Application for

2025

AVST

Examination

AVST APPLICANT INSTRUCTIONS

The Academy of Veterinary Surgical Technicians (AVST) appreciates your interest in becoming a Veterinary Technician Specialist in Surgery, VTS (Surgery). The AVST's goal is to assure the veterinary profession and the public that an AVST certified technician possesses the knowledge, skills and experience needed to practice surgical nursing at an advanced level of competency.

The requirements of eligibility for the examination are defined in the AVST Constitution and Bylaws. Although the academy requirements are rigorous, they are not designed to be obstacles to prevent candidates from becoming certified; they are intended to assure the public and the profession that technicians certified by the AVST have demonstrated a high degree of competence.

All forms demonstrated in this packet **MUST** be used for the application submission. They are available individually online at www.avst-vts.org. Download the blank forms from the website for use in your application. With the exception of the AVST Small Animal Advanced Surgical Skills Form and other application-associated signatures, all forms must be filled out electronically. It is highly recommended that you use only **Adobe Acrobat on a PC** to fill out the Case Log and Skills List because other programs and/or Mac computers may alter the fonts and/or formatting of these forms. Handwritten forms will not be accepted. **Include only the information requested. Extraneous documents will not be accepted and may result in your application being rejected.** This is a professional application, and all efforts should be made by the applicant to ensure it is an example of their highest quality of work. Poor spelling and grammar may adversely affect the approval of your application. **Plagiarism is unacceptable and will result in the rejection of your application. It may also disqualify you from applying in the future.**

The Academy of Veterinary Surgical Technicians has adopted a two-part application process. Applicants must read all information included in this packet **CAREFULLY** to ensure full understanding of all requirements.

The **Pre-Application** and the non-refundable $25 fee are due by **11:59:59pm EST on April 30, 2024**. Applicants will be notified of the decision on the Pre-Application within 15 days of submission. The Pre-Application can be submitted early. If so, rejected Pre-Applications can be resubmitted ***once*** without an additional fee up until the Pre-Application deadline, April 30, 2024.

The **Final Application** and the non-refundable $50 fee are due by **11:59:59pm EST on January 31, 2025**, and can only be submitted if the pre-application was accepted. Candidates will receive notification of eligibility to participate in the certifying examination by **May 1, 2025.** The certifying examination is administered electronically via ExamSoft®/Examplify software in **October 2025** in conjunction with the ACVS Surgery Summit. An exam candidate may take the examination a total of 3 times in 3 years with the acceptance of both parts of the application.

If the Pre-application has been accepted, but the applicant does not submit a Final Application, the fee for the Pre-application will be forfeited. If the applicant decides to apply in a future application cycle, the applicant will be required to submit a new Pre-application with the required Pre-Application fee. **If the Pre-application is not accepted, the applicant cannot submit the Final Application.**

Included at the end of this application packet (**page 46**) is a checklist to help ensure you complete all the necessary steps to submit your application. **If your application is incomplete or late, it will be rejected.**

AVST Pre-Application Requirements and Instructions:

Form 1- Professional History and Experience Form

You may begin working on your application **after** you have completed a minimum of 10,000 hours (equivalent to 5 years of full-time employment) of work as a **credentialed** veterinary technician (or foreign equivalent). Before starting your AVST application, ensure that you have been employed for at least **6000 hours** (3 years) in a small animal surgical environment. You must also document that at least **4500 hours** (75% of 6000) of your time was dedicated exclusively to performing veterinary surgical duties. All required work experience hours must be completed **prior** to beginning your case logs on **January 1, 2024**. For the purpose of this eligibility

requirement, the definition of 'surgery' as established by the Academy of Veterinary Surgical Technicians will be used.

Outline your experience working as a **credentialed** veterinary technician in the **five years prior** to the application submission date. Read the AVST Definition of Surgery and determine the number of hours you have spent providing surgical care. For each employer listed on Form 1, determine how many regular hours you worked on average per week. We will accept up to 2000 hours per year (40 hours per week, 50 weeks per year) of work experience for a primary employer. Overtime and on-call hours are not included in the calculation because they are not typically consistent or reliable. However, surgical cases that occur during these times may be included in the applicant's Case Log and Case Reports.

Your original date of credentialing, date of passing the VTNE (or its equivalent outside of the U.S.A.) and graduation date (if applicable) must also be documented on the history form. List your NAVTA membership identification number on the form; NAVTA membership is strongly advised for all AVST candidates. List any other veterinary technician specialty (VTS) certifications you possess. If you have recently applied for or earned a VTS designation in another discipline it means that for the last 3 years, you have spent at least 75% of your time working in that particular discipline. Since the same criteria are required for pursuing a specialty in surgery (dedicating 75% or more of your time to surgical-related duties) you must first complete a minimum of **6000 exclusively surgical-related hours** (~ 3 years) before you could apply for this specialty. All required work experience hours must be completed **prior** to beginning your case logs on **January 1, 2024**.

Proof of Credentialing, Diploma, and Resume/Curriculum Vitae

The applicant must be legally credentialed to practice as a veterinary technician in a state of the United States or province of another country. In most states, this includes graduation from an AVMA approved Veterinary Medical Technology program. Applicant must provide proof of a **legal** credential to practice in a state or province. Include a **PDF copy** of your **current** credentials (e.g., license, certification, registration.) Canceled checks and other documents will not be accepted as proof.

If you are also a graduate from an AVMA approved Veterinary Technology Program, submit a **PDF copy** of your diploma as proof of graduation.

The applicant must also submit an electronic copy of their updated resume/curriculum vitae (CV).

Documentation of Name Change

If your last name is different on any document submitted for the pre-application, include your previous name in parenthesis on the History Form and submit a scanned copy of a legal document to verify this name change. Examples include marriage certificate, divorce certificate, legal name change form from state, etc.

Form 2 - Continuing Education Record

The Applicant must submit a **minimum of forty (40) *qualifying* hours** of advanced continuing education (CE) pertaining to surgical procedures or associated topics that can be directly correlated to any of the AVST Advanced Surgical Skills. **However, no more than five (5) hours of anesthesia-related or analgesia-related CE and no more than five (5) hours of physical rehabilitation-related CE will be accepted.** More than 40 hours of CE may be submitted to compensate for any hours that may be deemed unqualified and subsequently rejected. **However, no more than 60 hours of CE may be submitted.** Continuing education programs **MUST** be presented by a VTS member (in any of the specialty academies) or a veterinary diplomate of an American or European college from any of the following approved disciplines: American College of Veterinary Surgeons (ACVS), American College of Veterinary Internal Medicine (ACVIM to include small and large animal internal medicine, cardiology, oncology and neurology), American College of Veterinary Ophthalmologists (ACVO), American College of Veterinary Anesthesia and Analgesia (ACVAA), American College of Veterinary Emergency and Critical Care (ACVECC), American College of Veterinary Pathologists (ACVP), American College of Veterinary Radiology (ACVR), American College of Veterinary Clinical Pharmacology (ACVCP), American Veterinary Dental College (AVDC), American College of Veterinary Dermatology (ACVD), American College of Veterinary

Sports Medicine and Rehabilitation (Canine or Equine) (ACVSMR), and the European College of Veterinary Surgeons (ECVS). You **MUST** list the CE provider's **diplomate/credential** status (DACVS, DACVAA, DACVIM, DECVS, VTS, etc.) on the CE form. **Failure to include the speaker's credentials will result in those hours being rejected.**

There is only one exception to the above speaker credentialing requirement. CE presented at the ACVS Surgery Summit as a part of the Technicians' Program will be accepted as long as the topic presented is directly related to surgery. Limits for CE pertaining to anesthesia, analgesia, and rehabilitation still apply. Topics relating to mental health, professional development, or management topics will not be accepted.

Only the continuing education activities outlined below will be applicable for this academy. Furthermore, submitting continuing education activities analogous to self-study (e.g., reading journal articles and passing an associated quiz) will not be accepted.

You must use the **Continuing Education Record** to submit only the continuing education attended by the applicant from **January 1, 2020**, to the date you submit your application (previous 5 years.)

A PDF copy of a CE Certificate provided by the organization or speaker must be provided as proof of attendance and should be electronically combined in the same file as the CE form for each conference/seminar/webinar attended. Cancelled checks or other documents will not be accepted as proof of attendance.

Use the AVST's definition of continuing education to determine if your CE meets the requirements regarding content. If the title of the CE does not provide enough information to show the CE was related to surgery, you may submit scanned copies of the course description provided by the organization providing the CE. Each meeting attended should be listed on a **separate** copy of this form. For a particular meeting, each lecture attended should be listed on the form. In evaluating the CE resources, the AVST Credentials Committee is looking for diversity in the percentage of CE obtained from in-house, online, and meeting/conference attendance, therefore **no more than 50% (20 hours)** of in-house and online combined CE will be accepted. If more than 20 hours total of in-house and online CE are submitted, they will not contribute towards the total hours needed. **This means that it is MANDATORY that at least 20 hours of CE must come from national, state, or local meetings. Furthermore, ensure that the people providing the CE are AVST approved speakers.**

Since this is the first year that the Continuing Education Record is included in the Pre-application, applicants will be allowed to submit additional CE with the Final Application. It is preferred that applicants submit 40 hours of qualifying CE with the Pre-Application. **However, a minimum of 20 hours of CE must be submitted with the Pre-Application. Pre-Applications submitted with no CE hours will be rejected.** A total of 40 qualifying CE hours must be submitted between the Pre-application and the Final Application.

Continuing Education Definitions

Due to the COVID-19 pandemic, CE hours obtained by attending national, state, or local "Virtual" Conferences (e.g., NAVC, Fetchdvm360, Vet Show, ACVS Virtual Live, etc.) online in the years 2020 and 2021 will be considered equivalent to in-person attendance. The CE certificates must specify that the session was attended live or "interactive" in order to be counted as in-person. CE hours obtained by other traditional webinars or on-demand conferences (e.g., ACVS Digital Learning, ACVS On-Demand, VETgirl, VetFolio, VSPN, Think Anesthesia®, etc.) will be considered online CE training.

Nationally recognized meeting (Includes in-person or virtual live/interactive):

> A gathering of people for the purpose of providing continuing education in the field of veterinary medicine. National meetings are announced in journals typically read by professionals in the field of veterinary medicine. There is an expectation that continuing education at a nationally recognized meeting will be provided by lecturers or instructors who are considered experts in the subject they are discussing. You will need an official CE certificate. **Please be aware**: the people providing instruction may not meet the AVST requirements for acceptable CE.

Local meeting (Includes in-person or online live/interactive):

A gathering of people for the purpose of providing continuing education in the field of veterinary medicine. Local meetings are presented by state/city organizations. There is an expectation that continuing education at a local meeting will be provided by lecturers or instructors who are considered experts in the subject they are discussing. You will need an official CE certificate. **Please be aware**: the people providing instruction may not meet the AVST requirements for acceptable CE.

In-house training:

Continuing education provided for people who work at a particular practice or institution. This type of continuing education is not open to the veterinary profession at large and lecturers or instructors often work at the practice or institution. You must be currently employed at the facility providing the in-house training. You may hire an outside speaker to come to talk to your practice as part of in-house training. **Please be aware**: the people providing instruction may not meet the AVST requirements for acceptable CE. If part of your CE is in-house (meetings accessible only to technicians inside your facility) you will need an official CE certificate or a signed letter from the person supervising your attendance. The CE certificate or letter should detail where and when the training took place, the name and diplomate or VTS status of the CE provider, the objectives and goals, a statement of your satisfactory performance and the total hours provided. (1 hour of lecture = 1 hour of CE)

Online training (Includes on-demand or non-interactive sessions):

Requires an official CE certificate or a signed letter from the person supervising your attendance in the program. The CE certificate or letter should detail when the training took place, the name and diplomate status of the CE provider, the objectives and goals of the training program, a statement of your satisfactory performance and the total hours provided. **Please be aware**: the people providing instruction may not meet the AVST requirements for acceptable CE.

Pre-Application Submission Instructions:

Save all files in PDF format using the list provided at the end of this section, replacing your actual names for "firstname" and "lastname" in each file name. For example, if your name is Jane Smith, then you would entitle your Form 1 file like this: jane.smith.history.pdf.

Pre-app Folder: Place all of your files in a single folder entitled: **firstname.lastname.preapp.AVST2025**

FORM 1: Professional History & Experience Form: Download the form and fill it out electronically. Save it as a PDF with the appropriate file name in your Pre-application Folder.

Proof of Credentialing: Obtain a PDF copy or scan a paper copy of your current credentials into a PDF file. Save it as a PDF with the appropriate file name in your Pre-application Folder.

Diploma: If you have graduated from an AVMA accredited Veterinary Medical Technology Program, scan a paper copy of your diploma into a PDF file. Save it with the appropriate file name in your Pre-application Folder.

Resume/Curriculum Vitae: You must also include a current copy of your resume **or** curriculum vitae. Save it as a PDF with the appropriate file name in your Pre-application Folder**.**

FORM 2: CE Form with CE Certificate/Proof of Attendance: Download Form 2 and fill it out electronically. You will need a new form for each conference/seminar/webinar that you attend. You may need more than one form for each conference.

If you have an electronic certificate, save it as a PDF. If you have a paper certificate, scan it to a PDF. Every conference/seminar/ webinar must be supported by a CE certificate provided by the organization or speaker as proof of attendance.

*****NEW*** All forms for each conference including the certificate/proof of attendance must be combined into one PDF.** Name your files chronologically. For example, firstname.lastname.CE1.pdf would be the first

conference submitted and firstname.lastname.CE2.pdf would be the second. Include all CE files in your Pre-application Folder**.**

PayPal Receipt: Save your PayPal receipt as a PDF with the appropriate file name in your Pre-Application Folder.

All file names for your Pre-Application should be in the format provided below:

FORM 1: Professional History & Experience Form……..……firstname.lastname.history.pdf

Name Change Documentation……..firstname.lastname.namechange.pdf

Proof of Credentialing……firstname.lastname.credentials.pdf

Diploma (if applicable)……firstname.lastname.diploma.pdf

Resume/Curriculum Vitae……firstname.lastname.resume.pdf

FORM 2: CE Form with CE Certificate

(first conference)……..……..firstname.lastname.CE1.pdf

(second conference)……..firstname.lastname.CE2.pdf

PayPal receipt……...firstname.lastname.receipt1.pdf

Pre-Application Folder……firstname.lastname.Preapp.AVST2025.pdf

Pre-Application Fee:

You must submit the **$25.00** application fee using the **"Pre-Application Fee"** PayPal link found on our website.

https://avst-vts.org

The Pre-Application documents must be submitted electronically according to the following instructions:

We Transfer Instructions

To submit the 2025 AVST Pre-application, follow these steps:

1. **Go to https://wetransfer.com/. This service is free and does not require an account.**
2. Enter **avst.credentials@gmail.com** in the "email to" box.
3. Enter **your personal email address** in the "your email" box (work email addresses not advised due to firewalls)
4. Enter **"2025 AVST Pre-Application"** in the "title" box.
5. Enter **your full name** in the "message" box.
6. Click "Or select a folder" at the top of the box.
   - Ensure that ALL application documents are present before selecting the folder.
   - Individual files will NOT be accepted!
7. Select your application folder "firstname.lastname.Preapp.AVST2025"
8. Click the TRANSFER button.
9. **NOTE:** You will be asked to verify your email by **entering a code** sent to your email address. Enter code and click "verify."

The uploaded files will be transferred to AVST with a date and time stamp.

WeTransfer will send you an immediate confirmation email indicating the files were transferred successfully. A second confirmation email will be sent by WeTransfer when AVST downloads your files. Please keep **BOTH** email confirmations with time stamps as verification that the process was conducted properly.

The complete **Pre-Application documents** must be submitted via WeTransfer before **11:59:59 pm Eastern Time, April 30, 2024**. Pre-Applications submitted via WeTransfer and time stamped after **11:59:59 pm Eastern Time on April 30, 2024**, will not be accepted and will result in an automatic rejection. There are NO exceptions to the

April 30 deadline! **All application submissions are final.** Nothing may be added or exchanged to the Pre-application unless requested by AVST. **If your application is incomplete or late, it will be rejected.** You will receive notification of your eligibility to submit a Final 2025 AVST Application within 15 days of submission. Rejected Pre-Applications can be resubmitted ***once*** without an additional fee up until the Pre-Application deadline, April 30, 2024.

AVST Final Application Requirements and Instructions:

Form 3 – AVST Small Animal Advanced Surgical Skills List

The AVST requires a licensed veterinarian or a VTS who has mastered the skill to attest to your ability to perform the task. Your testifier **must** sign at the bottom of the form to validate their initials throughout the form. If the testifier signing and validating any particular skill is a veterinary surgeon, ensure their name is also listed as the primary clinician in your case log summary or in your case report.

Mastery is defined as being able to perform the task safely, with a high degree of success, and without being coached or prompted. Mastery requires having performed the task a multitude of times in a wide variety of patients and situations. The applicant must demonstrate mastery of **90%** of the skills on this form (equivalent to mastering **72 of the 79** listed skills for the Small Animal Advanced Surgical Skills Form). **The skills you have mastered must be demonstrated on the skills list, or in your case logs and case reports.**

*****NEW***** The AVST Advanced Surgical Skills List has been revised to include sections for describing certain skills, providing indications for use, or adding other qualifying information. Some skills require that you describe them directly on the Skills List and may or may not require a supporting case log. Other skills request that you list or describe information in the supporting case log rather than on the Skills List. Pay close attention to the instructions given for each item. Some ask you to "describe" while others request "list" or "specify." Space is limited, so be brief but accurate in your descriptions.

For those skills that do require supporting case logs, **please list the skill number in the case log** along with the skill description in the appropriate section. For those skills that are described directly in the Skills List, you do not need to go into further detail in the supporting case log. A brief mention of the skill, along with its number is all that is necessary to provide the context in which the skill was performed. Again, please be brief and accurate and identify the skill by number in the case log.

Other skills require that you provide a photograph as support. Each of your pictures should also include a **Skill Information Card: A 3"x5" card with your name, the date, and the associated skill number handwritten on it**. Be sure that this card is visible and legible in your final photograph. If this card is absent or illegible, the photo will be rejected. You may submit 2 paired photographs for certain skills such as those involving equipment that extends to and from the sterile field (e.g., arthroscopic equipment). Below is a list of what should be included in your photographs for each item.

Paired photographs should contain the same Skill Information Card and the file names should contain the same skill and item number with an additional letter (a or b) for each file in the pair. For example, if 2 photos are submitted for each view of a radiograph for skill #73, name the files as follows: firstname.lastname.skill73.1a and firstname.lastname.skill73.1b

Further instructions for formatting and submitting photographs are provided on **page 8**.

Content Requirements for Skills Photographs:

Skill # 18 Orthopedic Equipment: Equipment set up and ready for use. **(Up to 2 photos each)**

Skill #19 Arthroscopic Equipment: Control tower powered on with all equipment plugged in, control settings adjusted, fluid delivery system set up, with all items ready for use. Second photo of all equipment within the sterile field also set up and ready for use. **(Up to 2 photos each)**

Skill #20 Laparoscopic/Thoracoscopic Equipment: Control tower powered on with all equipment plugged in, control settings adjusted, with all items ready for use. Second photo of equipment within the sterile field also set up and ready for use. **(Up to 2 photos each)**

Skill #21 Laser Equipment: Control panel powered on with equipment plugged in, control settings adjusted, with all ready for use. Second photo of equipment within the sterile field also set up and ready for use. **(Up to 2 photos each)**

Skill #22 Stapling/Vessel Sealing Devices: Equipment set up and ready for use in sterile field. In the case of vessel sealing devices, a second photo of control panel powered on with settings adjusted and ready for use. **(Up to 2 photos each)**

Skill #23 Electrocautery: Equipment in sterile field and control panel powered on with settings adjusted and ready for use. **(Up to 2 photos each)**

Skill #24 Suction: Equipment set up with tubing appropriately attached to canister and ready for use. **(Up to 2 photos each)**

Skill # 32 Gas Sterilization: Sterilizer loaded appropriately with door open.

Skill #33 Steam Sterilization: Sterilizer loaded appropriately with door open.

Skill #35 Wrapped Pack: Item ready to be sterilized with outer sterility indicators visible.

Skill #36 Individually Wrapped Item: Item ready to be sterilized with sterility indicators visible.

Skill #43-47 Clip, Prep & Positioning: Patient positioned in OR after final aseptic preparation, **before** being draped in.

Skill #60 Bandages: Completed bandages.

Skill# 64 Novel Wound Treatments: Treatment applied to wound **prior** to being covered by a bandage. Include the original product packaging in the second photograph. If equipment based, provide a photograph of the equipment in use (e.g., hyperbaric oxygen chamber). **(Up to 2 photos each)**

Skill #71 PPE: For hands-free radiograph techniques, provide a photograph of the patient properly positioned for a radiograph using appropriate positional aids. The photo should be zoomed in on the area being radiographed with the collimation light on, but the positional aids should also be evident in the photograph along with any calibration device and left or right positional marker.

Skill #73 Orthopedic Radiographs: Properly positioned, diagnostic, orthogonal radiographs. Photos should be of the actual radiograph, not the patient being positioned as for skill #71. May be submitted as one or two photo files. Cover all patient and client information **prior** to taking the photo. **(Up to 2 photos each)**

Skill #76 Purse String/Finger Trap Suture: Properly placed, tied, and completed suture.

Photograph Instructions:

- All photos of completed skills or equipment must be taken by the applicant, at the applicant's place of employment.
- Please read the Skills List and instructions carefully to ensure the correct photo is taken.
- None of the skills require the applicant to be in the photo.
- Photos must include a 3"x5" **Skill Information Card** with the following information *legibly* **handwritten**:
    - Applicant's name
    - Date the photo was taken (must be within current application year, Jan 1-Dec 31, 2024)
    - Skill number
- Information on the card must be of adequate size to read in the photo.
- Photos must show what is asked for in the skill explanation and the photo content requirements.
- If the skill is not evident in the photo, the skill will be rejected.

- Zoom in to be sure that the skill is visible in the photo with minimal extraneous content, but don't zoom in so close that the context is cut out. Missing items will result in the skill photo being rejected.
- Neither the patient nor the applicant should be identifiable in the photo. Be sure to zoom in to the area being photographed. Other personnel should also not be included in the photos.
- **Do NOT break sterility for the sake of a photograph.** You should be able to hold the skill information card in the frame without contaminating the sterile field.
- Photos may not be used by more than one applicant. Each applicant must provide their own photos, taken by the applicant, with their own card visible in the picture.
- **Photos that have been digitally altered will NOT be accepted. NO PHOTOSHOPPING IS ALLOWED.**
- Only JPG (JPEG) files with be accepted.
- The maximum file size is 1MB.
- Photos must be of good quality and adequate size so that the content is easily visible.
- If the picture is too small to see the content, it will be rejected. Test this on your computer screen by opening the photo and zooming in.
- Approximate size should be 600x800 pixels, 8.5x11 inches, or 21x28 cm. Suggested resolution is 100-150 DPI.
- If your photo exceeds the maximum file size of 1MB, the resolution or image size are likely too big. The size can be adjusted using an online service such as https://imageresizer.com/.
- An online search for "how to resize an image without losing quality," "how to resize images on a Mac," or "how to resize an image on a PC" will provide additional options.
- Additional links to online resources for image resizing are also available on the AVST website under the "Resources" tab.

If a skill was mastered at a prior place of employment during the current application period listed in your employment history, it must be validated by the veterinarian associated with the prior employment in the form of a signature on the Small Animal Advanced Surgical Skills Form or by a **Letter of Explanation** stating such.

The AVST Small Animal Advanced Surgical Skills Form example begins on **page 19**.

Form 4 - Case Log

Candidates must submit a case log of at least **50** (but not more than **75)** cases completed from **January 1, 2024 – December 31, 2024.** The case log will be used to demonstrate your experience as a surgical technician and your mastery of advanced surgical nursing skills. The 50 cases contained in the case log must meet the AVST Definition of Surgery. Additional case log entries may be submitted to demonstrate mastery of a skill where applicable. Please remember case log entries submitted to reference a skill that does not meet the AVST Definition of Surgery should not be included as part of the 50 required cases. In addition, if only 50 cases are submitted, a single unacceptable case could result in an application being rejected.

For the purpose of the Small Animal exam, the AVST will include **canine, feline, lagomorphs, avian, reptiles, primates, small exotic pets,** and **small laboratory animals** as 'small animal' patients. Applicants are not required to include all of the aforementioned species in their case logs, but at least two species are required.

Each case log should include the following: name or ID number, date, patient information (species/breed, age, sex, weight), duration of surgical care, technician role, wound classification, attending clinician's name and credentials, the reason for surgery, and type of surgery performed. It should also concisely describe the preoperative diagnostics and preparation of patient, instrument, equipment, and operating room preparations performed prior to surgery, a brief list of instruments and equipment used intraoperatively, as well as any postoperative diagnostics, external coaptation used, postoperative care performed, etc. Information supplied in the case logs is intended to provide a *summary* of the surgical procedure performed on a **variety of species** while succinctly demonstrating as many advanced surgical nursing skills as possible (as outlined on the AVST Advanced Surgical Skills Form.) **If you use a case to demonstrate mastery of a particular skill you MUST provide detailed verbiage pertaining to the use of that specific skill in the case summary (e.g., list the context in**

which you used the skill and/or briefly describe how you performed it either in the Case Log or on the Skills List). Each case log should also clearly outline your role in the surgical procedure and demonstrate how your actions helped contribute to a successful outcome.

Remember that the case log **MUST** demonstrate a variety of surgical procedures to represent the applicant's diversity in the operating room (e.g., thoracic surgery, abdominal surgery, neurologic surgery, orthopedic surgery, minimally invasive surgery, oncologic surgery, etc.) as well as the applicant's use of advanced surgical skills and care throughout all phases of the case. **Ensure that elective, common or routine surgical procedures do not comprise more than fifteen percent of your case log.** Elective, common, or routine case examples include onychectomy, ovariohysterectomy or orchiectomy, dental extractions, patellar luxation or cranial cruciate ligament surgery, or minor mass removal. Furthermore, submitting more than 5 similar surgical cases (i.e., routine, elective cruciate surgery example: submitting more than 5 combined tibial plateau leveling osteotomy, extracapsular cruciate ligament repair, and tibial tuberosity advancement, or submitting more than 5 splenectomies) may result in disqualification of the supplementary case log entries. Furthermore, copying passages (using 'cut' and 'paste' features) from one case log entry into another may adversely impact your application.

The applicant must utilize the **AVST Abbreviations List** for surgery-related abbreviations in the skills list, case logs, and case reports. Download the AVST Abbreviations List document and include it with your application packet. You may also use commonly encountered medical abbreviations without defining them. These would include abbreviations that are generally accepted and found in medical records such as bloodwork values and units of measurement. If you use an abbreviation that is not listed, then you must concisely define the abbreviation the first time you use it in your skills list or case log. For example, laryngeal paralysis (LarPar). **Please do not "create" abbreviations to save space in your documents.**

The AVST Approved Abbreviations List can be found on **page 34.**

Please see examples of general veterinary medical abbreviations on **16.**

The case log form should not contain more than 2 case log entries per page. Do not exceed this limit. Be sure the case log is detailed, neat, spell checked, and clearly written. **Please do not include personal client information such as the owner's name, address, phone numbers, etc.**

All cases included in the applicant's log must be completed at the facility where the applicant is employed or while under the supervision of the employer at a different location. (e.g., your practice takes patients to a separate MRI facility.)

You may not exceed 75 case log entries.

Please review the AVST Case Log SAMPLE on **page 33**.

Four Case Reports

Select four cases **from your case log** that best demonstrate your diversity and expertise in surgery to submit as case reports. These four case reports should be carefully chosen and will allow you the opportunity to elaborate on your mastery of as many of the AVST Advanced Surgical Skills as possible. All information from the case log should be included in the report. You must also document the case log number as a reference to confirm the case is entered as part of your case log. In addition to the information from the case log, the case reports **MUST** demonstrate your knowledge, skills, and abilities in advanced surgical nursing techniques on a **variety** of surgical **patient species** undergoing assorted (e.g., soft tissue, orthopedic, oncologic, minimally invasive, thoracic, ophthalmic, neurologic) and challenging (e.g., non-routine or non-elective) surgical procedures.

The case report should describe, in detail, how the patient was evaluated and managed during all phases of surgical care. It is imperative that the information contained in your case report is clearly understood. Present each case in a logical manner. Be sure to check your spelling and define any abbreviations (e.g., total hip replacement-THR.) It is important to show how you participated in the evaluation and management of the patient and were not just an observer. Consider some of the following ways of demonstrating your knowledge and experience:

1. Show how your veterinary team assessed the patient and developed a surgical plan.
2. Discuss the relevant pathophysiology of the patient and include the reason for the surgical procedure.
3. Detail the patient's history, including laboratory data, current medication(s), any prior procedure(s), and describe diagnostic imaging techniques used.
4. Discuss proposed outcome of surgery being performed. Why was this procedure chosen over another? (e.g., limb salvage over a limb amputation) Identify potential complications.
5. Explain preoperative patient preparation details for each procedure such as anatomic landmarks for the surgical clip margins, agents and aseptic technique used, rationalization for antimicrobial agent choice, and intraoperative patient position or positioning devices.
6. Detail the preoperative preparations and intraoperative setup for the procedure.
7. Explain the surgical approach, pertinent anatomy and physiology, and a complete synopsis of the full intraoperative procedure. Discuss any particular intraoperative challenges, unique supplies, instrumentation, equipment, and suture material requirements as well as their purpose during the procedure. ***NEW*** State the wound classification for the procedure and explain the reasons for this classification.
8. Discuss the immediate and extended postoperative nursing plan, including medications, nutritional recommendations, rehabilitation, bandaging techniques, and wound care.
9. Discuss detailed client education and provide a follow-up report summarizing the final laboratory test results and prognosis or final outcome.
10. Provide a list of the surgical instruments, equipment, and supplies used as well as information on their proper care; also detail the sterilization techniques and methods employed to ensure sterility. List wrapping materials used and other pertinent data.
11. Include a list of at least 5 references that are cited within your case report using the American Medical Association citation style.

Each case report will contain a maximum of 7 pages and may contain a maximum of **five** 8.5 x 11-inch pages of case report content, a 1-page listing of all surgical instruments and equipment used, and 1 page stating references used, following the format provided. Each case report must be printed in a 10-point Times New Roman font, double-spaced, left and right justified, and with 0.5-inch page margins. *Case reports that do not meet these requirements will be rejected.* The case reports must be the original work of the applicant. References should follow the American Medical Association (AMA) citation style. **Please do not include personal client information such as the owner's name, address, phone numbers, etc.**

Please review detailed AVST Case Report content instructions beginning on **page 35**.

An AVST Case Report SAMPLE begins on **page 37**.

Letter of Intent

Please provide a brief **letter** that describes who you are and why you are interested in becoming an AVST member. Please tell us what you feel you can contribute to the AVST and what you plan to do with the certification once you have achieved it. Letters should be a maximum of ONE page in length, single-spaced, using 12-point font Times New Roman, and 1-inch margins. Letters must be signed or contain a digital signature.

Letters of Recommendation

You must include two signed letters of recommendation with your application. One of the letters must be from an ACVS/ECVS diplomate or a Veterinary Technician Specialists (VTS) member (any academy). The second letter must be from one of the VTSs or veterinarians included as a testifier of your skills that has signed on the bottom of Form 3. The letters should include details on training, ethical behavior, and quality of skills.

Recommenders with the above credentials are preferred, however AVST recognizes that there are limited numbers of these practitioners available. Therefore, letters of recommendation will be accepted from the following:

Diplomates in Anesthesia/Analgesia (DACVAA), Emergency & Critical Care (DACVECC), Ophthalmology (DACVO), Internal Medicine (DACVIM), Veterinary Sports Medicine and Rehabilitation (DACVSMR), or Clinical Practice (DABVP).

If no Diplomate or VTS is available from the Colleges or Academies listed above, AVST will accept a letter of recommendation from a licensed DVM with a second letter from them stating that no Diplomate or VTS is easily available for the candidate to utilize. **Note: This requires the letter writer to submit 2 letters, one letter of recommendation and one letter of explanation.**

AUSTRALIAN APPLICANTS: ANZCS is not equivalent to an American or European Diplomate. Therefore, a letter of explanation must be included as described above.

Letters of recommendation should include details on training, ethical behavior, and quality of skills. Letters must be signed then scanned and saved as a PDF. The letters may be submitted separately at the wish of the writer, as described on **page 13**.

The following information should be included in the letters of recommendation:

- Under what circumstances have you known the candidate?
- How long have you known the applicant?
- Describe the applicant's integrity and sincerity of commitment to the veterinary technician profession.
- Describe the applicant's professional ethics, trustworthiness, and honesty in a professional setting.
- Describe the applicant's technical ability as a veterinary technician in the field of surgery.
- Include any general comments that you would like to add regarding the applicant.

Form 5 - Waiver, Release, and Indemnity Agreement

This form must be signed and included with your application packet.

Disclaimer: *The AVST supports and promotes professional honesty and personal integrity during the application process to become certified as a VTS (Surgery). Any form of professional dishonesty, including plagiarism, will not be tolerated. Any application found to have evidence of plagiarism or providing dishonest information will be automatically rejected and may disqualify them from applying in the future. Statements made by candidates in public forums such as on social media that contradict information provided on the application can and will be considered by the AVST Credentials Committee.*

Final Application Submission Instructions:

The AVST designed the application forms so you can complete most of the forms using your computer. With the exception of the AVST Small Animal Advanced Surgical Skills Form and other application-associated signatures, all forms must be word-processed. **Handwritten forms will not be accepted**. Remember, this is a professional application; spelling/grammar and overall presentation will be considered when the application is reviewed. The AVST reserves the right to contact the applicant and ask for additional documentation to verify information contained in the application.

It is highly recommended that you only use Adobe Acrobat on a PC for filling out the AVST Skills List and Case Log Forms. Other programs such as Internet Explorer and/or Mac computers may alter the fonts and/or formatting of these forms.

Save all files in PDF format using the list provided at the end of this section, replacing your actual names for "firstname" and "lastname" in each file name. For example, if your name is Jane Smith, then you would entitle your Form 3 file like this: jane.smith.skills.pdf.

Final Application Folder: Place all of your files in a single folder entitled: **firstname.lastname.Final.AVST2025**

FORM 2: CE Form with CE Certificate/Proof of Attendance: If a Supplemental CE Record is required (if less than 40 hours of CE were approved from your Pre-Application), download Form 2 and fill it out electronically. You will need a new form for each conference/seminar/webinar that you attend. You may need more than one form for each conference.

If you have an electronic certificate, save it as a PDF. If you have a paper certificate, scan it to a PDF. Every conference/seminar/ webinar must be supported by a CE certificate provided by the organization or speaker as proof of attendance.

*****NEW*** All forms for each conference including the certificate/proof of attendance must be combined into one PDF.** Name your files chronologically. For example, firstname.lastname.CE1.pdf would be the first conference submitted and firstname.lastname.CE2.pdf would be the second. Include all CE files in your Pre-application Folder**.**

FORM 3: Small Animal Surgical Skills Form: Download the form and fill it out electronically before printing it and having it signed and initialed by your testifying witnesses. After completing the form, scan it to a PDF and save it with the appropriate file name in your Final Application Folder.

Gas Sterilization Certificate: If you have completed skill #36 from the Small Animal Surgical Skills Form, you must provide a PDF copy of your certificate. If you have an electronic certificate, save it as a PDF with the appropriate file name in your Final Application Folder. If you have a paper certificate, scan it to a PDF file. Save it with the appropriate file name in your Final Application Folder.

FORM 4: Case Log: We have created a Case Log Form so that all case logs can be submitted together in one file. Download the form from our website and enter all your case logs on the form. Save the form with the appropriate file name in your Final Application Folder. Each text box in this form will expand by scrolling. Do not utilize more than the following number of lines specified for each text box in the following table. This is for ease of reading by the reviewer and for fairness to all applicants. ***Your application will be automatically rejected if this privilege is abused.***

Title of Text Box	Maximum # of Lines
Surgery & Reason Performed	3
Pre-op Workup	5
Surgical Clip & Aseptic Prep	4
Room & Table Setup	4
Specialized Equipment & Instrumentation	4
Other Advanced Skills Performed	4
Short- & Long-Term Care	5
Instrument Use & Sterilization	5

Abbreviations: Save the AVST approved abbreviations list as a PDF with the appropriate file name in your Final Application Folder

Case Reports: Save your case reports in four separate files, one for each report including the equipment list and reference page. Save each case report as a PDF with the appropriate file name and number. There should be four different case reports included in your Final Application Folder.

Letter of Intent: You may compose your letter of intent using Word or another word processing program, then it can be printed, signed, and scanned as a PDF or have a digital signature. Save it as a PDF file with the appropriate file name in your Final Application Folder.

Letters of Recommendation and Explanation: All Letters should be composed using Word or another word processing program, then printed, signed, and scanned as a PDF or have a digital signature. They should be saved as a PDF file with the appropriate file names in your Final Application Folder.

Letters may alternatively be submitted directly to the AVST by the writer by emailing them to the following email address: avst.credentials@gmail.com. The letter should be signed and scanned as a PDF or have a digital signature. The letter should be saved as a PDF file with the appropriate file name. The subject line for the email should say "**Letter for (name of applicant) AVST Application**."

FORM 5: Waiver, Release, & Indemnity: Download and print the form. Sign and date the form, then scan it in as a PDF with the appropriate file name in your Final Application Folder.

PayPal Receipt: Save your PayPal receipt as a PDF with the appropriate file name in your Final Application Folder.

Prior to submission:

- Proofread your application, checking for spelling, grammar, and typographical errors.
- Be sure to use proper medical terminology throughout your application.
- Verify that ALL file names are correct.
- Verify that ALL photo file names are correct.
- Verify that the Skills Information Card is **visible and legible** in ALL photos.
- Verify that ALL files are saved in the correct format.
- Verify that ALL letters are included or emailed separately according to the instructions.

All file names for your Final Application should be in the format provided below:

FORM 2: CE Form with CE Certificate

(first conference)……..……..firstname.lastname.CE1.pdf

(second conference)……..firstname.lastname.CE2.pdf

FORM 3: Skills List with signature page…….firstname.lastname.skills.pdf

Photographs……firstname.lastname.skill.skill#.item#.jpg

Gas Sterilization Certificate……...firstname.lastname.gascert.pdf

FORM 4: Case Log……...firstname.lastname.caselog.pdf

Abbreviations List……...firstname.lastname.abbreviations.pdf

Case Report #1……..firstname.lastname.report1.pdf

Case Report #2 …….firstname.lastname.report2.pdf

Case Report #3……..firstname.lastname.report3.pdf

Case Report #4……..firstname.lastname.report4.pdf

Supplemental CE Record (if applicable): FORM 2, CE Form with attached CE Certificate:

(first conference)……firstname.lastname.SCE1.pdf

(second conference)……firstname.lastname.SCE2.pdf

Letter of Intent…….firstname.lastname.intent.pdf

Letter of recommendation #1……..firstname.lastname.letter1.pdf

Letter of recommendation #2……..firstname.lastname.letter2.pdf

Letter of Explanation……..firstname.lastname.letter3.pdf

FORM 5: Waiver, Release, & Indemnity……...firstname.lastname.waiver.pdf

PayPal receipt……...……firstname.lastname.receipt2.pdf

Final Application Folder……firstname.lastname.Final.AVST2025.pdf

Final Application Fee:

You must submit the **$50.00** application fee using the **"Application Fee"** PayPal link found on our website.

https://avst-vts.org

The Final Application documents must be submitted electronically according to the following instructions:

We Transfer Instructions:

To submit the 2025 AVST Final Application, follow these steps:

1. **Go to https://wetransfer.com/. This service is free and does not require an account.**
2. Enter **avst.credentials@gmail.com** in the "email to" box.
3. Enter **your personal email address** in the "your email" box (work email addresses not advised due to firewalls)
4. Enter **"2025 AVST Final Application"** in the "title" box.
5. Enter **your full name** in the "message" box.
6. Click "Or select a folder" at the top of the box.
   - Ensure that ALL application documents are present before selecting the folder.
   - Individual files will NOT be accepted!
7. Select your application folder "firstname.lastname.Final.AVST2025"
8. Click the TRANSFER button.
9. **NOTE:** You will be asked to verify your email by **entering a code** sent to your email address. Enter code and click "verify."

The uploaded files will be transferred to AVST with a date and time stamp.

WeTransfer will send you an immediate confirmation email indicating the files were transferred successfully. A second confirmation email will be sent by WeTransfer when AVST downloads your files. Please keep **BOTH** email confirmations with time stamps as verification that the process was conducted properly.

The **Final Application documents** must be submitted via WeTransfer before **11:59:59 pm Eastern Time, January 31, 2025**. Complete applications submitted via WeTransfer and time stamped after **11:59:59 pm Eastern Time on January 31, 2025**, will not be accepted and will result in an automatic rejection. There are NO exceptions for the January 31 deadline! **All application submissions are final.** Nothing may be added or exchanged to the Final Application unless requested by AVST.

Included at the end of this application packet (**page 46**) is a checklist to help ensure you complete all the necessary steps to submit your application. **If your application is incomplete or late, it will be rejected.** You will receive notification of your eligibility to participate in the certification exam by **May 1, 2025**. You may take the examination a total of 3 times in 3 years with the acceptance of the application.

Appeals

If your application is rejected, you may appeal the decision within 30 days of the notification of rejection. Your appeal must be made in writing to the AVST Secretary and submitted to AVST, 6516 Monona Dr. #246, Madison, Wisconsin 53716. You may also submit your appeal via email to: avst.sxtech@gmail.com If submitting via email, send your appeal letter as a PDF file attachment. All appeal decisions will be based on the original submitted application. **You may not submit additional data** to augment the original application, therefore ensure the original application is complete and accurately reflects your qualifications.

Academy of Veterinary Surgical Technicians (AVST)

Definition of Surgery

A. Veterinary Surgery includes the advanced knowledge of surgical procedures and instrumentation (including instrument identification and care), proper sterilization techniques, principles of infection control, aseptic techniques, perioperative patient care, physical rehabilitation and a thorough knowledge of the anatomy and pathophysiology of animals.

B. Surgery is defined as the branch of medicine that deals with the diagnosis and treatment of injury, deformity, and disease by manual and instrumental means. A procedure is considered surgical when it involves cutting of tissues or closure of a previously sustained wound. A surgical procedure may include elective, emergency, reconstructive, transplantation, replantation, cosmetic or minimally invasive procedures such as arthroscopy, laparoscopy, thoracoscopy and laser surgery.

Academy of Veterinary Surgical Technicians (AVST)

Wound Classification

- **Clean:** Elective procedures with nontraumatic, noninflamed, operative wound with no entry into the biliary, gastrointestinal, genitourinary, or respiratory tract. No break in aseptic technique. Incision closed by primary union with no drain placed.
- **Clean Contaminated:** Operative wound in which the biliary, gastrointestinal, genitourinary, or respiratory tract is entered under controlled conditions with no significant spillage or contamination. An otherwise clean procedure with a minor break in aseptic technique. An otherwise clean wound in which a drain is placed.
- **Contaminated:** Fresh traumatic wounds (<6-8 hours old). Procedures in which gastrointestinal contents or infected urine is spilled. Procedures with a major break in aseptic technique.
- **Dirty:** Untreated traumatic wounds (>6-8 hours old). Purulent discharge, devitalized tissue, or foreign bodies encountered within the wound. Infected surgical site. Procedure in which a viscus is perforated, or fecal contamination occurs.

Examples of General Veterinary Medical Abbreviations

*All generally recognized veterinary medical abbreviations are acceptable. Applicants are not limited to this list.

AD/AS/AU – right, left, both ears
ALKP – alkaline phosphatase
ALT – alanine transferase
BAR – bright, alert, responsive
BG – blood glucose
BID - two times a day (q12h)
BUN – blood urea nitrogen
bpm - beats per minute
brpm - breaths per minute
Ca – calcium
Cl - chloride
CBC - complete blood count
CHEM – blood chemistries
cm/mm - centimeter / millimeter
DLH - Domestic Longhair
DMH- Domestic Medium Hair
DSH - Domestic Shorthair
FI – female intact
FS - female spayed
g – gram
GSD – German Shepherd Dog
h/hr – hour
Hct – hematocrit
Hb – hemoglobin concentration
IC – intracardiac
IM - intramuscular (intramedullary)
IP – intraperitoneal
IV – intravenous
K – potassium
Kg - kilogram
L - liter
Lact - lactate
mcg/µg – microgram
mg - milligram
MI – male intact
min – minute
ml/cc - milliliter/cubic centimeter
MN - male neutered
OD/OS/OU – right, left, both eyes
NPO - nothing by mouth/nil per os
P - pulse
PCV/TS – packed cell volume/total solids
PO – by mouth
PRN - as needed
psi – pounds per square inch
q – every (as in q8h, q90min)
QAR - quiet, alert, responsive
QID - four times a day (q 6 hours)
R - respirations
RBC – red blood cells
SID - once daily
SQ - subcutaneous
T - temperature
T4 – thyroxine
TNTC – to numerous to count
TID - three times a day (q 8 hours)
U.S.G. – Urine specific gravity
UA - urinalysis
WBC – white blood cells
WNL - within normal limits

AVST Professional History and Experience — Form 1

Full Name/Credentials: ____

Address: ______________________ City: ____________ State: _____ Zip: _________

Phone: ____________________ Email: __________________________

Present Occupation/Title: ____

Are you a graduate of an AVMA accredited veterinary technology program? **Y-N** Graduation Date: ___________

Are you currently licensed/registered/possess a credential to legally practice in your state or province? **Y-N**

Date of Original Credentialing: ___________ Pass date of VTNE (or equivalent): ___________

Are you a NAVTA member? **Y-N** IF YES, please provide NAVTA member ID number: ___________

Have you previously applied for **or** earned a VTS designation in any other discipline? **Y-N**

If YES, please list discipline of VTS designation and date of application: ____________________ Date: ___________

List your employment history for only the previous 5 years.

*****Do NOT use abbreviations/acronyms for Names of Practice/Institution*****

Name of Practice/Institution: ____________________________________	
Type of Practice:	Average number of hours worked per week:
Start Date:	Percent of time devoted to surgery:
End Date:	Total surgery hours:
Name of Practice/Institution: ____________________________________	
Type of Practice:	Average number of hours worked per week:
Start Date:	Percent of time devoted to surgery:
End Date:	Total surgery hours:
Name of Practice/Institution: ____________________________________	
Type of Practice:	Average number of hours worked per week:
Start Date:	Percent of time devoted to surgery:
End Date:	Total surgery hours:
Name of Practice/Institution: ____________________________________	
Type of Practice:	Average number of hours worked per week:
Start Date:	Percent of time devoted to surgery:
End Date:	Total surgery hours:

Total surgery hours:

____

AVST CONTINUING EDUCATION RECORD Form 2

Date(s) of Conference: _____

Name of conference, meeting, etc.: _____

Organization or Person providing the CE: _____

Speaker Name	Credentials	Title of Presentation	Hours

Total Time _____

Type of CE:

Continuing education programs **MUST** be presented by a VTS member (in any of the specialty academies), a veterinary diplomate of an American or European college, or other qualified speakers as outlined in the AVST Application Packet (page 6). You **MUST** list the CE provider's **diplomate/credential** status (DACVS, DACVAA, DACVIM, DECVS, VTS, etc.) on the CE form. **Failure to include the speaker's credentials will result in those hours being rejected.**

Academy of Veterinary Surgical Technicians

Small Animal Advanced Surgical Skills Form - Form 3

The applicant is required to state that he/she has mastered the skills on this form. **Be sure to fulfill all requirements listed for each skill.** The minimum number of case logs for each skill can be found in the third column. Each skill must have the minimum number of valid supporting case logs to authenticate that particular numbered skill. ***No partial credit will be awarded***. Place only one case log number in each available box in columns 4 - 8. The gray boxes are not to be used. You may provide one additional case log for each skill beyond the minimum requirement. **Whenever possible, do not repeat the same surgical procedure in case logs that are used to support the same skill. A wider variety of procedures will better illustrate your knowledge and mastery of the skill.** Examples that have been provided with some skills are intended as a guide, and the applicant is not limited to or required to use cases that match these examples.

*****NEW*****

The AVST Advanced Surgical Skills List has been revised to include sections for describing certain skills, providing indications for use, or adding other qualifying information. Some skills require that you describe them directly on the Skills List and may or may not require a supporting case log. Other skills request that you list or describe information in the supporting case log rather than on the Skills List. **Pay close attention to the instructions given for each item.** Some ask you to "describe" while others request "list" or "specify." Space is limited, so be brief but accurate in your descriptions.

For those skills that do require supporting case logs, please list the skill number in the case log along with the skill description in the appropriate section. For those skills that are described directly in the Skills List, you do not need to go into further detail in the supporting case log. A brief mention of the skill, along with its number is all that is necessary to provide the context in which the skill was performed. Again, please be brief and accurate and identify the skill by number in the case log.

Other skills require that you provide a photograph as support. Each of your pictures should also include a Skill Information Card with your name, the date, and the associated skill number. Be sure that this card is legible in your final photograph. **If this card is absent or illegible, the photo will be rejected.** You may submit 2 paired photographs for certain skills such as those involving equipment that extends to and from the sterile field (e.g., arthroscopic equipment). Please see the AVST 2025 Application Packet for more detailed instructions for submitting photographs and a list of what should be included in your picture(s) for each item.

The AVST is aware that some states or provinces may not allow a task to be performed by a credentialed veterinary technician. The AVST requires that a Veterinary Technician Specialist (of any specialty) or a veterinarian who has mastered the skill attest to your mastery of each skill on this form. **Your testifier must sign at the bottom of the form to validate their initials throughout the form.** If the testifier signing and validating a particular skill is a veterinary surgeon, ensure their name is also listed as the primary clinician in your case log summary or case report.

Mastery is defined as possessing an outstanding skill or having expertise. The applicant must be able to perform the task safely, with a high degree of success, and without being coached or prompted. Mastery requires having performed the task a multitude of times in a wide variety of patients and situations.

*NOTE: Any formatting issues with the following table are not present on the actual Academy of Veterinary Surgical Technicians Small Animal Advanced Surgical Skills Form that is utilized by the applicant.

Aseptic Technique

A VTS (Surgery) plays an integral role in maintaining asepsis under a variety of conditions. Aseptic technique is described as a set of specific practices and procedures performed under carefully controlled conditions with the goal of minimizing contamination by pathogens.

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
1	Perform proper disinfection of an OR with the appropriate use of a surface disinfectant and contact time.	N/A						
	Specify disinfectant & describe technique:							
2	Perform an aseptic patient preparation using **2** different types of antiseptics and contact times.	2						
	Specify antiseptic & contact time:							
	Specify antiseptic & contact time:							
3	Adhere to aseptic technique in the OR while acting as a circulating nurse.	2						
	Describe the technique for each of the following tasks. Appropriate tasks should be listed in the supporting case logs and indicated by the associated skill number.							
	Open a wrapped pack:							
	Open a peel pouched item:							
	Open suture:							
	Pour sterile lavage:							
	Moving through sterile environment:							
4	Perform a surgical hand scrub using a water-based scrub. (e.g., 2% chlorhexidine scrub)	1						
	Describe technique:							

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
5	Perform a surgical hand scrub using an alcohol-based scrub. (e.g., Avagard™, Sterillium®)	1						
	Describe Technique:							
6	Perform open gloving.	1						
	Describe Technique:							
7	Perform closed gloving.	1						
	Describe Technique:							
8	Perform assisted gloving.	1						
	Describe Technique:							
9	Perform proper OR technique in the event of contamination. (e.g., use of sterile sleeves, re-gloving, and/or re-gowning techniques)	1						
	Describe Technique:							

Operating Room Techniques

A VTS (Surgery) must be able to perform successfully in a surgical suite to reduce the overall time of the procedure, reduce contamination, and maintain the patient's well-being as the highest priority.

Circulating Nurse Duties:

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
For skills 10-13, describe OR set-up and list packs, instruments, and equipment in each supporting case log under "Room & Table Prep" and/or "Specialized Instrumentation & Equipment." Include the associated skill number at the beginning of the description or list.								
10	Properly set up an OR with the necessary equipment and instrumentation for **4** different **soft tissue** surgical procedures.	4						
11	Properly set up an OR with the necessary equipment and instrumentation for **4** different **orthopedic** surgical procedures.	4						
#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials

12	Properly set up an OR with the necessary equipment and instrumentation for **4** different **minimally invasive** surgical procedures.	**4**						
13	Properly set up an OR with the necessary equipment and instrumentation for **2** different **ophthalmic and/or neurologic** surgical procedures.	**2**						

Scrub Nurse Duties:

For skills 14-17, describe how you assisted the surgeon in each supporting case log under "Other Advanced Skills Performed" Include the associated skill number at the beginning of your description.

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
14	Perform appropriate tissue handling and/or passing of instrumentation while assisting the surgeon during **abdominal** surgical procedures.	**1**						
15	Perform appropriate tissue handling and/or passing of instrumentation while assisting the surgeon during **thoracic** surgical procedures.	**1**						
16	Perform appropriate tissue handling and/or passing of instrumentation while assisting the surgeon during **2** different **orthopedic** surgical procedures.	**2**						
17	Perform appropriate tissue handling and/or passing of instrumentation while assisting the surgeon during **2** different **minimally invasive** surgical procedures.	**2**						

Equipment

A VTS (Surgery) must have knowledge of various equipment specific to surgery, including proper applications, identification, care, maintenance, and troubleshooting.

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
For skills 18-21, list appropriate equipment in each supporting case log under "Specialized Instrumentation & Equipment." Include the associated skill number at the beginning of the list. ***Photo requirement: For each skill/case, include a photo of the appropriate equipment using the file name as listed below each skill. See instructions for more information on photo requirements.**								

18	Properly set up various types of equipment for use in **orthopedic** surgery. (e.g., nitrogen or battery powered equipment, etc.)	**4**						
	***Photo file names:** firstname.lastname.skill.18.1, firstname.lastname.skill.18.2, firstname.lastname.skill.18.3, firstname.lastname.skill.18.4, +/- firstname.lastname.skill.18.5							
19	Properly set up various types of equipment for use in **arthroscopic** surgery. (e.g., video/ picture capture devices, arthroscope, shaving devices, fluid delivery systems, etc.)	**2**						
	***Photo file names:** firstname.lastname.skill.19.1, firstname.lastname.skill.19.2, firstname.lastname.skill.19.3, firstname.lastname.skill.19.4, +/- firstname.lastname.skill.19.5							
20	Properly set up various types of equipment for use in **laparoscopic and thoracoscopic** surgery. (e.g., video/picture capture devices, scope, insufflation equipment, etc.)	**2**						
	***Photo file names:** firstname.lastname.skill.20.1, firstname.lastname.skill.20.2, firstname, +/- firstname.lastname.skill.20.3							
21	Set up equipment used for **Laser** surgery. (e.g., appropriate PPE, warning signs, laser tips, etc.)	**1**						
	***Photo file names:** firstname.lastname.skill.21.1, +/- firstname.lastname.skill.21.2							
For skills 22-24, specify each item & its <u>indications for use</u> in the supporting case logs under "Room & Table Setup" or "Specialized Instrumentation & Equipment." Include the skill number with your description. *Photo requirement: For each skill/case, include a photo of the appropriate equipment using the file name as listed below each skill. See instructions for more information on photo requirements.								
22	Supply appropriate accessories or set up for **4** <u>different</u> stapling or vessel sealing devices. (e.g., LDS, EEA, TA, Ligasure™, Hemoclips, etc.) Provide indications for use of each.	**4**						
	***Photo file names:** firstname.lastname.skill.22.1, firstname.lastname.skill.22.2, firstname.lastname.skill.22.3, firstname.lastname.skill.22.4, +/- firstname.lastname.skill.22.5							
23	Properly set up and provide indications for use of electrocautery units and appropriate patient grounding.	**1**						
	***Photo file names:** firstname.lastname.skill.23.1, +/- firstname.lastname.skill.23.2							
24	Properly set up and provide indications for use of portable or central suction units and suction instrumentation.	**1**						
	***Photo file names:** firstname.lastname.skill.24.1, +/- firstname.lastname.skill.24.2							
Procedure Specific Instrumentation:								
For skills 25-28, list appropriate instrumentation in each supporting case log under "Specialized Instrumentation & Equipment." Include the associated skill number at the beginning of the list.								
#	**Skill**	**Minimum**	**CL1**	**CL2**	**CL3**	**CL4**	**CL5**	**Testifier's**

		Case Logs						Initials
25	Identify *specialized* **soft tissue** surgical instrumentation for **4** different **procedures.**	**4**						
26	Identify *specialized* **orthopedic** surgical instrumentation for **4** different **procedures.**	**4**						
27	Identify *specialized* **ophthalmic or neurologic** instrumentation.	**1**						
28	Identify *specialized* **joint replacement** instrumentation.	**1**						

Surgical Instrument Care and Sterilization Methods

A VTS (Surgery) must have knowledge of various sterilization methods. Sterilization is the process of destroying all microorganisms in or on a given environment to prevent infection.

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
***Photo requirement: For skills 32, 33, 35 & 36 include a photo using the file name as listed below each skill. See instructions for more information on photo requirements.**								
29	Perform proper surgical instrumentation cleaning using appropriate solutions. (enzymatic vs. detergent cleaning)	**N/A**						
	Specify solution, describe technique & list indications for use:							
30	Set-up and use an ultrasonic cleaner for cleaning surgical instruments.	**N/A**						
	Describe set-up and use:							
31	Perform lubrication of surgical instruments using appropriate products.	**N/A**						
	Specify product, describe technique & list indications for use:							
32	Properly set up, load, and use either an ethylene oxide or hydrogen peroxide gas plasma sterilizer.	**N/A**						
	List indications for use, load parameters, safety precautions, and load sterility indicators:							
	***Photo file names:** firstname.lastname.skill32							
#	**Skill**	**Minimum Case Logs**	**CL1**	**CL2**	**CL3**	**CL4**	**CL5**	**Testifier's Initials**
33	Properly set up, load, and use a steam sterilizer (autoclave).	**N/A**						

	List indications for use & load parameters:							
	***Photo file names:** firstname.lastname.skill33							
34	Obtain certification for use of either ethylene oxide or hydrogen peroxide gas plasma sterilization.	**N/A**						
	Include a PDF copy of the certificate with your application: firstname.lastname.gascert							
35	Prepare surgical packs using class II wraps. (drape materials: paper, linen, or SMS polypropylene)	**N/A**						
	***Photo file names:** firstname.lastname.skill35							
36	Properly prepare individually processed items using peel pouches (plastic/paper combinations). May be either single or double pouch technique.	**N/A**						
	***Photo file names:** firstname.lastname.skill36							
37	Properly identify & place appropriate sterility indicators of each class (I-V)	**N/A**						
	List method of activation & location for placement in/on the pack for each class of sterility indicator							
	Class I:							
	Class II:							
	Class III:							
	Class IV:							
	Class V:							
38	Assess sterility of a double wrapped surgical pack.	**N/A**						
	Describe technique:							
39	Assesses sterility of an individually processed item.	**N/A**						
	Describe technique:							
40	Perform a biological test for any type of sterilizer and evaluate the results.	**N/A**						
	Describe technique:							

Small Animal Surgical Procedures

A VTS (Surgery) must have a diverse surgical procedure knowledge base. A surgical procedure is a medical procedure involving an incision with instruments performed to repair damage or arrest disease in a living body.

Patient Preparation and Positioning:								
#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
41	Perform an appropriate surgical clip and aseptic prep application on intact epithelium.	1						
	Describe technique:							
42	Perform an appropriate surgical clip and aseptic prep application on torn or denuded epithelium.	1						
	Describe technique:							
***Photo requirement: For skills 43-47, include a photo using the file name as listed below each skill. See instructions for more information on photo requirements.**								
43	Perform an appropriate surgical clip, aseptic prep application, and properly position the patient for **4** different **soft tissue** surgical procedures.	4						
	***Photo file names:** firstname.lastname.skill.43.1, firstname.lastname.skill.43.2, firstname.lastname.skill.43.3, firstname.lastname.skill.43.4, +/- firstname.lastname.skill.43.5							
44	Perform an appropriate surgical clip, aseptic prep application, and properly position the patient for **4** different **orthopedic** surgical procedures.	4						
	***Photo file names:** firstname.lastname.skill.44.1, firstname.lastname.skill.44.2, firstname.lastname.skill.44.3, firstname.lastname.skill.44.4, +/- firstname.lastname.skill.44.5							
45	Perform an appropriate surgical clip, aseptic prep application, and properly position the patient for **2** different **laparoscopic or thoracoscopic** surgical procedures.	2						
	***Photo file names:** firstname.lastname.skill.45.1, firstname.lastname.skill.45.2, +/- firstname.lastname.skill.45.3							
46	Perform an appropriate surgical clip, aseptic prep application, and properly position the patient for **arthroscopic** surgical procedures on **2** different **joints**.	2						
	***Photo file names:** firstname.lastname.skill.46.1, firstname.lastname.skill.46.2, +/- firstname.lastname.skill.46.3							
47	Perform an appropriate surgical clip, aseptic prep application, and properly position the patient for **2** different **ophthalmic and/or neurologic** surgical procedures.	2						
	***Photo file names:** firstname.lastname.skill.47.1, firstname.lastname.skill.47.2, +/- firstname.lastname.skill.47.3							

Surgical Care Expertise:

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
For skills 48-53, summarize the surgical procedure performed in the supporting case logs under "Surgery & Reason Performed." Include the associated skill number with your description.								
48	Participate in and describe **4** different **soft tissue** surgical procedures.	**4**						
49	Participate in and describe **4** different **orthopedic** surgical procedures.	**4**						
50	Participate in and describe **2** different **laparoscopic or thoracoscopic** surgical procedures.	**2**						
51	Participate in and describe **2** different **arthroscopic** surgical procedures.	**2**						
52	Participate in and describe **2** different **ophthalmic and/or neurologic** surgical procedures.	**2**						
53	Participate in a surgical procedure utilizing an allograft product or autograft technique and provide the indications for its use.	**1**						
	Specify type & provide indications for use:							
For skills 54-56, list the required information in the supporting case logs under "Specialized Instrumentation & equipment" or "Other Advanced Skills Performed." Include the associated skill number with your description.								
54	Identify suture patterns and describe indications for each.	**2**						
	Provide indications for the following suture patterns:							
	Appositional:							
	Everting:							
	Inverting:							
55	Identify and describe use of suture materials in different procedures, tissue layers, or organs.	**3**						
	Specify & describe 3 different suture materials and provide use of each:							
	1:							
	2:							
	3:							
56	Identify and describe indication(s) for and use of intraoperative coagulation aids. (e.g., Surgicel®, Gelfoam®)	**1**						
	Specify type & provide indications for use:							

Bandaging and Wound Management

Bandages are materials used to protect, immobilize, compress, or support a wound or injured area of the body. A VTS (Surgery) must possess knowledge of external coaptation methods and wound care techniques.

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
***Photo requirement: For skills 60 & 64, include a photo using the file name as listed below each skill. See instructions for more information on photo requirements.**								
57	Participate in a case utilizing proper wound management techniques and describe the phases of wound healing.	**1**						
	List & describe wound phases:							
58	Perform or assist in appropriate wound management using a primary layer for moist wound healing.	**1**						
	Specify product used, its mechanism of action & indications for use:							
59	Apply appropriate topical antimicrobials for wound management and/or burns.	**1**						
	Specify product used, its mechanism of action & indications for use:							
60	Properly place **4** <u>different</u> bandages, splints, or casts. Identify bandage type, materials used in each layer, and potential complications for each in the supporting case logs.	**4**						
	***Photo file names:** firstname.lastname.skill.60.1, firstname.lastname.skill.60.2, firstname.lastname.skill.60.3, firstname.lastname.skill.60.4, +/- firstname.lastname.skill.60.5							
61	Select appropriate flush solution and perform a wound lavage using the proper equipment and technique.	**1**						
	Specify solution used & describe technique:							
62	Perform or assist in the proper care of skin grafts or flaps.	**1**						
	Describe skill:							
63	Identify and describe a surgical wound complication. (e.g., seroma, infection, dehiscence, etc.)	**1**						
	Describe skill:							

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
64	Perform or assist in the appropriate use of a novel wound treatment therapy (biotherapy [e.g., maggots or leeches], hyperbaric oxygen chamber, fish-skin graft, etc.)	**1**						
	List the therapy and its indication for use in an appropriate area of the supporting case log(s). Include the associated skill number with your description.							
	***Photo file names:** firstname.lastname.skill.64.1 +/- firstname.lastname.skill.64.2							
65	Maintain a passive, active, and/or vacuum assisted drains.	**1**						
	Describe skill:							

Pharmacology and Laboratory

A VTS (Surgery) needs to understand indications and usage guidelines for a variety of antimicrobial agents used in the perioperative period.

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
66	Administer a peri-operative beta-lactam antibiotics and describe its indications and appropriate dosing.	**1**						
	Specify antibiotic and provide indications for use and complete dosing information:							
67	Administer a peri-operative fluoroquinolone antibiotic and describe its indication and appropriate dosing.	**1**						
	Specify antibiotic and provide indications for use and complete dosing information:							
68	Describe the appropriate use of time-released antibiotic impregnated gels, liquids, or beads.	**1**						
	Specify product, provide indications for use & describe use:							
69	Perform proper tissue handling of samples submitted for histology. (e.g., formalin ratios, inking or labeling margins, etc.)	**1**						
	Describe skill:							

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
70	Perform proper specimen handling of fluid and tissue samples collected for culture and cytology.	1						
	Describe skill:							

Personal Safety

Maintaining an individual's safety is imperative while working in a surgical environment.

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
For skills 71 & 72, List PPE used for each in the supporting case log. Include the associated skill number.								
71	Utilize proper PPE when obtaining orthopedic radiographs **or** minimize exposure by using a hands-free technique.	1						
	OPTION: If using hands-free technique, provide a photo of the patient properly positioned for an orthopedic radiograph using appropriate positional aids. See instructions for more information on photo requirements. *Photo file names: firstname.lastname.skill.71.1 +/- firstname.lastname.skill.71.2							
72	Utilize proper PPE while using fluoroscopy or C-ARM safety in a surgical setting.	1						

Adjunct Surgical Skills

A VTS (Surgery) needs to be well rounded and have advanced knowledge and skills in other areas considered pivotal in the management of surgical patients.

#	Skill	Minimum Case Logs	CL1	CL2	CL3	CL4	CL5	Testifier's Initials
***Photo requirement: For skills 73 & 76, include a photo using the file names listed below each skill. Obscure any client or patient information prior to taking the photos. See instructions for more information on photo requirements.**								
73	Obtain high-quality diagnostic orthopedic radiographs.	1						
	***Photo file names:** firstname.lastname.skill.73.1 +/- firstname.lastname.skill.73.2							
74	Perform or assist in a procedure that utilizes interventional radiology techniques. (e.g., C-Arm, Fluoroscopy, CT, or MRI guided)	1						
	Describe procedure & your role in it:							
75	Properly aspirate, care for, and maintain a chest tube.	1						

	Describe skill:							
#	**Skill**	**Minimum Case Logs**	**CL1**	**CL2**	**CL3**	**CL4**	**CL5**	**Testifier's Initials**
76	Place a purse string and/or a finger trap suture.	**1**						
	***Photo file names:** firstname.lastname.skill.76.1 +/- firstname.lastname.skill.76.2							
77	Perform sample collection and preparation of platelet rich plasma (PRP) therapy or assist in the sample collection and preparation of stem cell therapy.	**1**						
	Specify therapy & describe technique:							
78	Perform an industry accepted modality of rehabilitation. (e.g., cryotherapy, low level laser therapy, PROM, extra-corporeal shock wave therapy, etc.)	**1**						
	Specify modality & describe technique:							
79	Administer or perform at least 4 different methods of providing analgesia under a variety of circumstances. (e.g., oral, topical, parenteral, transdermal, or locoregional anesthetic techniques)	**4**						
	Describe each method (including technique, drugs used, dose/dosage, route, interval & duration) in the supporting case logs under "Short and Long-term Care." Include the associated skill number with each.							

Anatomy and Physiology Knowledge:

To assist in surgery, a VTS (Surgery) must have a thorough understanding of the structures of the body and how they function. Throughout your logs and case reports we should be able to see that you have advanced knowledge of anatomy and physiology related to each surgical procedure and be able to identify potential complications and post-operative considerations for each.

The AVST Small Animal Advanced Surgical Skills validation form follows on the next page.

Academy of Veterinary Surgical Technicians
Small Animal Advanced Surgical Skills Form - Form 3

The applicant is required to state whether or not he/she has mastered the skills on this form. The AVST is aware that some states or provinces may not allow a task to be performed by a credentialed veterinary technician. The AVST requires that a Veterinary Technician Specialist (of any specialty) or a veterinarian who has mastered the skill attest to your mastery of each skill on this form. Your testifier must sign at the bottom of the form to validate their initials throughout the form. If the testifier signing and validating any particular skill is a veterinary surgeon, ensure their name is also listed as the primary clinician in our case log summary or on your case report.

Mastery is defined as possessing an outstanding skill or having expertise. The applicant must be able to perform the task safely, with a high degree of success, and without being coached or prompted. Mastery requires having performed the task a multitude of times in a wide variety of patients and situations.

Applicant Name: _____

I, the undersigned, declare that **I have read the AVST Small Animal Advanced Surgical Skills Form.**

I further attest that the above-named applicant has achieved the **AVST definition of mastery** for the above skills that are marked with my signature/initials.

Printed name	Signature	Initials	Degree
Printed name	**Signature**	**Initials**	**Degree**
Printed name	**Signature**	**Initials**	**Degree**
Printed name	**Signature**	**Initials**	**Degree**
Printed name	**Signature**	**Initials**	**Degree**
Printed name	**Signature**	**Initials**	**Degree**

AVST Case Log Sample:

Case Log | **Academy of Veterinary Surgical Technicians** | **Form 4**

Case Log#: 1 **Name/ID#:** Bruce/8675309 **Species/Breed:** K9/Rottweiler **Sex:** MN **Age:** 4y **Weight:** 36kg	
Date: 01/12/2024 **Duration of Care:** 2 days	Circulating / Clean **Clinician:** Hershel Greene, DVM, DACVS
Surgery & Reason Performed:	#49: Right tibia Fx repair with MI ILN placement. Highrise syndrome. Medial approach to tibia. Steinmann pin directed retrograde into proximal tibia through Fx site. IM canal of proximal & distal sections prepared for ILN placement with appropriate sized reaming tool. Series 11, 8.0mm, 2x2, blunted, 185mm ILN attached to ILN tibial drill guide extension, inserted normograde & secured with four 3.5mm bolts directed by ILN drill guide.
Pre-op Work Up:	PE: right hindlimb NWB lameness. CBC/CHEM WNL. #71, 73: Hands-free technique used for orthogonal views of both tibia with a 100-mm calibration bar at the level of the tibia bone. Right tibia RADS: Complete, highly comminuted, mid diaphyseal fracture of the right tibia and fibula with several smaller fracture fragments present at the fracture site. The healthy left tibia was measured for length of ILN. MRJ bandage placed until surgery.
Surgical Clip & Aseptic Prep:	#2, #44: Circumferential clip of right pelvic limb from mid-tarsus to greater trochanter with Pt in dorsal recumbency. Hanging leg prep of 2% CHG scrub centered on the medial tibia with 2-minute contact time and 70% isopropyl alcohol rinse in the same pattern.
Room/Table Prep:	Horizontal hard surfaces were cleaned with Opticide 3 with 3-minute contact time. Sandbags were used to bolster Pt while in dorsal recumbency. #23: Megadyne electrocautery pad used for patient grounding with monopolar cautery.
Specialized Instrumentation & Equipment:	#26: Battery-powered drill with drill bits. ILN pack with appropriate-length nail and securing bolts. Steinmann pin and medullary canal reaming tool. Tibial extension ILN drill guide.
Other Advanced Skills Performed:	#74: Fluoroscopy was used intraoperatively to check ILN placement. Sterile dosimetry rings were used to measure radiation. A sterile sleeve covered the c-arm during sterile field proximity.
Short and Long-term Care (include wound care):	#79: Femoral & sciatic nerve blocks were performed with the aid of a nerve locater (down to 0.5mA) during patient prep using 18mg bupivacaine & 4mcg dexmedetomidine each site. Incisional nerve block with 191mg liposomal bupivacaine postoperatively. Hydromorphone 0.05mg/kg IV PRN for breakthrough pain. Carprofen 75mg PO BID for 10 days TGH. Return for S/R in 10 days and recheck RADS in 8 and 12 weeks to monitor healing.
Instrument Use and Sterilization:	Non-motorized instruments were promptly soaked in an endozyme solution to break up organic waste before rinsing and placing in an ultrasonic cleaner for 10 minutes. After lubricating jointed instruments, they were dried and sorted for further processing.
Case Log#: 2 **Name/ID#:** Deacon Frost/18122 **Species/Breed:** Canine/Spitz **Sex:** MN **Age:** 13y **Weight:** 17.3kg	
Date: 01/17/2024 **Duration of Care:** 3 days	Scrub / Clean **Clinician:** Eric Brooks, DVM, DACVS
Surgery & Reason Performed:	#48: Exploratory laparotomy for right lateral liver lobectomy. PC: Pt lethargic and inappetent. Spontaneous hemoperitoneum. Midline laparotomy, falciform fat removed, free blood suctioned from abdomen, right lateral liver lobe isolated and removed with a TA30V staple cartridge applied across the hilus. Punch Bx of left medial liver lobe. Gelfoam used to control hemorrhage at Bx site. Abdomen flushed with NaCl prior to 4-layer closure.
Pre-op Workup:	AFAST: abdominal effusion. Abdominocentesis: hemoperitoneum. CBC/CHEM/PT/PTT: ELE (elevated liver enzymes), PCV 30%, TS 6.8g/dL. CT abdomen and thorax: 11x7x8cm right sided soft tissue hepatic mass.
Surgical Clip & Aseptic Prep:	#43: Abdominal fur clipped from xiphoid to pubis and 2 inches from midline bilaterally. Aseptic prep with 2% CHG scrub and 70% isopropyl alcohol rinse in a target pattern. #4, #7: Surgical hand scrub with 2% CHG disposable scrub brush for 5 minutes prior to closed gloving.
Room/Table Prep:	#24: Active suction was set up with multiple extra cannisters to help with the excessive blood volume in the abdomen. Total blood volume was documented in the record once collected. Adjustable Pt table set in V-position for dorsal positioning. GSP, Balfour, retractors, and multiple sizes of TA stapler with associated staple cartridges placed in OR.
Specialized Instrumentation & Equipment:	Balfour, TA30 DST series stapler, TA 30mm V3 cartridges, malleable retractors, 6mm punch biopsy. #56: emergency hemostatic agents (surgicel, gelfoam)
Other Advanced Skills Performed:	#14: Poole suction tip attached to suction tubing and used to evacuate blood from abdomen. TA30 cartridge received from circulating nurse & loaded into TA stapler handpiece before handing to surgeon. Malleable retractor used to gently retract liver tissue for surgeon to visualize & access the hilus for TA staple placement. #70: The excised liver lobe was sectioned and stored in 10% formalin in a 1:10 ratio in preparation for shipment to the lab for histology.
Short and Long Term Care (include wound care):	#79: Incisional nerve block with 92mg liposomal bupivacaine. LRS 60ml/kg/day IV, Fentanyl CRI 3mcg/kg/hr IV, ketamine 0.2mg/kg/hr IV. PCV/TS and BP were checked during hospitalization until stable. Gabapentin 200mg PO q8-12h for 14 days and Galliprant 30mg PO SID for 10 days TGH. S/R in 10-14 days, refer to oncology department for follow-up pending histopathology results.
Instrument Use and Sterilization:	The TA stapler handpiece was cleaned and marked to update the tally of uses. It is labeled for single use, but with proper cleaning and sterilization practices, its use may be prolonged. It was then double wrapped in peel pouches with a class 5 integrator strip visible in the innermost pouch to prepare for EO sterilization.

Academy of Veterinary Surgical Technicians Approved Abbreviations List

The following abbreviations are acceptable for use in the AVST Skills List, Case logs & Case Reports.

*Any generally recognized medical abbreviations are also acceptable. Please see the application packet for a list of examples.

ABG – arterial blood gas
adm - administer
ADCA – adenocarcinoma
AFAST – Abdominal Focused Assessment with Sonography for Trauma, Triage, and Tracking
AGASACA – apocrine gland anal sac adenocarcinoma
ALD - angular limb deformity
AUS - abdominal ultrasound
B/C - bandage change
BAR – bright, alert, responsive
BAS/BOAS - brachycephalic (obstructive) airway syndrome
BCS - body condition score
Bhug – Bair hugger
Bx – biopsy
CA - carcinoma
CBLO – CORA based leveling osteotomy
CCL/CrCl - cranial cruciate ligament
CDET - common digital extensor tendon
CHG – chlorhexidine gluconate
CO2- carbon dioxide
CP – conscious proprioception
CRI - constant rate infusion
CRT - capillary refill time
CSF - cerebrospinal fluid
CT – computed tomography
CVP - central venous pressure
DDFT - deep digital flexor tendon
DJD - degenerative joint disease
DPO – double pelvic osteotomy
d/t – due to
ECG - electrocardiogram (graph)
EEA – end to end anastomosis
EMG - electromyelogram (graph)
EO/EtO - ethylene oxide
ESF - external skeletal fixator
FCP/FMCP – fragmented (medial) coronoid process
FHNE - femoral head and neck excision
FHO - femoral head ostectomy
FLUTD – feline lower urinary tract disease
FNA - fine needle aspirate
FSA – fibrosarcoma
Fx – fracture
GIA – gastrointestinal anastomosis
GDV – gastric dilatation volvulus
GSP - general surgery pack
GSW – gunshot wound
H2O blank – warm water circulating blanket
HBC – hit by car
h/o – history of
HSA – hemangiosarcoma
ICU - intensive care unit
ILN – Interlocking Nail
IPPV - intermittent positive pressure ventilation
IVDD – intervertebral disc disease
JPS – juvenile pubic symphysiodesis
LarPar – laryngeal paralysis
LASER – light amplification by stimulated emission of radiation
LBO - lateral bulla osteotomy
LDS – ligating & dividing stapler
LFS - lateral fabellar suture
LLP/LPL - lateral patellar luxation
MCT – mast cell tumor
MI – Minimally invasive
MIPO- minimally invasive percutaneous osteotomy or minimally invasive plate osteosynthesis
MLP/MPL - medial patellar luxation
MRI – magnetic resonance imaging
MRIT - modified retinacular imbrication technique
MRJ – modified Robert Jones
NaCl – 0.9% sodium chloride
N/G - nasogastric
NormR – Normosol
NPO - nothing by mouth/nil per os
NSAID - non-steroidal anti-inflammatory
NSF- no significant findings
NWB - non-weight bearing
OA – osteoarthritis
OATS – osteochondral autologous transfer surgery
OCD - osteochondritis dissecans
OE – orchidectomy
O/G - orogastric
OHE - ovariohysterectomy
OR – operating room
ORIF – open reduction and internal fixation for fracture repair
OSA - osteosarcoma
PC – presenting complaint
PDA - patent ductus arteriosus
PE – physical exam
PGR – patella groove replacement
PLyte - PlasmaLyte
PPDH – peritoneal pericardial diaphragmatic hernia
PPE – personal protective equipment
PPV - positive pressure ventilation
PRN - as needed
PROM - passive range of motion
PRP – platelet rich plasma
PSS - portosystemic shunt
Pt - patient
PU - perineal urethrostomy
PVP-I – povidone iodine
QAR - quiet, alert, responsive
R&A – resection and anastomosis
RADS - radiographs
ROM - range of motion
S/R - suture removal
SC - subcuticular
STS - soft tissue sarcoma
Sx - surgery
TA - thoracoabdominal
TECA - total ear canal ablation
TER – total elbow replacement
TFAST – Thoracic Fast Assessment with Sonography for Trauma, Triage, and Tracking
TGH - to go home
THA/THR - total hip arthroplasty/ total hip replacement
TPLO - tibial plateau leveling osteotomy
TPO - triple pelvic osteotomy
TTA - tibial tuberosity advancement
UAL – unilateral arytenoid lateralization
UAP – ununited anconeal process
U/S - ultrasound
USG – ultrasound guided
UTI – urinary tract infection
VBO - ventral bulla osteotomy
VBG – Venous blood gas
WB - weight bearing
WNL - within normal limits

Academy of Veterinary Surgical Technicians Case Report Layout

1. **Case Log Number**
2. **Name/ID number**
3. **Signalment**
   Provide the age, sex, species, breed, and weight of the patient. **(Ensure a variety of species are represented amongst all case report submissions.)**
4. **Presenting Problem**
5. **Differential Diagnosis**
6. **Attending Clinician**
7. **Pertinent Patient History and Physical Exam**
   Provide the physical examination findings, pertinent laboratory test results, current patient history, pertinent previous history, and current medications. Outline pre-existing/related health problems or procedural complicating factors.
8. **Tentative Diagnosis**
9. **Diagnostic Imaging Options**
   Explain any additional procedures or diagnostics used before, during, or after the procedure.
10. **Surgical Treatment Options**
    Include the type of surgical procedure performed and explain why it was chosen over an alternative procedure (i.e., ameroid constrictor versus cellophane banding for a portosystemic shunt.) Include an explanation about the pertinent anatomy and physiology as it relates to the overall surgical plan. Detail any anticipated complications as well as problems you anticipate from the operative procedure itself.
11. **Patient and Equipment Preparation**
    Pre-surgical care summary
    Thoroughly explain preoperative preparation details for each patient's surgical procedure such as anatomic landmarks for the surgical clip margins and other special preoperative considerations (e.g., prepucial flush prior to laparotomy, aseptic prep application precautions around open or draining wounds.) Provide rationalization for antibiotic or antimicrobial agent choices. Outline your plan for pain management during the procedure and provide a brief synopsis of any analgesic techniques used. Explain your role in the preoperative preparations for the surgical procedure. Detail how you anticipated the surgeon's needs regarding unique or specialized instrumentation or equipment requirements and advanced preparation of the surgical suite.
    Intraoperative preparations
    Discuss aseptic prep agents used and reason for agent selected. Include the application technique or patterns used for both the initial and final aseptic prep applications, recommended contact times, and list any complicating factors encountered. Explain intraoperative patient position or positioning devices and aseptic technique used for the patient. Describe the aseptic technique or gowning and gloving methods utilized by all operating room personnel. Discuss techniques used to ensure that the proper sterilization of instruments and specialized equipment was accomplished before being issued to the surgeon.
12. **Operative Report**
    Provide detailed information regarding the intraoperative setup of the operating suite. Explain the surgical approach, pertinent anatomy and physiology, and a complete synopsis of the full intraoperative procedure. Discuss any particular intraoperative challenges. Include all pertinent supplies, instrumentation and equipment used and explain their intended function or purpose. Include an explanation of implants, sutures or other materials used and why they were chosen. Outline your responsibility and detail any special handling considerations for tissue or fluid specimens or cultures obtained during the procedure. Detail how your role was integral to the success of the procedure as you performed duties of either the scrub nurse or circulating nurse. *****NEW: Include a wound classification for the procedure and explain why you assigned this classification.**

13. Postoperative Care

Discuss the immediate postoperative patient care provided. Summarize the complete postoperative nursing care plan and outline anticipated complications as well as treatment options should they occur. Describe pertinent postoperative care required to complete surgical treatment for the patient's condition (e.g., special diets, use of external coaptation, rehabilitation, or wound care.)

14. Client Education and Prognosis

Define any care the patient requires post operatively including activity restriction, bandage care, nutrition, medication, rehabilitation, and any follow-up care necessary. Provide a final summary of the case and/or diagnosis; describe the results of all laboratory tests and how the surgical findings or diagnosis may impact the patient's future prognosis.

15. Include a copy of the instrument and equipment used (as ≤ 6th page).

Provide a list of the surgical instruments, equipment and supplies that were anticipated or used during this procedure. Detail the sterilization techniques utilized for the procedure as well as the methods used to document sterility assurance. List wrapping materials used for each item and include other pertinent data on how each item was wrapped.

16. A list of references should be on the last (≤ 7th) page.

Provide at least 5 references for each case report. References should follow the American Medical Association (AMA) style. References are listed in the order of first appearance in the case report. Citations are noted using superscript Arabic numerals.

More details on this style of referencing are available here: **http://library.stkate.edu/citing-writing/ama.**

Each case report will contain a maximum of 7 pages and may contain a maximum of **five** 8.5 x 11-inch pages of case report content, 1 page listing all surgical instruments and equipment used, and 1 page stating references used, following the AMA format. Each case report must be printed in a 10-point Times New Roman font, double-spaced, left and right justified, and with 0.5-inch page margins. *Case reports that do not meet these requirements will be rejected.* The case reports must be the original work of the applicant. **Please be careful to BLACK OUT/DELETE any personal client data such as owner name, address, phone numbers, etc.**

An example of an AVST case report follows these instructions.

AVST Case Log: #2 **Name/ID#:** Flame, 44317 **Signalment:** 9-month-old, male neutered, Siamese feline, weight 4.4 kg.

Presenting Problem: Weight bearing lameness of the left pelvic limb

Differential Diagnosis: Capital femoral physeal fracture, femoral fracture, pelvic fracture, medial patellar luxation

Pertinent Patient History and Physical Exam

Flame had a weight bearing lameness of the left pelvic limb that was noticed on February 9, 2024, when his owner came home from work. The cat was examined by his primary veterinarian that same day. The examination revealed crepitus and pain on palpation and extension of the left hip. A ventral-dorsal (VD) pelvic radiograph was obtained and a left femoral capital physeal fracture was diagnosed. Flame was prescribed buprenorphine at 0.01 mg/kg PO TID and was referred to an orthopedic specialist the next day. On physical examination, the rectal temperature was 102.9°F, pulses were 130 beats per minute, respirations were 10 breaths per minute, and mucous membranes were pink with a capillary refill time of one second. No heart murmurs or arrhythmias were noted on auscultation, no external wounds were found on exam and the surgeon confirmed crepitus of the hip joint. Flame resisted manipulation and seemed painful during palpation and PROM of the left hip. The neurological exam was WNL.

Tentative Diagnosis

Based on physical exam, patient history and referral radiographs, a left capital femoral physeal fracture was diagnosed. A capital physeal fracture, or slipped capital physis, can occur without great force or trauma and usually occurs in young, skeletally immature animals with open physes.[1] Fractures of the capital femoral physes are overrepresented in cats due to an orthopedic developmental disease called slipped capital femoral epiphysis. While all cats may be affected, it is most often diagnosed in young, overweight male cats that were castrated at a young age and it often presents bilaterally in effected patients.[2]

Diagnostic Imaging Options

Lateral and VD views of the pelvis were taken under general anesthesia by the scrub technician before surgery in order to get accurately positioned radiographs without causing further discomfort to the patient. On a VD pelvis view it is important to make sure the pelvis is straight, symmetrical, and that the femurs are parallel to one another. The hemi pelvises should be superimposed on the lateral radiograph. Depending on the surgical procedure chosen, radiographs with proper anatomical positioning and calibration markers are necessary for surgical planning. Poorly positioned radiographs can cause distortion that may lead to the use of inappropriately sized implants. A calibration marker is necessary when using digital radiography so that measurements can be calibrated and corrected for magnification. The calibration device used consisted of two radiopaque ball-bearings suspended a known distance of 10cm apart in a rectangular piece of radiolucent plexiglass, and it was placed in a fixed position, parallel to the radiography table at the same height as the anatomy to be radiographed. All personnel present during radiograph exposure wore appropriate personal protection equipment (lead apron, thyroid shield, gloves, and dosimetry devices at collar level), and non-essential personnel were asked to leave prior to exposure.

Surgical Treatment Options

In order to prevent degenerative joint disease and continued functional lameness with associated pain, surgery was recommended.[1] Three surgical options were discussed: the micro total hip replacement (Micro THR), femoral head ostectomy (FHO), and fracture reduction and fixation. Total hip replacement has been used for over 30 years in medium and large dogs.[3] The Micro THR has been available through Biomedtrix Inc. (Boonton Township, NJ) since June, 2005.[4] The goal of the Micro THR is to provide small dogs and cats (<12kg) a pain-free, functional joint. Force plate analysis studies in dogs with THRs showed a return to normal gait and limb function following THR surgery.[5] One study showed the functional outcome (PE, PROM, muscle mass, and client survey results) following THR as excellent in all three operated cats, and in the same study 3/5 cats operated with FHO were reported as having a lesser outcome than with THR.[6] The FHO biomechanically alters the hip joint by removing the femoral head and neck, therefore creating a scar tissue pseudoarthrosis. Femoral head ostectomy is considered a salvage procedure that results in the loss of a functional joint, with a post-operative goal of removing the source of pain, which in this case would be the broken fragment. It is a less expensive and specialized operation that can offer a good outcome, provided appropriate aftercare is given. Physical therapy should begin immediately post operatively to build, or maintain, muscle mass and achieve good PROM.[6] The patient's gait is usually altered due to limb shortening, although it might be imperceptible to owners.[7] Internal surgical reduction and fixation of the fracture was also offered. Repair of a capital physeal fracture can be achieved with Kirschner wires and can provide good function if the fracture is anatomically reduced and stabilized properly and promptly.[1] It has been reported that cats with capital physeal fractures have better function with fracture repair versus the FHO.[8] Following the discussion of options, the owners scheduled Micro THR surgery for the following day with the goal of restoring normal function without future arthritic changes.

Patient and Equipment Preparation

Preventing infection is imperative with joint replacement surgery. If infection occurs, explantation of the prosthesis may be required, leaving the patient with a modified FHO. It is important to follow a consistent protocol and use highly trained team members to shorten anesthesia/surgery time, as the risk of infection increases by 0.5% per minute of anesthesia.[9] The operating room was steam cleaned the night before. Thirty minutes prior to the incision, cefazolin (22mg/kg) and gentamicin (2.2mg/kg) were administered intravenously. Cefazolin is a first-generation cephalosporin that is a good broad-spectrum antibiotic for peri-operative use. Gentamicin is an aminoglycoside antibiotic that is primarily effective against aerobic gram-negative bacteria, and it was chosen to expand the spectrum of the prophylactic antibiotics used peri-operatively.

Shortly after induction, orthogonal radiographs of the pelvis with a Biomedtrix calibration marker were obtained to determine implant selection. Using a Biomedtrix Micro CFX™ digital template, a 12mm acetabular implant and #3 femoral stem implant were deemed most appropriate. After radiographs, the surgical site was prepared using an electrical clipper with a #40 clipper blade. The fur was clipped over the left hip extending just past the vertebral midline, forward to the last rib, to midline medially, and midway between the hock and metatarsus. The clipped area was vacuumed to remove all loose fur. A preliminary aseptic prep was performed by the circulating technician using clean gauze moistened with 4% chlorhexidine gluconate scrub, three consecutive times for a contact time

of two minutes, beginning over the hip and extending to the outer clipped margins. The 4% chlorhexidine gluconate scrub was then wiped off with clean gauze soaked in 0.9% saline solution until all residual scrub was removed. The unclipped portion of the foot was covered with an exam glove and wrapped with bandaging tape. Prior to moving to the operating room (OR), personnel donned caps and masks and removed outer lab coats.

In the OR, the cat was positioned on top of a properly tested and operating ground plate with conductive gel in right lateral recumbency using a vacuum beanbag positioning device to secure the cat in proper position. Patient positioning is vital to THR success, and it is important that the pelvis be aligned with the hemi pelvises perfectly superimposed and the vertebral column parallel to the table edge. Incorrect positioning can result in misalignment of the implants at surgery. The left leg was hung to facilitate aseptic preparation of the entire limb and the cat was kept warm using a warm water circulating blanket. A CRI of morphine (0.1mg/kg/hr), lidocaine (20µg/kg/min), and ketamine (5µg/kg/min) was prepared and administered at a rate of 5ml/kg/hr via a fluid pump and a fluid warming device was used. The circulating technician donned sterile gloves via open gloving to begin preparation of the limb. Sterilized gauze moistened with 4% chlorhexidine gluconate scrub was used to perform the scrub in a target pattern starting over the incision site (localized over the greater trochanter) and extending outward to the rest of the clipped area three consecutive times for a contact time of two minutes. Chlorhexidine is a broad-spectrum antiseptic that has a rapid onset time with a minimum two-minute contact time and provides residual activity for up to two days.[1] Sterile gauze soaked in 0.9% saline solution was used to remove the residual scrub from the skin.

The two surgical scrub technicians performed an aseptic hand scrub using a 4% chlorhexidine surgical hand scrub with a sterilized scrub brush. Surgical gowns, towels, and gloves were opened by the circulating technician and were donned by the surgical team. Gowns were secured by the circulating technician, and gloves were donned with a closed gloving technique. The circulating technician aseptically opened all surgical packs for the scrub technicians to organize on the main instrument table and one side table. After quarter draping the leg with sterile towels, the scrub technician covered the non-sterile portion of the foot with sterile cohesive bandaging. The tape securing the leg in hanging position was cut and released by the circulating technician. The leg was covered with a double layer of sterile stockinette to minimize contact with the skin during the procedure and two disposable drapes were placed over the patient. The scrub technicians organized the instruments on the instrument table chronologically so that the instruments to be used first were easiest to access. When instruments were no longer needed, they were placed at the back of the instrument table to reduce clutter. A side instrument table was also used for larger surgical instrumentation including the Biomedtrix Micro CFX™ instrumentation set. The surgeon performed the same aseptic scrub prior to gowning, gloving, and entering the OR to begin surgery.

Operative Report

Sharp-sharp utility scissors were used to cut an opening in the stockinette just before the incision was made. An incision was made with a #15 blade on a Bard-Parker #3 blade handle cranial to the greater trochanter of the femur and extended to the middle of the femoral diaphysis. The surgeon sewed sterile water-proof plastic ophthalmic drapes into the incision using 4-0 nylon to prevent

contamination from the skin. The blade handle, Mayo-Hegar needle holders, and Adson tissue forceps used on the initial skin incision were set aside and not used for the rest of the procedure. Curved Mayo dissecting scissors and a new #15 blade and handle were used to dissect through adipose tissue, fascia, and muscle while monopolar electrocautery aided in hemostasis. Two baby Gelpi retractors allowed visualization of the hip joint, then the round ligament was transected with Mayo scissors and the fragment of the capital femoral epiphysis was grasped and removed with a small Stefan bone reduction forceps. A Biomedtrix femoral neck template was utilized to guide the surgeon in making the appropriate femoral neck ostectomy line. A battery powered oscillating saw with a 0.5cm wide saw blade was used to perform the femoral neck ostectomy while a single action Lempert rongeur aided in the removal of the fragment. A finger Hohmann and a finger Meyerding retractor allowed visualization of the acetabulum as a single action Lempert rongeur was utilized to remove remnants of the round ligament. A nitrogen-powered high-speed drill with a 4mm burr was used to prepare the acetabulum and a 12mm Micro CFX™ acetabular trial was used to ensure proper preparation and sizing. A 20g dose (½ dose) of Surgical Simplex™ P bone cement with 1g of cefazolin was prepared by the scrub technician in a cement mixer until dough phase consistency was reached. The mixer was compromised of a charcoal vapor absorber and connected to the OR suction to reduce inhalation of chemical fumes. Dough phase consistency should not be sticky when manipulated, similar to craft dough. Surgical Simplex™ P (ingredients: 75% methylmethacrylate, 15% polymethylmethacrylate, and 10% barium sulfate) is low viscosity bone cement with a long liquid phase (mixing phase) and a short working phase. Cement preparation to a workable phase requires about five minutes mixing time, dependent on OR temperature, cooler temperatures increase mixing time. The surgeon changed gloves prior to implantation; then applied the cement into the prepared acetabular bone bed and implanted a 12mm Micro CFX™ acetabular cup. A Freer elevator was used to remove excess cement around the implant while a remaining piece of bone cement was kept on the table to be monitored for cement hardening by the scrub assistant. When the cement was hardened, a piece of sterile gauze was placed in the acetabular cup to protect the polyethylene surface during stem preparation. A small Stefan bone reduction forceps was placed around the proximal 90° externally rotated femur while a large A-O periosteal elevator was used as a lever to lateralize the proximal femur. The femoral bone bed preparation for the stem was made using an awl to open the canal, followed by #1-2, and #2-3 femoral reamers. All reaming was done with the reamers on a Jacobs hand chuck. A #3 Micro CFX™ femoral trial was utilized to ensure proper implant sizing. Cement was prepared as before and was hand packed into the femoral canal by the surgeon. A #3 Micro CFX™ femoral stem was implanted using a micro femoral impactor and a bone mallet. The stem was held in compression with the impactor by the surgeon until the cement hardened. A remaining piece of unused bone cement was kept on the table to monitor cement hardening by the scrub assistant. Once the cement had hardened, the A-O elevator was removed, and excess bone cement was extracted using a Freer elevator. The gauze previously packed in the acetabulum was taken out and discarded. An 8mm +2 femoral trial head and neck length was placed on the stem neck to confirm the desirable femoral neck length and then the Stefan bone reduction forceps was removed, implant reduction was completed, confirmed appropriate, disarticulated, and the trial head removed. An 8mm +2 femoral head prosthesis was secured onto the femoral stem with a head impactor and mallet and the acetabulum was lavaged with 0.9% saline irrigation and suctioned with a 7 French Frazier suction tip.

Caution was used with the suction tip, and all instruments, to ensure the implant surfaces were not scratched. The implants were rearticulated, and the implant was inspected for proper alignment and PROM. Capsulorrhaphy and deep gluteal muscle closure were performed using a Halstead vertical mattress pattern with 2-0 polydioxanone (PDS) suture, a slow absorbing monofilament suture that provides adequate tensile strength for up to six weeks. The fascia was closed with 2-0 PDS in a simple continuous pattern. The subcutaneous layer was closed with 4-0 PDS in a simple continuous pattern, and the skin closed with 4-0 nylon monofilament non-absorbable suture. Nylon is a pliable, non-absorbable suture commonly used for skin closure. No breaks of sterility occurred during surgery, an elective surgical incision was made, and no hollow viscera were entered. Therefore, this was classified as a clean procedure. A lateral and VD radiograph of the pelvis were obtained postoperatively in the same manner as the pre-operative radiographs to ensure proper implant placement prior to moving the patient to recovery.

Post-Operative Care

The patient was moved to recovery and extubated in a heated recovery cage with non-slip flooring. The incision was cold compressed for 20 minutes, but passive cryotherapy was not tolerated overnight. Flame was administered oxymorphone (0.1mg/kg) IV on extubation and placed on maintenance crystalloid fluids overnight. Cefazolin was administered IV every six hours for a total of four doses. Within twelve hours after surgery, he was using the leg well and eating, drinking, and urinating. Twenty-four hours after surgery, Flame was started on 50 mg cefpodoxime (10 mg/kg, off label) PO once daily for 10 days and buccal buprenorphine (0.1mg/kg) TID for 10 days. He was discharged the following day.

Client Education and Prognosis

The owners were given verbal and written discharge instructions. An Elizabethan collar was sent home to prevent licking and chewing at the incision. They were instructed to monitor the incision daily for any drainage and to keep the Elizabethan collar on until suture removal. Sutures were to be removed after two weeks during the follow up examination. The prognosis was very good with proper aftercare and owner compliance. Activity was limited for six weeks with no running, jumping, or playing with other cats in order to avoid post-operative complications including luxation, implant loosening or femoral fracture. The owners were instructed to prevent jumping and keep Flame indoors, confined to a crate or small room with non-slip surfaces.

At six weeks, pelvic radiographs were obtained. Flame was doing very well, and recheck radiographs revealed stable implant positioning with solid bone-cement interfaces. At this time, he was gradually allowed to return to a more normal activity level, and the client was advised to avoid activities that may result in a fall indefinitely, to prevent luxation or femoral fracture, and to alert their veterinarian about infections or dental procedures in the future, so prophylactic antibiotics could be administered. The American Academy of Orthopaedic Surgeons states: “Given the potential adverse outcomes and cost of treating an infected joint replacement, the AAOS recommends that clinicians consider antibiotic prophylaxis for all total joint replacement patients prior to any invasive procedure that may cause bacteremia.”[10] Flame was prescribed yearly examinations to monitor function and implant integrity.

Steam: pre-vacuum autoclave with cycle settings: 270°F, 17-20 psi, 4-minute cycle.

Linen Pack: Sterilized by manufacturer

(4) 24" x 32" quarter drapes
(1) 8' x 6'blue paper over drape
(1) OR instrument table cover
(10) 4x4 gauze sponges (radiopaque)
Suction tubing
Plastic irrigation bowl

Disposables: Sterilized by manufacturer

(2) #15 surgical blades
Monopolar electrocautery pencil
Bi-polar electrocautery forceps
(2) Half dose Surgical Simplex™ P bone cement
(2) Converters® Drapes (60in x 76in)
(2) Plastic ophthalmic incise drapes (121cm x 129cm)

General Surgical Pack: Sterilized with steam, double wrapped in KenVet Drape

(8) Backhaus towel clamps
Curved Mayo scissors
Curved Metzenbaum scissors
(2) Mayo-Hegar needle holders
(1) Allis tissue forceps
(2) Brown Adson thumb forceps
(2) Bard-Parker #3 handle
(3) Halstead mosquito curved hemostats
(3) Curved Kelly hemostats
#7 Frazier suction tip
Sharp/blunt OR scissors

Biomedtrix Micro THR CFX™ Set: Sterilized steam, double wrapped in blue polypropylene sheets

Femoral neck template
Acetabular trials: 12mm, 14mm, 16mm
Femoral stem trials: #2, #3
Femoral head trials: 8mm+0, 8mm+2
Micro stem impactor
Femoral reamers: 1-2, 2-3
(2) Awls
Mead mallet

Additional steam sterilized instruments:
Elevators: Adson, A-O, Freer
Retractors: baby Gelpi, finger Hohmann, finger Meyerding, Senn
Stefan Bone reduction forceps
Hall's 3M high speed burr and nitrogen cable
Stryker oscillating sagittal saw
Double layer small stockinette
Jacob's hand chuck and key
Co-flex bandaging tape
Single action Lempert rongeur

Quality Control Methods

Class 1 external chemical indicator tape; steam: Comply™ indicator tape
Class 5 / Other internal chemical indicator strips; Steam: Comply™ SteriGage,
Chemical indicator strips were placed in the least accessible/most dense part of the pack or inside the innermost wrap or pouch.

References

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8. Beal MW, Brown DC, Shofer FS. The effects of perioperative hypothermia and the duration of anesthesia on postoperative wound infection rate in clean wounds: a retrospective study. *Vet Surg.* 2000;29:123-127.
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Waiver, Release, and Indemnity Form - 5

I hereby submit my credentials to the Academy of Veterinary Surgical Technicians (AVST) for consideration for examination in accordance with its rules and enclose the required application fee. I agree that prior to or subsequent to my examination the AVST Credentials Committee may investigate my standing as a technician, including my reputation for complying with the standards of ethics of the profession. I understand and agree that the application fee shall be nonrefundable.

I agree to abide by the decisions of the Credentials Committee and thereby voluntarily release, discharge, waive and relinquish any and all actions or causes of actions against the Academy of Veterinary Surgical Technicians and each and all of its members, committees, officers, examiners and assigns from and against any liability whatsoever in respect of any decisions or acts that they may make in connection with this application, the examination, the grades on such examinations and/or the granting or issuance, or failure thereof, of any certificate, except as specifically provided by the Constitution and Bylaws of this organization. I agree to exempt and relieve, defend and indemnify, and hold harmless the Academy of Veterinary Surgical Technicians, and each and all of its members, committees, officers, examiners and assigns against any and all claims, demands and/or proceedings, including court costs and attorney's fees, brought by or prosecuted for my benefit, extended to all claims of every kind and nature whatsoever whether known or unknown at this time. I further agree that any certificate which may be granted and issued to me shall be and remain the property of the Academy of Veterinary Surgical Technicians. Certificates of recognition and credential designation that are revoked because of a violation to the provisions of the Academy's Constitution or Bylaws; policies and procedures; failure to complete annual renewals; or does not maintain their primary veterinary technician or nurse credential while a member of the Academy, will be returned to the Academy and the former Academy member will cease and desist from using the "VTS" or VNS" member designation. Failure to comply with this agreement will result in legal action from the Academy, NAVTA or other vested parties.

I certify that all information provided by me on the application is true and correct. I acknowledge that I have read, understand, and agree to abide by the above two paragraphs.

_____ _____

(Signature) (Date)

_____

(Please print your name)

To: Supervising Veterinarian or Veterinary Technician Specialist mentor:

This letter has been presented to you by a credentialed veterinary technician currently employed at your facility who has an interest in pursuing membership in the Academy of Veterinary Surgical Technicians (AVST). In order to achieve this objective your technician will complete a two-step process of submitting an application packet for approval by the credentials committee and sitting for a comprehensive examination. Successful completion of both steps will earn your technician the title of Veterinary Technician Specialist in Surgery. A technician with VTS (Surgery) certification demonstrates superior knowledge in the care and management of veterinary surgical cases while promoting patient safety, consumer protection and professionalism.

The application process is especially time consuming, and your technician will need your support and guidance throughout the process. I recommend that you read the entire application packet to become familiar with the areas in which your technician will require your assistance. Listed below are some areas of the application that are particularly important as well as some suggestions and guidelines to assist you in helping your technician prepare an application for submission.

- All cases contained in the case log must be performed **within the year** prior to the application deadline of December 31.
- All cases must be performed at the facility where the technician is employed or while under the supervision of the employer at a different location (i.e., your clinic performs an MRI at a different location, but you and your technician are still in charge of the case and perform the surgery).
- Allow your technician to assist in developing a surgical plan from start to finish. The technician should be able to anticipate the needs of the surgeon in performing the surgical procedure, including instrumentation, equipment, suture, aseptic technique, post operative care, bandages, diagnostics, etc. that is specific for each surgical case and discuss with you why they selected each instrument, piece of equipment, suture, bandage, radiographic view, etc.
- The AVST requires that a licensed veterinarian or VTS member attest to the technician's ability to **master** the required percentage of **skills** on the AVST Advanced Surgical Skills Form. Mastery is defined as being able to perform the task safely, with a high degree of success and without being coached or prompted. Mastery requires having performed the task in a wide variety of patients and situations.
    - Look over the skills list completely and **only** sign off on a skill if you feel confident that your technician meets the definition of mastery.
    - All signed skills must be demonstrated in the case logs.
    - Assist your technician in acquiring new skills for the application process.
- Send your technician to at least one national meeting a year to give them ample exposure to the most current information related to surgery and allow them to accumulate continuing education credits.

On behalf of the Academy of Veterinary Surgical Technicians, I would like to thank you for supporting your technician through the application process. If you have any questions, please do not hesitate to contact me at avst.sxtech@gmail.com.

Sincerely,

Catherine T Mann, RVT, VTS (Surgery) (Anesthesia & Analgesia)

Catherine T Mann, RVT, VTS (Surgery) (Anesthesia & Analgesia)

Credentials Committee Chair
Academy of Veterinary Surgical Technicians

Checklist for the Pre-Application:

- ☐ Form 1: Professional History and Experience Form
- ☐ Documentation of Name Change (if applicable)
- ☐ Proof of Credentials (Certification/License/Registration)
- ☐ Diploma (if a graduate of an AVMA accredited program)
- ☐ Resume/Curriculum Vitae
- ☐ Continuing Education Record*
    - One (or more) Form 2 for each conference attended.
    - Proof of attendance combined with Form 2 for each conference.
- ☐ PayPal Receipt for $25 Pre-Application Fee

Checklist for the Final Application:

- ☐ Form 3: AVST Advanced Surgical Skills List
- ☐ Skills Photographs
- ☐ Gas Sterilization Certificate (if applicable)
- ☐ Form 4: AVST Case Log
- ☐ AVST Abbreviations List
- ☐ Case Reports (4)
- ☐ Supplemental Continuing Education Record *(if applicable)
    - One (or more) Form 2 for each conference attended.
    - Proof of attendance combined with Form 2 for each conference.
- ☐ Letter of Intent
- ☐ Letters of Recommendation (2)
- ☐ Letter(s) of Explanation (if applicable)
- ☐ Form 5: Waiver, Release & Indemnity Agreement
- ☐ PayPal Receipt for $50 Final Application Fee

*Since this is the first year that the AVST Application has been split into a Pre-Application and a Final Application, an incomplete number of CE hours may be submitted with the Pre-Application. It is preferred that applicants submit 40 hours of qualifying CE with the Pre-Application. **However, a minimum of 20 hours of CE must be submitted with the Pre-Application. Pre-applications submitted with no CE hours will be rejected.** A total of 40 acceptable CE hours must be submitted between the Pre-application and the Final Application.