

# 2022 HBVC Lab Descriptions

## **Clinical Examinations (Advanced)**

Instructors: Meghan Milbrath and Terry Ryan Kane

This is a live-hive laboratory where participants will work in small groups with the instructors to perform a complete clinical examination of a honey bee colony. It is recommended that participants have some fundamental knowledge about honey bee biology and beekeeping equipment as the focus will be on technical skills for working with colonies in practice.

### Honey Bee Anatomy

### Instructor: Zachary Huang

This workshop will examine the anatomy of honey bee workers to learn both form and function. Participants will learn about the anatomy, watch a demonstration of how to dissect an adult worker bee and then have the opportunity to dissect the bees themselves.

### Microscopy for diagnosing bacterial brood diseases

### Instructor: Peter Fowler

This hands-on workshop will introduce techniques to aid in the diagnosis of two bacterial brood diseases, American and European foulbrood, using equipment already common in many veterinary practices. Following a brief introduction to both diseases, participants will have the chance to prepare and evaluate slides from previously collected field samples containing both pathogens as well as examine previously prepared slides for reference.

Techniques covered will include:

- Sample collection for submission to USDA
- Holst milk test and Wood's lamp for the confirmation of American foulbrood
- Lateral flow device for American and European foulbrood
- Modified hanging drop slide preparation for American and European foulbrood

### **Hive Inspections for the Beginner**

Instructors: Dan Wyns, Ana Heck, Melissa Hollahan, Meghan Milbrath

During this 4-hour live-hive laboratory, participants will be introduced to the fundamental knowledge needed to work safely with honey bee colonies. Participants will be introduced to and have a chance to practice using personal protective equipment and beekeeping tools. Working in small groups, healthy honey bee colonies will be inspected with the objective of learning what normal looks like.