Incision & Suture – ACS883
University of Florida Animal Care Services Training Core

Target Audience: Research staff and PIs with limited experience in survival surgery
Course Type: 1hr contact wet lab

Course Description:
This course is designed to cover basic incision technique and wound closure in association with performing survival surgery in non-USDA covered species.

Enrollment in the UF animal contact program is required prior to course sign up. Students are expected to have an understanding of the primary techniques they will be performing as part of the approved animal use protocol. Students must be approved for survival surgery in rodents as part of an animal use protocol prior to course sign up.

Course Goals:
Personnel who complete this course successfully will be able to perform and demonstrate:
- Appropriate surgical tissue handling including blunt dissection techniques
- Proper use of surgical instruments
- Creation of surgical incisions
- Application and removal of surgical wound clips (if approved in protocol)
- Suturing techniques (simple interrupted pattern)

Personnel who complete this course successfully will be able to discuss proper techniques for:
- Preventing contamination of suture
- Post-surgical monitoring and follow up
- Post-surgical wound care and monitoring
- Surgical complications (dehiscence) and procedure for reporting
- Post-surgical recordkeeping

Prerequisite Courses:
- Rodent Aseptic Technique (UF_ACS480_OLT) – online course
- Mouse and Rat Biomethodology (UF_ACS845_OLT) – online course
- Mouse or Rat Biomethodology Wet Lab (UF_ACS890_ILT, UF_ACS892_ILT, UF_ACS891_ILT, or UF_ACS893_ILT) – hands-on

Recommended Prerequisite Courses and Course Flow:
- Rodent Aseptic Technique Wet Lab (UF_ACS884_ILT) – hands-on
- Rodent Anesthesia and Monitoring Wet Lab (UF_ACS885_ILT) – hands-on
Definitions:

- **Discussion** – course instructors will briefly discuss associated procedures/policy
- **Demonstration** – course instructors will demonstrate techniques; however, participants will not be required to practice or verify skills
- **Hands-on** – course instructors will demonstrate techniques and assist participants in practicing the technique utilizing live animals
- **Verification** – participants will be required to demonstrate proficiency with the skill/technique to complete training
- **Survival surgery** – any surgical procedure that involves making an incision in the skin from which an animal regains consciousness.
- **Aseptic Technique** – procedures and practices that reduce microbial contamination to the lowest possible practical level and the use of operative techniques to reduce the likelihood of infection or contamination of surgical wounds.
- **Sterilization** – the process of making something free from bacteria or other living microorganisms

<table>
<thead>
<tr>
<th>Topic</th>
<th>Discussion</th>
<th>Demonstration*</th>
<th>Hands-on*</th>
<th>Verification*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Opening instrument packs</td>
<td></td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Instrument names and uses</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Proper instrument handling</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Placement and removal of scalpel blades</td>
<td>X</td>
<td></td>
<td>X</td>
<td></td>
</tr>
<tr>
<td>Incision creation</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Tissue handling</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Blunt dissection technique</td>
<td>X</td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Using needle drivers to remove suture from packet</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
<tr>
<td>Suture contamination</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Simple interrupted suture pattern</td>
<td>X</td>
<td></td>
<td>X</td>
<td>X</td>
</tr>
<tr>
<td>Post-surgical monitoring</td>
<td>X</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Surgical complications and reporting</td>
<td></td>
<td></td>
<td></td>
<td>X</td>
</tr>
</tbody>
</table>

*All participants will be instructed to wear the proper PPE required for working with rodents prior to starting any activity with live animals

**Participant Evaluation**

If participants are unable to demonstrate proficiency with the skill/techniques listed for “Verification,” they will be marked as “did not pass” in myTraining within the UF training system and a one-on-one training session to review the techniques will be scheduled.