12th Annual
MEMBERS’ NIGHT

Friday, October 18, 2019

The Academy of Natural Sciences of Drexel University
Welcome to the 12th annual Members' Night!

Dear Academy members,

When you are enjoying a visit to the Academy on any other day of the year, you might forget that within this very building there are more than 100 scientists and students conducting groundbreaking research. Our experts care for our collections, investigate the ways in which the earth is changing, educate the public on important issues and much more. And tonight, you have the unique opportunity to meet them.

At Members’ Night, we unlock the doors to our “behind the scenes” areas, giving members exclusive access to our entire building. In addition to enjoying the signature galleries you know and love, we invite you to explore our research labs with our scientists, study our collections with our curators, perform experiments with our researchers, clean fossils with our paleontologists and ask all the questions you’d like along the way.

You will also meet our educators and exhibits staff who, with your support, have put together a wonderful slate of exhibits and programs this year. Tonight, after you’ve explored Pangea in Dinosaurs Around the World, venture to the Exhibits Fabrication Shop on Level 5 to witness an animatronic dinosaur dissection! And don’t forget to greet our live animals (educators in their own right) on Level 1.

You have made an incredible impact with your membership this year. Thank you for being a champion of the natural world and for making our research, exhibits and public programs possible. We could not do what we do without your generosity.

I look forward to greeting you in person tonight.

Sincerely,

Scott Cooper, PhD
President & CEO
We’ll be taking pictures tonight!
We will be taking photographs at Members’ Night, and images may be used in Academy promotional materials. Please let our photographers know if you do not want your photograph to be taken. Thank you!

Maps
The light blue and navy blue areas on the following maps illustrate the locations of Members’ Night activities on each level.

Helpful Hint
To avoid crowds, try starting on the upper levels and working your way down.

Elevators
The elevators do not go to every level. They are color coded to help you find your way. Elevator operators are happy to assist you, and informative elevator routes are available at each information desk.

NAVIGATION TIPS

EXPERIENCE ACADEMY SCIENCE HANDS-ON!
Academy Café
Open until 9 p.m. Members receive a 10 percent discount. Extra seating is available in the Commons. Restrooms and stroller parking are located on this level.

Dino Discoveries
Visit Dinosaur Hall and find out what Academy members dug up in Montana and Wyoming this summer. Help our staff surface clean the fossils!

Crypto Critters
Can you find all of the camouflaged creatures in our tank of Crypto Critters? Play this game to test your skills!

Dinosaurs Around the World
Embark on a globetrotting expedition around Pangea, where dinosaurs reign throughout the land. Complete a passport along the way to earn a small prize at the Admissions Desks.

Ocean Acidification and Marine Snails
Ocean acidification is impacting the shells of marine snails. Take a look at dissolving shell specimens, watch a demonstration and meet the scientists who research this important issue.

Night Skies at the Academy
The Academy is bringing the starry sky indoors. Make constellation crafts, take home your own star wheel and meet our nocturnal animals.

Live Animal Encounters
Be on the lookout for live animal encounters throughout the evening on Level 1.

Exploration of Vertebrate Diversity in 3D
Use CT scans to look inside specimens and learn about the oVert project funded by NSF.

Fish Finds
Take a look at some of the local fish the Academy’s fisheries team discovered this summer.

Ichthyology
noun
the branch of zoology dealing with fishes. Derived from the Greek word *ikthys* meaning "fish."
Check Out Our Mussels
Meet and touch live freshwater mussels and explore shell specimens from the Academy’s collection.

Drexel Programs at the Academy
Learn how Drexel and the Academy work together to provide the BEES program for undergraduate students and the DESLA program for high school students.

Protect Clean Water
Learn how environmental policy, planning and innovation help protect the Delaware River Watershed and all our waterways.

Amazing Insects Telling Stories About Streams
Learn to read the story that aquatic insects tell about the quality of our water. Use microscopes to observe the bugs up close.

Wonderful Water Cycle
The water cycle is wonderful! Learn about this important process while making your own water cycle bracelet and observing demonstrations.

Environmental Chemistry
Explore the equipment Academy chemists use in the field.

DIY Library Adventure Book
Create your own Library adventure book to learn about this important part of the Academy.

Treasures From the Library and Archives
Examine unique finds from the Academy’s Library and Archive Collections, and learn what our librarians and archivists do.

Block Printing Extravaganza
Learn how block printing was used to create illustrations in some of our oldest books.

Ecology
noun
the branch of biology dealing with the relations of organisms to one another and to their physical surroundings.
Bug Appétit
Help prepare meals and feed our live invertebrates. Watch live feedings for our arachnids and centipedes.

The Microscopic Life of Aquatic Habitats
Discover the amazing diversity of micro- and macroscopic aquatic life in water samples from local habitats. How many species can you find?

Phycology noun \ the branch of botany dealing with algae. Derived from the greek word phykos meaning “seaweed.”

Complimentary cookies will be served in the BEES Classroom while supplies last.

Restrooms
1. **Butterfly and Moth Prep**
   Help Academy entomologists prepare butterflies and moths for collections.

2. **Insects & Popular Culture: Insects and Record Album Cover Art**
   Take a look at record album covers featuring insects alongside specimens from the Academy’s Entomology Collection.

3. **Insects and Fire**
   As fires become more frequent and intense globally, learn how they affect insect communities in the New Jersey Pine Barrens and what this can tell us about other fires around the world.

4. **Bird Specimen Preparation**
   See how our ornithologists prepare bird specimens and collect valuable biodiversity data for the museum’s scientific collections.

5. **Avian Parasites**
   Examine avian parasites up close with the scientists who investigate them.

6. **Assist the Molecular Lab**
   Work with our scientists to practice your pipetting skills, and view samples of our agarose gels and other equipment in the molecular lab.

7. **Bird Specimen Science**
   Explore the Academy’s world-renowned Ornithology Collection, and learn about our unique scientific research specimens.

8. **Terror at Port Kennedy Cave: A Haunted Cave Experience**
   Explore a haunted cave to learn about the ice age fossils of Port Kennedy Cave in Valley Forge. Fun for all ages.

9. **No Backbone Necessary**
   Examine specimens from the Academy’s Invertebrate Paleontology Collection — the oldest in North America! Learn more about the digitization process to make the collection available online.

10. **Beach Party**
    The ever-popular beach is back! Pick out and identify shells, and find one to add to your own collection.

11. **Weird Things in Jars**
    Discover creatures big and small, all weird and bizarre. Watch as Academy scientists dissect specimens on a big screen.

12. **Worms That Are Snails**
    Meet the subjects of Academy malacologists’ current research, including the Giant Shipworm.

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**Malacology**

*noun*

the branch of zoology dealing with mollusks.

Derived from the Greek *malakos* meaning “soft.”
Is That a Plant?
Can you identify which of the herbarium specimens are plants and which are imposters?

Digitizing a Herbarium
Learn how Drexel students are working with Academy collection managers to make our herbarium specimens available to the global research community.

Make Your Own Herbarium
Learn how 1.2 million specimens in the Academy’s herbarium are cared for, and prepare your own herbarium to take home!

Animatronic Dinosaur Dissection
Watch our exhibits team dissect the animatronic Albertosaurus and learn how it works.

Botany
noun
the branch of biology dealing with plants. Derived from the ancient Greek word *botane* meaning "pasture" or "grass."
Vote for your favorite activity!
Check the name of your favorite activity. Place your ballot in a box at either entrance. The team that wins your Members’ Choice Award gets a trophy to display in their office for the next year. We’ll announce the winning activity in the next member email!

### Level 1
- Crypto Critters
- Dino Discoveries
- Exploration of Vertebrate Diversity in 3D
- Fish Finds
- Night Skies at the Academy
- Ocean Acidification and Marine Snails

### Level 2
- Amazing Insects Telling Stories About Streams
- Block Printing Extravaganza
- Check Out Our Mussels
- DIY Library Adventure Book
- Drexel Programs at the Academy
- Enviromental Chemistry
- Protect Clean Water
- Treasures From the Library and Archives
- Wonderful Water Cycle

### Level 3
- Bug Appétit
- The Microscopic Life of Aquatic Habitats

### Level 4
- Assist the Molecular Lab
- Avian Parasites
- Beach Party
- Bird Specimen Preparation
- Bird Specimen Science
- Butterfly and Moth Prep
- Insects & Popular Culture: Insects and Record Album Cover Art
- Insects and Fire
- No Backbone Necessary
- Terror at Port Kennedy Cave: A Haunted Cave Experience
- Weird Things in Jars
- Worms That Are Snails

### Level 5
- Animatronic Dinosaur Dissection
- Digitizing a Herbarium
- Is That a Plant?
- Make Your Own Herbarium

### Other
- Other ____________________________

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