER AUDITORIUM
Wisconsin IceCube Particle Astrophysics Center

Deep in the ice at the heart of Antarctica, IceCube, the biggest and strangest detector in the world waits for mysterious messengers from the cosmos. Scientists are using tiny and elusive particles called neutrinos to explore the most extreme places in the universe. These ghostly neutrinos give us an exclusive way to study powerful cosmic engines like exploding stars and black holes. In this 30-minute show, stunning simulations of the most energetic places in our universe, and the galaxies around us, are the prelude to a thrilling journey inside IceCube, looking for traces of neutrino collisions in the ice. From one of the most remote locations on Earth to the unexplored regions of the cosmos, Chasing the Ghost Particle: From the South Pole to the Edge of the Universe will take you on a journey you won’t forget. Following the film, your journey continues with an interactive tour of the universe in the planetarium. No advanced tickets required.

UW GEOLOGY MUSEUM | WEEKS HALL | 9:00 AM - 4:00 PM
UW Madison Geology Museum

Explore the Geology Museum and take a peek into Wisconsin’s deep history! On your visit you can touch rocks from a time when there were volcanoes in Wisconsin; see corals, jellyfish and other sea creatures that used to live and swim where we now walk; and stand under the tusks of a mastodon while imagining yourself in the Ice Age. Also on display at the Geology Museum are rocks and minerals that glow, a model of a Wisconsin cave, dinosaurs and meteorites. Our mineral, rock and fossil collections have the power to educate and inspire visitors of all ages. Come see for yourself!
**SATURDAY, APRIL 4, 2020**

**WISCONSIN SCIENCE MUSEUM – SCIENCE DEMONSTRATIONS, ACTIVITIES AND DISPLAYS**
Wisconsin Science Museum

Demonstrations, activities and displays about light and energy.

**CURRIE LAB (BACTERIOLOGY): LEAFCUTTER ANT DISPLAY COLONY | MICROBIAL SCIENCES BUILDING | 10:00 AM - 3:30 PM**
Department of Bacteriology

Come visit the Leafcutter Ant Display at the Microbial Sciences Building and learn about the amazing way these ants work together with their microbial partners to survive.

**HOW CAN SPOTTING THE DIFFERENCE SAVE LIVES?**
UW-Madison Cytotechnology Program, Wisconsin State Lab of Hygiene

Our station would have two major parts: A hands-on component and a computer-based component. For the hands-on component, we will prepare a craft illustrating the difference between normal and cancer cells. For the computer-based component, participants will view virtual versions of glass microscope slides.

**WHEN YOU SAY WISCRANSIN**
USDA / UW Department of Horticulture

Did you know Wisconsin is the largest producer of cranberries in the United States and the world? Using genomic science, we aim to keep Wisconsin #1 and make this amazing fruit even better for future generations. Have you ever seen DNA? At our station you can extract the DNA from cranberries and even take it home with you! Also, come take our taste test to see if real cranberry juice tastes how you think it does!

**THE SCIENCE OF CHOCOLATE**
Food Science Club

Displaying the science of chocolate and composition of ingredients that go into everyone's favorite sweet!

Saturday Exploration Stations are at The Discovery Building 10:00 AM - 2:00 PM
INSECT AMBASSADORS
Entomology Department - Entomology Graduate Student Association

Insect Ambassadors has cases of local and tropical specimens of many types of insects, as well as a small microscope for close examination of specimens and living ambassadors including Madagascar hissing cockroaches and Stick insects.

FUN WITH BRAINS!
Waismann Center

Join the Educational Neuroscience Lab from UW-Madison for some brainy fun! Learn more about how your brain works with demonstrations using real brains, games, and make-your-own brain hats!

L. R. INGERSOLL PHYSICS MUSEUM | 1150 UNIVERSITY AVE., CHAMBERLIN HALL, ROOM 2130 | 9:00 AM - 4:00 PM
Physics Department

The Ingersoll Physics Museum is free to public and runs on donations. Our exhibits give our guests a hands-on experience of physical concepts ranging from mechanics to modern physics in a demonstrational kid-friendly environment. Our 1500sf museum consists of over 65 exhibits with some rotating in and out each year. In conjunction to our museum, you can find photos of the Nobel Prize Winners in Physics from 1901-1993, as well as many historical instruments on display along the corridors of Chamberlin Hall.

TOUR ALDO LEOPOLD ARCHIVES | UNIVERSITY OF WISCONSIN ARCHIVES, 425 STEENBOCK LIBRARY, 550 BABCOCK | 1:00 AM - 3:30 PM
University of Wisconsin Archives

The Aldo Leopold Archives house a remarkable collection of documents and artifacts that trace the life and career of the UW professor who is rightly considered to be one of the most important individuals in the history of conservation. The session will focus on his pioneering research and how it continues to inform environmental science today.

Saturday Exploration Stations are at The Discovery Building 10:00 AM - 2:00 PM
WHAT HAPPENS WHEN I E-CYCLE MY OLD ELECTRONICS?
Wisconsin DNR

We will have information on what people can do with their old electronics, what happens when electronics are recycled, and information about battery safety. We’ll have a children’s game and handouts.

UW MADISON DAIRY CATTLE CENTER | 1815 LINDEN DR | 9:00 AM - 3:00 PM
UW Madison DCC

Guided tours go out at the top of every hour. Come meet and learn about the girls behind Wisconsin’s Dairyland. This 45 min guided tour through the Dairy Cattle Center will give participants the chance to learn more about the Wisconsin Dairy Industry, learn about the cows and the people that are at the heart of the farm. Also learn about other research and learning opportunities held here on the UW Madison campus.

EXPLORE AN OUTDOOR LEARNING CENTER | UPHAM WOODS OUTDOOR LEARNING CENTER, N194 COUNTY RD N, WISCONSIN DELLS, WI 53965 - CHECK IN AT THE WELCOME CENTER | 10:00 AM - 2:00 PM

This is a great opportunity to explore and tour the beautiful Upham Woods Outdoor Learning Center. Visit us to hike on one of our mainland trails near the WI River and even get the chance to meet some of our education animals!
**SUNDAY, APRIL 4, 2020**

**ORCHARDS (OREGON CHILD ABSENTEEISM DUE TO RESPIRATORY DISEASE STUDY) | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM**

UW Department of Family Medicine and Community Health

ORCHARDS is a community-based influenza surveillance study aimed at detecting influenza in schools and surrounding communities early and effectively. At our station, you’ll get to try out our influenza rapid-testing machine, which can detect influenza in 15 minutes with a simple nasal swab using fluorescent immunoassay technology!

**DOCTORS OUGHT TO CARE | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM**

UW School of Medicine and Public Health - Doctors Ought to Care

Come see, touch, and learn about real human organs!

**BREAKING DOWN BACTERIAL WALLS | RENNEBOHM HALL | 12:00 - 4:00 PM**

Division of Pharmaceutical Sciences

Bacterial cells are surrounded and protected by a cell envelope, which is vital for their survival and infection, which makes it a good target for antibiotics. However, some infectious bacteria have become resistant to all known antibiotics, which is a rising global health concern. Our station involves putting together models of the bacterial cell envelope, a barrier that prevents antibiotics from entering and killing the bacteria. Those models provide a visual aid to show how we can look for weaknesses in the cell envelope so that the antibiotics can work better.

*School of Pharmacy faculty, staff & students only

**WSPS ORGAN DONATION AWARENESS | RENNEBOHM HALL | 12:00 - 4:00 PM**

WSPS, School of Pharmacy

The Wisconsin Society of Pharmacy Students Organ Donation Awareness Operation focuses on raising awareness of both solid organ and bone marrow donation. Join us to learn more about the science behind organ donation through fun, interactive activities.

*School of Pharmacy faculty, staff & students only
SUNDAY, APRIL 4, 2020

GENERATION RX | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM
WSPS, School of Pharmacy

Generation Rx; an operation in WSPS that focuses on safe medication practices and preventing the misuse and abuse of Rx medications.
*School of Pharmacy faculty, staff & students only

EXPLORATION STATIONS AT THE LAKESHORE NATURE PRESERVE | THE PICNIC POINT ENTRANCE TO THE PRESERVE, AT 2000 UNIVERSITY BAY DRIVE | 2:00 - 3:30 PM
Friends of the Lakeshore Nature Preserve

At the Stone Wall, Emeritus Geology Professor Dave Mickelson will introduce visitors to the origins and kinds of rocks in the stone wall. Just inside the entrance, at the Tree Station, naturalists Diane Dempsey and Stephanie Wilbrand will help visitors identify leafless trees and calculate tree age. On the hillside beyond them, a Birding Station will be hosted by the dynamic birder, Paul Noeldner. Guests will be provided with binoculars and a spotting scope to look into the spring sky and across the lake, and strategies for identifying birds. At each station, children can engage in related activities. At the entrance to the Lakeshore Nature Preserve’s Picnic Point, near the stone wall, friendly guides will give each person a booklet that contains a map of Picnic Point, with our three exploration stations indicated on it. The booklet also contains activities and challenges related to those three stations. Free parking is available in UW Lot 130 (2003 University Bay Drive, Madison, WI 53706).

OPERATION IMMUNIZATION | RENNEBOHM HALL | 12:00 - 4:00 PM
WSPS, School of Pharmacy

Come explore the world of viruses, bacteria and how to protect yourself from them with Operation Immunization! We will provide education on the importance of vaccines, how they work, and which bugs we can protect against.
*School of Pharmacy faculty, staff & students only

OPERATION HEART - WSPS | RENNEBOHM HALL | 12:00 - 4:00 PM
WSPS, School of Pharmacy

Operation Heart provides a children’s matching game where kids have to determine if something is heart healthy or not. After playing the game the kids get a chance to listen to their heart beat with a stethoscope.
*School of Pharmacy faculty, staff & students only
5-4-3-2-1-0 LIFTOFF TO A HEALTHY LIFESTYLE! | SIGNE SKOTT COOPER HALL | 12:00 - 4:00 PM
UW-Madison School of Nursing

5-4-3-2-1 Liftoff to a Healthy Lifestyle! This Exploration Station centers around the 5-2-1-0 Pediatric Obesity Prevention model promoted by the American Academy of Pediatrics. It incorporates various lessons that focus on ways to maintain a healthy lifestyle, including creating healthy eating habits by eating 5 fruits and vegetables each day, limiting screen time to less than 2 hours per day, and consuming 0 sugar-sweetened beverages. Activities will include creating the participants’ own “healthy plate” by choosing from various food items, a guessing game to determine which beverages contain the highest content of sugar, and an activity that allows each participant to measure their own heart rate after engaging in a fun physical activity. This station aims to make the journey to improving your health easy and fun!
*Exploration Stations for School of Nursing faculty, staff and students only

THERAPEUTIC ORIGAMI | SIGNE SKOTT COOPER HALL | 12:00 - 4:00 PM
School of Nursing

ORIGAMI’s science was used to create many cutting edge technologies such as space arrays, Origami stents, Origami DNA models, foldable telescopic lenses, airbags in cars etc.

ORIGAMI is also therapeutic and educational. We can learn mathematics, geometry and more. Let’s have fun making ORIGAMI!
*Exploration Stations for School of Nursing faculty, staff and students only

OPERATION AIRWAYS | RENNEBOHM HALL | 12:00 - 4:00 PM
WSPS, School of Pharmacy

Will be interacting with children to teach them about lung health by playing games with them and showing them lung models.
*School of Pharmacy faculty, staff & students only

BE WISE; IMMUNIZE! | SIGNE SKOTT COOPER HALL | 12:00 - 4:00 PM
School of Nursing

An interactive station to engage children of all ages in the science behind vaccinations, from learning facts about the spreading of germs to what to expect when getting vaccinated! Children will learn how successfully wash hands, ridding themselves of glow germs, play with a buzzy bee and see how it helps numb the pain with vaccinations, and painting with syringes. All topped with vaccination information and schedules for parents!
*Exploration Stations for School of Nursing faculty, staff and students only
**EXERCISE AND THE BRAIN | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM**
Wisconsin Alzheimer’s Disease Research Center

Come get moving and learn why exercise is one of the brain’s best friends! Have fun showing off your memory and thinking skills while you blast through activities that’ll get your heart pumping. Then, find out what scientists at UW-Madison are doing to discover how the brain changes as people grow up.

**COLOR ME TOXICOLOGY | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM**
Molecular and Environmental Toxicology (MET)

This will be a hands on activity related to toxicology. In the past we have had the white carnations turn different colors with food dye. We will do an updated version of this!

**WHICH MICROBE ARE YOU? A PERSONALITY QUIZ | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM**
UW-Madison

Learn what a microbe is and take a short personality quiz all about microbes found on and around switchgrass. Vote for the most popular microbe!

**INSPECT YOUR INSIDES AND HEAR YOUR HEART! | SIGNE SKOTT COOPER HALL | 12:00 - 4:00 PM**
School of Nursing

Come take a listen and get a behind the scenes peek of the organs in your body and how you can tell if they’re healthy- hear your heart, inspect your insides and learn a lot!  
* Exploration Stations for School of Nursing faculty, staff and students only

**PROTECT YOUR BRAIN...IT’S THE ONLY ONE YOU’LL EVER HAVE! | SIGNE SKOTT COOPER HALL | 12:00 - 4:00 PM**
School of Nursing

This station will meet the following goals:  
1. Raise brain safety awareness across all pediatric age groups as it applies to sports, fitness, and recreation.  
2. Provide interactive hands-on activities to learn and explore  
*Exploration Stations for School of Nursing faculty, staff and students only
### MED DROP OF SAFE COMMUNITIES | RENNEBOHM HALL | 12:00 - 4:00 PM
Wisconsin Society of Pharmacy Students

Stop by our booth to learn more about how to dispose of unwanted/unused/expired medications in the home! Kids can come by to play fun interactive games about the importance of safe medication use and disposal. Prizes included as well!  
*School of Pharmacy faculty, staff & students only

### OPERATION DIABETES | RENNEBOHM HALL | 12:00 - 4:00 PM
Wisconsin Society of Pharmacy Students

We will have hands on activity for children to count carbohydrates, learn the amounts of sugar in typical beverages, and learn more about diabetes and eating healthy.  
*School of Pharmacy faculty, staff & students only

### MINDFUL MOVEMENT | SIGNE SKOTT COOPER HALL | 12:00 - 4:00 PM
School of Nursing

Mindful Movement: Learn how to use movement and your mind to regulate emotions and handle big feelings.  
*Exploration Stations for School of Nursing faculty, staff and students only

### BLOW YOUR STRESS AWAY! | SIGNE SKOTT COOPER HALL | 12:00 - 4:00 PM
School of Nursing

Come learn about stress in your body! What does stress do? Is stress good or bad for us? How can we manage our stress? Learn helpful tips and tricks that we can all use to keep our bodies healthy and keep stress away!  
*Exploration Stations for School of Nursing faculty, staff and students only

### LET’S BREATHE | SIGNE SKOTT COOPER HALL | 12:00 - 4:00 PM
School of Nursing

We will explore the lungs and how they work!  
*Exploration Stations for School of Nursing faculty, staff and students only
**SUNDAY, APRIL 4, 2020**

**UW SON SIMULATION LAB: EXPLORING NURSING | SIGN SKOTT COOPER HALL, 2ND FLOOR | 12:00 - 4:00 PM**

School of Nursing

Come explore what the UW School of Nursing simulation lab offers students! Take a brief guided walking tour or stay for a hands-on activity with staff.

*Exploration Stations for School of Nursing faculty, staff and students only

**BOUNCY BALL/SLIME EXPERIMENT | RENNEBOHM HALL | 12:00 - 4:00 PM**

School of Pharmacy

From making plastic bottles to DVDs, polymers are part of our daily lives. Polymers are a chain of chemical subunits linked together. In this activity, you will explore the properties of polymers by playing with bouncy balls/slimes and even making your own! Join us as we dive into the world of chemistry and learn more about polymers.

*School of Pharmacy faculty, staff & students only

**MEDSMART - PLAY TO LEARN | RENNEBOHM HALL ATRIUM | 10:00 AM - 3:30 PM**

CRoME Lab: Collaborative Research On MEdication use & family health

Our team focus on conducting pediatric health services research on medication safety through game-based learning. At our exploration station we hope to provide medication education through a fun, interactive experience.

*School of Pharmacy faculty, staff & students only

**MAPPING ANTIBIOTIC RESISTANCE IN WISCONSIN | RENNEBOHM HALL | 12:00 - 4:00 PM**

School of Pharmacy

Explore an interactive map of antibiotic resistance in Wisconsin. Create friendly microbes. Learn about antibiotics and what drives antibiotic resistance.

*School of Pharmacy faculty, staff & students only

**THE SCIENCE & HISTORY OF SODA FOUNTAINS | RENNEBOHM HALL | 12:00 - 4:00 PM**

School of Pharmacy

This exhibit provides a fun overview of the scientific history of soda fountains in pharmacy.

*School of Pharmacy faculty, staff & students only
WHY STUDY FRUIT FLIES? | RENNEBOHM HALL | 12:00 - 4:00 PM
Pharmaceutical Sciences Division

Our exploration station introduces the public to the principles of genetic model organism research and basic genetics using hands-on activities with the fruit fly, Drosophila melanogaster. Students are introduced to the many genetic tools in the fruit fly as they build their own paper fly that they can take home with them. The students customize their fly by choosing specific traits that can be modified in a real organism, such as eye color, wing shape, and bristle type. Students also learn about the difference between genotype, or the genetic sequence, and phenotype, or the externally visible trait. They can then observe real, living fruit flies under a microscope, allowing them to see what their paper fly would look like as an actual organism. Altogether, this exploration station introduces both students and adults to the power and importance of genetic model organism research.

COMPOUNDING MEDICATIONS & STERILE PRODUCTS | RENNEBOHM HALL | 12:00 - 4:00 PM
School of Pharmacy

Learn how to make capsules and gummie medications. Observe Sterile Product Preparation

MEDICAL PHYSICS AND RADIATION | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM
Medical Physics

Medical Physics seeks to support and further the medical field by studying and developing medical devices and tools concerned with medical imaging, radiation therapy, and nuclear medicine. This exploration station allows visitors to work with a small ultrasound machine used for imaging, a Geiger-Muller counter used for detecting radiation, and a hands-on radiation treatment planning activity.

BRAINS! | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM
Neuroscience Training Program

Hands on interaction with human brains; activities to learn about the nervous system
**DNA - THE RECIPE FOR YOU | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM**

Center for Human Genomics and Precision Medicine

Just like a recipe is the instructions for a chocolate chip cookie, your DNA is the instructions for you! Come see what your DNA instructions say by making a trait bracelet! Participants will make their trait bracelet by answering questions about various traits they have (Do you have brown eyes, Can you curl your tongue) and picking the bead based on your answer. After you have completed your bracelet you can compare it to your siblings, parents, and friends to see which traits you share and which ones are different.

**MODEL ORGANISMS | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM**

SACNAS

For our table: We will explain that model organism are used in many science experiments, that all model organisms have DNA made up of A T C and G, and then help kids make DNA bracelets using different colored beads representing A T C and G.

**ELECTRIC EARS & HOW WE HEAR | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM**

Binaural Hearing and Speech Lab

Learn how science and hearing go together, then listen to demos of hearing loss and electric hearing. This hands-on exhibit will demonstrate how the sense of hearing works; from the development of cells that form the inner ear to the electrical impulses that the brain “hears.”

**YOU BELONG AT UW-MADISON. WE’LL HELP YOU GET THERE. | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM**

The Office of Student Financial Aid

The Office of Student Financial Aid is excited to share the powerful force of compound interest and information on how to access higher education. Pro Tip: There’s candy, basketball, and a spinning wheel involved- you won’t want to miss it!

**HOW CAN WE BUILD A 5 CENT BATTERY? | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM**

UW-Madison Chemistry Department

Participants will learn about the basic components of a battery (two metals + conductive solution) by building batteries from lemons and pennies to make an LED light up.
WHAT MAKES PROTEINS FOLD? | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM
UW-Madison Chemistry Department

Come learn why protein folding is vital for life and human health and what makes proteins fold and unfold. At this station, participants will start with a solution containing the protein bovine serum albumin (BSA) and the small molecule ANS. This solution shows blue fluorescence when BSA is folded but no fluorescence when the protein is unfolded. Then, participants will add the base NaOH and the acid HCl to the solution and watch how the fluorescence changes to learn how pH affects protein folding.

THE MAGIC OF MILK | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM
Department of Dairy Science

The Magic of Milk will cover how cows make milk, the benefits milk can provide to the body and describe how milk travels from farm to table. Participants can view an udder model showing the anatomy of the mammary gland and look under microscopes to see the cells that produce milk.

CLINICAL SIMULATION PROGRAM TOUR | HEALTH SCIENCES LEARNING CENTER, CSC H6/1 | 12:00 - 2:00 PM
Clinical Simulation Program

Three 40 minute tours of the Clinical Simulation Program

HOW WE PERCEIVE COLOR | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM
McPherson Eye Research Institute

How does color vision work? What do people who are “color blind” see? Do a simple test to find out whether you are color blind. Learn how context can affect color perception—making different colors look alike, and identical colors look different.

HOW CAN SPOTTING THE DIFFERENCE SAVE LIVES? | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM
UW-Madison Cytotechnology Program, Wisconsin State Lab of Hygiene

Our station would have two major parts: A hands-on component and a computer-based component. For the hands-on component, we will prepare a craft illustrating the difference between normal and cancer cells. For the computer-based component, participants will view virtual versions of glass microscope slides (with assistance from our staff)
INSECT AMBASSADORS | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM
Entomology Department - Entomology Graduate Student Association

Insect Ambassadors has cases of local and tropical specimens of many types of insects, as well as a small microscope for close examination of specimens and living ambassadors including Madagascar hissing cockroaches and Stick insects.

THE POWERFUL HEART | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM
UW-Madison PALMA

We will be presenting a station on the function of the heart and development of the cardiac system.

COMPOUNDING MEDICATIONS & STERILE PRODUCTS | RENNEBOHM HALL | 12:00 - 4:00 PM
School of Pharmacy

Learn how to make capsules and gummie medications. Observe Sterile Product Preparation. 
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EBLING LIBRARY HAS THE ANSWERS (AND THE SKELETON) | HEALTH SCIENCES LEARNING CENTER | 12:00 - 4:00 PM
Ebling Library for the Health Sciences, part of the School of Medicine & Public Health

Graduate students from the Ebling Library (3rd floor of the Health Sciences Learning Center) will be sitting at a table with a laptop, able to show visitors how to find authoritative information regarding health concerns. They can show PubMed, authoritative drug information, etc. They will also oversee the velcro Skeleton “puzzle,” something the visiting children LOVE to put together. There will likely be public health information from the NLM, CDC, etc. AND, I will be there, taking photos, as usual, and guiding people to the historical exhibition on the 3rd floor, Staggering Losses: WWI & the Influenza Pandemic of 1918, which has been extended through April 5th, due to popular demand!

DELIVERING MEDICINE | RENNEBOHM HALL | 12:00 - 4:00 PM
School of Pharmacy, Hong Lab

This exhibit uses gelatin to show how medicine works in the body. The food coloring in the gelatin represents the medicine in your pills / vitamins. By looking at the food coloring leave the gelatin, we can imagine how medicine dissolves in our stomachs. Do you think it’s faster or slower if you chew it up? Stop by to find out, and get your own jello to go!
TOUR ALDO LEOPOLD ARCHIVES | UNIVERSITY OF WISCONSIN ARCHIVES, 425 STEENBOCK LIBRARY, 550 BABCOCK | 1:30 - 3:00 PM
University of Wisconsin Archives

The Aldo Leopold Archives house a remarkable collection of documents and artifacts that trace the life and career of the UW professor who is rightly considered to be one of the most important individuals in the history of conservation. The session will focus on his pioneering research and how it continues to inform environmental science today.

UW MADISON DAIRY CATTLE CENTER | 1815 LINDEN DR | 9:00 AM - 3:00 PM
UW Madison DCC

Guided tours go out at the top of every hour. Come meet and learn about the girls behind Wisconsin’s Dairyland. This 45-min guided tour through the Dairy Cattle Center will give participants the chance to learn more about the Wisconsin Dairy Industry, learn about the cows and the people that are at the heart of the farm. Also learn about other research and learning opportunities held here on the UW Madison campus.