

Anesthesia and Intrathecal Catheterization Technique in Sheep

\$450, 8:30 AM - 12:30 PM

This hands-on workshop will demonstrate and train participants in the anesthesia, surgical techniques, equipment, and instruments needed to perform intrathecal catheterization in a sheep model. After observing the procedure, each participant will perform a hemilaminectomy and place an intrathecal catheter and access port. Participants will gain experience with the equipment, instruments, and surgical techniques in a supportive setting. Care and management related to the procedures will be discussed with special emphasis on anesthesia, post-operative care, and management of intrathecal access ports.

Maximum number of participants allowed: **10**

Instructor(s): Heather Deloid, DVM Wake Forest Innovations
Eric Adams, M.S., S.R.S., Northern Biomedical Research, Inc.

Targeted Cell Delivery Techniques in the Mouse

\$295, 8:30 AM - 12:30 PM

This hands-on workshop will demonstrate and train participants in the most common surgical approaches (renal subcapsular, intraabdominal fat pad, and intraportal) for targeted cell delivery along with practicing techniques in routine injections often used as control sites. Participants will gain practice with micro-surgical tools, perform the surgical technique related to each approach, and discuss the advantages and limitations associated with each site. After learning implant procedures, participants will also perform the associated explant technique where appropriate (nephrectomy, fat pad excision, lobectomy). Care and management related to the procedures will be discussed with special emphasis on anesthesia as well as pre and post-operative care.

Maximum number of participants allowed: **10**

Instructor: Jody Janecek, BS; Luke Mutch, AAS; Mickey Dunning, BS; and Melanie Graham, MPH, PhD, University of Minnesota

Vascular Access Techniques and Successful Management in the Swine Model

\$400, 1 PM – 5 PM

This hands-on workshop gives a chance to practice with surgical technique, tools, and instrumentation for (peripheral, central, and portal) venous cannulation (acute and chronic) in a swine model in a supportive setting. Beginners will gain a better anatomical understanding of various approaches and learn basic techniques. More experienced participants can refine their skills and have the opportunity to discuss past experiences, have immediate feedback, and ask questions and work with trainers to enhance technique for improved outcomes. Care and management of chronic vascular access will also be discussed as well as opportunity to practice access techniques.

Maximum number of participants allowed: **10**

Instructor: Mickey Dunning, BS; Luke Mutch, AAS; Jody Janecek, BS; and Melanie Graham, MPH, PhD, University of Minnesota

Rat Closed Loop Bile Duct Catheterization

\$250, 1:00 PM - 5:00 PM

This hands-on workshop gives a chance for participants to observe, learn and perform a closed loop bile duct surgery on a rat under the supervision of skilled rodent surgeons. Participants will learn and perform a less invasive surgical procedure after having the chance to observe and ask questions of the surgery demonstration team. Successful maintenance of a bile duct closed loop catheter will be discussed after the surgery portion of this workshop. Beginner surgeons will find this workshop useful to enhance their knowledge of the anatomy surrounding the bile duct and tip for successful abdominal surgery. Advanced surgeons may find this useful for technical improvements in their own surgery and tips for a maintaining a successful bile duct surgery.

Maximum number of participants allowed: **10**

Instructor: Brad Gien, Chelsey Gosman and Stefanie Smith, Envigo