

From: Clyde, Gaylynn Goolsby
Sent: Monday, July 08, 2019 9:40 AM
To: [REDACTED] 38; Woodford, Nina Lynne; McCleary, Jessie May
Cc: or.ocv.alert
Subject: RE: catheter placement
Attachments: Intravenous Indwelling Catheters Use & Care.pdf; Equine intravenous catheterisation.pdf; Jugular Catheter placement.docx

Hi [REDACTED] 38

Sounds like a challenging but fun experience. Here are some articles with good pictures for you. We can try to get you into the simulation lab on campus. I will need to discuss with Nina about placement of catheter in the bears (is this procedure on any of the active protocols?).

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: [REDACTED] 38
Sent: Monday, July 8, 2019 8:00 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>; Woodford, Nina Lynne <nwoodford@wsu.edu>; McCleary, Jessie May <jmccleary@wsu.edu>
Subject: catheter placement

I might need to place some jugular catheters in the future, and I'm wondering if one of you can help me get proficient at it? Is there a way I can practice? I've done it once or twice, and get the general procedure, but might end up being the only person way off in the middle of nowhere arctic with no help who has any idea how to do it, so I kind of have to not screw up...

If doing it with the bears here is the only option to learn, we have a drugging scheduled July 15 time tbd, but probably 9ish.. maybe that's an option? Also, could you tell me what I would need to order for a jugular catheter for a grizzly or polar bear?

Thanks!

38

Washington State University

Cell: 38

Intravenous Indwelling Catheters: Use & Care

Ann B. Weil, DVM, MS, Diplomate ACVA, and Jeff Ko, DVM, MS, Diplomate ACVA, Purdue University



Overview

Intravenous (IV) indwelling catheters are commonly used in dogs and cats for ease of various drug and fluid administration. They are placed in either peripheral or central veins and may be maintained for days if the site has been sterilely prepared and is inspected daily.

Uses

- Routine fluid administration
- Drug administration, including emergency drugs
- Administering blood products and colloids
- Measurement of central venous pressure
- Facilitation of blood draws in patients requiring multiple tests or with very poor vein access
- Total parenteral nutrition administration

Placement of an intravenous catheter ensures that the drug will be administered intravascularly. This is of particular importance when the intended drug is very irritating to tissues if administered perivascularly (eg, thiopental and chemotherapeutic agents).

Treatments that include frequent administration of drugs or those that involve large volumes can be facilitated by using an intravenous indwelling catheter. For drugs or fluids (like plasma or blood) that must be administered intravenously, IV catheter placement may be the only option for administration.

Types of Catheters

Peripheral—Through-the-needle catheter

Various sizes ranging from 18 gauge to 24 gauge are commonly used in small animal practice.

Central—Central catheters placed via Seldinger technique (or wire-guided)

Central catheters include through-the-needle catheters such as intracaths and wire-guided catheters. Wire-guided catheters allow multiple uses and administrations from a single device.

- Single lumen
- Double lumen
- Triple lumen

Various sizes ranging from 16 gauge to 22 gauge are commonly used in small animal practice. Central venous catheters are normally cleaner because they are less likely to be urinated or vomited on by the patient. They stay in place longer because they are less likely to be chewed out. Also, because they tend to be made of softer, more flexible materials (especially multiple lumen devices), they are less likely to cause phlebitis during long-term use.

Sites for Placement

Peripheral indwelling intravenous catheters are usually placed in the cephalic vein in the forelimbs of dogs and cats. In the hindlimb, they are most commonly placed in the lateral saphenous vein in the dog and the medial femoral vein in the cat. Peripheral catheter placement is not technically difficult and the device may be placed using physical or chemical restraint of the patient. Aseptic techniques should be used.

New Article Series

Patient Support is a new column that outlines optimum strategy and intervention for providing the best patient-centered veterinary care while pursuing curative medicine and surgery.

Central indwelling venous catheters are usually placed in the internal and external jugular veins. Insertion of central catheters is technically demanding. A sedative or general anesthetic may be required for placement in a healthy patient; chemical restraint is not necessary for ill or debilitated patients. A small volume of local anesthetic placed at the device site is very useful for maintaining patient comfort during the procedure. Aseptic techniques should be used.

Central catheters may be placed in peripheral veins for long-term use and improved security of device placement. In cats, the medial saphenous vein is frequently used for this purpose. The lateral saphenous vein is typically used in dogs and may also be used in cats.

continues

Placement & Security of Indwelling Catheters

Central

1. Place animal in lateral recumbency.
2. Clip area, being careful to avoid clipper burn.
3. Scrub the area using sterile technique.
4. Have another person restrain the animal and occlude the vein.
5. Scrub hands and put on sterile gloves.
6. Have another person flush the needle and the lumen of the central catheter while the sterile-gloved person holds the ports. The unsterile person may not touch anything inside the Arrow catheter packaging.
7. Drape the patient's neck to prevent inadvertent contamination of the catheter. *Draping is recommended but is not done in this series to allow for better visualization.*
8. Palpate the vein.
9. Tent the skin over the vein and use a surgical blade to make a small nick in the skin for insertion of the needle. A small amount of local anesthetic (2% lidocaine) may be placed prior to the skin nick.
10. Insert the needle, bevel up, with the needle going toward the heart.
11. When blood is observed flashing back into the needle catheter, feed the wire from the wire guide forward into the lumen of the needle catheter, while still holding the device. **Do not move the needle catheter!**
12. Once the wire is advanced sufficiently into the vein, remove the plastic wire guide; then carefully pull the needle catheter back out over the wire. Be sure to hold the wire at all times.
13. *An alternative way of doing this is to place a through-the-needle catheter (a peripheral catheter), instead of using the needle catheter that comes with the jugular catheter package. Using a peripheral through-the-needle catheter (after removing the stylette) may be easier and less likely to pierce the vessel wall while*



Introducing a jugular needle catheter into an anesthetized dog



Introducing a wire guide through the lumen of the needle with sterile technique

- passing the wire.
14. Place a dilator over the wire and dilate through the skin and into the vein. The skin may need to be held and the dilator wedged through. When the dilator is pulled out, a small amount of blood should be observed from the hole. Pull the dilator completely off while still holding the wire in place. Apply pressure to the site to prevent blood loss.
15. Remove the cap from the brown port of the catheter and ensure it is not clamped off.
16. Measure how far you want to place your catheter (from insertion point to the heart). Alternatively, measuring the length of the catheter before the procedure is started will minimize the amount of time it takes to place the catheter and prevent



Threading a double-lumen jugular catheter through the wire guide and into the jugular vein



A jugular catheter in situ, sutured but not wrapped

blood loss during placement.

17. At this point, the wire should be coming out of the brown port and can be held while the catheter is fed over the wire into the vein to the desired length. Catheters are marked for ease of measurement. While holding the catheter in place, remove the wire.
18. Attach syringe of heparinized saline to the catheter and aspirate blood to ensure proper placement and to remove any air bubbles. Flush and clamp catheter, and place infusion cap on the end.
19. Suture to the skin through the plastic clamps. A "butterfly" of tape may be placed higher up and sutured as well.
20. Cover the site where the catheter enters the skin with betadine ointment and gauze.
21. Wrap the neck with soft padding, Kling, then Vet Wrap. The bandage should be firm, but never tight.

Peripheral

1. Place the animal in sternal recumbency if possible.
2. Clip the area where the catheter will be placed, avoiding clipper burn.
3. Gently scrub the area 3 times (Iodine versus chlorhexidine is discussed later).
4. Flush the catheter and t-set with heparinized saline (information on recommended heparin amount is provided later).
5. Restrain the patient and occlude the vein.
6. Insert catheter, bevel up, with the point of the needle headed toward the body.
7. When blood is observed in the catheter, feed the catheter forward. ***Do not advance the stylette!***
8. Remove the stylette when the catheter is threaded to the hub.
9. Attach the t-set and injection cap.
10. Wrap a long piece of 1/2-inch medical adhesive tape around the device; then around the leg.
11. Flush the catheter through the t-set to check for patency.

continues

12. Dry the leg.
13. Place a Band-aid coated with betadine ointment where the catheter enters the skin.
14. Place 1-inch tape under the device and around the leg.
15. Wrap a short piece of 1/2-inch tape around the t-set and catheter to secure the t-set into the catheter.
16. Using another piece of 1-inch tape and starting at the top of the catheter, loop the t-set and tape to the leg.

Maintenance

Catheters should be flushed with heparinized saline or physiologic saline every 2 to 4 hours if the patient is not receiving fluids or a constant rate infusion of drugs. Opinions regarding the use of either heparinized saline or plain saline to flush intravenous catheters intermittently are contradictory. Some studies have shown that using heparinized saline decreases the likelihood of intraluminal clot formation and therefore prevents device malfunction. Others have shown that heparinized saline provides no significant advantages over regular sodium chloride for maintaining patency and preventing blood clot formation.¹ The concentration of heparin used with saline ranges from 2 IU/ml to 100 IU/ml. Some hospitals use premixed commercial heparin/saline while others use their own mixture of heparin/saline.

In humans, the concerns of using heparin as an antithrombotic agent for intravenous catheters include heparin-induced thrombocytopenia and allergic reactions to heparin. When a catheter is flushed repeatedly with solutions containing high concentrations of heparin, bleeding complications may result. This is of particular concern in small veterinary patients such as cats, toy breed dogs, or neonates. In our hospital, we prefer to use low concentration heparinized saline (2 IU per ml) and flush every 2 to 4 hours to maintain the patency of the catheter. Care must be taken to keep the catheter site clean and dry. At least daily inspection of the catheter site is very helpful in identifying prob-

lems early. Complications can be reduced by regular and timely changes of the dressing. For catheters that need to be maintained for longer durations (longer than 3 days), disinfectants such as chlorhexidine gluconate should be applied at the time of insertion and reapplied every 48 to 72 hours to prevent bloodstream infection.²

Catheters should be secured properly. Peripheral catheters are usually secured with 1/2- to 1-inch medical tape; central venous catheters are usually secured with sutures. Bandaging peripheral or central venous catheters too tightly or too loosely may cause significant problems. Excessively tight bandaging will cause local edema, while loose bandaging leads to malposition of the catheter and possible loss. It is important to periodically check the animal for either of these occurrences and make any necessary adjustments.

Many animals will require some method of restraint (Elizabethan collars, etc) to keep them from chewing out catheters. Another challenge is the security and proper placement of the injection cap or port to the hub of the catheter. A loosely attached injection cap or port will allow back flow of the blood or leakage of fluids, clotting of the catheter lumen, and ultimately cause malfunction of the catheter. Therefore, it is important to properly select and set the injection cap and port to best fit the catheter.

Complications

Intravenous catheter placement can result in serious complications including excessive bleeding, sepsis, thrombophlebitis, and thrombosis or air emboli.³ Performing coagulation testing prior to central catheter placement is particularly warranted in critically ill patients with potential coagulation problems. Studies have compared the use of chlorhexidine gluconate or povidone iodine to disinfect the catheter insertion site and prevent bloodstream infection and sepsis. One study showed that site preparation with 2% chlorhexidine resulted in lower infection rates

Some Signs of Catheter-Related Infection

- Presence of purulence at catheter insertion site
- Elevation of body temperature over 38.5°C (101.3°F)
- Erythema or tenderness at insertion site
- Hypothermia with signs of shock
- Any elevation of body temperature associated with a positive blood culture

than did preparation with povidone-iodine or 70% alcohol.⁴

Scheduled replacement of catheters has been proposed as a method of preventing infections. Studies of peripheral catheters show increased thrombophlebitis and bacterial colonization when a catheter is left in place longer than 72 hours.⁵ Changing the device every 3 days may improve patient comfort and reduce infection rates.

It has been suggested that a fibrin sheath develops around the catheter within 24 hours, increasing bacterial attachment and replication and resulting in thrombus formation. This promotes further microbial adherence.⁵ In humans, the diagnosis of catheter-related central vein thrombosis is based on visualizing an intravascular thrombus, incompressibility of the vein by probe pressure, or absence of spontaneous flow as detected by Doppler. The diagnosis of pulmonary emboli/air embolism requires pulmonary angiography or lung scanning.

Indwelling intravenous catheters are useful tools in veterinary practice. However, proper hygiene prior to insertion combined with good technique aids in preventing infections. Vigilance in monitoring and maintenance of indwelling catheters are keys to preventing further complications associated with their use. ■

See Aids & Resources, back page, for references, contacts, and appendices.



NURSING NOTES

Equine intravenous catheterisation

C. W. HAY

College of Veterinary Medicine, University of Georgia, Athens, GA 30602, USA.

INTRODUCTION

Can you place an intravenous catheter in a horse? If you cannot then you are missing an essential technique employed in modern equine practice. Intravenous (iv) catheters allow fluid and antibiotic administration to a wide range of equine patients from sick foals to adults with colic or pneumonia. In addition they are used to administer anaesthetic agents to horses presented for surgery. Knowing how to select a catheter for any given situation, how to place it and the potential complications is essential for a nurse working in an equine practice.

CATHETER SELECTION

When the decision to use an iv catheter has been made consideration of several factors will aid a rational approach to selection of the correct catheter.

CATHETER MATERIALS

There are several types of material used in catheter manufacture and these differ in rigidity. In increasing order of softness these are: polypropylene, polyethylene, polytetrafluoroethylene (Teflon), silicone, nylon, polyvinylchloride and polyurethane. The first 3 catheter materials listed here are irritant to the vascular endothelium and therefore trigger coagulation and thrombosis around the catheter and its site of entry into the vein.

Polytetrafluoroethylene (Teflon) iv catheters are commonly used in equine practice. When using Teflon it is advisable to change the catheter every 3 days and replace it with another catheter in the other jugular vein. Silicone (also known as Sialastic) catheters are softer and it is possible therefore to leave them in place much longer. Unfortunately, silicone catheters are harder to place and are smaller in diameter and large volumes of fluid cannot therefore be infused rapidly.

SIZE

Various lengths and gauges (diameter) of iv catheters are

available. For adult horses a good all round choice is 14-gauge 13.5-cm. Shorter catheters may pull out of the vein more readily as the horse moves. Large diameter catheters, e.g. 10-gauge, can be used for rapid fluid administration to dehydrated horses or to administer anaesthetic agents to large patients (i.e. >600 kg). Sixteen-gauge catheters are usually too small for administration of maintenance fluids to adult horses but they are suitable for antibiotic administration and for use in foals.

COST AND AVAILABILITY

It is expensive to stock a wide range of iv catheter types and sizes. Therefore, most practices stock 1 or 2 catheter types in several sizes.

In conclusion a 14-gauge 13.5-cm catheter is appropriate for most equine patients requiring iv catheterisation. Polytetrafluoroethylene (Teflon) catheters are commonly used and it is advisable to change them after 3 days of use. Different gauges and catheter types should be selected for specific situations.

CATHETERISATION SITES

For iv access in horses the jugular veins are chosen because they are large, easily accessible and safe for the operator to use. Each vein can be located in the jugular furrow of the neck between the sternomandibularis muscle dorsally and

TABLE 1: Materials required for equine iv catheterisation

14-gauge 13.5 cm catheter
Surgical scrub (chlorhexidine or povidone-iodine)
Alcohol
Lignocaine
Non-absorbable suture material (No. 1 or 2 metric)
Catheter cap
Heparinised saline flush (10 i.u. heparin/ml)
Plastic syringes (2.5 and 10 ml)
Hypodermic needles (20-gauge x 1 inch, 18-gauge x 1 1/2 inch)

Optional

Bandage materials
Extension set



Fig 1: A generous area of hair has been clipped around the jugular vein and it has been distended by firm occlusion of its most distal part in the neck with the operator's left hand



Fig 2: The skin has been prepared with a surgical scrub and 2 ml lignocaine are being infiltrated subcutaneously with a 20-gauge 1-inch needle



Fig 3a: The catheter is held at an angle between 45 and 70° to the skin (in this figure with the operators' right hand) so that the vein can be entered as evidenced by blood flowing from the stylette

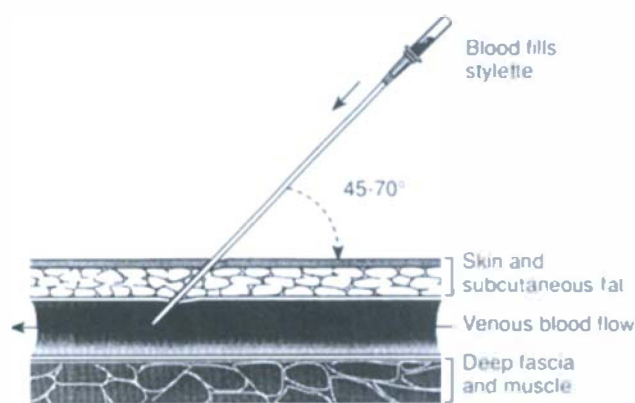


Fig 3b: This diagram illustrates the catheter and stylette as they are introduced into the jugular vein



Fig 4a: After the vein is entered the angle at which the catheter enters the vein is reduced and both the catheter and stylette are advanced, thus seating the catheter adequately in the vein

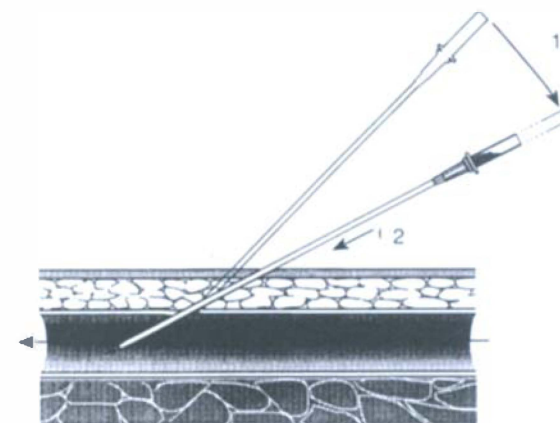


Fig 4b: This diagram shows a reduction of the angle of entry (1) and advancement (2) into the vein

the brachiocephalicus ventrally, with the trachea lying medially. Distally the jugular vein runs more deeply beneath the skin and subcutaneous tissue and therefore it is easier to catheterise along the proximal two-thirds of the neck. By occluding the vein near the thorax with your left

thumb you can see it distend up the animal's neck. Occasionally the vein can be hard to locate because of excessive fat or muscling and, for this reason, it may be helpful to place the 2nd and 3rd fingers of the right hand over the jugular furrow and repeatedly distend the vein by releasing and then applying pressure with the left thumb.

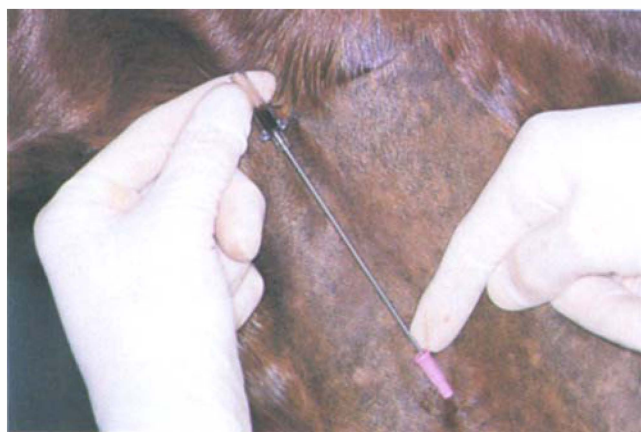


Fig 5a: The stylette is held steady whilst the catheter is threaded into the vein

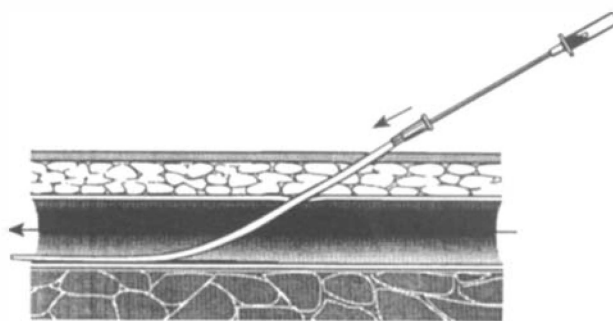


Fig 5b: The catheter can be seen here entering the vein while the stylette is held steady

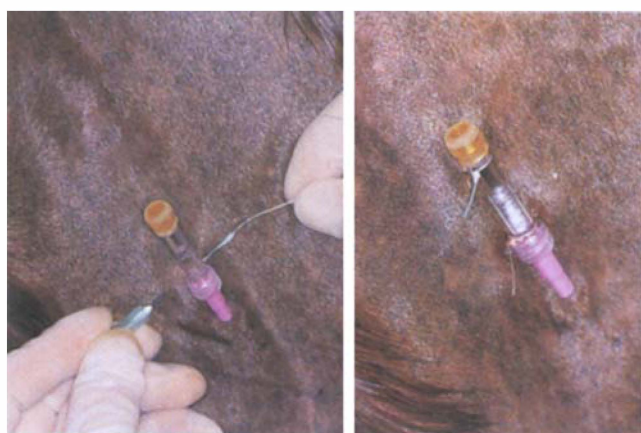


Fig 6: A catheter cap is attached (a) and the catheter and cap sutured in place (b) with an 18-gauge 1.5-inch needle



Fig 7: An extension set may be attached and sutured in the same way as a catheter cap would be. Additional fixation is achieved by attaching white tape to the extension set and suturing it to the skin

Usually it is possible to feel the vein emptying under the right fingers as blood flows out from it. By using this technique it is easier to appreciate and catheterise the left jugular vein. You may find it easier to catheterise the right jugular vein depending upon your dexterity.

The lateral thoracic and cephalic veins can also be catheterised. These veins are technically harder to catheterise and there is a high risk that the catheter will become dislodged.

PLACEMENT TECHNIQUE

A list of materials required to place an iv catheter is shown in Table 1. The jugular vein is located (Fig 1) and a generous area of hair around it is clipped and prepared with a chlorhexidine or povidone-iodine scrub and alcohol. Midway through the scrub 1 or 2 ml local anaesthetic are injected subcutaneously around the site to be catheterised (Fig 2).

Wearing of sterile gloves may be considered an advantage during catheter placement.

The catheter and stylette are flushed with heparinised saline and are introduced into the distended vein at an angle of 45–70° to the skin (Fig 3a, b). Blood flows out of

the stylette when the vein wall has been penetrated. The angle of the catheter is then reduced to 20 or 30° and simultaneously the catheter and stylette are advanced 4 or 5 cm (Fig 4a, b). This allows the catheter to be adequately seated within the vein.

While the stylette is held steady the catheter is threaded into the vein (Fig 5a, b). The catheter is then capped, flushed and sutured in place. A technique for suturing using an 18-gauge 1.5-inch needle is shown in Figure 6. Suitable suture material is number 1 or 2 USP (4.0 or 5.0 metric) nylon, prolene or polymerised caprolactam.

An extension set may be attached to the catheter and sutured in place (Fig 7). To secure the extension set white tape has been attached and is sutured to the skin.

Instead of placing the catheter downwards with the direction of blood flow (antegrade) an alternative technique is to place it upwards against the direction of blood flow (retrograde). An advantage of this may be easier placement. Although it is possible inadvertently to penetrate the carotid artery with both techniques, it may be more obvious in antegrade placement because blood is more likely to spurt freely from the catheter.

After placement, a protective bandage may be placed over the catheter. If the horse is in a clean environment then this is not usually necessary. However, this is good practice in foals because they tend to lie down more than adults and are more likely therefore to contaminate the catheter site.

CATHETER MAINTENANCE

Monitoring and flushing are important components of catheter maintenance. Observation of the vein for increased firmness, heat or swelling will indicate thrombosis and possibly infection. Regular flushing every 6 h with heparinised saline (10 i.u. heparin/ml) helps to prevent occlusion of the catheter lumen by blood clots. Stiffer catheters, such as polypropylene or large diameter (e.g. 10-gauge) ones, are best removed as soon as possible. If at any time there is any doubt as to the patency of the catheter or condition of the vein it is best to remove and replace the catheter.

CATHETER COMPLICATIONS

Intravenous catheter use can be associated with several complications (Table 2) and managing some of these can be both very frustrating and expensive. Therefore, pay close attention to detail in catheter placement and maintenance.

THROMBOSIS

Intravenous catheters trigger the blood clotting cascade and as a result a fibrin sleeve forms around them. If the reaction becomes extensive an organising intravascular blood clot or thrombus is the result. As a rule polytetrafluoroethylene catheters can be left in place for 3 days. Stiffer catheters like polypropylene and polyethylene or large diameter (10-gauge) catheters should be removed sooner. Softer catheters like silicone and polyvinylchloride may be left in place for much longer. Besides the physical

characteristics of the catheter and the length of time it is in place thrombus formation is also promoted by trauma during placement and excessive movement once in place. Atraumatic catheter placement technique and securing with suture material alleviates this.

Septicaemic foals and horses suffering from colic are at increased risk of developing thrombosis associated with an iv catheter because these conditions can lead to activation of the coagulation cascade. Therefore be vigilant in monitoring these patients for evidence of jugular vein thrombosis.

Thrombosis may be promoted also by infusion of concentrated agents such as 10% guaifenesin, 10% thiopentone or 5% dextrose because they cause endothelial irritation.

THROMBOPHLEBITIS

Thrombophlebitis occurs when bacteria from the skin are introduced during catheter placement and lead to infection of subcutaneous and vascular tissues and thence local thrombosis. Consequences of this include abscessation of the vein with draining pus and septicaemia. A wide clip and adequate surgical scrub will minimise the potential for thrombophlebitis by reducing bacterial presence.

Unilateral jugular vein occlusion can arise from thrombosis or thrombophlebitis but will not usually impair blood drainage from the head due to adequate collateral drainage from the opposite vein. Bilateral occlusion on the other hand may result in marked oedema, leading to impairment of the patients' ability to breath and necessitating tracheostomy.

KINKING

Kinking can occur as the horse moves its neck. It may be possible to see the kink externally or it may be in the subcutis. The result is failure of fluid flow through the catheter. Securing the catheter to the skin adequately with suture material helps to prevent this problem. During iv fluid administration it is helpful to attach the fluid line to the patients' halter or mane with tape, thus reducing the tension on the catheter as the horse moves around.

EMBOLISM

Embolism is a term used when an abnormal piece of material is present in the blood stream. A catheter may break away from the skin and become an embolus or a piece of a thrombus may similarly dislodge. A catheter embolus may lodge in the right ventricle of the heart or pulmonary artery and could lead to the death of the patient from cardiac failure unless it can be removed. If the catheter cap becomes loose or if it has been penetrated many times with needles air may enter the bloodstream and lead to air embolism.

TABLE 2: Catheter complications: causes and avoidance

Complication	Cause	Avoidance
Thrombosis	Presence of catheter Movement of catheter	Unavoidable Secure catheter
Thrombophlebitis	Infection	Aseptic placement
Catheter kinking	Movement	Secure catheter
Catheter clogging	Infrequent flushing	Flush every 6 h with heparinised saline
Embolism	Catheter embolism Thromboembolism	Monitor catheter for kinking Minimise thrombus formation

HEPARIN FLUSH IN NEONATAL FOALS

Some commercial preparations of heparinised saline contain benzyl alcohol as a preservative and this can be hepatotoxic to neonatal foals. It is possible to prepare a heparinised flush by adding 5000 i.u. heparin to a 500 ml bag of saline, giving a final concentration of 10 i.u. heparin/ml. Not only is this flush suitable for foals but it can be used in adults if a commercial heparin flush cannot be obtained.

CONCLUSION

As a nurse in an equine practice it is probable that you will

be responsible for placing intravenous catheters. The techniques described here may be modified to suit you. However, it is important not to compromise a high standard of aseptic technique and catheter maintenance. Once you establish a protocol adhere to it and minimise the potential for complications. This will have a direct input in the successful management of equine cases in your practice.

ACKNOWLEDGEMENTS

I thank Dr Andrew Parks for advice during preparation of this paper.

The North American Veterinary Conference

(formerly the Eastern States Veterinary Conference)

**will be held on 16th–21st January, 1993 at
Marriott's Orlando World Center, Orlando, Florida.**

The program will comprise an extensive variety of veterinary topics, with up-to-the-minute information concerning many specialist areas including gastroenterology, orthopaedics, anaesthesiology and echocardiography. There will be a special Military Veterinarian Symposium on Saturday, 16th January.

The Exhibit Hall offers interesting insights into technology and innovative equipment, and lunch will be provided here for all pre-registered veterinarians and practice managers from 18th to 20th January.

Marriott's Orlando World Center offers accommodation at discount prices to conference registrants, as well as providing a range of entertainment and recreation facilities.

For specific information on the scientific programme, contact: Eastern States Veterinary Association, 2614 SW 34th Avenue, Suite 4, Gainesville, FL 32608, USA. Tel. 904-375-5672

For further details regarding registration, accommodation, travel, recreation and entertainment, contact the North American Veterinary Conference Headquarters, PO Box 467, Hingham, MA 02043, USA.

Jugular Catheters in Calves

Placement

1. Using a halter place head in head catch or tie up
2. Clip left side of neck and clean with iodine and alcohol wipes three times
3. Infuse a quarter inch (~1cc) area with 2% lidocaine over the jugular. Pull the skin laterally away from the jugular for infusion.
4. Scrub area again with iodine
5. With a #15 blade make an incision through the lidocaine infused area, again pulling skin away from the jugular only go through the dermis.
6. Place Mila catheter 14 or 16g 5 ¼ length
7. Super glue catheter at the base
8. Thread through a 1.5 inch needle 1-2 g, suture in place or use already swaged needle.
9. Place T-port
10. Gauze with triple over the catheter, brown gauze around the neck, vet wrap entire catheter with T-port just under last wrap.
11. When pulling blood every 4 hours, discard 2mls (T-port volume) then draw blood, flush with sterile saline. Lock the catheter with 10-20% greater than the total volume of the system with lock solution (Hep-saline 10IU/ml)
12. Re-wrap T-port

Maintenance

1. The catheter site should be inspected daily (remove the bandage, or parts of the bandage) for signs of local infection (pain, redness, swelling of the tissue) and dislocation.
2. The bandage should be changed daily (clean gloves must be used) and a swab with iodine or chlorhexidine applied to the catheter site , then re-wrapped
3. The catheter must be flushed at a minimum of every 8hours
4. The PRN should be wiped with iodine solution or alcohol (wait 10 sec) before accessing. The PRN should not be removed at any time (unless fluids are being administered).

Duration

1. Jugular catheters with proper aseptic placement and maintenance can be in place for 21-25 days (depending on catheter type and manufacturer recommendations).

From: Gorence, Galen Jay
Sent: Thursday, April 04, 2019 4:09 PM
To: Morton, Becky; Kinslow, Laura E
Cc: Simasko, Steve; Walker, Brendan; Fuchs, Rita; Ritter, W Sue; Ritter, Robert C; Tanner, Bert; Karatsoreos, Ilia; Davis, Jon Franklin; McLaughlin, Ryan; Brown, R Lane; Rossi, David; Wayman, Suzanne Appleyard; Woodford, Nina Lynne; Chandra, Murali; Varnum, Michael; or.ocv.alert; Or.ocv.ivsnorth@lists.wsu.edu; Cole, Craig; Peters, James Henry; Wayman, Gary Allen; Driskell, Iwona M; Bernhardt, Miranda; Driskell, Ryan; Griswold, Michael D; Hassold, Terry; Hunt, Patricia Ann; Kim, Kwanhee; Oatley, Jon Michael; Oatley, Melissa Joan; Winuthayanon, Wipawee; [REDACTED] 38 [REDACTED] 38 [REDACTED]; Broadbent-Mitzel, Angie; Brown, Katherine Marguerite; Ciccarelli, Michela; [REDACTED] 38 [REDACTED] 38 [REDACTED]; Du, Guihua; [REDACTED] 38 [REDACTED]; [REDACTED] 38 [REDACTED]; [REDACTED] 38 [REDACTED] Herrera Birrueta, Gerardo Guad; Hoover, Anna; Horan, Tegan; Ianello Giassetti, Mariana; Law, Nate; Lawson, Crystal; Lopez-Biladeau, Blanca E; Miao, Deqiang; [REDACTED] 38 [REDACTED]; [REDACTED] 38 [REDACTED]; [REDACTED] 38 [REDACTED]; [REDACTED] 38 [REDACTED]; Topping, Traci Beth; Urena, Frank R; [REDACTED] 38 [REDACTED]
Subject: RE: Core drilling in Biotech basement

I found out this afternoon that Motley and Motley will be doing some back filling and packing on the South side of BLS. They will do this work tomorrow morning and it should take about an hour. There will be some vibration and noise that we will hear and feel it down stairs.

Galen

From: Gorence, Galen Jay
Sent: Tuesday, April 2, 2019 12:12 PM
To: Morton, Becky <bmorton@wsu.edu>; Kinslow, Laura E <kinslow@wsu.edu>
Cc: Simasko, Steve <steve_simasko@wsu.edu>; Walker, Brendan <b_walker@wsu.edu>; Fuchs, Rita <rita.fuchs@wsu.edu>; Ritter, W Sue <sritter@wsu.edu>; Ritter, Robert C <rritter@wsu.edu>; Tanner, Bert <bertrand.tanner@wsu.edu>; Karatsoreos, Ilia <ilia.karatsoreos@wsu.edu>; Davis, Jon Franklin <jon.davis@wsu.edu>; McLaughlin, Ryan <ryan.mclaughlin@wsu.edu>; Brown, R Lane <lanebrown@wsu.edu>; Rossi, David <david.rossi@wsu.edu>; Wayman, Suzanne Appleyard <s.appleyard@wsu.edu>; Woodford, Nina Lynne <nwoodford@wsu.edu>; Chandra, Murali <murali@wsu.edu>; Varnum, Michael <varnum@wsu.edu>; or.ocv.alert <or.ocv.alert@wsu.edu>; 'Or.ocv.ivsnorth@lists.wsu.edu' <Or.ocv.ivsnorth@lists.wsu.edu>; Cole, Craig <craig.cole@wsu.edu>; Peters, James Henry <james_peters@wsu.edu>; Wayman, Gary Allen <waymang@wsu.edu>
Subject: FW: Core drilling in Biotech basement

Good morning,
Apollo has moved the drilling from Wednesday to Friday morning. The contractor assures us that this will be a low impact portion on the project. I don't anticipate VBR spaces being affected by this noise. We may or may not hear in BLS.

Galen

From: Harper, Jason A
Sent: Monday, April 1, 2019 11:12 AM
To: Gorence, Galen Jay <gorence@wsu.edu>
Cc: Morton, Becky <bmorton@wsu.edu>; Kramer, Laurilee Marie <lkramer@wsu.edu>; Handy, Jason Joseph <jason.handy@wsu.edu>
Subject: FW: Core drilling in Biotech basement

FYI, you probably won't hear anything (maybe Galen) but wanted to give a heads up.

Thanks

Jason

From: Jason Hibbard <jason.hibbard@apollomech.com>

Sent: Monday, April 1, 2019 10:40 AM

To: Harper, Jason A <jaharper@wsu.edu>

Cc: Brian Soles <brian.soles@apollomech.com>; Seth DuChemin <Seth.DuChemin@apollomech.com>

Subject: RE: FW:

Jason,

Just got a confirmation from the core drillers and we have rescheduled for the morning of Friday the 5th.

Thanks

From: Harper, Jason A <jaharper@wsu.edu>

Sent: Monday, April 1, 2019 9:23 AM

To: Jason Hibbard <jason.hibbard@apollomech.com>

Cc: Brian Soles <brian.soles@apollomech.com>; Seth DuChemin <Seth.DuChemin@apollomech.com>

Subject: RE: FW:

Jason,

Let me know when you have the core driller scheduled so I can send out a notice to the building occupants.

Thanks

Jason

From: Jason Hibbard <jason.hibbard@apollomech.com>

Sent: Friday, March 29, 2019 9:49 AM

To: Harper, Jason A <jaharper@wsu.edu>

Cc: Brian Soles <brian.soles@apollomech.com>; Seth DuChemin <Seth.DuChemin@apollomech.com>

Subject: RE: FW:

Jason,

We have the core holes laid out in the Biotech basement if you're available to take a look.

Thanks

From: Harper, Jason A <jaharper@wsu.edu>

Sent: Thursday, March 28, 2019 9:43 AM

To: Jason Hibbard <jason.hibbard@apollomech.com>

Cc: Brian Soles <brian.soles@apollomech.com>; Seth DuChemin <Seth.DuChemin@apollomech.com>

Subject: RE: FW:

Cool, give me a shout and I'll meet you there.

Jason

From: Jason Hibbard <jason.hibbard@apollomech.com>
Sent: Thursday, March 28, 2019 9:24 AM
To: Harper, Jason A <jaharper@wsu.edu>
Cc: Brian Soles <brian.soles@apollomech.com>; Seth DuChemin <Seth.DuChemin@apollomech.com>
Subject: RE: FW:

My guys will be laying out the hole locations today and will be ready to look at tomorrow morning.

Thanks

From: Harper, Jason A <jaharper@wsu.edu>
Sent: Thursday, March 28, 2019 9:23 AM
To: Jason Hibbard <jason.hibbard@apollomech.com>
Cc: Brian Soles <brian.soles@apollomech.com>; Seth DuChemin <Seth.DuChemin@apollomech.com>
Subject: RE: FW:

Can you let me know when you are down in that area, I'll call Gary on the radio and have him meet you so you can show him your plan.

Thanks Man

Jason

From: Jason Hibbard <jason.hibbard@apollomech.com>
Sent: Thursday, March 28, 2019 8:49 AM
To: Harper, Jason A <jaharper@wsu.edu>
Cc: Brian Soles <brian.soles@apollomech.com>; Seth DuChemin <Seth.DuChemin@apollomech.com>
Subject: RE: FW:

Jason,

Yes, we do have location picked out for the new pump and the expansion tank which is replacing an existing expansion tank.

Along with that work down in the Biotech basement we will be having 6 holes cored through the mechanical room wall. I would like to confirm these penetrations with you before we do any drilling. I have scheduled a core driller for next Wednesday morning and I am going to talk to Galen this morning about that.

Thanks

From: Harper, Jason A <jaharper@wsu.edu>
Sent: Thursday, March 28, 2019 8:36 AM
To: Jason Hibbard <jason.hibbard@apollomech.com>

Cc: Brian Soles <brian.soles@apollomech.com>

Subject: FW:

Hey Jason,

Do you have a layout for the new process chilled water equipment in Biotech, the building mechanic is going to start moving stuff out of the way?

Thanks

Jason

From: Johnson, Gary E. <gary.e.johnson@wsu.edu>

Sent: Thursday, March 28, 2019 8:22 AM

To: Harper, Jason A <jaharper@wsu.edu>

Subject:

Jason

Where is the new process chilled water equipment going to be located in Biotech mechanical room?

Thanks

Gary Johnson

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**, an innovator in Software as a Service (SaaS) for business. Providing a **safer** and **more useful** place for your human generated data. Specializing in; Security, archiving and compliance. To find out more [Click Here](#).

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**, an innovator in Software as a Service (SaaS) for business. Providing a **safer** and **more useful** place for your human generated data. Specializing in; Security, archiving and compliance. To find out more [Click Here](#).

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**, an innovator in Software as a Service (SaaS) for business. Providing a **safer** and **more useful** place for your human generated data. Specializing in; Security, archiving and compliance. To find out more [Click Here](#).

Disclaimer

The information contained in this communication from the sender is confidential. It is intended solely for use by the recipient and others authorized to receive it. If you are not the recipient, you are hereby notified that any disclosure, copying, distribution or taking action in relation of the contents of this information is strictly prohibited and may be unlawful.

This email has been scanned for viruses and malware, and may have been automatically archived by **Mimecast Ltd**, an innovator in Software as a Service (SaaS) for business. Providing a **safer** and **more useful** place for your human generated data. Specializing in; Security, archiving and compliance. To find out more [Click Here](#).

From: Luft, Jan Elizabeth
Sent: Tuesday, August 13, 2019 4:56 PM
To: White, Stephen; or.ocv.alert; Libby, Julia E
Cc: 38 Durfee, Codie; Durfee, Codie Jo; 'Stephen.White@wsu.edu'; Fry, Lindsay Michelle
Subject: RE: Culling mice - request training

I will let the OCV decide if they want to do the training. I am sure they will reply to this e-mail. They may be able to use the mice to train others also. Not sure if Youkie was able to arrange training with the OCV.

Jan Luft
IVS South
335-4199

From: White, Stephen <stephen.white@usda.gov>
Sent: Tuesday, August 13, 2019 4:40 PM
To: or.ocv.alert <or.ocv.alert@wsu.edu>; Luft, Jan Elizabeth <jluft@wsu.edu>; Libby, Julia E <jlibby@wsu.edu>
Cc: 38; Durfee, Codie <codie.durfee@usda.gov>; Durfee, Codie Jo <chanke@wsu.edu>; 'Stephen.White@wsu.edu' <Stephen.White@wsu.edu>; Fry, Lindsay Michelle <lfry@wsu.edu>
Subject: Culling mice - request training

Hi all,
Thanks for your help as we have established and begun learning about our new mouse colonies. After a bit more success than we had feared initially, we need to resize our breeding colony. In total we plan to cull 11 adults, 2 unweaned litters, and 37 weaned pups. Our protocol for euthanasia is by CO2 with either cervical dislocation, exsanguination, or decapitation as a secondary method. Since we do not need blood, cervical dislocation would be our preferred secondary method for its reliability and expedience.

We have not euthanized a mouse in our lab before and would need training. As such, we would like to coordinate with the vivarium and/or OCV to be shown the euthanasia of these mice as training. 38 will be out of the office August 15 through August 26 but Codie Durfee will be here during that time.

Below is a table of which cages we plan to euthanize vs. keep in the breeding colony. The table is organized by age (adult vs. weaned pup) and genotype (TLR2 knockout vs. non-knockout Black 6 wild-type mice). This is also attached as a Word document.

What should be done to work out training?

Thank you!
Stephen

<u>Cull</u>	<u>Keep</u>
<u>TLR2 knockout adults</u> Cage 1: 2 adults (male, female pair) + pups Cage 4: 1 adult (male) Cage 5: 2 adults (male, female pair)	<u>TLR 2 knockout adults</u> Cage 2: 2 adults (male, female pair) + pups Cage 3: 2 adults (male, female pair) + pups
<u>Black 6 (wild-type) adults</u> Cage 6: 2 adults (male, female pair)	<u>Black 6 (wild-type) adults</u> Cage 7: 2 adults (male, female pair) + pups Cage 10: 2 adults (male, female pair) + pups

Cage 8: 2 adults (male, female pair) + pups Cage 9: 2 adults (male, female pair) <u>TLR2 knockout weaned pups</u> Cage 11: 4 male pups Cage 12: 2 female pups Cage 13: 3 male pups Cage 14: 5 female pups Cage 15: 4 female pups Cage 21: 3 male pups Cage 23: 3 male pups Cage 24: 3 female pups Cage 25: 2 male pups <u>Black 6 (wild-type) weaned pups</u> Cage 16: cull 2 pups (male), leave other 3 Cage 17: 1 female pup Cage 18: 5 male pups <u>Total adults culled: 11 + 2 groups unweaned pups</u> <u>Total weaned pups culled: 37</u>	<u>TLR2 knockout weaned pups</u> Cage 20: 3 male pups Cage 22: 3 female pups Cage 29: 2 male pups Cage 30: 2 male pups <u>Black 6 (wild-type) weaned pups</u> Cage 16: keep 3 pups (male), cull other 2 Cage 19: 3 female pups Cage 26: 4 male pups Cage 27: 3 female pups Cage 28: 3 female pups <u>Total adults kept: 8 + 4 groups unweaned pups</u> <u>Total weaned pups kept: 27</u>
--	--

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

From: Turner, Gary Dean
Sent: Wednesday, October 24, 2018 9:23 AM
To: Woodford, Nina Lynne; Loaiza, Fred A,II; or.ocv.alert
Subject: RE: Dr. Tibary Alpaca's ASAF# 4790 at 166-F pen, 7

The other one was euthanized. Advanced pneumonia.

Gary D. Turner BPS
Manager, Teaching and Research Herds Unit & VTH Animal Care
Washington State University College of Veterinary Medicine
Department of Veterinary Clinical Sciences
PO Box 646610
Pullman, WA. 99164-6610
509-335-0818 FAX 509-335-0880
gdtturner@vetmed.wsu.edu
www.vetmed.wsu.edu

One person can make a difference, and everyone should try. John F. Kennedy

From: Woodford, Nina Lynne
Sent: Wednesday, October 24, 2018 8:41 AM
To: Loaiza, Fred A,II <floaiza@wsu.edu>; or.ocv.alert <or.ocv.alert@wsu.edu>
Cc: Turner, Gary Dean <gdtturner@wsu.edu>
Subject: RE: Dr. Tibary Alpaca's ASAF# 4790 at 166-F pen, 7

441 was fine. They did float a few points but the swelling that the USDA inspector saw was just fleece and uneven shearing

Don't know about the other one but we'll check in and let you know

Nina Woodford DVM, MPH DACLAM
Director and Attending Veterinarian
Office of the Campus Veterinarian
Washington State University
509-335-6246
nwoodford@wsu.edu

From: Loaiza, Fred A,II
Sent: Wednesday, October 24, 2018 8:37 AM
To: or.ocv.alert <or.ocv.alert@wsu.edu>
Cc: Turner, Gary Dean <gdtturner@wsu.edu>
Subject: Dr. Tibary Alpaca's ASAF# 4790 at 166-F pen, 7

Just wondering how the Alpaca's are doing? Someone told me the first one they hauled in # 441 had an oral exam last week. We had another one hauled in yesterday, #1553. It is

probably for different reasons but it does give me reason to be concerned. (Since they were under our care.)

Do we know anything yet on either of them? If it's not too much trouble can we be kept in the loop?

Thank you,

Fred Loaiza

Animal Care Facilities Mgr.

WSU CVM ARU

PO Box 647010

Pullman, WA 99164-7010

509-335-2188 Fax 509-335-5830

floaiza@wsu.edu

From: Clyde, Gaylynn Goolsby
Sent: Friday, May 24, 2019 2:39 PM
To: Smith, Michael Alan; Brown, R Lane
Cc: or.ocv.alert; Norberg, Ashley; Gorence, Galen Jay; Horwath, Maureen
Subject: RE: Eastlick B73 Lane Brown Health checks 5/24/19

Thanks Michael. No on the necropsy at this time.

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Smith, Michael Alan <msmith010@wsu.edu>
Sent: Friday, May 24, 2019 12:30 PM
To: Brown, R Lane <lanebrown@wsu.edu>
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>; Norberg, Ashley <ashley.walrath@wsu.edu>; Gorence, Galen Jay <gorence@wsu.edu>; Horwath, Maureen <mhorwath@wsu.edu>
Subject: Re: Eastlick B73 Lane Brown Health checks 5/24/19

I can take care of this, does OCV want to necropsy the animal?

Michael sMtih

From: Brown, R Lane
Sent: Friday, May 24, 2019 10:59:07 AM
To: Smith, Michael Alan
Cc: or.ocv.alert; Norberg, Ashley; Gorence, Galen Jay; Horwath, Maureen
Subject: Re: Eastlick B73 Lane Brown Health checks 5/24/19

Please euthanize.

Best regards,

Lane

Sent from my iPhone

On May 24, 2019, at 7:52 PM, Smith, Michael Alan <msmith010@wsu.edu> wrote:

Brown Lab & OCV,

I had one new health concern under protocol 6319 in room B73. The runt pup from 106 was lethargic/hunched and fur erect when I checked on it, upon further inspection it had long, stringy, light, wet feces coming from the rectum. It's abdomen looked a little extended. I was able to free some feces from it. But there appears to may be some intestinal problems and/or blockage. I placed some food on the floor, but will require OCV care if it is to be kept.

Michael Smith
Animal Tech II
BLS/Eastlick Vivarium

From: Estes, Lisa M.
Sent: Friday, May 24, 2019 2:00 PM
To: Smith, Michael Alan; Brown, R Lane
Cc: or.ocv.alert; Norberg, Ashley; Gorence, Galen Jay; Horwath, Maureen
Subject: RE: Eastlick B73 Lane Brown Health checks 5/24/19

OCV does not.
Lisa

From: Smith, Michael Alan <msmith010@wsu.edu>
Sent: Friday, May 24, 2019 12:30 PM
To: Brown, R Lane <lanebrown@wsu.edu>
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>; Norberg, Ashley <ashley.walrath@wsu.edu>; Gorence, Galen Jay <gorence@wsu.edu>; Horwath, Maureen <mhorwath@wsu.edu>
Subject: Re: Eastlick B73 Lane Brown Health checks 5/24/19

I can take care of this, does OCV want to necropsy the animal?

Michael sMtih

From: Brown, R Lane
Sent: Friday, May 24, 2019 10:59:07 AM
To: Smith, Michael Alan
Cc: or.ocv.alert; Norberg, Ashley; Gorence, Galen Jay; Horwath, Maureen
Subject: Re: Eastlick B73 Lane Brown Health checks 5/24/19

Please euthanize.

Best regards,

Lane

Sent from my iPhone

On May 24, 2019, at 7:52 PM, Smith, Michael Alan <msmith010@wsu.edu> wrote:

Brown Lab & OCV,

I had one new health concern under protocol 6319 in room B73. The runt pup from 106 was lethargic/hunched and fur erect when I checked on it, upon further inspection it had long, stringy, light, wet feces coming from the rectum. It's abdomen looked a little extended. I was able to free some feces from it. But there appears to may be some intestinal problems and/or blockage. I placed some food on the floor, but will require OCV care if it is to be kept.

Michael Smith
Animal Tech II

BLS/Eastlick Vivarium

From: Smith, Michael Alan
Sent: Friday, May 24, 2019 12:30 PM
To: Brown, R Lane
Cc: or.ocv.alert; Norberg, Ashley; Gorence, Galen Jay; Horwath, Maureen
Subject: Re: Eastlick B73 Lane Brown Health checks 5/24/19

I can take care of this, does OCV want to necropsy the animal?

Michael sMtih

From: Brown, R Lane
Sent: Friday, May 24, 2019 10:59:07 AM
To: Smith, Michael Alan
Cc: or.ocv.alert; Norberg, Ashley; Gorence, Galen Jay; Horwath, Maureen
Subject: Re: Eastlick B73 Lane Brown Health checks 5/24/19

Please euthanize.

Best regards,

Lane

Sent from my iPhone

On May 24, 2019, at 7:52 PM, Smith, Michael Alan <msmith010@wsu.edu> wrote:

Brown Lab & OCV,

I had one new health concern under protocol 6319 in room B73. The runt pup from 106 was lethargic/hunched and fur erect when I checked on it, upon further inspection it had long, stringy, light, wet feces coming from the rectum. It's abdomen looked a little extended. I was able to free

some feces from it. But there appears to may be some intestinal problems and/or blockage. I placed some food on the floor, but will require OCV care if it is to be kept.

Michael Smith
Animal Tech II
BLS/Eastlick Vivarium

From: Brown, R Lane
Sent: Friday, May 24, 2019 10:59 AM
To: Smith, Michael Alan
Cc: or.ocv.alert; Norberg, Ashley; Gorence, Galen Jay; Horwath, Maureen
Subject: Re: Eastlick B73 Lane Brown Health checks 5/24/19

Please euthanize.

Best regards,

Lane

Sent from my iPhone

On May 24, 2019, at 7:52 PM, Smith, Michael Alan <msmith010@wsu.edu> wrote:

Brown Lab & OCV,

I had one new health concern under protocol 6319 in room B73. The runt pup from 106 was lethargic/hunched and fur erect when I checked on it, upon further inspection it had long, stringy, light, wet feces coming from the rectum. It's abdomen looked a little extended. I was able to free some feces from it. But there appears to may be some intestinal problems and/or blockage. I placed some food on the floor, but will require OCV care if it is to be kept.

Michael Smith
Animal Tech II
BLS/Eastlick Vivarium

From: Clyde, Gaylynn Goolsby
Sent: Friday, May 24, 2019 2:39 PM
To: Smith, Michael Alan; Brown, R Lane
Cc: or.ocv.alert; Norberg, Ashley; Gorence, Galen Jay; Horwath, Maureen
Subject: RE: Eastlick B73 Lane Brown Health checks 5/24/19

Thanks Michael. No on the necropsy at this time.

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Smith, Michael Alan <msmith010@wsu.edu>
Sent: Friday, May 24, 2019 12:30 PM
To: Brown, R Lane <lanebrown@wsu.edu>
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>; Norberg, Ashley <ashley.walrath@wsu.edu>; Gorence, Galen Jay <gorence@wsu.edu>; Horwath, Maureen <mhorwath@wsu.edu>
Subject: Re: Eastlick B73 Lane Brown Health checks 5/24/19

I can take care of this, does OCV want to necropsy the animal?

Michael sMtih

From: Brown, R Lane
Sent: Friday, May 24, 2019 10:59:07 AM
To: Smith, Michael Alan
Cc: or.ocv.alert; Norberg, Ashley; Gorence, Galen Jay; Horwath, Maureen
Subject: Re: Eastlick B73 Lane Brown Health checks 5/24/19

Please euthanize.

Best regards,

Lane

Sent from my iPhone

On May 24, 2019, at 7:52 PM, Smith, Michael Alan <msmith010@wsu.edu> wrote:

Brown Lab & OCV,

I had one new health concern under protocol 6319 in room B73. The runt pup from 106 was lethargic/hunched and fur erect when I checked on it, upon further inspection it had long, stringy, light, wet feces coming from the rectum. It's abdomen looked a little extended. I was able to free some feces from it. But there appears to may be some intestinal problems and/or blockage. I placed some food on the floor, but will require OCV care if it is to be kept.

Michael Smith
Animal Tech II
BLS/Eastlick Vivarium

From: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>
Sent: Thursday, June 13, 2019 3:00 PM
To: Clyde, Gaylynn Goolsby
Cc: Gorence, Galen Jay; or.ocv.alert; APHIS-Sacramento Live Animal Export
Subject: RE: Export Laboratory Mice to Australia

Good Afternoon,

FedEx has not picked-up the packages so I retrieved the envelop going back to you. We will hold the certificate we endorsed today, including the shipping label. WE will charge for next week's certificate only.

pcortes

From: Clyde, Gaylynn Goolsby [mailto:gclyde@wsu.edu]
Sent: Thursday, June 13, 2019 2:22 PM
To: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>
Cc: Gorence, Galen Jay <gorence@wsu.edu>; or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Dr. Cortes,

Appreciate you getting it endorsed. Unfortunately, just heard from the shipping company and they did not schedule the flight for these animals. We will need to do this all over again next week.

Summary for next week:

1. We will examine the animals June 18th.
2. Fill in the same health certificate with updated date
3. We will send you an email to sacanimalexport@aphis.usda.gov with a copy of the health certificate, and the permit on June 18th
4. We will FedEx the signed health certificate, permit, PayGov sheet, paid overnight shipping label on June 18th. Shipping address:
USDA-APHIS VS
Veterinary Export Service Center
10365 Old Placerville Rd., Suite 210
Sacramento, CA. 95827
5. We will need the returned health certificate returned on June 20th or 21st for shipment on the 21st of June.

Please cancel this shipment plan for the 14th. If anything above looks incorrect, please let me know asap.

Hopefully, we can get these animals out next week.

Thank you for all your assistance,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246

Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>
Sent: Thursday, June 13, 2019 2:11 PM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Cc: Gorence, Galen Jay <gorence@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Dr. Clyde,
I have signed the certificate and Ali Brown has processed it – billed, scanned and enveloped using the mailing label you provided. FedEx picks-up from our office around 2:30 to 3:00 pm.
pcortes

From: Clyde, Gaylynn Goolsby [<mailto:gclyde@wsu.edu>]
Sent: Thursday, June 13, 2019 9:31 AM
To: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>
Cc: Gorence, Galen Jay <gorence@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Dr. Cortes,

Thank you for the reply. We **must** have those documents back to us tomorrow morning. Someone on your end J.Cortez signed at 10:02am yesterday. There is a 72 hour window for these animals to get out of the country.

Please let me know when this ships today.

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>
Sent: Thursday, June 13, 2019 8:45 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>

Cc: Gorence, Galen Jay <gorence@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Good Morning, Dr. Clyde,

I have the documents in front of me for review and endorsement. For the next shipment, you may send emails to sacanimalexport@aphis.usda.gov. The email you used is for animal products only.

The documents will be sent back to you using the FedEx label provided. Tracking #: 7909 6248 0318.

pcortes

Portia L Cortes, D.V.M.
Export Veterinary Medical Officer
USDA APHIS
Veterinary Export Trade Services
Service Center - Sacramento
10365 Old Placerville Road, Suite 210
Sacramento, CA 95827

(916) 854-3960

From: Clyde, Gaylynn Goolsby [<mailto:gclyde@wsu.edu>]
Sent: Wednesday, June 12, 2019 5:16 PM
To: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@usda.gov>
Cc: Gorence, Galen Jay <gorence@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Hi Kaitlyn and Dr. Cortes,

Just checking on the progress of our endorsement for our laboratory mice going from Washington State to Australia. The mice are scheduled for departure Friday morning, as long as we get the paper work back from you all tomorrow or early Friday.

Did you guys get it mailed today?

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@usda.gov>
Sent: Tuesday, June 11, 2019 11:24 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Wonderful! We will keep an eye out for it.

Thank you again,

Kaitlyn

From: Clyde, Gaylynn Goolsby [<mailto:gclyde@wsu.edu>]
Sent: Tuesday, June 11, 2019 11:09 AM
To: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@usda.gov>
Subject: RE: Export Laboratory Mice to Australia

Hi Kaitlyn,

Thank you for your help on this shipment to Australia. You guys should see the health certificate tomorrow.

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@aphis.usda.gov>
Sent: Friday, May 31, 2019 10:21 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Cc: APHIS-Sacramento Live Animal Export <sacanimalexport@aphis.usda.gov>
Subject: RE: Export Laboratory Mice to Australia

Good morning,

For export of live mice, please send all requests to our live animal email: Sacanimalexport@aphis.usda.gov

Thank you,

Kaitlyn Nielson

**Animal Health Technician/Document Examiner-USDA-VS
Veterinary Export Trade Services, Service Center: Sacramento, CA.
10365 Old Placerville Rd. #210
Sacramento, CA 95827-2518
Phone: 916-854-3932**

From: Clyde, Gaylynn Goolsby [<mailto:gclyde@wsu.edu>]
Sent: Thursday, May 30, 2019 12:05 PM
To: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@aphis.usda.gov>
Cc: Estes, Lisa M. <lisam@wsu.edu>
Subject: Export Laboratory Mice to Australia

To whom it may concern,

We are in the process of trying to ship six laboratory mice from Washington State University to Australia.

Attached are:

1. Email from Errin Isedale (person in charge of the imported goods)
2. The Permit from the Australian Government
3. The "Health Certificate" they forwarded our office (draft)

Please advise on what steps we need to proceed:

1. Do we need to fill in a APHIS form 7001?
2. Do we need a notarized affidavit for the statements listed on the provided health certificate?
3. Once we have finalized all paper work, we send to you for signature with return shipping label?
4. There are 17 items outlined on the permit pgs. 4-5 asking for information such as email contact, fax number, telephone number. Not sure where that information goes?

Thank you for your assistance,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

From: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>
Sent: Thursday, June 13, 2019 3:00 PM
To: Clyde, Gaylynn Goolsby
Cc: Gorence, Galen Jay; or.ocv.alert; APHIS-Sacramento Live Animal Export
Subject: RE: Export Laboratory Mice to Australia

Good Afternoon,

FedEx has not picked-up the packages so I retrieved the envelop going back to you. We will hold the certificate we endorsed today, including the shipping label. WE will charge for next week's certificate only.

pcortes

From: Clyde, Gaylynn Goolsby [mailto:gclyde@wsu.edu]
Sent: Thursday, June 13, 2019 2:22 PM
To: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>
Cc: Gorence, Galen Jay <gorence@wsu.edu>; or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Dr. Cortes,

Appreciate you getting it endorsed. Unfortunately, just heard from the shipping company and they did not schedule the flight for these animals. We will need to do this all over again next week.

Summary for next week:

1. We will examine the animals June 18th.
2. Fill in the same health certificate with updated date
3. We will send you an email to sacanimalexport@aphis.usda.gov with a copy of the health certificate, and the permit on June 18th
4. We will FedEx the signed health certificate, permit, PayGov sheet, paid overnight shipping label on June 18th. Shipping address:
USDA-APHIS VS
Veterinary Export Service Center
10365 Old Placerville Rd., Suite 210
Sacramento, CA. 95827
5. We will need the returned health certificate returned on June 20th or 21st for shipment on the 21st of June.

Please cancel this shipment plan for the 14th. If anything above looks incorrect, please let me know asap.

Hopefully, we can get these animals out next week.

Thank you for all your assistance,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246

Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>
Sent: Thursday, June 13, 2019 2:11 PM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Cc: Gorence, Galen Jay <gorence@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Dr. Clyde,
I have signed the certificate and Ali Brown has processed it – billed, scanned and enveloped using the mailing label you provided. FedEx picks-up from our office around 2:30 to 3:00 pm.
pcortes

From: Clyde, Gaylynn Goolsby [<mailto:gclyde@wsu.edu>]
Sent: Thursday, June 13, 2019 9:31 AM
To: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>
Cc: Gorence, Galen Jay <gorence@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Dr. Cortes,

Thank you for the reply. We **must** have those documents back to us tomorrow morning. Someone on your end J.Cortez signed at 10:02am yesterday. There is a 72 hour window for these animals to get out of the country.

Please let me know when this ships today.

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>
Sent: Thursday, June 13, 2019 8:45 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>

Cc: Gorence, Galen Jay <gorence@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Good Morning, Dr. Clyde,

I have the documents in front of me for review and endorsement. For the next shipment, you may send emails to sacanimalexport@aphis.usda.gov. The email you used is for animal products only.

The documents will be sent back to you using the FedEx label provided. Tracking #: 7909 6248 0318.

pcortes

Portia L Cortes, D.V.M.
Export Veterinary Medical Officer
USDA APHIS
Veterinary Export Trade Services
Service Center - Sacramento
10365 Old Placerville Road, Suite 210
Sacramento, CA 95827

(916) 854-3960

From: Clyde, Gaylynn Goolsby [<mailto:gclyde@wsu.edu>]
Sent: Wednesday, June 12, 2019 5:16 PM
To: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@usda.gov>
Cc: Gorence, Galen Jay <gorence@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Hi Kaitlyn and Dr. Cortes,

Just checking on the progress of our endorsement for our laboratory mice going from Washington State to Australia. The mice are scheduled for departure Friday morning, as long as we get the paper work back from you all tomorrow or early Friday.

Did you guys get it mailed today?

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@usda.gov>
Sent: Tuesday, June 11, 2019 11:24 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Wonderful! We will keep an eye out for it.

Thank you again,

Kaitlyn

From: Clyde, Gaylynn Goolsby [<mailto:gclyde@wsu.edu>]
Sent: Tuesday, June 11, 2019 11:09 AM
To: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@usda.gov>
Subject: RE: Export Laboratory Mice to Australia

Hi Kaitlyn,

Thank you for your help on this shipment to Australia. You guys should see the health certificate tomorrow.

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@aphis.usda.gov>
Sent: Friday, May 31, 2019 10:21 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Cc: APHIS-Sacramento Live Animal Export <sacanimalexport@aphis.usda.gov>
Subject: RE: Export Laboratory Mice to Australia

Good morning,

For export of live mice, please send all requests to our live animal email: Sacanimalexport@aphis.usda.gov

Thank you,

Kaitlyn Nielson

**Animal Health Technician/Document Examiner-USDA-VS
Veterinary Export Trade Services, Service Center: Sacramento, CA.
10365 Old Placerville Rd. #210
Sacramento, CA 95827-2518
Phone: 916-854-3932**

From: Clyde, Gaylynn Goolsby [<mailto:gclyde@wsu.edu>]
Sent: Thursday, May 30, 2019 12:05 PM
To: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@aphis.usda.gov>
Cc: Estes, Lisa M. <lisam@wsu.edu>
Subject: Export Laboratory Mice to Australia

To whom it may concern,

We are in the process of trying to ship six laboratory mice from Washington State University to Australia.

Attached are:

1. Email from Errin Isedale (person in charge of the imported goods)
2. The Permit from the Australian Government
3. The "Health Certificate" they forwarded our office (draft)

Please advise on what steps we need to proceed:

1. Do we need to fill in a APHIS form 7001?
2. Do we need a notarized affidavit for the statements listed on the provided health certificate?
3. Once we have finalized all paper work, we send to you for signature with return shipping label?
4. There are 17 items outlined on the permit pgs. 4-5 asking for information such as email contact, fax number, telephone number. Not sure where that information goes?

Thank you for your assistance,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

From: Clyde, Gaylynn Goolsby
Sent: Thursday, June 13, 2019 2:22 PM
To: APHIS-Sacramento Live Animal Export
Cc: Gorence, Galen Jay; or.ocv.alert
Subject: RE: Export Laboratory Mice to Australia

Dr. Cortes,

Appreciate you getting it endorsed. Unfortunately, just heard from the shipping company and they did not schedule the flight for these animals. We will need to do this all over again next week.

Summary for next week:

1. We will examine the animals June 18th.
2. Fill in the same health certificate with updated date
3. We will send you an email to sacanimalexport@aphis.usda.gov with a copy of the health certificate, and the permit on June 18th
4. We will FedEx the signed health certificate, permit, PayGov sheet, paid overnight shipping label on June 18th. Shipping address:
USDA-APHIS VS
Veterinary Export Service Center
10365 Old Placerville Rd., Suite 210
Sacramento, CA. 95827
5. We will need the returned health certificate returned on June 20th or 21st for shipment on the 21st of June.

Please cancel this shipment plan for the 14th. If anything above looks incorrect, please let me know asap.

Hopefully, we can get these animals out next week.

Thank you for all your assistance,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>
Sent: Thursday, June 13, 2019 2:11 PM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Cc: Gorence, Galen Jay <gorence@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Dr. Clyde,

I have signed the certificate and Ali Brown has processed it – billed, scanned and enveloped using the mailing label you provided. FedEx picks-up from our office around 2:30 to 3:00 pm.

pcortes

From: Clyde, Gaylynn Goolsby [<mailto:gclyde@wsu.edu>]

Sent: Thursday, June 13, 2019 9:31 AM

To: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>

Cc: Gorence, Galen Jay <gorence@wsu.edu>

Subject: RE: Export Laboratory Mice to Australia

Dr. Cortes,

Thank you for the reply. We must have those documents back to us tomorrow morning. Someone on your end J.Cortez signed at 10:02am yesterday. There is a 72 hour window for these animals to get out of the country.

Please let me know when this ships today.

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: APHIS-Sacramento Live Animal Export <sacanimalexport@usda.gov>

Sent: Thursday, June 13, 2019 8:45 AM

To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>

Cc: Gorence, Galen Jay <gorence@wsu.edu>

Subject: RE: Export Laboratory Mice to Australia

Good Morning, Dr. Clyde,

I have the documents in front of me for review and endorsement. For the next shipment, you may send emails to sacanimalexport@aphis.usda.gov. The email you used is for animal products only.

The documents will be sent back to you using the FedEx label provided. Tracking #: 7909 6248 0318.

pcortes

Portia L Cortes, D.V.M.

Export Veterinary Medical Officer
USDA APHIS
Veterinary Export Trade Services
Service Center - Sacramento
10365 Old Placerville Road, Suite 210
Sacramento, CA 95827

(916) 854-3960

From: Clyde, Gaylynn Goolsby [<mailto:gclyde@wsu.edu>]
Sent: Wednesday, June 12, 2019 5:16 PM
To: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@usda.gov>
Cc: Gorence, Galen Jay <gorence@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Hi Kaitlyn and Dr. Cortes,

Just checking on the progress of our endorsement for our laboratory mice going from Washington State to Australia. The mice are scheduled for departure Friday morning, as long as we get the paper work back from you all tomorrow or early Friday.

Did you guys get it mailed today?

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@usda.gov>
Sent: Tuesday, June 11, 2019 11:24 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Subject: RE: Export Laboratory Mice to Australia

Wonderful! We will keep an eye out for it.

Thank you again,

Kaitlyn

From: Clyde, Gaylynn Goolsby [<mailto:gclyde@wsu.edu>]
Sent: Tuesday, June 11, 2019 11:09 AM
To: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@usda.gov>
Subject: RE: Export Laboratory Mice to Australia

Hi Kaitlyn,

Thank you for your help on this shipment to Australia. You guys should see the health certificate tomorrow.

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@aphis.usda.gov>
Sent: Friday, May 31, 2019 10:21 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Cc: APHIS-Sacramento Live Animal Export <sacanimalexport@aphis.usda.gov>
Subject: RE: Export Laboratory Mice to Australia

Good morning,

For export of live mice, please send all requests to our live animal email: Sacanimalexport@aphis.usda.gov

Thank you,

Kaitlyn Nielson
Animal Health Technician/Document Examiner-USDA-VS
Veterinary Export Trade Services, Service Center: Sacramento, CA.
10365 Old Placerville Rd. #210
Sacramento, CA 95827-2518
Phone: 916-854-3932

From: Clyde, Gaylynn Goolsby [<mailto:gclyde@wsu.edu>]
Sent: Thursday, May 30, 2019 12:05 PM
To: APHIS-Sacramento VS Import Export <sacramento.vs.import.export@aphis.usda.gov>
Cc: Estes, Lisa M. <lisam@wsu.edu>
Subject: Export Laboratory Mice to Australia

To whom it may concern,

We are in the process of trying to ship six laboratory mice from Washington State University to Australia.

Attached are:

1. Email from Errin Isedale (person in charge of the imported goods)
2. The Permit from the Australian Government
3. The "Health Certificate" they forwarded our office (draft)

Please advise on what steps we need to proceed:

1. Do we need to fill in a APHIS form 7001?
2. Do we need a notarized affidavit for the statements listed on the provided health certificate?
3. Once we have finalized all paper work, we send to you for signature with return shipping label?
4. There are 17 items outlined on the permit pgs. 4-5 asking for information such as email contact, fax number, telephone number. Not sure where that information goes?

Thank you for your assistance,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

This electronic message contains information generated by the USDA solely for the intended recipients. Any unauthorized interception of this message or the use or disclosure of the information it contains may violate the law and subject the violator to civil or criminal penalties. If you believe you have received this message in error, please notify the sender and delete the email immediately.

From: Woodford, Nina Lynne
Sent: Wednesday, October 31, 2018 2:06 PM
To: or.ocv.alert; Gorence, Galen Jay; Luft, Jan Elizabeth; Gabelmann, Doris L
Subject: RE: Facility Liaisons - Upcoming Department of Ecology Inspections

Item for agenda next week

Nina Woodford DVM, MPH DACLAM
Director and Attending Veterinarian
Office of the Campus Veterinarian
Washington State University
509-335-6246
nwoodford@wsu.edu

From: Woodford, Nina Lynne
Sent: Wednesday, October 31, 2018 2:06 PM
To: or.ocv.alert <or.ocv.alert@wsu.edu>; Gorence, Galen Jay <gorence@wsu.edu>; Luft, Jan Elizabeth <jlluft@wsu.edu>; Gabelmann, Doris L <dgabelmann@wsu.edu>
Subject: FW: Facility Liaisons - Upcoming Department of Ecology Inspections

FYI – I think we are in pretty good shape after AAALAC but we are anticipating an unannounced inspection from Department of Ecology in the next 3 months primarily focused on chemical & dangerous waste, old lights, batteries, oil, and used chemical containers. General housekeeping has been excellent

Nina Woodford DVM, MPH DACLAM
Director and Attending Veterinarian
Office of the Campus Veterinarian
Washington State University
509-335-6246
nwoodford@wsu.edu

From: Plotner, Todd
Sent: Tuesday, April 24, 2018 12:37 PM
To: Costello, Dan <dan.costello@wsu.edu>; Blacker, Denise Rae <blackerd@wsu.edu>; Boston, Terry A <bostont@wsu.edu>; Carlson, Deborah Suzanne Lovel <dcarlson@wsu.edu>; Cole, Craig <craig.cole@wsu.edu>; Deeds, Shawn <shawn_deeds@wsu.edu>; Fischer, Christopher J <fischercj@wsu.edu>; Gardner, Bill <wgardner@wsu.edu>; Hagihara, Dwight <hagihara@wsu.edu>; Holbrook, Don <holbrook@wsu.edu>; Hulst, Don <idhulst@wsu.edu>; Johnson, John W <jwjohnson@wsu.edu>; Johnson, Philip Ryan <philrjohnson@wsu.edu>; Kamerrer, Kathleen Fae <kamerrer@wsu.edu>; Kline, Joseph C <jkline@wsu.edu>; LaBolle, Mark A. <mark.labolle@wsu.edu>; Lafferty, Wade <lafferty@wsu.edu>; Lucas, Kimi R <kimi.lucas@wsu.edu>; Lundquist, Susan Marie <carrico@wsu.edu>; Malcolm, George M <mmalcolm@wsu.edu>; Martin, Thomas A <martint@wsu.edu>; Neunherz, Darlene M <drussell@wsu.edu>; Neunherz, Gregory Alan <greg_neun@wsu.edu>; Nordquist, Daniel G <nordquist@wsu.edu>; Opheim, Tony <tony.opheim@wsu.edu>; Potratz, Steven John <steve_potratz@wsu.edu>; Rhoades, Beverly <bevr@wsu.edu>; Rice, Erin-Kae Dooling <ekrice@wsu.edu>; Shaheen,

John Anthony <shaheen@wsu.edu>; Sweeney, Louise Ann <lasweeney@wsu.edu>; Yang, Olivia Owyong <olivia.yang@wsu.edu>; Johnson, Carrie <c.johnson@wsu.edu>; Krehbiel, Doug Wynn <doug.krehbiel@wsu.edu>; Kearney, Dixie Lee <dixie.kearney@wsu.edu>; Martinez, Michelle S <msmartinez@wsu.edu>; Turner, Gary Dean <gdtturner@wsu.edu>; Goodell, Ryan Highsmith <ryan.goodell@wsu.edu>; Russell, Steven Paul <spruss@wsu.edu>; Woodford, Nina Lynne <nwoodford@wsu.edu>; Hoffman, Jessica Jane <jessica.j.hoffman@wsu.edu>
Cc: Sampson, Jason T <sampsonj@wsu.edu>; Ringo, Shawn Patrick <sringo@wsu.edu>; Slocum, Eric Lane <slocume@wsu.edu>; Finch, Richard W <finchr@wsu.edu>; Triplett, Benjamin <ben.triplett@wsu.edu>
Subject: Facility Liaisons - Upcoming Department of Ecology Inspections

Liaisons,

Here is information about the Department of Ecology inspections mentioned at this morning's meeting. Contact information for EH&S is below.

Sincerely,
Todd

Begin forwarded message:

From: "Sampson, Jason T" <sampsonj@wsu.edu>
Date: April 23, 2018 at 3:03:05 PM PDT
To: "Lomber, Jonathan P" <j.lomber@wsu.edu>, "Sullivan, John David" <johns@wsu.edu>, "Miller, Glenn E" <millerge@wsu.edu>, "Neunherz, Darlene M" <drussell@wsu.edu>, "Duncan, Robert" <duncanr@wsu.edu>, "Lewis, Scott Robert" <srlewis@wsu.edu>, "Hansen, Chad Donald" <hansenc@wsu.edu>, "Hill, Brad W" <bwhill@wsu.edu>, "Burt, Michael S" <mburt@wsu.edu>, "Gregg, Joshua L" <jgregg@wsu.edu>, "Smith, Lon W" <lwsmith@wsu.edu>, "Bailey, Gisela M" <gmbailey@wsu.edu>, "Duffy, Tricia E" <tduffy@wsu.edu>, "Mortimer, Michael William" <mortimer@wsu.edu>, "Lange, Iris" <ilange@wsu.edu>, "Lacy, Paul Alan" <lacyp@wsu.edu>, "Haas, Kevin James (khaas@wsu.edu)" <khaas@wsu.edu>, "Lucas, Kimi R" <kimi.lucas@wsu.edu>, "Kearney, Dixie Lee" <dixie.kearney@wsu.edu>, "Keller, Kent" <ckkeller@wsu.edu>, "Saam, Brian" <brian.saam@wsu.edu>, "Hutton, Sophia" <sophia.hutton@wsu.edu>, "Stratton, Robin G" <rstratton@wsu.edu>, "Kiser, Jennifer Nicole" <jennifer.kiser@wsu.edu>
Cc: "Silbernagel, Dale Andrew" <silbernagel@wsu.edu>, "Keon, Don" <hwt@wsu.edu>, "Speargas Whiteman, Amy" <aspeargas@wsu.edu>, "O'Loughlin, Levi" <levi.oloughlin@wsu.edu>
Subject: Upcoming Department of Ecology inspections

Recently the EPA and Department of Ecology reached out and indicated that WSU should anticipate an inspection sometime in the three months. Labs, shops, farms, and any areas that generate hazardous or universal waste will be subject to random inspection. As such, faculty and staff in those areas should review this checklist and verify they are following proper procedures:

- Universal Waste, including oil, lights, and batteries must be labelled with the words "Universal Waste Lights/Batteries" or "Used Oil". Lights and Batteries also need to list the start date for accumulation, which should be sometime within the past year. All waste boxes or containers must be properly closed or sealed when not being filled.
- Dangerous Waste must be properly labelled. At a minimum a dangerous waste label must have the words "Dangerous Waste", it must list the major hazard, and show all constituents written out with no abbreviations and the percentages associated with each. Label showed be attached to container before the first drop of waste is added.

- Dangerous Waste must be properly stored. Waste should be kept in compatible containers. In some situations it is also necessary to have some form of secondary containment for liquid waste. A specialized storage cabinet is ideal, but a tub made of chemical resistant plastic is also acceptable. All containers must be closed when not being filled. Incompatible wastes should be separated by distance or segregated by secondary containment tubs.
- General housekeeping will be scrutinized. Keep floors clean of debris and tripping hazards, counters should be free of clutter, and chemicals should be put away when not in use. Pay special attention around sinks and drains.
- Old chemical containers which have not been used in a long time and appear to have no practical use may be scrutinized by inspectors as improper storage of dangerous waste. EH&S will remove unwanted materials upon request.

Please forward this information to anyone you feel would be interested. If you need clarification or have any other questions, please call the Environmental Health and Safety office at 5-3041.

Thank you.

Jason Sampson

From: Wild, Margaret Ann
Sent: Friday, August 30, 2019 9:59 AM
To: Loaiza, Fred A,II
Cc: or.ocv.alert; Martinez, Michelle S
Subject: RE: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers

Thanks for looking into this Fred. I would respectfully differ with the pest company's assessment of risk of secondary toxicity, particularly to wildlife. I understand that use of these highly toxic anticoagulant rodenticides might be required in some situations, but I am going to reach out to the IACUC to ask about thinking about some risk reduction. Not that what we've done is the past is wrong, just thinking about if/how we might make it more environmentally friendly.

Best,
Margaret

Margaret A. Wild, DVM, PhD
Professor
Washington State University
College of Veterinary Medicine
Department of Veterinary Microbiology and Pathology
ADBF 4013
PO Box 647040
Pullman, WA 99164-7040
Ph: 509-335-6323

From: Loaiza, Fred A,II
Sent: Wednesday, August 28, 2019 3:05 PM
To: Wild, Margaret Ann <margaret.wild@wsu.edu>
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>; Martinez, Michelle S <msmartinez@wsu.edu>
Subject: RE: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers

Hi Dr. Wild,

I have some new information about the Generation Mini-Blocks we use in our bait stations, EPA # 7173-218. Like I said yesterday the rodent control is contracted out to Palouse Empire Pest Control 800 852-7498. I made calls to PEPC and the manufacturer of the product, Liphatech 800 351-1476. They both assured me that even though there is some risk of an animal eating a rodent after it ingested the bait, there have been no documented cases of secondary poisoning. Brad Bowman, of Palouse Empire Pest Control offered to speak with you if you like. He can do a much better job than I can to explain it .

If I learn anything else I will be sure to pass it on.

Thank you,

Fred Loaiza
Animal Care Facilities Mgr.

WSU CVM ARU
PO Box 647010
Pullman, WA 99164-7010
509-335-2188 Fax 509-335-5830
[*floaiza@wsu.edu*](mailto:floaiza@wsu.edu)

From: Wild, Margaret Ann
Sent: Tuesday, August 27, 2019 3:29 PM
To: Loaiza, Fred A,II <floaiza@wsu.edu>
Subject: RE: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers

Thanks for sharing this information. I know it isn't your decision, but this stuff can be bad for wildlife. It causes secondary poisoning and is of particular concern in raptors (see for example <http://npic.orst.edu/factsheets/rodenticides.html>). I'll reach out to the IACUC and will be interested to hear their perspective.

Best,
Margaret

Margaret A. Wild, DVM, PhD
Professor
Washington State University
College of Veterinary Medicine
Department of Veterinary Microbiology and Pathology
ADBF 4013
PO Box 647040
Pullman, WA 99164-7040
Ph: 509-335-6323

From: Loaiza, Fred A,II
Sent: Tuesday, August 27, 2019 2:57 PM
To: Wild, Margaret Ann <margaret.wild@wsu.edu>
Subject: FW: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers

Dr. Wild,

The question has been brought up before about secondary poisoning with our rodent bait stations. This email with attachments are what I sent to the IACUC upon their request. We currently still use the bait stations in all our facilities.

Hope this is helpful, thank you for the question.

Fred Loaiza
Animal Care Facilities Mgr.
WSU CVM ARU
PO Box 647010

Pullman, WA 99164-7010
509-335-2188 Fax 509-335-5830
[*floaiza@wsu.edu*](mailto:floaiza@wsu.edu)

From: Loaiza, Fred A,II
Sent: Friday, November 16, 2018 11:00 AM
To: Kuykendall, Kerri <kerri.kuykendall@wsu.edu>; Martinez, Michelle S <msmartinez@wsu.edu>
Subject: RE: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers

Good morning,

I have read the "Cover Letter" and the "Semiannual Facility Inspection Checklist". Everything appeared acceptable with only thing I thought I could make clearer. Under the heading of

"Suggestions for Improvement, Pest Control"

1. There are rodent bait stations around the facility for rodent control. Some of the rodenticides are associate with higher risk of secondary toxicity if another animal consumes a rodent that has ingested bait. Please work with your Pest Control Company to identify the type of rodenticide in use. Whenever possible rodenticides with the secondary toxicity should be used. If live traps are used, then must be checked daily and documentation.

I personally contacted our pest company, Palouse Pest Control, I spoke with the owner, Brad Bowman explained they only use Generation mini blocks in our bait stations. As suggested this is one of the most environmental friendly baits we can use. I have attached the MSDS for that product and an image of the company logo on our bait stations. We appreciate the opportunity to share this information with you. If you have any further questions or concerns please let us know.

Thank you,

Fred Loaiza
Animal Care Facilities Mgr.
WSU CVM ARU
PO Box 647010
Pullman, WA 99164-7010
509-335-2188 Fax 509-335-5830
[*floaiza@wsu.edu*](mailto:floaiza@wsu.edu)

From: Kuykendall, Kerri
Sent: Thursday, November 15, 2018 8:39 AM
To: Martinez, Michelle S <msmartinez@wsu.edu>; Loaiza, Fred A,II <floaiza@wsu.edu>
Subject: FW: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers

Hi,

Please see attached cover letter.

Thanks,

Kerri

From: Kuykendall, Kerri

Sent: Thursday, November 15, 2018 8:34 AM

To: Loaiza, Fred A,II <floaiza@wsu.edu>; Martinez, Michelle S <msmartinez@wsu.edu>

Cc: Woodford, Nina Lynne <nwoodford@wsu.edu>

Subject: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers

Hello,

I have been asked by the Institutional Animal Care and Use Committee (IACUC) to send out the Animal Facility Checklist reports that were composed following the semi-annual visit by the WSU-IACUC. Please see the attached cover letter and checklist(s) for the facilities/areas that are in your charge. The cover letter provides definitions of the findings on the checklists as well as guidance on how to respond to the findings.

Please do not hesitate to contact me if you have questions regarding this information.

Sincerely,

Kerri

Kerri Kuykendall
Program Specialist 3/Post-Approval Reviewer
Animal Welfare Program
Washington State University
Office: (509) 335-8043
URL: <https://iacuc.wsu.edu/>



From: Loaiza, Fred A,II
Sent: Wednesday, August 28, 2019 3:05 PM
To: Wild, Margaret Ann
Cc: or.ocv.alert; Martinez, Michelle S
Subject: RE: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers
Attachments: Generation-Mini-Blocks-SDS-2019-ENGLISH.pdf; ENG_GEN_MiniBlocks_Label.pdf

Hi Dr. Wild,

I have some new information about the Generation Mini-Blocks we use in our bait stations, EPA # 7173-218. Like I said yesterday the rodent control is contracted out to Palouse Empire Pest Control 800 852-7498. I made calls to PEPC and the manufacturer of the product, Liphatech 800 351-1476. They both assured me that even though there is some risk of an animal eating a rodent after it ingested the bait, there have been no documented cases of secondary poisoning. Brad Bowman, of Palouse Empire Pest Control offered to speak with you if you like. He can do a much better job than I can to explain it .

If I learn anything else I will be sure to pass it on.

Thank you,

Fred Loaiza
Animal Care Facilities Mgr.
WSU CVM ARU
PO Box 647010
Pullman, WA 99164-7010
509-335-2188 Fax 509-335-5830
floaiza@wsu.edu

From: Wild, Margaret Ann
Sent: Tuesday, August 27, 2019 3:29 PM
To: Loaiza, Fred A,II <floaiza@wsu.edu>
Subject: RE: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers

Thanks for sharing this information. I know it isn't your decision, but this stuff can be bad for wildlife. It causes secondary poisoning and is of particular concern in raptors (see for example <http://npic.orst.edu/factsheets/rodenticides.html>). I'll reach out to the IACUC and will be interested to hear their perspective.

Best,
Margaret

Margaret A. Wild, DVM, PhD
Professor
Washington State University
College of Veterinary Medicine
Department of Veterinary Microbiology and Pathology

ADBF 4013
PO Box 647040
Pullman, WA 99164-7040
Ph: 509-335-6323

From: Loaiza, Fred A,II
Sent: Tuesday, August 27, 2019 2:57 PM
To: Wild, Margaret Ann <margaret.wild@wsu.edu>
Subject: FW: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers

Dr. Wild,

The question has been brought up before about secondary poisoning with our rodent bait stations. This email with attachments are what I sent to the IACUC upon their request. We currently still use the bait stations in all our facilities.

Hope this is helpful, thank you for the question.

Fred Loaiza
Animal Care Facilities Mgr.
WSU CVM ARU
PO Box 647010
Pullman, WA 99164-7010
509-335-2188 Fax 509-335-5830
[*floaiza@wsu.edu*](mailto:floaiza@wsu.edu)

From: Loaiza, Fred A,II
Sent: Friday, November 16, 2018 11:00 AM
To: Kuykendall, Kerri <kerri.kuykendall@wsu.edu>; Martinez, Michelle S <msmartinez@wsu.edu>
Subject: RE: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers

Good morning,

I have read the "Cover Letter" and the "Semiannual Facility Inspection Checklist". Everything appeared acceptable with only thing I thought I could make clearer. Under the heading of

"Suggestions for Improvement, Pest Control"

1. There are rodent bait stations around the facility for rodent control. Some of the rodenticides are associate with higher risk of secondary toxicity if another animal consumes a rodent that has ingested bait. Please work with your Pest Control Company to identify the type of rodenticide in use. Whenever possible rodenticides with the secondary toxicity should be used. If live traps are used, then must be checked daily and documentation.

I personally contacted our pest company, Palouse Pest Control, I spoke with the owner, Brad Bowman explained they only use Generation mini blocks in our bait stations. As suggested this is one of the most environmental friendly baits we can use. I have attached the MSDS for that product and an image of the company logo on our bait stations. We appreciate the opportunity to share this information with you. If you have any further questions or concerns please let us know.

Thank you,

Fred Loaiza
Animal Care Facilities Mgr.
WSU CVM ARU
PO Box 647010
Pullman, WA 99164-7010
509-335-2188 Fax 509-335-5830
floaiza@wsu.edu

From: Kuykendall, Kerri
Sent: Thursday, November 15, 2018 8:39 AM
To: Martinez, Michelle S <msmartinez@wsu.edu>; Loaiza, Fred A,II <floaiza@wsu.edu>
Subject: FW: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers

Hi,

Please see attached cover letter.

Thanks,

Kerri

From: Kuykendall, Kerri
Sent: Thursday, November 15, 2018 8:34 AM
To: Loaiza, Fred A,II <floaiza@wsu.edu>; Martinez, Michelle S <msmartinez@wsu.edu>
Cc: Woodford, Nina Lynne <nwoodford@wsu.edu>
Subject: Fall 2018 IACUC Checklist - ARU Large Animal Facilities and Trailers

Hello,

I have been asked by the Institutional Animal Care and Use Committee (IACUC) to send out the Animal Facility Checklist reports that were composed following the semi-annual visit by the WSU-IACUC. Please see the attached cover letter and checklist(s) for the facilities/areas that are in your charge. The cover letter provides definitions of the findings on the checklists as well as guidance on how to respond to the findings.

Please do not hesitate to contact me if you have questions regarding this information.

Sincerely,

Kerri

Kerri Kuykendall
Program Specialist 3/Post-Approval Reviewer
Animal Welfare Program
Washington State University
Office: (509) 335-8043
URL: <https://iacuc.wsu.edu/>



SAFETY DATA SHEET

Section 1: Identification

Product identifier: Generation® Mini Blocks
Other identifier(s): EPA Registration No. 7173-218
Uses or restrictions: Rodenticide with difethialone
Manufacturer: Liphatech, Inc.
3600 W. Elm Street, Milwaukee, WI 53209
Emergency phone: 800-351-1476 Monday - Friday 8:00 am - 4:30 pm
(US Central time zone)
After hours phone: Human or Animal emergencies: RMPDC at 866-514-9168
Spill emergencies: CHEMTREC at 800-424-9300

Section 2: Hazard Identification

Hazard class: Specific Target Organ Toxicity (Single exposure), Category 2;
Specific Target Organ Toxicity (Repeated exposure), Category 2
Warning: May cause damage to blood and reduce the clotting ability of blood if swallowed, inhaled or absorbed through skin. Do not breathe dust. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling. If exposed or if you feel unwell, call a poison control center or doctor. Dispose of container and contents according to instructions on product label. Store locked up.



Section 3: Composition / Information on Ingredients

Hazardous ingredients:
Difethialone (CAS registry no. 104653-34-1) 0.0025%

Section 4: First Aid Measures

Emergency overview: This material may reduce the clotting ability of the blood and cause bleeding. Symptoms of toxicity include lethargy, loss of appetite, reduced clotting ability of blood, and bleeding. Have the product label with you when obtaining treatment advice.
If swallowed: Call a poison control center or doctor. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor.
If inhaled: Move person to fresh air. If person is not breathing, call an ambulance, then give artificial respiration and call poison control or doctor.
If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor.
If on skin or clothing: Take off contaminated clothing. Rinse skin with plenty of cool water for 15-20 minutes. Call a poison control center or doctor.
Note to Physician or Veterinarian: Contains anticoagulant ingredient. For humans or animals ingesting bait and/or showing obvious poisoning symptoms (bleeding or prolonged prothrombin times), give Vitamin K₁ intramuscularly or orally. In severe cases, blood transfusions may be needed.

Section 5: Fire-fighting Measures

Extinguishing media: Use media suitable for the surrounding fire
Specific fire or explosion hazards: None known
Special cautions for firefighters: Wear self-contained breathing apparatus (full facepiece) & full protective clothing. Contain runoff to prevent pollution.

Section 6: Accidental Release Measures

Precautions, PPE and Procedures: Wearing PPE as specified in Section 8, isolate and contain spill. Limit access to spill area to necessary personnel. Do not allow spilled material to enter sewers, streams or other waters.
Methods and materials: Scoop up spilled material and place in a closed, labeled container for use according to label instructions or disposal.

Section 7: Handling and Storage

Precautions for safe handling: Read the entire product label before using this rodenticide. **Conditions for safe storage:** Store in original container in a cool, dry area out of reach of children, pets and domestic animals. Do not contaminate water, food or feed. Keep container tightly closed. Do not remove or destroy the product label.

Section 8: Exposure Controls / Personal Protection

Established exposure limits: Not applicable

Appropriate engineering controls: Special ventilation is not required for the normal handling and use of this product when following label instructions.
Individual protection measures: Wear long pants, shoes, socks and waterproof gloves when handling this product. Follow manufacturer's instructions for cleaning/maintaining PPE, or else wash with detergent and hot water. Keep and wash PPE separately from other laundry. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. Wash hands thoroughly after applying bait and before eating, drinking, chewing gum, using tobacco or using the toilet, and change into clean clothing.

Section 9: Physical and Chemical Properties

Appearance: Solid block, yellow color, raw grain odor. Odor threshold not determined.
Water solubility: Negligible **pH:** Not applicable
Density: 1.05 g/cc **Viscosity:** Not applicable
% Volatile (volume): Not applicable **Evaporation rate:** Not applicable
Vapor density: Not applicable **Vapor pressure:** Not applicable
Boiling point: Not determined **Freezing point:** Not applicable
Flash point (ASTM D92): >190 °C **Autoignition temp.:** Not determined
Flammability: Not a flammable solid **Decomposition temp.:** Not determined
Explosive limits - Lower limit: Not applicable; Upper limit: Not applicable
Partition coefficient (n-octanol/water): Not applicable

Section 10: Stability and Reactivity

Reactivity: Not reactive, not sensitive to shock or static discharge
Chemical stability: Stable **Hazardous reactions:** None
Incompatible materials: None **Conditions to avoid:** None
Hazardous decomposition products: Oxides of carbon

Section 11: Toxicological Information

Likely routes of exposure: Ingestion, skin absorption.
Symptoms of toxicity: Lethargy, loss of appetite, reduced clotting ability of blood, and bleeding.
Eye effects/eye irritation: Mild, transient irritant
Acute oral effects: LD₅₀ (oral-rat): >5000 mg/kg
Acute inhalation effects: LC₅₀ (rat, 4 hour): 200 mg/L (extrapolated)
Acute dermal effects: LD₅₀ (dermal-rabbit): >2000 mg/kg
Skin irritation: Non-irritating
Skin sensitization: Not a skin sensitizer
Carcinogenicity: No ingredient listed by NTP, IARC or OSHA

Section 12: Ecological Information

This product is extremely toxic to birds and mammals. Do not apply this product directly to water, where surface water is present or to intertidal areas below the mean high water mark. Carefully follow label cautions and directions to reduce hazards to children, pets and non-target wildlife.

Section 13: Disposal Considerations

Disposal: Wastes resulting from the use of this product according to the label instructions must be disposed of as specified on the product label.
RCRA waste status: This product is not regulated as a hazardous waste under Federal law. State and local regulation may affect the disposal of this product. Consult your state or local environmental agency for disposal of waste generated other than by use according to label instructions.

Section 14: Transportation Information

Transportation data (49 CFR): This product is not regulated as a hazardous material for all modes of transportation within the U.S.
Hazard Class, Packing Group and UN ID No.: Not applicable

Section 15: Regulatory Information

TSCA: All components of this product are listed on the TSCA inventory.
SARA section 313: Contains no reportable components.
CA Proposition 65: Contains no substances subject to Prop 65 requirements.
FIFRA: This product is registered as a pesticide with the U.S. Environmental Protection Agency. The label requirements under Federal pesticide law differ from the classification criteria and hazard information required by OSHA on this Safety Data Sheet. Read and follow all cautions, directions and use restrictions on the product label on the container.

Section 16: Other Information

Prepared by: K. Paavola **Date:** 13 August 2019
This Safety Data Sheet is believed to be accurate at time of publication. No warranty, expressed or implied, is made with regard to this information. This information may not be adequate for every application, and the user must determine the suitability of this information due to the manner or conditions of use or storage, or local regulation.
Data submitted to ARLO on 10/20/2020

PRECAUTIONARY STATEMENTS

Hazard to Humans and Domestic Animals

CAUTION:

Harmful if swallowed or absorbed through the skin. Causes moderate eye irritation. Avoid contact with eyes, skin or clothing. Keep away from children, domestic animals and pets. All handlers (including applicators) must wear long pants, shoes, socks, and waterproof gloves. Any person who retrieves carcasses or unused bait following application of this product must wear waterproof gloves.

User Safety Requirements: Follow manufacturer's instructions for cleaning/maintaining PPE. If no such instructions for washables, use detergent and hot water. Keep and wash PPE separately from other laundry. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash hands thoroughly after applying bait and before eating, drinking, chewing gum, using tobacco or using the toilet, and change into clean clothing.

FIRST AID

Have this label with you when obtaining treatment advice.

If swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by the poison control center or doctor.

If in eyes: Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor immediately for treatment advice.

If on skin or clothing: Take off contaminated clothing. Rinse skin with plenty of cool water for 15-20 minutes. Call a poison control center or doctor immediately for treatment advice.

TREATMENT FOR PET POISONING: If animal eats bait, call veterinarian at once.
NOTE TO PHYSICIAN OR VETERINARIAN: Contains the anticoagulant difethialone. If swallowed, this material may reduce the clotting ability of blood and cause bleeding. For humans or animals ingesting bait and/or showing obvious poisoning symptoms (bleeding or prolonged prothrombin times), give Vitamin K₁ intramuscularly or orally. Also for pets, if needed, check prothrombin time every 3 days until values return to normal (up to 30 days). In severe cases, blood transfusions may be needed.

ENVIRONMENTAL HAZARDS: This product is extremely toxic to mammals and birds. Dogs, cats and other predatory and scavenging mammals and birds might be poisoned if they feed upon animals that have eaten this bait. Do not apply directly to water, or to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when disposing of equipment wash water or rinsate.

STORAGE AND DISPOSAL

Do not contaminate water, food or feed by storage or disposal.

Pesticide Storage: Store in original container in a cool, dry place inaccessible to children and pets.

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of in trash or at an approved waste disposal facility.

Container Handling: Nonrefillable container. Do not reuse or refill this container. Completely empty container, then offer for recycling or reconditioning; or puncture and dispose of in a sanitary landfill.

WARRANTY: To the extent consistent with applicable law, seller makes no warranty, expressed or implied, concerning the use of this product other than indicated on the label. Buyer assumes all risk of use and/or handling of this material when such use and/or handling is contrary to label instructions.

EPA Reg. No. 7173-218

EPA Est. No. 7173-WI-1

generation®

MINI BLOCKS

ALL WEATHER BAIT FOR WET OR DRY AREAS

FOR INDOOR AND OUTDOOR USE

KILLS NORWAY RATS, ROOF RATS, HOUSE MICE
AND WARFARIN-RESISTANT HOUSE MICE

KILLS OTHER RODENT SPECIES AS LISTED ON THIS LABEL

NORWAY RATS AND HOUSE MICE MAY CONSUME
A LETHAL DOSE IN ONE NIGHT'S FEEDING
WITH FIRST DEAD RODENTS APPEARING
FOUR OR FIVE DAYS AFTER FEEDING BEGINS

Active Ingredient: difethialone	0.0025%
Inert Ingredients	99.9975%
Total	100.0000%

KEEP OUT OF REACH OF CHILDREN
CAUTION

See side panel for additional precautionary statements.

LIPHATECH®

Liphatech, Inc.
3600 W. Elm Street
Milwaukee, WI 53209
(800) 351-1476

DIRECTIONS FOR USE

It is a violation of Federal law to use this product in a manner inconsistent with its labeling.

READ THIS LABEL and follow all use directions and precautions. Use only for the sites, pests, and application methods described on this label.

IMPORTANT: Do not expose children, pets or other nontarget animals to rodenticides. To help prevent accidents:

1. Store product not in use in a location out of reach of children and pets.
2. Apply bait in locations out of reach of children, pets, domestic animals, and nontarget wildlife, or in tamper-resistant bait stations. These stations must be resistant to destruction by dogs and children under six years of age, and must be used in a manner that prevents such children from reaching into bait compartments and obtaining bait. If bait can be shaken from stations when they are lifted, units must be secured or otherwise immobilized. Even stronger bait stations are needed in areas open to hoofed livestock, raccoons, bears, other potentially destructive animals, or in areas prone to vandalism.
3. Dispose of product container, unused, spoiled, and unconsumed bait as specified on this label.

Note: Bait stations are mandatory for outdoor, above-ground use. Tamper-resistant bait stations must be used if children, pets, non-target mammals, or birds may access the bait.

USE RESTRICTIONS: This product can only be used to control Norway rats, roof rats, house mice, Cotton rat* (*Sigmodon hispidus*), Eastern harvest mouse* (*Reithrodontomys humuli*), Golden mouse* (*Ochrotomys nuttalli*), Polynesian rat* (*Rattus exulans*), Meadow vole* (*Microtus pennsylvanicus*), White-throated woodrat* (*Neotoma albigula*), Southern plains woodrat* (*Neotoma micropus*) and Mexican woodrat* (*Neotoma mexicana*) in and within 100 feet of man-made structures constructed in a manner so as to be vulnerable to commensal rodent invasions and/or to harboring or attracting rodent infestations. Examples of such structures include homes and other permanent or temporary residences, food processing facilities, industrial and commercial buildings, trash receptacles, agricultural and public buildings, transport vehicles (ships, trains, aircraft), docks and port or terminal buildings, and related structures around and associated with these sites. Fence and perimeter baiting beyond 100 feet from a structure, as defined above, is prohibited. Do not sell this product in individual containers holding less than 16 pounds of bait. Do not place near or inside ventilation duct openings. Do not contaminate water, food, feedstuffs, food or feed handling equipment, or milk or meat handling equipment. Do not apply directly to food or feed crops. Do not broadcast bait. Burrow baiting with this product is prohibited. *Not permitted for use against the following species in California: Cotton rat, Eastern harvest mouse, Golden mouse, Polynesian rat, Meadow vole, White-throated woodrat, Southern plains woodrat, and Mexican woodrat.

Selection of Treatment Areas: Determine areas where rats and/or house mice will most likely find and consume bait. Generally, these are along walls, by gnawed openings, in corners and concealed places, between floors or walls, beside burrows, or in locations where rats and/or house mice or their signs have been observed. Remove as much alternative food as possible.

APPLICATION DIRECTIONS: House Mice: Apply 1 block per placement, usually spaced 8 to 12 feet apart. Up to 2 blocks may be needed at points of very high house mouse activity. Maintain a constant supply of fresh bait for 15 days or until signs of house mouse activity cease.

Rats: Apply 6 to 23 blocks per placement, usually spaced 15 to 30 feet apart. Maintain a constant supply of fresh bait for 10 days or until signs of rat activity cease.

For sewer applications, securely attach one end of a wire to block of bait and the other end to a stationary structure such as the bottom step of manhole ladder or to a sewer grate, allowing just enough wire for bait to rest on manhole benching. If benching is not present, suspend bait a few inches above the high water line or place bait on a board supported by opposing steps of the ladder. Securing bait in this manner will minimize chance for removal by rats or water. Place at least 23 blocks per manhole.

Follow-up: Replace contaminated or spoiled bait immediately. Wearing waterproof gloves, collect and dispose of all visible dead animals and leftover bait, as well as any bait that has become accessible to non-target animals. To discourage reinfestation, limit sources of rodent food, water and harborage as much as possible. If reinfestation does occur, repeat treatment. For a continuous infestation, set up permanent bait stations and replenish bait as needed.

(090115)

From: Clyde, Gaylynn Goolsby
Sent: Wednesday, December 05, 2018 1:39 PM
To: Karel-Ward, Emma
Cc: or.ocv.alert
Subject: RE: Foals for adoption

Hi Emma,

If they are not crossing state lines, they will not need a CVI, but CVI cost \$25. If the new owners would like a brand inspection we can look at them for that. Brand inspections are optional but recommended from WSDA for change of ownership. Brand inspection would be \$40, if they are going to all the same owner it would be just one charge.

GC

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Karel-Ward, Emma <ekarel@wsu.edu>
Sent: Wednesday, December 5, 2018 12:52 PM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Subject: Foals for adoption

Hi Gaylynn,

I have 3 foals that will be adopted out, possibly 4, and hopefully before Christmas! They are all staying in the state of Washington. What is the cost of doing a health certificate? We will pass that cost on to the new owners so I want to let them know. Not sure yet of any exit dates but will let you know when I know. Thanks!
Emma

*Emma Karel-Ward
Animal Care Facilities Manager
402 Bustad Hall
Pullman, WA 99164-7040*

Office located off Terre View Rd at:

3850 NE Antelope Trail Dr #188A

Office: 509-335-6017

Cell: 208-669-0582

When you change the way you look at things, the things you look at change.

From: Clyde, Gaylynn Goolsby
Sent: Friday, May 03, 2019 11:03 AM
To: Reda, Sherif M
Cc: Chandra, Murali; Gabelmann, Doris L; Gorence, Galen Jay; or.ocv.alert
Subject: RE: GP

Hi Sherif,

The drop jar method must be performed in a fume hood and following the IACUC outlined SOP https://iacuc.wsu.edu/documents/2016/06/wsu_sop_3.pdf/.

It outlines in the SOP that if a calibrated vaporizer is available, that needs to be used. I believe there is also a vaporizer in the surgery room down the hall. Precautions can be taken to eliminate GP dander in the facility, please work with the vivarium staff and our office to coordinate using the surgery area's vaporizer or use the portable machine.

Let us know if you have any questions.

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Reda, Sherif M <sherif_reda@wsu.edu>
Sent: Friday, May 3, 2019 10:45 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Subject: RE: GP

Hi Dr. Clyde,

We used to use the portable machine in the past but I have been using the drop jar method recently and nose cone afterwards as I am extracting the heart.

Sherif

From: Clyde, Gaylynn Goolsby
Sent: Friday, May 03, 2019 8:45 AM
To: Reda, Sherif M <sherif_reda@wsu.edu>; Gabelmann, Doris L <dgabelmann@wsu.edu>

Cc: or.ocv.alert <or.ocv.alert@wsu.edu>; Chandra, Murali <murali@wsu.edu>

Subject: RE: GP

Sherif,

If you send us all the information for the first GP used, we can fill it out for you:

ID, DOB, DOA,

Date of Disposition:

Estimated weight:

How euthanized: drugs, concentrations, secondary

What tissue was collected

Very important that we have complete records for all the GPs (entrance exam, abnormalities, treatment, disposition).

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Reda, Sherif M <sherif_reda@wsu.edu>

Sent: Friday, May 3, 2019 8:26 AM

To: Gabelmann, Doris L <dgabelmann@wsu.edu>

Cc: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>

Subject: Re: GP

Yes for the last GP used it is. I never received one for the first GP used.

Sherif

Get [Outlook for iOS](#)

From: Gabelmann, Doris L <dgabelmann@wsu.edu>

Sent: Friday, May 3, 2019 8:24 AM

To: Reda, Sherif M

Cc: Clyde, Gaylynn Goolsby

Subject: RE: GP

Is the disposition paper work up to date for inspection if they show up?

Dori

From: Reda, Sherif M
Sent: Friday, May 03, 2019 8:19 AM
To: Gabelmann, Doris L
Subject: Re: GP

Hi Dori,

I was going to come talk to you about it today. With the neuroscience retreat coming up, we're unable to do more experiments this week. I will be sacrificing him this coming Wednesday for sure. Sorry for any inconvenience. Thank you.

Sherif

On May 3, 2019, at 7:54 AM, Gabelmann, Doris L <dgabelmann@wsu.edu> wrote:

Sherif,

Just wanted to see when the GP is being used. We have been told USDA is on their way here and will need to inspect that room if he is still here.

Also, we will need to buy more food as well.

Dori

From: McCleary, Jessie May
Sent: Friday, May 03, 2019 8:47 AM
To: Clyde, Gaylynn Goolsby; Reda, Sherif M; Gabelmann, Doris L
Cc: or.ocv.alert; Chandra, Murali
Subject: Re: GP

Follow Up Flag: Follow up
Flag Status: Flagged

The form for the one that died is on my desk. I have not made it back to VBR to drop it by

Jess

From: Clyde, Gaylynn Goolsby
Sent: Friday, May 3, 2019 8:44 AM
To: Reda, Sherif M; Gabelmann, Doris L
Cc: or.ocv.alert; Chandra, Murali
Subject: RE: GP

Sherif,

If you send us all the information for the first GP used, we can fill it out for you:
ID, DOB, DOA,
Date of Disposition:
Estimated weight:
How euthanized: drugs, concentrations, secondary
What tissue was collected

Very important that we have complete records for all the GPs (entrance exam, abnormalities, treatment, disposition).

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Reda, Sherif M <sherif_reda@wsu.edu>
Sent: Friday, May 3, 2019 8:26 AM
To: Gabelmann, Doris L <dgabelmann@wsu.edu>
Cc: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Subject: Re: GP

Yes for the last GP used it is. I never received one for the first GP used.

Sherif

Get [Outlook for iOS](#)

From: Gabelmann, Doris L <dgabelmann@wsu.edu>
Sent: Friday, May 3, 2019 8:24 AM
To: Reda, Sherif M
Cc: Clyde, Gaylynn Goolsby
Subject: RE: GP

Is the disposition paper work up to date for inspection if they show up?

Dori

From: Reda, Sherif M
Sent: Friday, May 03, 2019 8:19 AM
To: Gabelmann, Doris L
Subject: Re: GP

Hi Dori,

I was going to come talk to you about it today. With the neuroscience retreat coming up, we're unable to do more experiments this week. I will be sacrificing him this coming Wednesday for sure. Sorry for any inconvenience. Thank you.

Sherif

On May 3, 2019, at 7:54 AM, Gabelmann, Doris L <dgabelmann@wsu.edu> wrote:

Sherif,

Just wanted to see when the GP is being used. We have been told USDA is on their way here and will need to inspect that room if he is still here.

Also, we will need to buy more food as well.

Dori

From: Clyde, Gaylynn Goolsby
Sent: Friday, May 03, 2019 8:45 AM
To: Reda, Sherif M; Gabelmann, Doris L
Cc: or.ocv.alert; Chandra, Murali
Subject: RE: GP

Sherif,

If you send us all the information for the first GP used, we can fill it out for you:

ID, DOB, DOA,

Date of Disposition:

Estimated weight:

How euthanized: drugs, concentrations, secondary

What tissue was collected

Very important that we have complete records for all the GPs (entrance exam, abnormalities, treatment, disposition).

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Reda, Sherif M <sherif_reda@wsu.edu>
Sent: Friday, May 3, 2019 8:26 AM
To: Gabelmann, Doris L <dgabelmann@wsu.edu>
Cc: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Subject: Re: GP

Yes for the last GP used it is. I never received one for the first GP used.

Sherif

Get [Outlook for iOS](#)

From: Gabelmann, Doris L <dgabelmann@wsu.edu>
Sent: Friday, May 3, 2019 8:24 AM
To: Reda, Sherif M

Cc: Clyde, Gaylynn Goolsby
Subject: RE: GP

Is the disposition paper work up to date for inspection if they show up?

Dori

From: Reda, Sherif M
Sent: Friday, May 03, 2019 8:19 AM
To: Gabelmann, Doris L
Subject: Re: GP

Hi Dori,

I was going to come talk to you about it today. With the neuroscience retreat coming up, we're unable to do more experiments this week. I will be sacrificing him this coming Wednesday for sure. Sorry for any inconvenience. Thank you.

Sherif

On May 3, 2019, at 7:54 AM, Gabelmann, Doris L <dgabelmann@wsu.edu> wrote:

Sherif,

Just wanted to see when the GP is being used. We have been told USDA is on their way here and will need to inspect that room if he is still here.
Also, we will need to buy more food as well.

Dori

From: Clyde, Gaylynn Goolsby
Sent: Friday, May 03, 2019 11:03 AM
To: Reda, Sherif M
Cc: Chandra, Murali; Gabelmann, Doris L; Gorence, Galen Jay; or.ocv.alert
Subject: RE: GP

Hi Sherif,

The drop jar method must be performed in a fume hood and following the IACUC outlined SOP https://iacuc.wsu.edu/documents/2016/06/wsu_sop_3.pdf/.

It outlines in the SOP that if a calibrated vaporizer is available, that needs to be used. I believe there is also a vaporizer in the surgery room down the hall. Precautions can be taken to eliminate GP dander in the facility, please work with the vivarium staff and our office to coordinate using the surgery area's vaporizer or use the portable machine.

Let us know if you have any questions.

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Reda, Sherif M <sherif_reda@wsu.edu>
Sent: Friday, May 3, 2019 10:45 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Subject: RE: GP

Hi Dr. Clyde,

We used to use the portable machine in the past but I have been using the drop jar method recently and nose cone afterwards as I am extracting the heart.

Sherif

From: Clyde, Gaylynn Goolsby
Sent: Friday, May 03, 2019 8:45 AM
To: Reda, Sherif M <sherif_reda@wsu.edu>; Gabelmann, Doris L <dgabelmann@wsu.edu>

Cc: or.ocv.alert <or.ocv.alert@wsu.edu>; Chandra, Murali <murali@wsu.edu>
Subject: RE: GP

Sherif,

If you send us all the information for the first GP used, we can fill it out for you:
ID, DOB, DOA,
Date of Disposition:
Estimated weight:
How euthanized: drugs, concentrations, secondary
What tissue was collected

Very important that we have complete records for all the GPs (entrance exam, abnormalities, treatment, disposition).

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Reda, Sherif M <sherif_reda@wsu.edu>
Sent: Friday, May 3, 2019 8:26 AM
To: Gabelmann, Doris L <dgabelmann@wsu.edu>
Cc: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Subject: Re: GP

Yes for the last GP used it is. I never received one for the first GP used.

Sherif

Get [Outlook for iOS](#)

From: Gabelmann, Doris L <dgabelmann@wsu.edu>
Sent: Friday, May 3, 2019 8:24 AM
To: Reda, Sherif M
Cc: Clyde, Gaylynn Goolsby
Subject: RE: GP

Is the disposition paper work up to date for inspection if they show up?

Dori

From: Reda, Sherif M
Sent: Friday, May 03, 2019 8:19 AM
To: Gabelmann, Doris L
Subject: Re: GP

Hi Dori,

I was going to come talk to you about it today. With the neuroscience retreat coming up, we're unable to do more experiments this week. I will be sacrificing him this coming Wednesday for sure. Sorry for any inconvenience. Thank you.

Sherif

On May 3, 2019, at 7:54 AM, Gabelmann, Doris L <dgabelmann@wsu.edu> wrote:

Sherif,

Just wanted to see when the GP is being used. We have been told USDA is on their way here and will need to inspect that room if he is still here.

Also, we will need to buy more food as well.

Dori

From: Jacks, Megan Elizabeth
Sent: Tuesday, July 23, 2019 3:55 PM
To: Clyde, Gaylynn Goolsby; Woodford, Nina Lynne
Cc: or.ocv.alert
Subject: Re: Health certificates

Hello everyone,

Thank you for all of the information! That helps us make sure we are making it as seamless as possible for everyone.

We are picking up 20 calves.

Thank you,

Megan

Get [Outlook for iOS](#)

From: Clyde, Gaylynn Goolsby
Sent: Tuesday, July 23, 2019 3:24:30 PM
To: Woodford, Nina Lynne; Jacks, Megan Elizabeth
Cc: or.ocv.alert
Subject: RE: Health certificates

Hi Megan,

Sorry, forgot to mention I was out on Thursday. Nina said she would be available. Typically, we have had either Emma or Cody text us as they were coming through Colfax. Please text to 509-330-1871, this is our e-phone. We have been meeting at 141, Quarantine facility #12 on the map. Take Airport rd. or Terraview off the hi way like you are going to the old USDA area, 141 is on the left. You can pull in, go to the end of the drive and turn around easily.

We need the 15 digit USDA ear tag numbers from the calves. If you can get these as they are loading that will be helpful. They should all be tagged. We typically do a quick physical on them (TPR) in the trailer write the CVI and brand inspection and you are on your way. Because of the hot weather we try to make this a quick process. These have all been castrated or banded calves in the past, in which case we do not need an entry permit.

How many calves?

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246

Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Woodford, Nina Lynne <nwoodford@wsu.edu>
Sent: Monday, July 22, 2019 4:47 PM
To: Jacks, Megan Elizabeth <megan.blauert@wsu.edu>; Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: RE: Health certificates

Gay Lynn is out Thursday so it will be me. So far I'm open Thursday afternoon. I'll block out 2:30-3:30 on my schedule.

Nina Woodford DVM, MPH DACLAM
Director and Attending Veterinarian
Office of the Campus Veterinarian
Washington State University
509-335-6246
nwoodford@wsu.edu

From: Jacks, Megan Elizabeth <megan.blauert@wsu.edu>
Sent: Monday, July 22, 2019 2:35 PM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: Re: Health certificates

Hello Dr. Clyde,

We are scheduled to pick up the calves this week on Thursday. Where is convenient for us to meet you to do everything, and how would you like us to communicate with you as we get back into Pullman? I'm not entirely sure how long the loading process takes (this will be my first time going over), but I assume we will be back around 2:30-3pm. I just want to make sure we aren't causing any headaches on your end!

Thank you,

Megan

Get [Outlook for iOS](#)

From: Clyde, Gaylynn Goolsby
Sent: Monday, July 22, 2019 9:37:38 AM

To: Jacks, Megan Elizabeth
Cc: or.ocv.alert
Subject: RE: Health certificates

Hi Megan,

I will be in the office through August 2nd. Let me know when they will arrive and I can write CVI and BI's.

Nina will also be available if they come after I am gone for 3 weeks.

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Jacks, Megan Elizabeth <megan.blauert@wsu.edu>
Sent: Monday, July 22, 2019 9:17 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Subject: Health certificates

Hello Dr. Clyde!

I wanted to check in with you real quick beforehand, I believe if I remember correctly you take some time off for harvest around this time, maybe later. We are going to be ordering Pasco calves as soon as I get all of the information from everyone (hopefully today) and I wanted to make sure you'd be available either end of this week or next week for health certificates before heading to Idaho depending on when we can schedule with 5D to pick up.

Thank you!

Megan

Get [Outlook for iOS](#)

From: Clyde, Gaylynn Goolsby
Sent: Tuesday, July 23, 2019 3:25 PM
To: Woodford, Nina Lynne; Jacks, Megan Elizabeth
Cc: or.ocv.alert
Subject: RE: Health certificates
Attachments: 141 K.jpg

Hi Megan,

Sorry, forgot to mention I was out on Thursday. Nina said she would be available. Typically, we have had either Emma or Cody text us as they were coming through Colfax. Please text to 509-330-1871, this is our e-phone. We have been meeting at 141, Quarantine facility #12 on the map. Take Airport rd. or Terraview off the hi way like you are going to the old USDA area, 141 is on the left. You can pull in, go to the end of the drive and turn around easily.

We need the 15 digit USDA ear tag numbers from the calves. If you can get these as they are loading that will be helpful. They should all be tagged. We typically do a quick physical on them (TPR) in the trailer write the CVI and brand inspection and you are on your way. Because of the hot weather we try to make this a quick process. These have all been castrated or banded calves in the past, in which case we do not need an entry permit.

How many calves?

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246
Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Woodford, Nina Lynne <nwoodford@wsu.edu>
Sent: Monday, July 22, 2019 4:47 PM
To: Jacks, Megan Elizabeth <megan.blauert@wsu.edu>; Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: RE: Health certificates

Gay Lynn is out Thursday so it will me. So far I'm open Thursday afternoon. I'll block out 2:30-3:30 on my schedule.

Nina Woodford DVM, MPH DACLAM
Director and Attending Veterinarian
Office of the Campus Veterinarian
Washington State University
509-335-6246
nwoodford@wsu.edu

From: Jacks, Megan Elizabeth <megan.blauert@wsu.edu>
Sent: Monday, July 22, 2019 2:35 PM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: Re: Health certificates

Hello Dr. Clyde,

We are scheduled to pick up the calves this week on Thursday. Where is convenient for us to meet you to do everything, and how would you like us to communicate with you as we get back into Pullman? I'm not entirely sure how long the loading process takes (this will be my first time going over), but I assume we will be back around 2:30-3pm. I just want to make sure we aren't causing any headaches on your end!

Thank you,

Megan

Get [Outlook for iOS](#)

From: Clyde, Gaylynn Goolsby
Sent: Monday, July 22, 2019 9:37:38 AM
To: Jacks, Megan Elizabeth
Cc: or.ocv.alert
Subject: RE: Health certificates

Hi Megan,

I will be in the office through August 2nd. Let me know when they will arrive and I can write CVI and BI's.

Nina will also be available if they come after I am gone for 3 weeks.

Thank you,

Gay Lynn Clyde, DVM
Assistant Director Campus Veterinary Services
Office of Campus Veterinarian
Washington State University
Pullman, WA. 99164-1165
Phone (509) 335-4991 or (509) 335-6246

Fax (509) 335-3162
Email: gclyde@wsu.edu
Program URL: <http://campusvet.wsu.edu>

From: Jacks, Megan Elizabeth <megan.blauert@wsu.edu>
Sent: Monday, July 22, 2019 9:17 AM
To: Clyde, Gaylynn Goolsby <gclyde@wsu.edu>
Subject: Health certificates

Hello Dr. Clyde!

I wanted to check in with you real quick beforehand, I believe if I remember correctly you take some time off for harvest around this time, maybe later. We are going to be ordering Pasco calves as soon as I get all of the information from everyone (hopefully today) and I wanted to make sure you'd be available either end of this week or next week for health certificates before heading to Idaho depending on when we can schedule with 5D to pick up.

Thank you!

Megan

Get [Outlook for iOS](#)



From: Estes, Lisa M.
Sent: Thursday, August 01, 2019 9:34 AM
To: 38 McCleary, Jessie May; IACUC
Cc: McLaughlin, Ryan; or.ocv.alert
Subject: RE: IACUC Aseptic Surgery Training Instructions

Hi 38
We will put you down for tomorrow. See you at 11 am.
Thank you
Lisa

Lisa Estes, LVT RLATG
Washington State University
Office of the Campus Veterinarian
509-335-6246

From: 38
Sent: Thursday, August 1, 2019 9:24 AM
To: McCleary, Jessie May <jmccleary@wsu.edu>; IACUC <or.ora.iacuc@wsu.edu>
Cc: McLaughlin, Ryan <ryan.mclaughlin@wsu.edu>; or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: Re: IACUC Aseptic Surgery Training Instructions

Good morning,

Friday 11 to 1 works perfectly. Thank you for letting me know!

38

Get [Outlook for iOS](#)

From: McCleary, Jessie May <jmccleary@wsu.edu>
Sent: Wednesday, July 31, 2019 8:21:16 AM
To: IACUC <or.ora.iacuc@wsu.edu>; 38
Cc: McLaughlin, Ryan <ryan.mclaughlin@wsu.edu>; or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: RE: IACUC Aseptic Surgery Training Instructions

Hello 38
I am a LVT from the Office of the Campus Veterinarian. I do have an AST-H workshop scheduled for Friday 8/2 at 11am-1pm. If you are able to attend let me know. If not, I will have an Aug schedule posted soon for future times available. I have attached the outline of the training for you to look over and a map to our building. Let me know if you have any questions. I am looking forward to meeting with you.

Thank you,

Jessie McCleary, LVT

Washington State University
Office of the Campus Veterinarian
jmccleary@wsu.edu
Office (509)335-2595
Main line (509)335-6246
Emergency phone (509)330-1871

From: IACUC <or.ora.iacuc@wsu.edu>
Sent: Wednesday, July 31, 2019 7:55 AM
To: [REDACTED] 38
Cc: McLaughlin, Ryan <ryan.mclaughlin@wsu.edu>; or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: IACUC Aseptic Surgery Training Instructions
Importance: High

Hi [REDACTED] 38

This is a courtesy notice that you are required for ASAF #6279 to complete the ***Aseptic Surgical Technique WSU (AST-O)***, an online course on AALAS Learning Library website that is required by WSU IACUC for all new researchers/ faculty/ staff performing surgery on research or teaching animals. Board-certified surgeons working within their specialty may be exempt.

Please note: As of May 4th, 2018 per the WSU IACUC Policy #20, all required online training must be completed prior to approval.

****All Principal Investigators need to submit an amendment prior to the approval of personnel working on the protocol. For the new online system instructions, please visit <https://myresearch.wsu.edu/Compliance/IACUC/ASAFInstructions.aspx>. For the old PDF system form, please visit <https://iacuc.wsu.edu/forms/>.**

Our records indicate that you already have an account with AALAS Learning Library.

- The link to log in is: <https://aalaslearninglibrary.org/index.html#/login/signin>
- Enter your User name: [REDACTED] 41
- Enter your password. If you need to reset your password, you can click on the "I forgot my password" link. If that does not work, contact the Animal Welfare Program.

Step 1: Once you log on, you will be directed to the AALAS homepage. Complete your profile located in the upper right corner with the person icon (arrow 1 in Figure 1).

Step 2: After you complete all required fields, find the ***Aseptic Surgical Technique WSU (AST-O)*** under the "Assignments" tab located in the top right (arrow 2 in Figure 1). The course and exam together can take approximately 1 hour.

Once you have passed the exam, you have completed the course.

Figure 1:



*If the exam link does not appear, a lesson has been missed. Please go to your profile (blue arrow 1 in Figure 1), then click on My Transcript to see which lessons are remaining.

To set up hands-on training after the completion of all required online training, please visit <https://iacuc.wsu.edu/hands-on-training/> to view the hands-on course schedule and then contact the Office of the Campus Veterinarian at or.ocv.alert@wsu.edu or (509) 335-6246. (DVM, LVT, MD, and RN may be exempt from the hands-on course.)

If you have any issues regarding IACUC training, please contact the Animal Welfare Program at (509) 335-5353 or email at iacuc@wsu.edu.

Sincerely,

Ashley Williams

Animal Welfare Program
Washington State University | Office of Research Assurances
Neill Hall 431 | Pullman, WA 99164-3143
iacuc@wsu.edu | Phone: (509) 335-5353
<https://iacuc.wsu.edu>

From: [REDACTED] 38
Sent: Thursday, August 01, 2019 9:24 AM
To: McCleary, Jessie May; IACUC
Cc: McLaughlin, Ryan; or.ocv.alert
Subject: Re: IACUC Aseptic Surgery Training Instructions

Good morning,

Friday 11 to 1 works perfectly. Thank you for letting me know!

[REDACTED] 38

Get [Outlook for iOS](#)

From: McCleary, Jessie May <jmccleary@wsu.edu>
Sent: Wednesday, July 31, 2019 8:21:16 AM
To: IACUC <or.ora.iacuc@wsu.edu>; [REDACTED] 38
Cc: McLaughlin, Ryan <ryan.mclaughlin@wsu.edu>; or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: RE: IACUC Aseptic Surgery Training Instructions

Hello [REDACTED] 38

I am a LVT from the Office of the Campus Veterinarian. I do have an AST-H workshop scheduled for Friday 8/2 at 11am-1pm. If you are able to attend let me know. If not, I will have an Aug schedule posted soon for future times available. I have attached the outline of the training for you to look over and a map to our building. Let me know if you have any questions. I am looking forward to meeting with you.

Thank you,

Jessie McCleary, LVT
Washington State University
Office of the Campus Veterinarian
jmccleary@wsu.edu
Office (509)335-2595
Main line (509)335-6246
Emergency phone (509)330-1871

From: IACUC <or.ora.iacuc@wsu.edu>
Sent: Wednesday, July 31, 2019 7:55 AM
To: [REDACTED] 38 N <kyra.parker@wsu.edu>
Cc: McLaughlin, Ryan <ryan.mclaughlin@wsu.edu>; or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: IACUC Aseptic Surgery Training Instructions
Importance: High

Hi [REDACTED] 38

This is a courtesy notice that you are required for ASAF #6279 to complete the ***Aseptic Surgical Technique WSU (AST-O)***, an online course on AALAS Learning Library website that is required by WSU IACUC for all new researchers/ faculty/ staff

performing surgery on research or teaching animals. Board-certified surgeons working within their specialty may be exempt.

Please note: As of May 4th, 2018 per the WSU IACUC Policy #20, all required online training must be completed prior to approval.

****All Principal Investigators need to submit an amendment prior to the approval of personnel working on the protocol. For the new online system instructions, please visit <https://myresearch.wsu.edu/Compliance/IACUC/ASAFInstructions.aspx>. For the old PDF system form, please visit <https://iacuc.wsu.edu/forms/>.**

Our records indicate that you already have an account with AALAS Learning Library.

- The link to log in is: <https://aalaslearninglibrary.org/index.html#/login/signin>
- Enter your User name: 41
- Enter your password. If you need to reset your password, you can click on the “I forgot my password” link. If that does not work, contact the Animal Welfare Program.

Step 1: Once you log on, you will be directed to the AALAS homepage. Complete your profile located in the upper right corner with the person icon (arrow 1 in Figure 1).

Step 2: After you complete all required fields, find the ***Aseptic Surgical Technique WSU (AST-O)*** under the “Assignments” tab located in the top right (arrow 2 in Figure 1). The course and exam together can take approximately 1 hour.

Once you have passed the exam, you have completed the course.

Figure 1:



*If the exam link does not appear, a lesson has been missed. Please go to your profile (blue arrow 1 in Figure 1), then click on My Transcript to see which lessons are remaining.

To set up hands-on training after the completion of all required online training, please visit <https://iacuc.wsu.edu/hands-on-training/> to view the hands-on course schedule and then contact the Office of the Campus Veterinarian at or.ocv.alert@wsu.edu or (509) 335-6246. (DVM, LVT, MD, and RN may be exempt from the hands-on course.)

If you have any issues regarding IACUC training, please contact the Animal Welfare Program at (509) 335-5353 or email at iacuc@wsu.edu.

Sincerely,

Ashley Williams

Animal Welfare Program

Washington State University | Office of Research Assurances

Neill Hall 431 | Pullman, WA 99164-3143

iacuc@wsu.edu | Phone: (509) 335-5353

<https://iacuc.wsu.edu>

From: McCleary, Jessie May
Sent: Wednesday, July 31, 2019 8:21 AM
To: IACUC; [REDACTED] 38
Cc: McLaughlin, Ryan; or.ocv.alert
Subject: RE: IACUC Aseptic Surgery Training Instructions
Attachments: AST-H Rodents Outline 2018.docx; OCV Location.pptx

Hello [REDACTED] 38

I am a LVT from the Office of the Campus Veterinarian. I do have an AST-H workshop scheduled for Friday 8/2 at 11am-1pm. If you are able to attend let me know. If not, I will have an Aug schedule posted soon for future times available. I have attached the outline of the training for you to look over and a map to our building. Let me know if you have any questions. I am looking forward to meeting with you.

Thank you,

Jessie McCleary, LVT
Washington State University
Office of the Campus Veterinarian
jmcclary@wsu.edu
Office (509)335-2595
Main line (509)335-6246
Emergency phone (509)330-1871

From: IACUC <or.ora.iacuc@wsu.edu>
Sent: Wednesday, July 31, 2019 7:55 AM
To: [REDACTED] 38
Cc: McLaughlin, Ryan <ryan.mclaughlin@wsu.edu>; or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: IACUC Aseptic Surgery Training Instructions
Importance: High

Hi [REDACTED] 38

This is a courtesy notice that you are required for ASAF #6279 to complete the ***Aseptic Surgical Technique WSU (AST-O)***, an online course on AALAS Learning Library website that is required by WSU IACUC for all new researchers/ faculty/ staff performing surgery on research or teaching animals. Board-certified surgeons working within their specialty may be exempt.

Please note: As of May 4th, 2018 per the WSU IACUC Policy #20, all required online training must be completed prior to approval.

****All Principal Investigators need to submit an amendment prior to the approval of personnel working on the protocol. For the new online system instructions, please visit <https://myresearch.wsu.edu/Compliance/IACUC/ASAFInstructions.aspx>. For the old PDF system form, please visit <https://iacuc.wsu.edu/forms/>.**

Our records indicate that you already have an account with AALAS Learning Library.

- The link to log in is: <https://aalaslearninglibrary.org/index.html#/login/signin>

- Enter your User name: **41**
- Enter your password. If you need to reset your password, you can click on the “I forgot my password” link. If that does not work, contact the Animal Welfare Program.

Step 1: Once you log on, you will be directed to the AALAS homepage. Complete your profile located in the upper right corner with the person icon (arrow 1 in Figure 1).

Step 2: After you complete all required fields, find the ***Aseptic Surgical Technique WSU (AST-O)*** under the “Assignments” tab located in the top right (arrow 2 in Figure 1). The course and exam together can take approximately 1 hour.

Once you have passed the exam, you have completed the course.

Figure 1:



*If the exam link does not appear, a lesson has been missed. Please go to your profile (blue arrow 1 in Figure 1), then click on My Transcript to see which lessons are remaining.

To set up hands-on training after the completion of all required online training, please visit <https://iacuc.wsu.edu/hands-on-training/> to view the hands-on course schedule and then contact the Office of the Campus Veterinarian at or.ocv.alert@wsu.edu or (509) 335-6246. (DVM, LVT, MD, and RN may be exempt from the hands-on course.)

If you have any issues regarding IACUC training, please contact the Animal Welfare Program at (509) 335-5353 or email at iacuc@wsu.edu.

Sincerely,

Ashley Williams

Animal Welfare Program
 Washington State University | Office of Research Assurances
 Neill Hall 431 | Pullman, WA 99164-3143
iacuc@wsu.edu | Phone: (509) 335-5353
<https://iacuc.wsu.edu>

Aseptic Surgical Technique for Rodents

Hands-on Workshop

Washington State University
Office of the Campus Veterinarian-Vet Services

1. Introduction

- a. Discuss similarities & differences between rodent and non-rodent surgery
 - i. Similar- Both require asepsis for anything touching the surgical area
 - ii. Differences are primarily due to the small size of the rodent
 - 1. Designated space vs. dedicated facility (room or suite)
 - a. Clean lab bench in non-traffic area
 - 2. Clean lab coat vs. sterile surgical gown
 - 3. Work alone vs. surgical team
 - a. Without assistant, asepsis requires careful planning

2. Procedure Area Preparation

- a. Designated for surgery currently, no traffic/ drafts, post signs “Aseptic Surgery in Progress”
- b. Surgical/anesthesia records and disinfected pen
- c. Disinfect surfaces. Remove unneeded items.
- d. Animal Prep area: clippers, scrub solution, eye ointment, disposable layer
- e. Surgical Area: heat source, light, glass bead sterilizer? Absorbent clean or sterile layer, sterile instrument pack, drape and suture, (wait to open until just before gloves on)
- f. Post-operative area: heat source on lowest setting, under half of recovery cage, white pad or paper towels (instead of bedding), analgesic and saline drawn into syringes(warm syringes with heating pad)

3. Instruments and Materials Preparation

- a. Autoclaving- steam heat (moist heat, physical method)
 - i. Metal instruments, some catheter tubing, saline, water
 - ii. Packaging
 - 1. Surgical packs- gauze, drape, instruments
 - 2. Envelopes- Visi-peel
 - 3. Indicator tape, indicator strips
 - 4. Monitor autoclave quarterly with biological indicator
 - iii. Date autoclaved materials – maximum 6 month expiration
 - iv. Pre-packaged sterile supplies- suture, blades (check expiration dates)
- b. Glass bead sterilizers- dry heat (modified aseptic technique “tips only”)
 - i. Start with autoclaved pack then use hot glass beads between animals
 - ii. Wipe instruments to remove blood & debris before use

Revised 9/21/18

Obtained by Rise for Animals.
Uploaded to Animal Research Laboratory Overview (ARLO) on 10/20/2020

- iii. Instrument tips in heat for 30-60 seconds (too long may warp)
 - iv. Cool before use to prevent burns to animal or surgeon
 - v. New autoclave pack every 5 animals.
 - vi. Only tips are re-sterilized. Position: tips away/ handles toward surgeon
 - vii. New surgery gloves for each animal (unless assistant prepped new animal)
 - viii. Tips only surgical technique (handles & hands are clean but not sterile)
- c. Chemical sterilants- liquid “cold sterilization”
- i. Liquid sterilants require 6-8 hours contact times to kill spores
 - ii. Liquid must contact all surfaces (fill tubing)
 - iii. Rinse chemicals off with sterile saline/H₂O before use
 - iv. Alcohol is a disinfectant but not a sterilant
- d. Chemical sterilants- gas “cold and dry sterilization”
- i. Ethylene Oxide
 - ii. Vaporized Hydrogen Peroxide

4. Animal Preparation

- a. Anesthesia
- i. Injectable or inhalation- assemble needed supplies (DEA regulations)
 - ii. Weigh each animal pre-operatively & write in surgery/anesthesia record (grams)
 - iii. Calculate dosages and draw up anesthesia, analgesia,
 - iv. Give subcutaneous saline before the surgery if possible
 - v. No food or water restriction for rodents
 - vi. Rodents are susceptible to dehydration, hypoglycemia, hypothermia
- b. Eye ointment
- i. Anesthetized rodents don't close eyes
 - ii. Prevent drying of corneas
 - iii. Use ophthalmic ointment (artificial tears)
- c. Monitor anesthetic depth (variation in strains and individual animals)
- i. Observe respiratory rate and depth (Count 15 seconds X 4)
 - ii. Color of mucus membranes, ears, tail, feet
 - iii. Toe pinch withdrawal reflex? Use fingers or hemostat
 - 1. If withdraw, too light for surgery but clipping is OK
 - 2. Intra-operative- Maintain sterility using hemostats- handles sterile
 - iv. If using injectable anesthetic (ketamine/xylazine) only boost with ketamine (1/3rd).
- d. Clip hair
- i. Blades #40 - maintain with spray cleaner/lubricant
 - ii. Razor or Depilatory Cream (Nair) may be used

- e. Scrub: can be done with exam gloves
 - i. Chlorhexidine (scrub or solution) then alcohol OR Povidone/iodine (scrub or solution) then alcohol
 - ii. Start at center and move out in spiral to clipped margins
 - iii. Triple scrub then may apply solution to dry on (not scrub- contains soap)
 - iv. Cotton swabs versus gauze sponges
 - v. Don't soak animal or get disinfectant in eyes

5. Surgeon Preparation

- a. Required
 - i. Remove earrings, necklaces, rings, watches, scarves, etc...
 - ii. Clean lab coat
 - 1. Free of debris, hair, or bedding to fall into surgical area
 - 2. Snug lab coat cuffs or tape around wide sleeves or roll up sleeves
 - iii. Face mask
 - 1. protect surgical field from bacteria (surgeon's exhaled breath)
 - 2. Mask is clean but not sterile (Do not touch with gloved hands)
 - iv. Surgical gloves – Wait until animal is prepped & ready to be draped
Working alone? Before gloving ask yourself: **LIST** (Light on, Instrument pack open, Supplies/suture, Toe pinch check anesthesia/ Time starting noted)
 - 1. Individually packaged latex or nitrile surgical gloves
 - a. **NOT** exam gloves even if cleaned and/or autoclaved
 - b. Do not re-sterilize & re-use surgical gloves
 - c. Surgical gloves- check expiration date
 - d. Sized in half sizes to fit (example: 6.0, 6.5, 7.0, 7.5)
 - 2. Wash hands with soap and warm water. Dry with clean towel.
 - 3. Aseptic gloving technique- demonstrate & practice
 - 4. If gloves are contaminated during surgery– get new gloves
 - 5. Put on new sterile gloves every 3 animals or if they become contaminated between surgeries.
 - v. **Review your ASAF** surgery section on “How aseptic technique is maintained”
You must adhere to what is written in the ASAF.
- b. Recommended
 - i. Hair cap/ bonnet recommended. Tie back long hair. Beard cover.
 - ii. An Assistant: the surgeon can't touch anything non-sterile once gloved. Surgery is more efficient, faster and less complicated if there is an assistant.
 - iii. **Review ASAF**, if cap for example, is listed then need to wear.

6. Draping

- a. Open sterile instrument and drape pack → put on sterile gloves → then may handle drape

- b. Place drape & lift drape to check toe pinch with hemostats without contaminating sterile gloves.
- c. Alternative: Press N' Seal plastic wrap –use will be demonstrated at workshop

7. Perform surgery

- a. Intraoperative monitoring of anesthetic depth- surgical record
- b. Maintain sterile gloves and sterile field
- c. Batch surgery? Working alone? Heat sterilize instrument tips prior to handling animal.

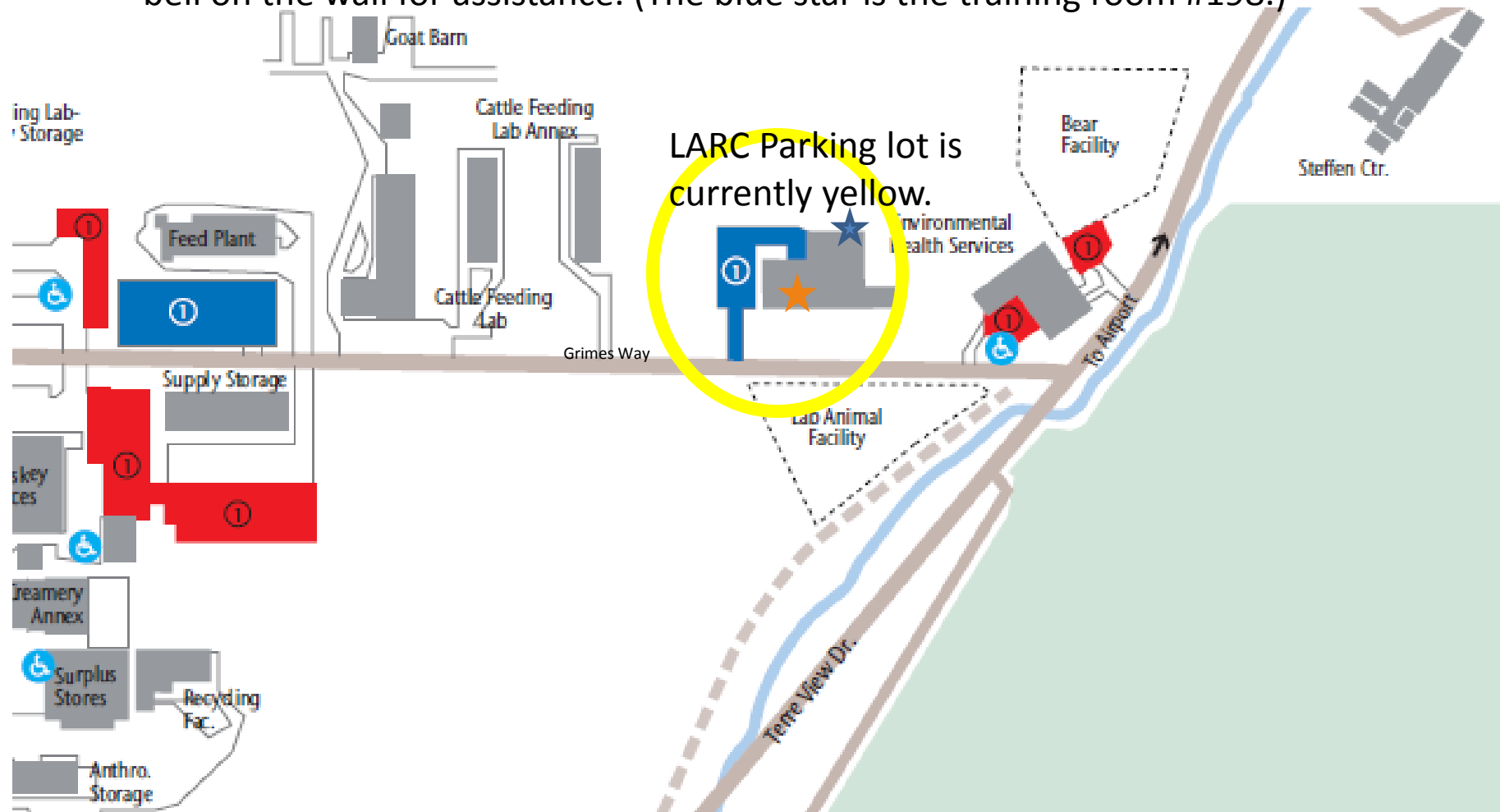
8. Recovery & post-operative care

- a. Post-operative analgesic and warm saline
- b. Wrap rodent in huck or paper towel to maintain body heat
- c. Rotate position every 10 minutes until sternal, semi awake
- d. Maintain heat source & keep separate until animal is moving about cage
- e. Check surgery rodents end of first day
- f. Monitor twice daily for first 3 days, then once daily for appetite, activity, grooming
- g. Check incision for redness, swelling, discharge, suture failure
- h. Water-soaked kibble or Gel pack in cage bottom advised
- i. Document observations, analgesics, and date of suture removal (~10 days)
- j. Analgesia discussion: do what is in approved protocol

9. Conclusion

- a. Success requires careful planning & preparation
- b. Difficult to do surgery alone especially on multiple animals- recommend having assistant to help prepare and recover animals while surgeon focuses on surgery

OCV is located in the LARC Building (in the yellow circle), the orange star is where the entrance door to the building. Front office is on your left. Josh our receptionist will bring you to Training Room. If he is not at his desk ring the bell on the wall for assistance. (The blue star is the training room #198.)



From: McCleary, Jessie May
Sent: Wednesday, January 09, 2019 1:31 PM
To: IACUC; Fine, Gracelyn Mae
Cc: Driskell, Ryan; or.ocv.alert
Subject: RE: IACUC Instructions for AST-O Training
Attachments: AST-H Rodents Outline 2018.docx; Hands-On Training Workshops.docx; OCV Location.pptx

Hello Grace, please let us know when you have completed the AST-O and we can get you scheduled for the hands-on workshop. I have attached the outline for the course, the times it is offered and a map to our building if needed. Also, let me know if you have any questions.

Thank you,

Jessie McCleary, LVT
Washington State University
Office of the Campus Veterinarian
jmcclary@wsu.edu
Office (509)335-2595
Main line (509)335-6246
Emergency phone (509)330-1871

From: IACUC <or.ora.iacuc@wsu.edu>
Sent: Wednesday, January 9, 2019 1:16 PM
To: Fine, Gracelyn Mae <gracelyn.fine@wsu.edu>
Cc: Driskell, Ryan <ryan.driskell@wsu.edu>; or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: IACUC Instructions for AST-O Training
Importance: High

Hi Grace,

This is a courtesy notice that you are required for Dr. Ryan Driskell's ASAFs to complete the ***Aseptic Surgical Technique WSU (AST-O)***, an online course on AALAS Learning Library website that is required by WSU IACUC for all new researchers/ faculty/ staff performing surgery on research or teaching animals. Board-certified surgeons working within their specialty may be exempt.

Please note: As of May 4th, 2018 per the WSU IACUC Policy #20, all required online training must be completed prior to approval.

****All Principal Investigators need to submit an amendment prior to the approval of personnel working on the protocol. For the new online system instructions, please visit <https://myresearch.wsu.edu/Compliance/IACUC/ASAFInstructions.aspx>. For the old PDF system form, please visit <https://iacuc.wsu.edu/forms/>.**

Our records indicate that you already have an account with AALAS Learning Library.

- The link to log in is: <https://aalaslearninglibrary.org/index.html#/login/signin>

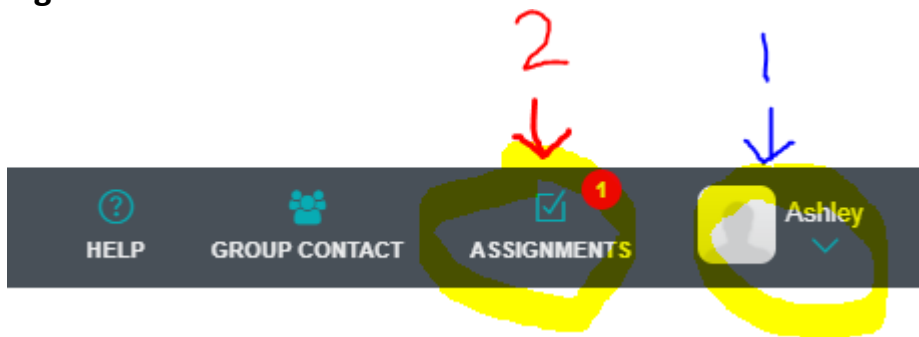
- Enter your User name: 41
- Enter your password. If you need to reset your password, you can click on the “I forgot my password” link. If that does not work, contact the Animal Welfare Program.

Step 1: Once you log on, you will be directed to the AALAS homepage. Complete your profile located in the upper right corner with the person icon (arrow 1 in Figure 1).

Step 2: After you complete all required fields, find the ***Aseptic Surgical Technique WSU (AST-O)*** under the “Assignments” tab located in the top right (arrow 2 in Figure 1). The course and exam together can take approximately 1 hour.

Once you have passed the exam, you have completed the course.

Figure 1:



*If the exam link does not appear, a lesson has been missed. Please go to your profile (blue arrow 1 in Figure 1), then click on My Transcript to see which lessons are remaining.

To set up hands-on training after the completion of all required online training, please contact the Office of the Campus Veterinarian at or.ocv.alert@wsu.edu or (509) 335-6246. DVM, LVT, MD, and RN may be exempt from the hands-on course.

If you have any issues regarding IACUC training, please contact the Animal Welfare Program at (509) 335-5353 or email at iacuc@wsu.edu.

Carmen Haines

Animal Welfare Program

Washington State University | Office of Research Assurances

iacuc@wsu.edu | Phone: (509) 335-1763

<https://iacuc.wsu.edu>

Aseptic Surgical Technique for Rodents

Hands-on Workshop

Washington State University
Office of the Campus Veterinarian-Vet Services

1. Introduction

- a. Discuss similarities & differences between rodent and non-rodent surgery
 - i. Similar- Both require asepsis for anything touching the surgical area
 - ii. Differences are primarily due to the small size of the rodent
 - 1. Designated space vs. dedicated facility (room or suite)
 - a. Clean lab bench in non-traffic area
 - 2. Clean lab coat vs. sterile surgical gown
 - 3. Work alone vs. surgical team
 - a. Without assistant, asepsis requires careful planning

2. Procedure Area Preparation

- a. Designated for surgery currently, no traffic/ drafts, post signs “Aseptic Surgery in Progress”
- b. Surgical/anesthesia records and disinfected pen
- c. Disinfect surfaces. Remove unneeded items.
- d. Animal Prep area: clippers, scrub solution, eye ointment, disposable layer
- e. Surgical Area: heat source, light, glass bead sterilizer? Absorbent clean or sterile layer, sterile instrument pack, drape and suture, (wait to open until just before gloves on)
- f. Post-operative area: heat source on lowest setting, under half of recovery cage, white pad or paper towels (instead of bedding), analgesic and saline drawn into syringes(warm syringes with heating pad)

3. Instruments and Materials Preparation

- a. Autoclaving- steam heat (moist heat, physical method)
 - i. Metal instruments, some catheter tubing, saline, water
 - ii. Packaging
 - 1. Surgical packs- gauze, drape, instruments
 - 2. Envelopes- Visi-peel
 - 3. Indicator tape, indicator strips
 - 4. Monitor autoclave quarterly with biological indicator
 - iii. Date autoclaved materials – maximum 6 month expiration
 - iv. Pre-packaged sterile supplies- suture, blades (check expiration dates)
- b. Glass bead sterilizers- dry heat (modified aseptic technique “tips only”)
 - i. Start with autoclaved pack then use hot glass beads between animals
 - ii. Wipe instruments to remove blood & debris before use

Revised 9/21/18

Obtained by Rise for Animals.
Uploaded to Animal Research Laboratory Overview (ARLO) on 10/20/2020

- iii. Instrument tips in heat for 30-60 seconds (too long may warp)
 - iv. Cool before use to prevent burns to animal or surgeon
 - v. New autoclave pack every 5 animals.
 - vi. Only tips are re-sterilized. Position: tips away/ handles toward surgeon
 - vii. New surgery gloves for each animal (unless assistant prepped new animal)
 - viii. Tips only surgical technique (handles & hands are clean but not sterile)
- c. Chemical sterilants- liquid “cold sterilization”
- i. Liquid sterilants require 6-8 hours contact times to kill spores
 - ii. Liquid must contact all surfaces (fill tubing)
 - iii. Rinse chemicals off with sterile saline/H₂O before use
 - iv. Alcohol is a disinfectant but not a sterilant
- d. Chemical sterilants- gas “cold and dry sterilization”
- i. Ethylene Oxide
 - ii. Vaporized Hydrogen Peroxide

4. Animal Preparation

- a. Anesthesia
- i. Injectable or inhalation- assemble needed supplies (DEA regulations)
 - ii. Weigh each animal pre-operatively & write in surgery/anesthesia record (grams)
 - iii. Calculate dosages and draw up anesthesia, analgesia,
 - iv. Give subcutaneous saline before the surgery if possible
 - v. No food or water restriction for rodents
 - vi. Rodents are susceptible to dehydration, hypoglycemia, hypothermia
- b. Eye ointment
- i. Anesthetized rodents don't close eyes
 - ii. Prevent drying of corneas
 - iii. Use ophthalmic ointment (artificial tears)
- c. Monitor anesthetic depth (variation in strains and individual animals)
- i. Observe respiratory rate and depth (Count 15 seconds X 4)
 - ii. Color of mucus membranes, ears, tail, feet
 - iii. Toe pinch withdrawal reflex? Use fingers or hemostat
 - 1. If withdraw, too light for surgery but clipping is OK
 - 2. Intra-operative- Maintain sterility using hemostats- handles sterile
 - iv. If using injectable anesthetic (ketamine/xylazine) only boost with ketamine (1/3rd).
- d. Clip hair
- i. Blades #40 - maintain with spray cleaner/lubricant
 - ii. Razor or Depilatory Cream (Nair) may be used

- e. Scrub: can be done with exam gloves
 - i. Chlorhexidine (scrub or solution) then alcohol OR Povidone/iodine (scrub or solution) then alcohol
 - ii. Start at center and move out in spiral to clipped margins
 - iii. Triple scrub then may apply solution to dry on (not scrub- contains soap)
 - iv. Cotton swabs versus gauze sponges
 - v. Don't soak animal or get disinfectant in eyes

5. Surgeon Preparation

- a. Required
 - i. Remove earrings, necklaces, rings, watches, scarves, etc...
 - ii. Clean lab coat
 - 1. Free of debris, hair, or bedding to fall into surgical area
 - 2. Snug lab coat cuffs or tape around wide sleeves or roll up sleeves
 - iii. Face mask
 - 1. protect surgical field from bacteria (surgeon's exhaled breath)
 - 2. Mask is clean but not sterile (Do not touch with gloved hands)
 - iv. Surgical gloves – Wait until animal is prepped & ready to be draped
Working alone? Before gloving ask yourself: **LIST** (Light on, Instrument pack open, Supplies/suture, Toe pinch check anesthesia/ Time starting noted)
 - 1. Individually packaged latex or nitrile surgical gloves
 - a. **NOT** exam gloves even if cleaned and/or autoclaved
 - b. Do not re-sterilize & re-use surgical gloves
 - c. Surgical gloves- check expiration date
 - d. Sized in half sizes to fit (example: 6.0, 6.5, 7.0, 7.5)
 - 2. Wash hands with soap and warm water. Dry with clean towel.
 - 3. Aseptic gloving technique- demonstrate & practice
 - 4. If gloves are contaminated during surgery– get new gloves
 - 5. Put on new sterile gloves every 3 animals or if they become contaminated between surgery's.
 - v. **Review your ASAF** surgery section on “How aseptic technique is maintained”
You must adhere to what is written in the ASAF.
- b. Recommended
 - i. Hair cap/ bonnet recommended. Tie back long hair. Beard cover.
 - ii. An Assistant: the surgeon can't touch anything non-sterile once gloved. Surgery is more efficient, faster and less complicated if there is an assistant.
 - iii. **Review ASAF**, if cap for example, is listed then need to wear.

6. Draping

- a. Open sterile instrument and drape pack → put on sterile gloves → then may handle drape

- b. Place drape & lift drape to check toe pinch with hemostats without contaminating sterile gloves.
- c. Alternative: Press N' Seal plastic wrap –use will be demonstrated at workshop

7. Perform surgery

- a. Intraoperative monitoring of anesthetic depth- surgical record
- b. Maintain sterile gloves and sterile field
- c. Batch surgery? Working alone? Heat sterilize instrument tips prior to handling animal.

8. Recovery & post-operative care

- a. Post-operative analgesic and warm saline
- b. Wrap rodent in huck or paper towel to maintain body heat
- c. Rotate position every 10 minutes until sternal, semi awake
- d. Maintain heat source & keep separate until animal is moving about cage
- e. Check surgery rodents end of first day
- f. Monitor twice daily for first 3 days, then once daily for appetite, activity, grooming
- g. Check incision for redness, swelling, discharge, suture failure
- h. Water-soaked kibble or Gel pack in cage bottom advised
- i. Document observations, analgesics, and date of suture removal (~10 days)
- j. Analgesia discussion: do what is in approved protocol

9. Conclusion

- a. Success requires careful planning & preparation
- b. Difficult to do surgery alone especially on multiple animals- recommend having assistant to help prepare and recover animals while surgeon focuses on surgery

Office of the Campus Veterinarian

Hands-On Training Workshops

Days and Times

(every week)

Tuesdays: 2-4pm

Thursdays: 10-noon

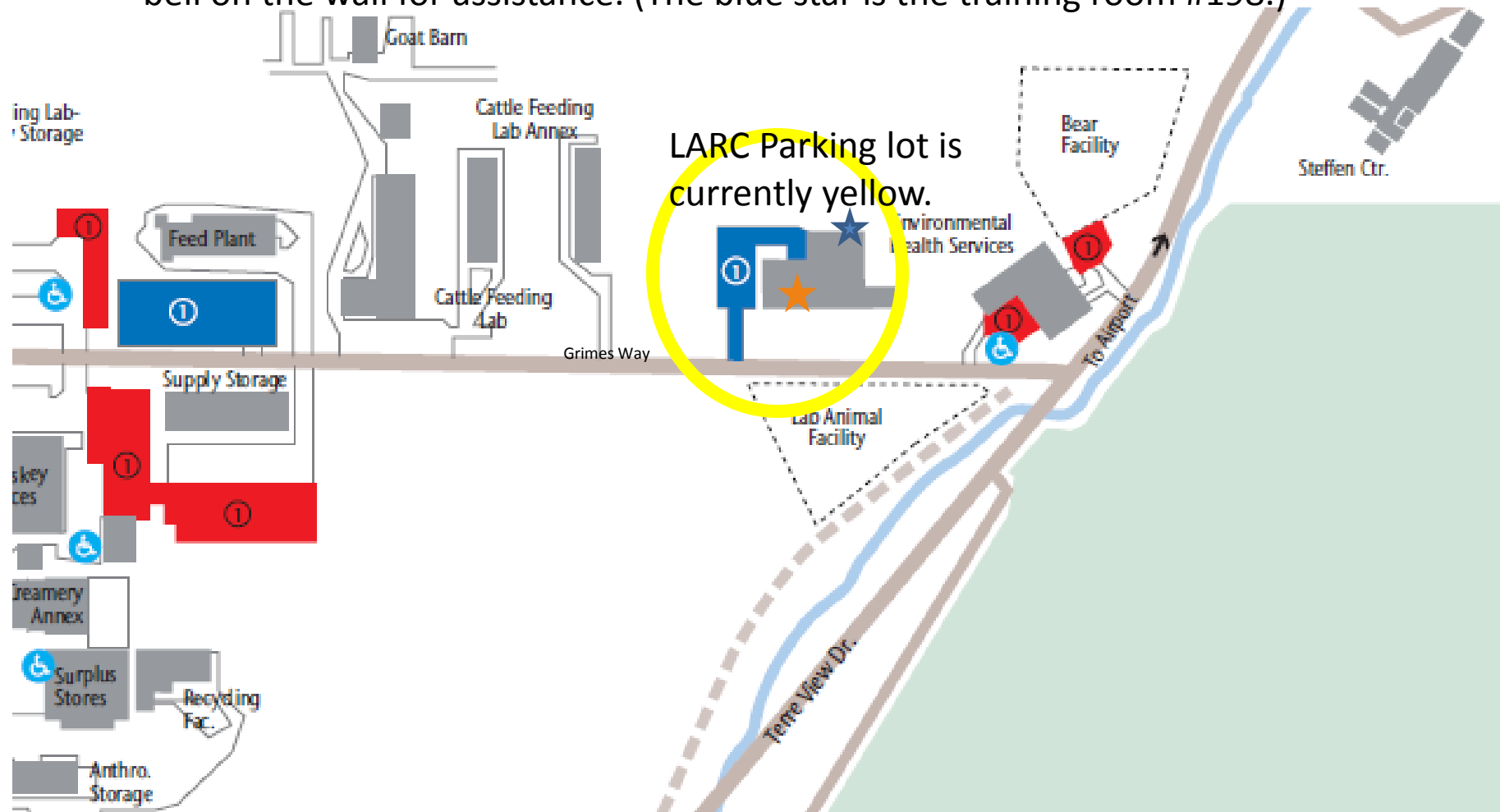
Please contact our office to request which dates and times work for your needs

Locations of training will be either VBR vivarium or LARC building depending on the needs of the training

Call 509-335-6246 for any questions or email us at

or.ocv.alert@WSU.edu

OCV is located in the LARC Building (in the yellow circle), the orange star is where the entrance door to the building. Front office is on your left. Josh our receptionist will bring you to Training Room. If he is not at his desk ring the bell on the wall for assistance. (The blue star is the training room #198.)



From: McCleary, Jessie May
Sent: Tuesday, August 27, 2019 7:51 AM
To: Driskell, Ryan; [REDACTED] 38
Cc: Gorence, Galen Jay; or.ocv.alert
Subject: RE: IACUC Training Instructions for AST-O

This would be for your student before he can do any surgical procedure. There are a couple of online training course he has to complete then let me know when he is available to do the hands-on workshop.
Let me know if you have any other questions.

Thanks
Jess

From: Driskell, Ryan <ryan.driskell@wsu.edu>
Sent: Tuesday, August 27, 2019 7:36 AM
To: McCleary, Jessie May <jmccleary@wsu.edu>; [REDACTED] 38
Cc: Gorence, Galen Jay <gorence@wsu.edu>; or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: RE: IACUC Training Instructions for AST-O

Hi Jessie,

Is this for me or my student who is going through training today?

Ryan

From: McCleary, Jessie May <jmccleary@wsu.edu>
Sent: Tuesday, August 27, 2019 7:27 AM
To: [REDACTED] 38
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>; Driskell, Ryan <ryan.driskell@wsu.edu>
Subject: RE: IACUC Training Instructions for AST-O

Hello [REDACTED] 38

I am a LVT from the Office of the Campus Veterinarian. Please let me know when you have completed the completed the AST-O training and we can get you scheduled for the hands-on portion of the training (AST-H).
Here is the link to the days available in Aug/Sept: <https://iacuc.wsu.edu/hands-on-training/>
Could you please send me the ASAF number for the protocol you are working under?
I have attached the outline of the training for you to look over and a map to our building. Let me know if you have any questions. I am looking forward to meeting with you.

Thank you,

Jessie McCleary, LVT
Washington State University
Office of the Campus Veterinarian
jmccleary@wsu.edu
Office (509)335-2595

Main line (509)335-6246
Emergency phone (509)330-1871

From: IACUC <or.ora.iacuc@wsu.edu>
Sent: Monday, August 26, 2019 4:26 PM
To: [REDACTED] 38
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: IACUC Training Instructions for AST-O
Importance: High

Hi [REDACTED] 38

This is a courtesy notice that you are required for Dr. Driskell's ASAFs to complete the ***Aseptic Surgical Technique WSU (AST-O)***, an online course on AALAS Learning Library website that is required by WSU IACUC for all new researchers/ faculty/ staff performing surgery on research or teaching animals. Board-certified surgeons working within their specialty may be exempt.

Please note: As of May 4th, 2018 per the WSU IACUC Policy #20, all required online training must be completed prior to approval.

****All Principal Investigators need to submit an amendment prior to the approval of personnel working on the protocol. For the new online system instructions, please visit <https://myresearch.wsu.edu/Compliance/IACUC/ASAFInstructions.aspx>. For the old PDF system form, please visit <https://iacuc.wsu.edu/forms/>.**

Our records indicate that you already have an account with AALAS Learning Library.

- The link to log in is: <https://aalaslearninglibrary.org/index.html#/login/signin>
- Enter your User name: [REDACTED] 41
- Enter your password. If you need to reset your password, you can click on the "I forgot my password" link. If that does not work, contact the Animal Welfare Program.

Step 1: Once you log on, you will be directed to the AALAS homepage. Complete your profile located in the upper right corner with the person icon (arrow 1 in Figure 1).

Step 2: After you complete all required fields, find the ***Aseptic Surgical Technique WSU (AST-O)*** under the "Assignments" tab located in the top right (arrow 2 in Figure 1). The course and exam together can take approximately 1 hour.

Once you have passed the exam, you have completed the course.

Figure 1:



*If the exam link does not appear, a lesson has been missed. Please go to your profile (blue arrow 1 in Figure 1), then click on My Transcript to see which lessons are remaining.

To set up hands-on training after the completion of all required online training, please visit <https://iacuc.wsu.edu/hands-on-training/> to view the hands-on course schedule and then contact the Office of the Campus Veterinarian at or.ocv.alert@wsu.edu or (509) 335-6246. (DVM, LVT, MD, and RN may be exempt from the hands-on course.)

If you have any issues regarding IACUC training, please contact the Animal Welfare Program at (509) 335-5353 or email at iacuc@wsu.edu.

Sincerely,

Ashley Williams

Animal Welfare Program
Washington State University | Office of Research Assurances
Neill Hall 431 | Pullman, WA 99164-3143
iacuc@wsu.edu | Phone: (509) 335-5353
<https://iacuc.wsu.edu>

From: Driskell, Ryan
Sent: Tuesday, August 27, 2019 7:36 AM
To: McCleary, Jessie May; [REDACTED] 38
Cc: Gorence, Galen Jay; or.ocv.alert
Subject: RE: IACUC Training Instructions for AST-O

Hi Jessie,

Is this for me or my student who is going through training today?

Ryan

From: McCleary, Jessie May <jmccleary@wsu.edu>
Sent: Tuesday, August 27, 2019 7:27 AM
To: [REDACTED] 38
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>; Driskell, Ryan <ryan.driskell@wsu.edu>
Subject: RE: IACUC Training Instructions for AST-O

Hello [REDACTED] 38

I am a LVT from the Office of the Campus Veterinarian. Please let me know when you have completed the completed the AST-O training and we can get you scheduled for the hands-on portion of the training (AST-H).

Here is the link to the days available in Aug/Sept: <https://iacuc.wsu.edu/hands-on-training/>

Could you please send me the ASAF number for the protocol you are working under?

I have attached the outline of the training for you to look over and a map to our building. Let me know if you have any questions. I am looking forward to meeting with you.

Thank you,

Jessie McCleary, LVT
Washington State University
Office of the Campus Veterinarian
jmccleary@wsu.edu
Office (509)335-2595
Main line (509)335-6246
Emergency phone (509)330-1871

From: IACUC <or.ora.iacuc@wsu.edu>
Sent: Monday, August 26, 2019 4:26 PM
To: [REDACTED] 38
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: IACUC Training Instructions for AST-O
Importance: High

Hi 38

This is a courtesy notice that you are required for Dr. Driskell's ASAFs to complete the ***Aseptic Surgical Technique WSU (AST-O)***, an online course on AALAS Learning Library website that is required by WSU IACUC for all new researchers/ faculty/ staff performing surgery on research or teaching animals. Board-certified surgeons working within their specialty may be exempt.

Please note: As of May 4th, 2018 per the WSU IACUC Policy #20, all required online training must be completed prior to approval.

****All Principal Investigators need to submit an amendment prior to the approval of personnel working on the protocol. For the new online system instructions, please visit <https://myresearch.wsu.edu/Compliance/IACUC/ASAFInstructions.aspx>. For the old PDF system form, please visit <https://iacuc.wsu.edu/forms/>.**

Our records indicate that you already have an account with AALAS Learning Library.

- The link to log in is: <https://aalaslearninglibrary.org/index.html#/login/signin>
- Enter your User name: 41
- Enter your password. If you need to reset your password, you can click on the "I forgot my password" link. If that does not work, contact the Animal Welfare Program.

Step 1: Once you log on, you will be directed to the AALAS homepage. Complete your profile located in the upper right corner with the person icon (arrow 1 in Figure 1).

Step 2: After you complete all required fields, find the ***Aseptic Surgical Technique WSU (AST-O)*** under the "Assignments" tab located in the top right (arrow 2 in Figure 1). The course and exam together can take approximately 1 hour.

Once you have passed the exam, you have completed the course.

Figure 1:



*If the exam link does not appear, a lesson has been missed. Please go to your profile (blue arrow 1 in Figure 1), then click on My Transcript to see which lessons are remaining.

To set up hands-on training after the completion of all required online training, please visit <https://iacuc.wsu.edu/hands-on-training/> to view the hands-on course schedule and then contact the Office of the Campus Veterinarian at or.ocv.alert@wsu.edu or (509) 335-6246. (DVM, LVT, MD, and RN may be exempt from the hands-on course.)

If you have any issues regarding IACUC training, please contact the Animal Welfare Program at (509) 335-5353 or email at iacuc@wsu.edu.

Sincerely,

Ashley Williams

Animal Welfare Program
Washington State University | Office of Research Assurances
Neill Hall 431 | Pullman, WA 99164-3143
iacuc@wsu.edu | Phone: (509) 335-5353
<https://iacuc.wsu.edu>

From: McCleary, Jessie May
Sent: Tuesday, August 27, 2019 7:27 AM
To: [REDACTED] 38
Cc: or.ocv.alert; Driskell, Ryan
Subject: RE: IACUC Training Instructions for AST-O
Attachments: AST-H Rodents Outline 2018.docx; OCV Location.pptx

Hello [REDACTED] 38

I am a LVT from the Office of the Campus Veterinarian. Please let me know when you have completed the completed the AST-O training and we can get you scheduled for the hands-on portion of the training (AST-H).

Here is the link to the days available in Aug/Sept: <https://iacuc.wsu.edu/hands-on-training/>

Could you please send me the ASAF number for the protocol you are working under?

I have attached the outline of the training for you to look over and a map to our building. Let me know if you have any questions. I am looking forward to meeting with you.

Thank you,

Jessie McCleary, LVT
Washington State University
Office of the Campus Veterinarian
jmccleary@wsu.edu
Office (509)335-2595
Main line (509)335-6246
Emergency phone (509)330-1871

From: IACUC <or.ora.iacuc@wsu.edu>
Sent: Monday, August 26, 2019 4:26 PM
To: [REDACTED] 38
Cc: or.ocv.alert <or.ocv.alert@wsu.edu>
Subject: IACUC Training Instructions for AST-O
Importance: High

Hi [REDACTED] 38

This is a courtesy notice that you are required for Dr. Driskell's ASAFs to complete the ***Aseptic Surgical Technique WSU (AST-O)***, an online course on AALAS Learning Library website that is required by WSU IACUC for all new researchers/ faculty/ staff performing surgery on research or teaching animals. Board-certified surgeons working within their specialty may be exempt.

Please note: As of May 4th, 2018 per the WSU IACUC Policy #20, all required online training must be completed prior to approval.

****All Principal Investigators need to submit an amendment prior to the approval of personnel working on the protocol. For the new online system instructions, please visit <https://myresearch.wsu.edu/Compliance/IACUC/ASAInstructions.aspx>. For the old PDF system form, please visit <https://iacuc.wsu.edu/forms/>.**

Our records indicate that you already have an account with AALAS Learning Library.

- The link to log in is: <https://aalaslearninglibrary.org/index.html#/login/signin>
- Enter your User name: **41**
- Enter your password. If you need to reset your password, you can click on the “I forgot my password” link. If that does not work, contact the Animal Welfare Program.

Step 1: Once you log on, you will be directed to the AALAS homepage. Complete your profile located in the upper right corner with the person icon (arrow 1 in Figure 1).

Step 2: After you complete all required fields, find the ***Aseptic Surgical Technique WSU (AST-O)*** under the “Assignments” tab located in the top right (arrow 2 in Figure 1). The course and exam together can take approximately 1 hour.

Once you have passed the exam, you have completed the course.

Figure 1:



*If the exam link does not appear, a lesson has been missed. Please go to your profile (blue arrow 1 in Figure 1), then click on My Transcript to see which lessons are remaining.

To set up hands-on training after the completion of all required online training, please visit <https://iacuc.wsu.edu/hands-on-training/> to view the hands-on course schedule and then contact the Office of the Campus Veterinarian at or.ocv.alert@wsu.edu or (509) 335-6246. (DVM, LVT, MD, and RN may be exempt from the hands-on course.)

If you have any issues regarding IACUC training, please contact the Animal Welfare Program at (509) 335-5353 or email at iacuc@wsu.edu.

Sincerely,

Ashley Williams

Animal Welfare Program

Washington State University | Office of Research Assurances

Neill Hall 431 | Pullman, WA 99164-3143

iacuc@wsu.edu | Phone: (509) 335-5353

<https://iacuc.wsu.edu>

Aseptic Surgical Technique for Rodents

Hands-on Workshop

Washington State University
Office of the Campus Veterinarian-Vet Services

1. Introduction

- a. Discuss similarities & differences between rodent and non-rodent surgery
 - i. Similar- Both require asepsis for anything touching the surgical area
 - ii. Differences are primarily due to the small size of the rodent
 - 1. Designated space vs. dedicated facility (room or suite)
 - a. Clean lab bench in non-traffic area
 - 2. Clean lab coat vs. sterile surgical gown
 - 3. Work alone vs. surgical team
 - a. Without assistant, asepsis requires careful planning

2. Procedure Area Preparation

- a. Designated for surgery currently, no traffic/ drafts, post signs “Aseptic Surgery in Progress”
- b. Surgical/anesthesia records and disinfected pen
- c. Disinfect surfaces. Remove unneeded items.
- d. Animal Prep area: clippers, scrub solution, eye ointment, disposable layer
- e. Surgical Area: heat source, light, glass bead sterilizer? Absorbent clean or sterile layer, sterile instrument pack, drape and suture, (wait to open until just before gloves on)
- f. Post-operative area: heat source on lowest setting, under half of recovery cage, white pad or paper towels (instead of bedding), analgesic and saline drawn into syringes(warm syringes with heating pad)

3. Instruments and Materials Preparation

- a. Autoclaving- steam heat (moist heat, physical method)
 - i. Metal instruments, some catheter tubing, saline, water
 - ii. Packaging
 - 1. Surgical packs- gauze, drape, instruments
 - 2. Envelopes- Visi-peel
 - 3. Indicator tape, indicator strips
 - 4. Monitor autoclave quarterly with biological indicator
 - iii. Date autoclaved materials – maximum 6 month expiration
 - iv. Pre-packaged sterile supplies- suture, blades (check expiration dates)
- b. Glass bead sterilizers- dry heat (modified aseptic technique “tips only”)
 - i. Start with autoclaved pack then use hot glass beads between animals
 - ii. Wipe instruments to remove blood & debris before use

Revised 9/21/18

Obtained by Rise for Animals.

Uploaded to Animal Research Laboratory Overview (ARLO) on 10/20/2020

- iii. Instrument tips in heat for 30-60 seconds (too long may warp)
 - iv. Cool before use to prevent burns to animal or surgeon
 - v. New autoclave pack every 5 animals.
 - vi. Only tips are re-sterilized. Position: tips away/ handles toward surgeon
 - vii. New surgery gloves for each animal (unless assistant prepped new animal)
 - viii. Tips only surgical technique (handles & hands are clean but not sterile)
- c. Chemical sterilants- liquid “cold sterilization”
- i. Liquid sterilants require 6-8 hours contact times to kill spores
 - ii. Liquid must contact all surfaces (fill tubing)
 - iii. Rinse chemicals off with sterile saline/H₂O before use
 - iv. Alcohol is a disinfectant but not a sterilant
- d. Chemical sterilants- gas “cold and dry sterilization”
- i. Ethylene Oxide
 - ii. Vaporized Hydrogen Peroxide

4. Animal Preparation

- a. Anesthesia
- i. Injectable or inhalation- assemble needed supplies (DEA regulations)
 - ii. Weigh each animal pre-operatively & write in surgery/anesthesia record (grams)
 - iii. Calculate dosages and draw up anesthesia, analgesia,
 - iv. Give subcutaneous saline before the surgery if possible
 - v. No food or water restriction for rodents
 - vi. Rodents are susceptible to dehydration, hypoglycemia, hypothermia
- b. Eye ointment
- i. Anesthetized rodents don't close eyes
 - ii. Prevent drying of corneas
 - iii. Use ophthalmic ointment (artificial tears)
- c. Monitor anesthetic depth (variation in strains and individual animals)
- i. Observe respiratory rate and depth (Count 15 seconds X 4)
 - ii. Color of mucus membranes, ears, tail, feet
 - iii. Toe pinch withdrawal reflex? Use fingers or hemostat
 - 1. If withdraw, too light for surgery but clipping is OK
 - 2. Intra-operative- Maintain sterility using hemostats- handles sterile
 - iv. If using injectable anesthetic (ketamine/xylazine) only boost with ketamine (1/3rd).
- d. Clip hair
- i. Blades #40 - maintain with spray cleaner/lubricant
 - ii. Razor or Depilatory Cream (Nair) may be used

- e. Scrub: can be done with exam gloves
 - i. Chlorhexidine (scrub or solution) then alcohol OR Povidone/iodine (scrub or solution) then alcohol
 - ii. Start at center and move out in spiral to clipped margins
 - iii. Triple scrub then may apply solution to dry on (not scrub- contains soap)
 - iv. Cotton swabs versus gauze sponges
 - v. Don't soak animal or get disinfectant in eyes

5. Surgeon Preparation

- a. Required
 - i. Remove earrings, necklaces, rings, watches, scarves, etc...
 - ii. Clean lab coat
 - 1. Free of debris, hair, or bedding to fall into surgical area
 - 2. Snug lab coat cuffs or tape around wide sleeves or roll up sleeves
 - iii. Face mask
 - 1. protect surgical field from bacteria (surgeon's exhaled breath)
 - 2. Mask is clean but not sterile (Do not touch with gloved hands)
 - iv. Surgical gloves – Wait until animal is prepped & ready to be draped
Working alone? Before gloving ask yourself: **LIST** (Light on, Instrument pack open, Supplies/suture, Toe pinch check anesthesia/ Time starting noted)
 - 1. Individually packaged latex or nitrile surgical gloves
 - a. **NOT** exam gloves even if cleaned and/or autoclaved
 - b. Do not re-sterilize & re-use surgical gloves
 - c. Surgical gloves- check expiration date
 - d. Sized in half sizes to fit (example: 6.0, 6.5, 7.0, 7.5)
 - 2. Wash hands with soap and warm water. Dry with clean towel.
 - 3. Aseptic gloving technique- demonstrate & practice
 - 4. If gloves are contaminated during surgery– get new gloves
 - 5. Put on new sterile gloves every 3 animals or if they become contaminated between surgeries.
 - v. **Review your ASAF** surgery section on “How aseptic technique is maintained”
You must adhere to what is written in the ASAF.
- b. Recommended
 - i. Hair cap/ bonnet recommended. Tie back long hair. Beard cover.
 - ii. An Assistant: the surgeon can't touch anything non-sterile once gloved. Surgery is more efficient, faster and less complicated if there is an assistant.
 - iii. **Review ASAF**, if cap for example, is listed then need to wear.

6. Draping

- a. Open sterile instrument and drape pack → put on sterile gloves → then may handle drape

- b. Place drape & lift drape to check toe pinch with hemostats without contaminating sterile gloves.
- c. Alternative: Press N' Seal plastic wrap –use will be demonstrated at workshop

7. Perform surgery

- a. Intraoperative monitoring of anesthetic depth- surgical record
- b. Maintain sterile gloves and sterile field
- c. Batch surgery? Working alone? Heat sterilize instrument tips prior to handling animal.

8. Recovery & post-operative care

- a. Post-operative analgesic and warm saline
- b. Wrap rodent in huck or paper towel to maintain body heat
- c. Rotate position every 10 minutes until sternal, semi awake
- d. Maintain heat source & keep separate until animal is moving about cage
- e. Check surgery rodents end of first day
- f. Monitor twice daily for first 3 days, then once daily for appetite, activity, grooming
- g. Check incision for redness, swelling, discharge, suture failure
- h. Water-soaked kibble or Gel pack in cage bottom advised
- i. Document observations, analgesics, and date of suture removal (~10 days)
- j. Analgesia discussion: do what is in approved protocol

9. Conclusion

- a. Success requires careful planning & preparation
- b. Difficult to do surgery alone especially on multiple animals- recommend having assistant to help prepare and recover animals while surgeon focuses on surgery

OCV is located in the LARC Building (in the yellow circle), the orange star is where the entrance door to the building. Front office is on your left. Josh our receptionist will bring you to Training Room. If he is not at his desk ring the bell on the wall for assistance. (The blue star is the training room #198.)

