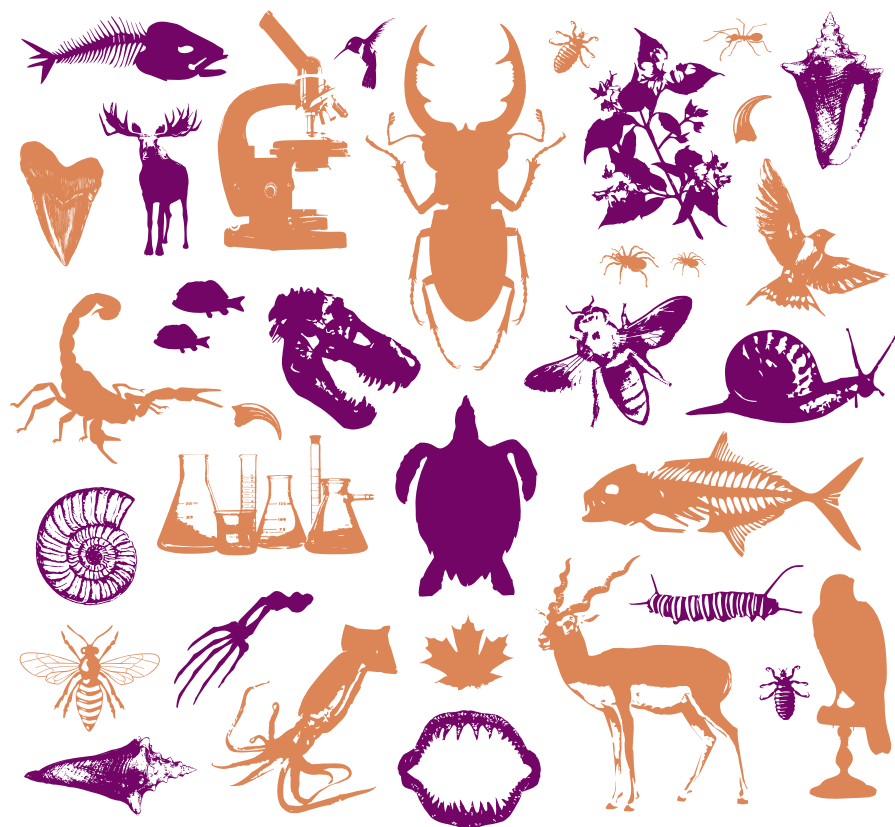


# MEMBERS' NIGHT



## PROGRAM

# 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





EXPERIENCE  
ACADEMY  
SCIENCE  
HANDS-ON!

## 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!



## NAVIGATION TIPS

### Maps

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

**LIGHT BLUE**  
areas indicate  
public areas of  
the museum.

**NAVY BLUE**  
areas are  
behind the  
scenes.

### 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.



**Orange (Butterfly)  
Elevator:**  
Ground Level-4



**Blue Elevator:**  
Level 1-5



**Green (Dinosaur)  
Elevator:**  
Level L-4



**Yellow Elevator:**  
Ground Level,  
1 and 5



# GROUND LEVEL



## 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.

## LEVEL 1

### A 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!

### B Auditorium Shows

Take a break from the action and watch videos about the Academy of Natural Sciences.

### C 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.

### D 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.

### E Crypto Critters

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

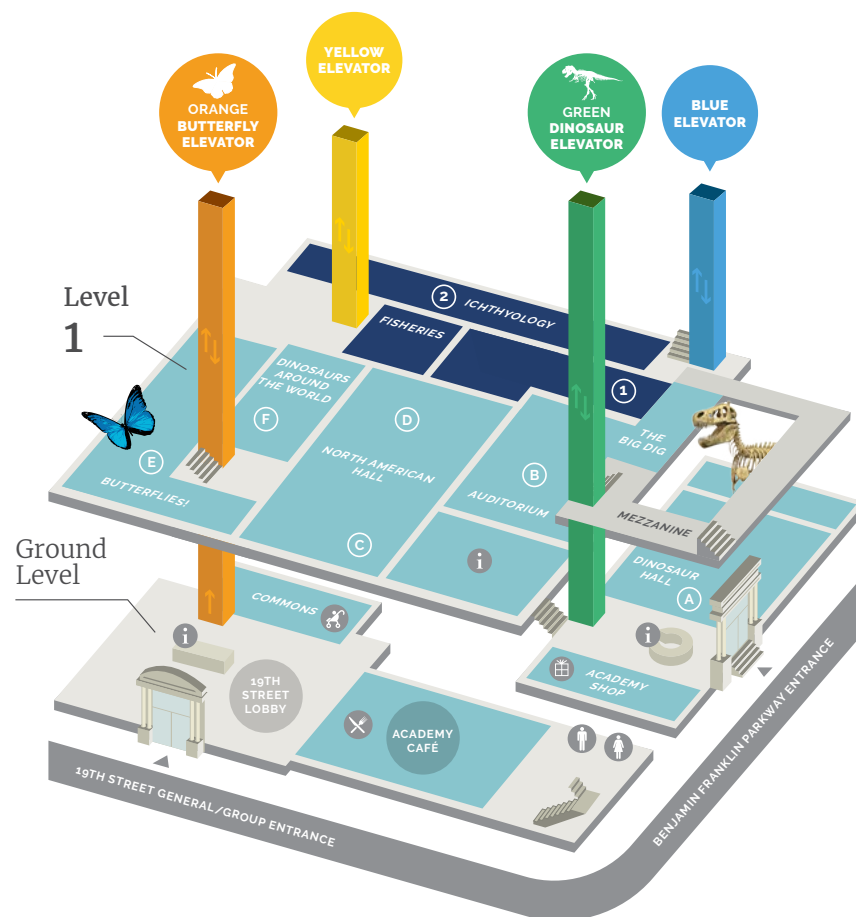
### F Dinosaurs Around the World

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.



### Live Animal Encounters

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



### 1 Exploration of Vertebrate Diversity in 3D

Use CT scans to look inside specimens and learn about the oVert project funded by NSF.

### 2 Fish Finds

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

### i Information Desk

### 🛍 Academy Shop

Open until 9 p.m. Members receive a 10 percent discount.

### 🍴 Food and Beverage

The Academy Café is open until 9 p.m. Members receive a 10 percent discount.

### 🚻 Restrooms

### 🛒 Stroller Parking

## Ichthyology

*noun* \ the branch of zoology dealing with fishes. Derived from the greek word *ikhthys* meaning "fish."

**A Check Out Our Mussels**  
Meet and touch live freshwater mussels and explore shell specimens from the Academy's collection.

**B 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.

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

**D 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.

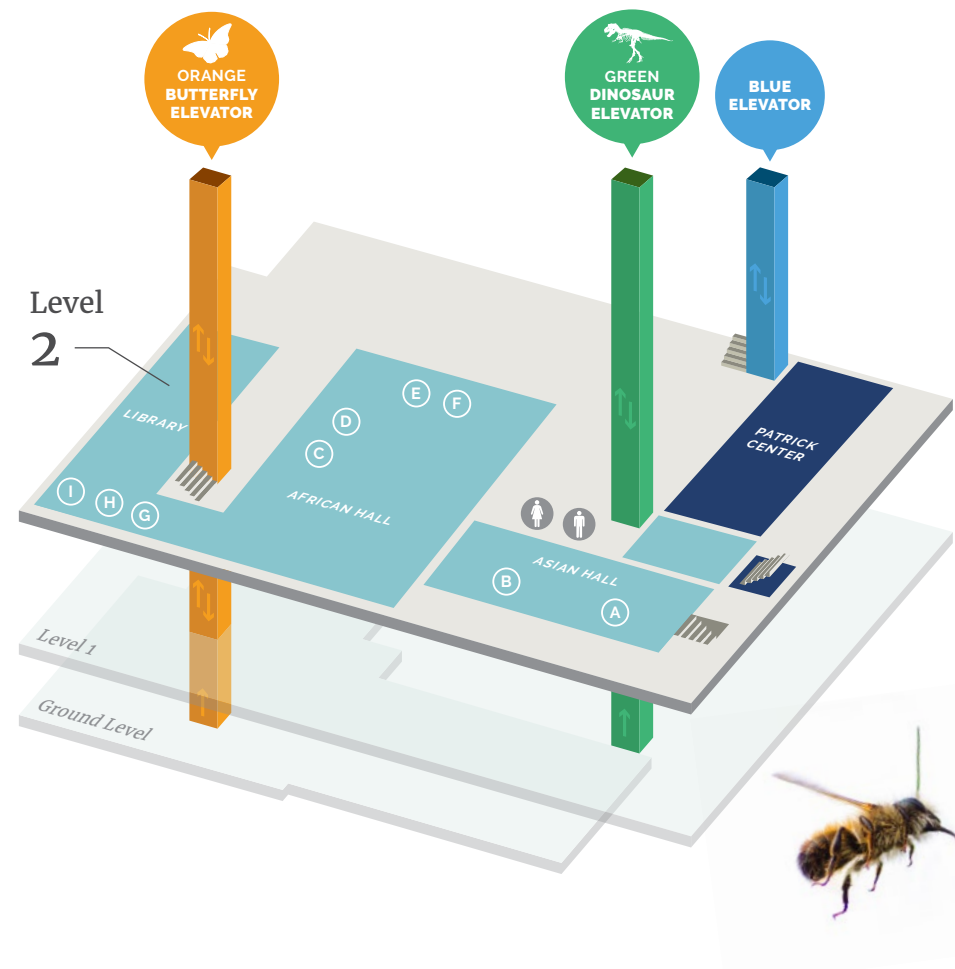
**E Wonderful Water Cycle**  
The water cycle is wonderful! Learn about this important process while making your own water cycle bracelet and observing demonstrations.

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

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

**H 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.

**I 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.



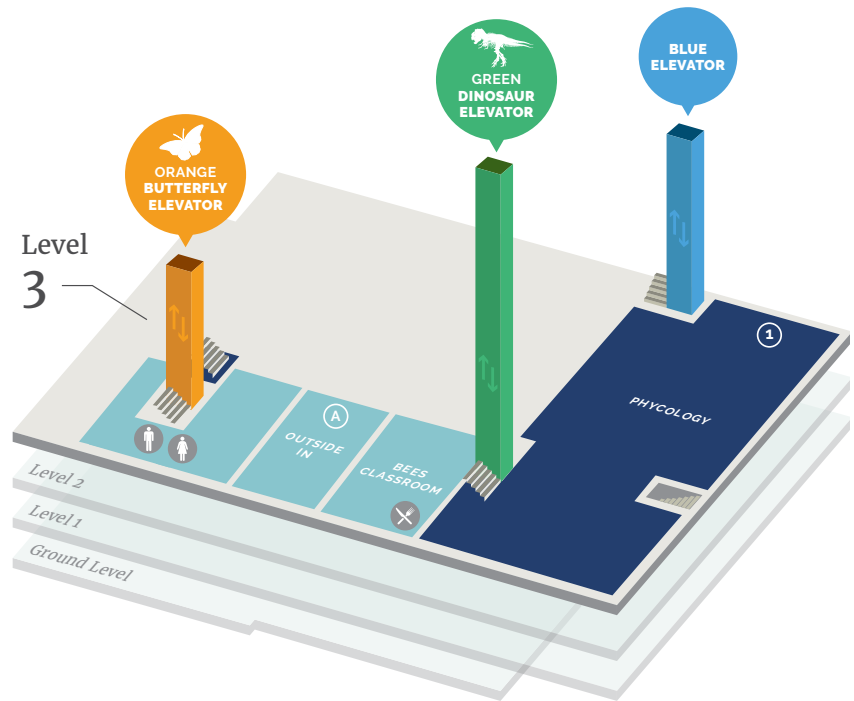




SEE THE  
SCIENCE  
BEHIND THE  
SCENES



## LEVEL 3



A

### Bug Appétit

Help prepare meals and feed our live invertebrates. Watch live feedings for our arachnids and centipedes.

✕

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

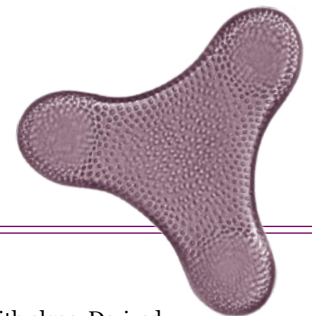
♂ ♀

### Restrooms

1

### 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."

# LEVEL 4

## 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

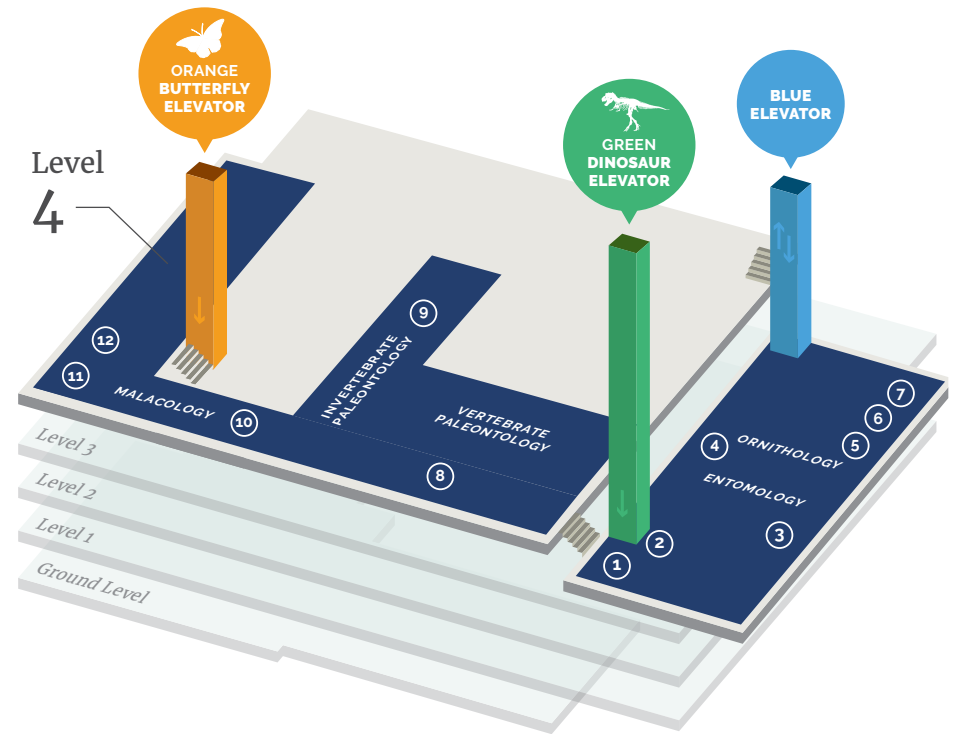
Work with our scientists to practice your pipetting skills, and view samples of our agarose gels and other equipment in the molecular lab.

## 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.

## 11 Weird Things in Jars

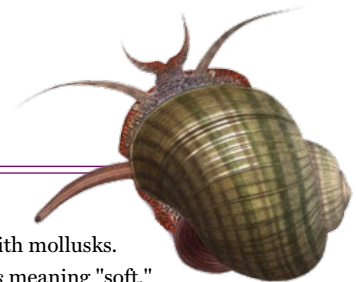
Discover creatures big and small, all weird and bizarre. Watch as Academy scientists dissect specimens on a big screen.

## 10 Beach Party

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

## 12 Worms That Are Snails

Meet the subjects of Academy malacologists' current research, including the Giant Shipworm.



## Malacology

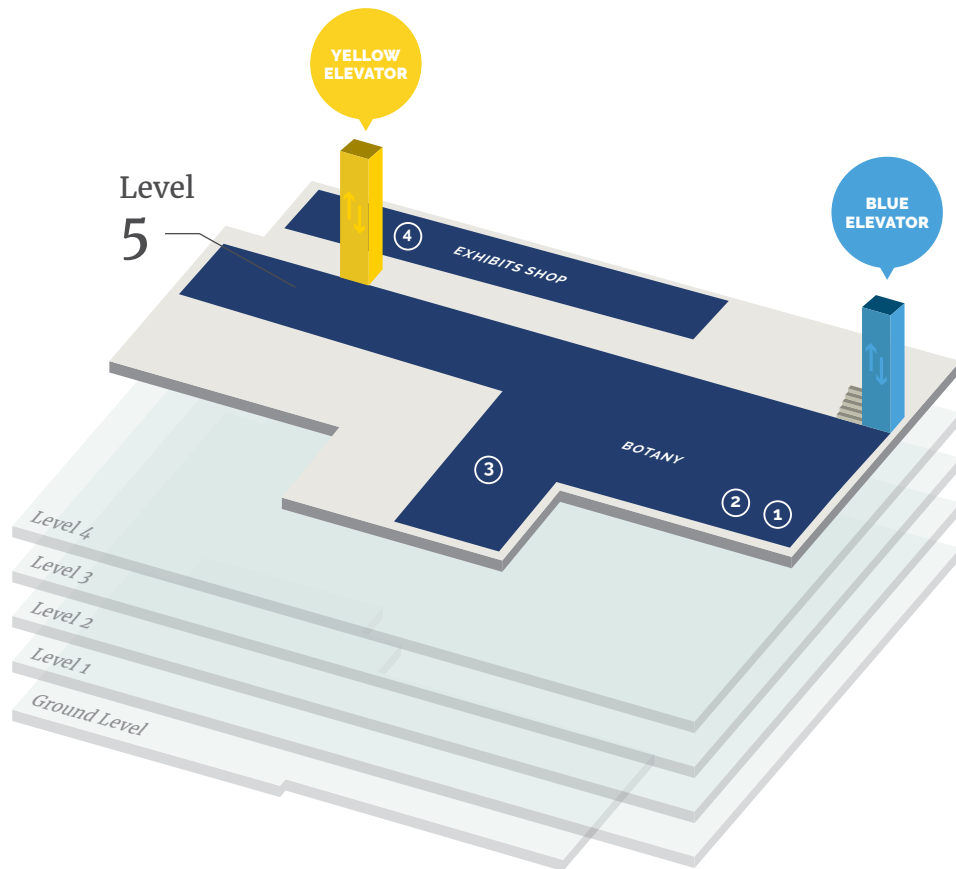
*noun* \ the branch of zoology dealing with mollusks. Derived from the greek *malakos* meaning "soft."

SEE  
TREASURES  
FROM THE  
COLLECTIONS





## LEVEL 5



### 1 Is That a Plant?

Can you identify which of the herbarium specimens are plants and which are imposters?

### 2 Digitizing a Herbarium

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

### 3 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!

### 4 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 *botanē* meaning "pasture" or "grass."





# 2019 Members' Choice Award

## 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
- ☐ Environmental 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 \_\_\_\_\_

Photo credits:

Five Five Collective for ANS

Mike Servedio/ANS

Dom Episcopo for ANS

J Fusco for ANS

12th Annual

# MEMBERS' NIGHT

Friday, October 18, 2019

Connect with us online!

@AcadNatSci

#ANSMembersNight



The Academy of  
Natural Sciences  
of DREXEL UNIVERSITY

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