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APPLICANT INSTRUCTIONS

The Academy of Veterinary Technicians in Anesthesia and Analgesia (AVTAA) appreciates your interest in becoming a Veterinary Technician Specialist in Anesthesia and Analgesia or VTS (Anesthesia & Analgesia). The AVTAA's goal in certifying veterinary technicians is to assure the veterinary profession and the public that an AVTAA certified technician possesses the knowledge, skills and experience needed to practice anesthesia at an advanced level of competency. The requirements of eligibility for the examination are defined in the AVTAA constitution and bylaws and should be **read thoroughly** before proceeding. 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 AVTAA have demonstrated a high degree of competency in the area of veterinary anesthesia and peri-operative analgesia.

The AVTAA application has two parts. First, you must meet the requirements of the pre-application and be preapproved. The deadline for the pre-application is **May 31 2019; 11:59:59 pm Eastern Time**.

All documents for the pre-application should be compressed into a single zipped folder and uploaded using the DROP BOX on the Application Page of the AVTAA website. There is a \$25 pre-application fee. Proof of this payment is required for the pre-application documents to be processed.

If pre-approval is granted you then will be eligible to submit a complete application packet at the end of the year. The deadline for the complete application packet is **December 31 2019**; **11:59:59 pm Eastern Time**.

All documents for the complete application should be compressed into a single zipped folder and uploaded using the DROP BOX on the Application Page of the AVTAA website. Individual documents submitted for the complete application will NOT be accepted. There is an additional \$25 application fee for submitting the complete application in December. Proof of this payment is required for the application documents to be processed. Complete application documents submitted are FINAL; once you submit the zipped file an individual form cannot be added or exchanged for an updated form. Please ensure that you are submitting the correct and final copy (e.g. form filled out completely, all pages scanned, no track changes, etc.) of all the documents in the zipped file.

NOTE: If someone other than the applicant will be paying the fees for the pre-application and/or complete application, then the applicant's name **MUST** be indicated on the PayPal receipt.

All documents for the pre-application and complete application **MUST** be saved using a specific file name that is outlined in the instructions. All forms provided in this packet **MUST** be used for the pre-application and complete application submission. They are available individually online at www.avtaa-vts.org. **All** forms must be typed or word-processed. With the exception of signatures, skills list entries with initials and anesthesia records, hand written forms will not be accepted. Forms that require signatures or allow written information (e.g. skills list and anesthesia records) should be scanned as .pdf, .doc or .docx files. **Do NOT submit scanned forms as jpeg files.** Download the blank PDF forms from the website using **ONLY** ADOBE READER. Other download programs may not format the forms properly. **Only use forms and follow instructions for the CURRENT application; previous year's application forms and instructions are no longer valid and will not be accepted. DO NOT alter the formatting or settings of ANY form; doing so may result in rejection of that form. All dates entered on forms should follow month/day/year format. 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.**

WARNING to MAC users: MAC computers do not handle .pdf documents very well. If using a MAC, verify ALL fields are present and filled in correctly before sending documents for the pre-application or complete application. Compare the MAC document to the example forms located in the application packet.

Questions about the AVTAA application process can be sent to Darci Palmer (AVTAA Executive Secretary), <u>dpalmerrvt@hotmail.com</u> or Jessica Konzer-Birdwell (AVTAA Credentials Chair), <u>jkonzer@utk.edu</u>. If you do not receive a reply within 5 business days please email again or contact the other person.

Disclaimer: AVTAA supports and promotes professional honesty and personal integrity during the application process to become certified as a VTS (Anesthesia & Analgesia). Any form of professional dishonesty, including plagiarism, will not be tolerated. Any application found to have evidence of plagiarism or guilty of providing dishonest information will be automatically rejected.

2020 Pre-Application Requirements

The following documents are required for the pre-application and are due by 11:59:59 pm Eastern Time, May 31 2019:

- 1. Professional History and Experience
- 2. Current license to practice as a veterinary technician or veterinary nurse (scanned copy)
- 3. Proof of original date of credentialing if not indicated on current license
 - a. See instruction below if state does not issue a paper license
- 4. Letter of good standing from veterinary medical board or regulatory body (NEW)
- 5. Scanned copy of Diploma (if applicable)
- 6. Scanned copy of legal documentation of name change (only if more than one last name is used on any documents)
- 7. Documentation of paid NAVTA membership for 2019 (scanned copy)
- 8. PayPal receipt indicating \$25.00 pre-application fee has been paid (DATE and applicant NAME must be present on receipt)

Please read and follow the directions for each of these documents in the application instruction packet

These documents require approval by the credentials committee in order for the applicant to submit a complete application packet in December 2019.

The credentials committee will be verifying work experience hours and confirming credential status in order to grant approval of these forms. **NOTE**: All employment history listed on the form MUST have a contact name and **work email** for the person who can verify work experience hours. It is the applicant's responsibility to ensure the name and email address is correct. Each employer (present and past) will be contacted via email for verification of hours claimed on form. The employer will be asked to respond within 10 days from the date indicated in the email. It is the applicant's responsibility to ensure ALL past and current employers respond to this email within the 10-day period. Approval will NOT be granted until all employment hours can be verified.

NOTE: **International applicants** are encouraged to submit the pre-application packet early as extra time may be needed to verify credential status as a veterinary nurse/technician in countries outside the USA. All non-English documents must be translated into English before submitting. A brief letter from the translator may be required to verify authenticity of translated documents.

If your pre-application documents do not receive approval then you are NOT eligible to submit a complete application in December. Any documents submitted in December 2019 will be automatically rejected.

The credentials committee will contact the applicant with approval status via email within 7-10 business days of submission of these documents. A detailed report will be provided if any documents are rejected. If documents are missing or the professional history and experience form is filled out incorrectly the applicant has the opportunity to correct the issues and resubmit the forms at no additional cost as long as it is before the May 31 deadline. A rejection due to not enough work experience hours or inability to provide all required documentation is FINAL and additional submissions will not be reviewed. There is **NO refund of the \$25.00 fee if the Pre- Application is rejected.**

Pre-approval must be granted before the 11:59:59 pm Eastern Time May 31st 2019 deadline.

Therefore, it is recommended that these forms be submitted well before the **11:59:59 pm Eastern Time** May 31st deadline. If these forms are submitted at 11:59:59 pm Eastern Time, May 31st and rejected then the applicant will **not** be able to submit new forms and will **not** be eligible to submit a complete application in December.

All pre-application documents should be **compressed into a single zipped folder**, titled yourfirstname.lastname.applicant2020.zip (e.g.betty.smith.applicant2020.zip) and submitted via the website Drop Box no later than **11:59:59 pm Eastern Time May 31, 2019**. Individual files will NOT be accepted for the pre-application.

You may pay the \$25.00 Pre Application Fee through PayPal on the AVTAA website.

Letter for 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 Technicians in Anesthesia and Analgesia (AVTAA). In order to achieve this objective your technician will complete a three-step process. The first two steps involve the pre-application (due by May 31st) and the complete application packet (due by Dec 31st). These steps require approval from the credentials committee. Following approval, the third step is sitting for a written examination the following year. Successful completion of all steps will earn your technician the title of Veterinary Technician Specialist in Anesthesia & Analgesia. A technician with VTS (Anesthesia & Analgesia) certification demonstrates superior knowledge in the care and management of veterinary anesthesia 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. We 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.

- The Professional History and Experience form and supporting documents requires **pre-approval before May 31, 2019**. Failure to have this approval by May 31st will disqualify the veterinary technician from submitting the remainder of the application in December. An employment verification letter will be emailed to every employer indicated on this form. A response is requested within 10 days of receiving the email. Pre-approval will not be granted until ALL employment hours have been verified. Please respond to this letter is a timely fashion.
- All cases contained in the case log must be performed within the year prior to the application submission 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 anesthesia).
- Allow your technician to manage complicated anesthesia cases from start to finish. The technician should be able to formulate an anesthetic drug protocol that is specific for each patient and discuss with you why they selected each particular drug; their plans for intra operative monitoring and pain management; anticipated anesthetic complications and recovery.
- The AVTAA requires that a board certified DVM or VTS member who has mastered the skill themselves, attest to the technician's ability to **master** the required percentage of **skills** in the combined skills section. 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 described 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 anesthesia and peri-operative analgesia and allow them to accumulate continuing education credits.

On behalf of the AVTAA, we would like to thank you for supporting your technician through the application process. If you have any questions, please do not hesitate to contact Jessica at <u>jkonzer@utk.edu</u> or Darci at <u>dpalmerrvt@hotmail.com</u>.

Sincerely,

Jessica Konzer-Birdwell BA, LVT, VTS (Anesthesia & Analgesia) AVTAA Credentials Committee Chair Darci Palmer BS, LVT, VTS (Anesthesia & Analgesia) AVTAA Executive Secretary

Professional History and Experience

You are eligible to apply to the AVTAA after you have completed **a minimum** of 6000 hours **AND a minimum** of 3 years of experience as a **credentialed** veterinary technician. During that time, you must have provided **a minimum** of 4500 hours (75% of 6000) of anesthesia care as described in the AVTAA definition of anesthesia. For the purpose of this eligibility requirement, the definition of anesthesia care as established by the Academy of Veterinary Technicians in Anesthesia and Analgesia will be used. All work experience MUST be completed by **June 1**st of the year you plan to submit a completed application.

Only list your experience working in a clinical setting as a **credentialed** veterinary technician in the **five years prior** to the application submission date. **Work experience prior to June 1**st **2014 will not be accepted.** A *credentialed technician* is a person who legally holds an active license to practice as a veterinary technician in some state or province. In the USA, this requires passing both the VTNE (excluding CA prior to 2014) and state examinations (if applicable). International applicants must meet specific requirements set forth by each country (see below).

List your name and contact information at the top of this form. If any documents indicate a different last name, then BOTH names must be indicated on this form. Indicate birth name in parenthesis after your full name. For example, birth name is Sarah Smith; married name is Conner \rightarrow Sarah Conner (Smith).

Be sure to fill out all sections of the form or it will be rejected. Designate which group of patients (large animal or small animal) constitutes the majority of your experience (> 50% of your work experience). For the purpose of this application the AVTAA will include: canine, feline, lagomorphs, avian, reptiles, primates, small exotic pets and small lab animals as "small animal patients". "Large animal patients" will include: equine, bovine, swine, ovine, caprine, camelids (camel, llama, alpaca) and wildlife such as deer, bear, reindeer, exotic large cats, elephants, etc. This selection will help determine which species make up the majority of your case logs, which skills list you submit and which exam you take once your application is accepted. **NOTE:** You will NOT be allowed to switch animal groups after your pre-application packet is approved.

If you are a graduate of an AVMA accredited veterinary technician program, please indicate your graduation date **and school of record.** A scanned copy of your diploma **must** be included in the pre-application packet.

You must be a NAVTA member in order to apply to the AVTAA. Please provide your NAVTA membership number on this form. Include scanned documentation (e.g. receipt of payment or copy of current NAVTA membership card) to show you have paid for membership for 2019. Save this file as **yourfirstname.NAVTA.** The file should be saved as a .jpg or .pdf.

Provide the date you passed the **VTNE** along with the license number and state(s) that you hold an active license to practice as a veterinary technician/nurse. Indicate the original date of credentialing that your license was obtained in each state/province. The **original date of credentialing** pertains to the date you received your license AFTER meeting state requirements. The VTNE pass date and the original date of credentialing may NOT be the same date if you live in a state that has a state exam before they issue a license to practice as a veterinary technician!

If your license has lapsed or been inactive between June 1st 2014 and June 1st 2019 please indicate the reason why on the form. Work experience will NOT be counted during periods of an inactive license. Failure to disclose inactive status may result in rejection of the pre-application.

If you hold another VTS title you must declare the year that it was obtained on the professional history and experience form. You are **NOT** eligible to apply to AVTAA if it has been less than 3 years since obtaining another VTS title. Attempting to apply to more than one academy at the same time is also prohibited.

If you have submitted a pre-application or complete application to AVTAA in the past please indicate the year you submitted these documents. This information is for record keeping purposes only.

List your employment history for your **primary job**(s) in the first 5 boxes. Employment history will only be counted if you receive a paycheck from the facility. Volunteer hours will not be accepted.

Each box designates your work experience for a ONE-year period of time between the dates listed below. Indicate the month/day/year for each entry.

Box 1 start date:	June 1 2014	end date:	June 1 2015
Box 2 start date:	June 1 2015	end date:	June 1 2016
Box 3 start date:	June 1 2016	end date:	June 1 2017
Box 4 start date:	June 1 2017	end date:	June 1 2018
Box 5 start date:	June 1 2018	end date:	June 1 2019

If you worked the entire year at the same practice, then the start and end dates should match the dates indicated at the top of each box. If you have worked multiple years at the same practice, then record the same practice information for each box and put the start and end dates as indicated. For example, if you have worked at the same practice from June 1 2014 till June 1 2019 then Boxes 1-5 would all contain the same employment information with each ONE-year period of time indicated in each box.

If you only worked a few months during that year time period, then use the start and end dates to indicate the appropriate time. Use the secondary boxes on the second page to indicate a change of employment for a

primary position mid-year (June to June). For example, if you worked a primary job on June 1 2014 but changed jobs on Jan 4 2015 it would be recorded as follows:

Box 1	start date:	June 1 2014	end date:	Jan 4 2015
Supplemental Box 1	start date:	Jan 5 2015	end date:	June 1 2015

The **Supplemental Box 1 would indicate the new job information. If you continued to work this new position during the dates indicated for Box 2 (first page) you would record the practice information again for a primary job and ensure that the work experience was within the year timeframe indicated in Box 2.

In Box 5, the end date will be June 1 2019 if you will be currently employed at this location past the 11:59:59pm ET, May 31 2019 deadline. If your pre-application documents are approved early (recommended) and employment indicated in box 5 is terminated before June 1 2019 then it is **your responsibility** to inform AVTAA of the change in employment status. Failure to do so will revoke your eligibility to submit a complete application in December.

Provide the name of the practice and indicate the practice type in each box (e.g. university teaching hospital, specialty/referral, general practice, research, emergency only). Provide the name and email (preferably a work related email) of your supervisor or practice manager that can provide verification of employment. Email will be used to contact the person you indicated for each job listed on the form. Please ensure this information is correct to avoid delays.

AVTAA reserves the right to ask for verification of all hours claimed on this form.

During the time period indicated in each box, determine how many **regular hours** you worked on average per **DAY** (e.g. 8hr/day, 10hr/day, etc.); the number of days worked per week and the number of weeks worked per year (not to exceed 50 weeks/yr). Hours worked per year are determined by the following equation (hours/day x days/week x weeks/year.) We will accept up to 2000hr/yr. (40hrs/wk x 50wk/yr) of regular work experience for a **primary job**.

Read the AVTAA definition of anesthesia care and determine the average **hours** of time per **day** spent providing primary anesthesia care and case management. For example, if on average, you work 8 hours per day and spend at least 6 hours of time each day performing anesthesia then you would indicate 6 hours on the form. In addition, indicate how many **days per week** you perform anesthesia. **We will not accept 100% of time performing anesthesia regardless of type of employment**. This is an unrealistic percentage when looking at average work experience over a years' time frame.

Note: Do NOT factor in on-call hours or overtime hours as these hours are often sporadic and difficult to calculate into an average calculation. However, cases performed during on-call or overtime hours between January 1 2019 and December 31 2019 may be used for the case logs and case reports.

If you worked a **secondary position** in addition to a primary position during the last 5 years, use the boxes on the second page of this form to indicate this work experience. Include the start and end dates for a secondary position in ONE box even if it is longer than one years' time. Fill in the regular hours and hours spent providing anesthesia in the same fashion as the primary jobs.

Before submitting the history and experience form ensure all information for hours worked is accurate to the best of your knowledge. Any change in hours AFTER the initial pre-application submission will require further documentation to explain the change in hour status.

Save the Professional History and Experience form as **yourfirstname.lastname.history**. The file should be saved as a .pdf or .doc or docx file. Example: betty.**smith.history.pdf WARNING:** MAC computers do not handle .pdf documents very well. If using a MAC, verify ALL fields are present and filled in correctly before sending. Compare your copy to the example history and experience form located in the instruction packet.

History Addendum

If any information changes on the Professional History and Experience Form (e.g. name change, address change, employment status) after June 1st 2019, then you **MUST** contact AVTAA with the changes in order for them to be reflected on the application submitted by December. This is especially important if you changed jobs after June 1st and want to use cases on your application from your new job. If that new job is not indicated on a history addendum form and approved by the credentials chair, then NONE of those cases will qualify as acceptable for the application.

Update the history form with the new information. If you have changed jobs then use the last box on the history form to provide your new work information. Hours claimed on the history addendum form will require employment verification before approval.

Save this file as **yourfirstname.lastname.addendumhx**. The file should be saved as a .pdf or .doc or .docx file. Example: **betty.smith.addendumhx.pdf**

Send the history addendum form via email to the credentials chair, Jessica Konzer-Birdwell, at <u>jkonzer@utk.edu</u>. The form will be reviewed and approval will be granted once all information provided is verified.

Full Name:	GREAT TECH (First Name)	(Last nar	ne)			
Email:	TECHATVET	HOPSITAL@	WORK.COM	1		
Phone:	123-456-7890					
Address:	123 MAIN STR Street	REET ANYW City	HERE ANYS State	STATE 12 Zip	Country	
Present Occupation/Titl	e: ANEST	THESIA TECH	INICIAN			
You provide anesthesia	primarily to:	SMALL AND	MAL			
Are you a graduate of a	n AVMA accredi	ited veterinary t	echnology pro	ogram?	YES 🔴	NO 🔵
School: BEST TECH S	SCHOOL IN CO	DUNTRY		Gradu	ation Date:	12/12/2004 Month/day/year
	3/5/2005 fonth/day/year	NAVT	A membershi	p number:		lional alg, year
Do you hold another	r VTS title: YES	NO 🔵	If yes, indicate	e year obtai	ned:	
Repeat AVTAA Ap Pre-application:		NO	If yes, indicate	e year(s) sub	omitted:	Original Date of
Complete Application:						Credentialing
			Stat	e	License #	(mm/dd/year)
			AL	12	34	4/1/2005
List each state in v	which you hold	an				
active license to le	•••					
as a veterinary tec	hnician/nurse					-
INDICATE origin	al date of cred	entialing				
Has your license ever la	apsed or been inac	ctive?	YES 🔵		Ν	0 🛑
Explain:						

International Candidates: (List your current certification(s) obtained and license information)

For Credentials Committee use only:

Total # of CREDENTIALED HOURS: ____

Total # of ANESTHESIA HOURS: _____

LIST YOUR EMPLOYMENT HISTORY 6/1/2014 till 6/1/2019

Primary Box 1: Work History from	n 6/1/2014 to 6/1/2015 Start Date: 6/1/2014 End Date: 6/1/2015
Name of Practice/Institution: BEST PRA	ACTICE Type of Practice: Specialty/Referral
Supervisor name: Dr. BOSSY LADY	Contact email: BOSSYLADY@BESTPRACTICE.COM
<u>Regular</u> hours worked per DAY : 10 (maximum of 2000 hr/year is accepted)	Number of days worked per week: 4 Number of weeks worked per year: 50 Number of days/wk performing anesthesia: 4 Average hours of work day spent providing primary anesthesia care: 7
Primary Box 2: Work History from	n 6/1/2015 to 6/1/2016 Start Date: 6/1/2015 End Date: 6/1/2016
Name of Practice/Institution: BEST PRA	ACTICE Type of Practice: Specialty/Referral
Supervisor name: Dr. BOSSY LADY	Contact email: BOSSYLADY@BESTPRACTICE.COM
Regular hours worked per DAY : 10 (maximum of 2000 hr/year is accepted)	Number of days worked per week: 4 Number of weeks worked per year: 50 Number of days/wk performing anesthesia: 4 Average hours of work day spent providing primary anesthesia care: 7
Primary Box 3: Work History from	n 6/1/2016 to 6/1/2017 Start Date:6/1/2016 End Date: 6/1/2017
Name of Practice/Institution: BEST PRA	ACTICE Type of Practice: Specialty/Referra
Supervisor name: Dr. BOSSY LADY	Contact email: BOSSYLADY@BESTPRACTICE.COM
Regular hours worked per DAY : 10 (maximum of 2000 hr/year is accepted)	 Number of days worked per week: 4 Number of weeks worked per year: 50 Number of days/wk performing anesthesia: 4 Average hours of work day spent providing primary anesthesia care: 7
Primary Box 4: Work History from	n 6/1/2017 to 6/1/2018 Start Date: 6/1/2017 End Date: 2/15/2018
Name of Practice/Institution: BEST PRA	ACTICE Type of Practice: Specialty/Referra
Supervisor name: Dr. BOSSY LADY	Contact email: BOSSYLADY@BESTPRACTICE.COM
<u>Regular</u> hours worked per DAY : 10 (maximum of 2000 hr /year is accepted)	Number of days worked per week: 4 Number of weeks worked per year: 50 Number of days/wk performing anesthesia: 4 Average hours of work day spent providing primary anesthesia care: 7
Primary Box 5: Work History from	n 6/1/2018 to 6/1/2019 Start Date: 6/1/2018 End Date: 6/1/2019
Name of Practice/Institution: GOTTANE	EWJOB Type of Practice: University Teaching Hospita
Supervisor name: Dr. SLEEPY	Contact email: DRSLEEP@NEWJOB.COM
	Number of doug worked nor weak, 5. Number of weaks worked nor years 50

<u>Regular</u> hours worked per DAY: 8 (maximum of 2000 hr/year is accepted) Number of days worked per week: 5 Number of weeks worked per year: 50 Number of days/wk performing anesthesia: 5

Average hours of work day spent providing primary anesthesia care: 7

The area below is for **SECONDARY POSITIONS** held during the same year as a primary job or a change of primary employment mid-year (June to June) for any of the 5 primary boxes.

Secondary Box 1	Start Date: 2/20/2018	End Date: 6/1/2018	
Name of Practice/Institution: GOTTAN	EWJOB Type of	of Practice: University Teaching Hospital	
Supervisor name: DR. SLEEPY	Contact email: DRSLEEP@N	EWJOB.COM	
Regularhours worked per DAY: 8 (maximum of 2000 hrs. / year is accepted)Number of days worked per week: 5Number of weeks worked per Number of days/wk performing anesthesia: 5 Average hours of work day spent providing primary anesthesia			
Secondary Box 2	Start Date:	End Date:	
Name of Practice/Institution:		Type of Practice:	
Supervisor name:	Contact email:		
<u>Regular</u> hours worked per DAY : (maximum of 2000 hrs. / year is accepted)	Number of days worked per week: Number of days/wk performing anes Average hours of work day spe	1 0	
Secondary Box 3	Start Date:	End Date:	

Name of Practice/Institution:		Type of Practice:
Supervisor name:	Contact email:	
<u>Regular</u> hours worked per DAY : (maximum of 2000 hrs. / year is accepted)	Number of days worked per week: Number of days/wk performing ar Average hours of work day sp	Number of weeks worked per year: nesthesia: pent providing primary anesthesia care:

History Addendum (ONLY use if employment has changed after June 1 2019)

Addendum	Start Date:	End Date:
Name of Practice/Institution:		Type of Practice:
Supervisor name:	Contact email:	
<u>Regular</u> hours worked per DAY : (maximum of 2000 hrs. / year is accepted)	Number of days worked per week: Number of days/wk performing ar Average hours of work day s	Number of weeks worked per year: nesthesia: pent providing primary anesthesia care:

Letter of good standing, License and Diploma

Applicant must be a graduate of an AVMA approved Veterinary Technology School **and/or** legally credentialed to practice as a Veterinary Technician in the United States or other country. Applicant must be **legally** credentialed and hold an active license to practice as a veterinary technician or veterinary nurse for **ALL** years of work experience indicated on the Professional History and Experience Form.

Provide a **letter of good standing** from the veterinary medical board or regulating body as proof of credentialing. Letter MUST be on letterhead and contain the following information: original date of credentialing, last renewal date, expiration date of current license, statement that applicant has been legally credentialed for all years claimed on form and declaration of any lapse or suspension in license. Only ONE license verification is required if you hold multiple licenses in different states at the same time between June 1 2014 and June 1 2019. However, if you moved to a different state(s) during this 5-year period and let the old license lapse then a letter will be required from each state/province.

Allow 2-4 weeks turnaround time to obtain this letter. This letter can be part of the pre-application documents submitted by the applicant or it can be emailed directly to AVTAA. If submitted with the pre-application then save it as **yourfirstname.yourlastname.standing**. This file can be saved as .pdf or .doc(x). If the veterinary medical board or regulatory body wishes to directly email the letter then it can be sent to avta.credentials@gmail.com. Please ask them to include {your name} in the subject line.

Include a **scanned copy** of your **current** in-date license. If your state does not issue a paper license but has a voluntary credential process, then this should be stated in the letter of good standing.

If your current license expires before December 31 2019 you MUST submit an updated license as soon as it is up for renewal. **Failure to do so will result in an automatic rejection of the complete application.** If the license expires in December then you may include the updated license with the complete application.

If you live in a state (HI, D.C., UT), commonwealth (e.g. Puerto Rico) or island (e.g. U.S. Virgin Islands) that has non-regulated jurisdictions without voluntary credentialing for veterinary technicians then at minimum you must be a graduate of an AVMA approved Veterinary Technology program AND pass the VTNE in some state. **Exemption:** *Those who passed the VTNE prior to 2014 and live in a non-regulated jurisdiction without voluntary credentialing are exempt from having to be a graduate from an AVMA approved Veterinary Technology program.* In these cases, the pass date of the VTNE will serve as the original date of credentialing. **Proof of passing the VTNE is required in the form of a letter from the AAVSB or original letter sent to applicant indicating a passing score.** For more information, please see https://www.aavsb.org/vtne/.

If you are a graduate of an AVMA approved veterinary technology program, you must submit a **scanned copy** of your diploma as proof of graduation. The name of the school must be present on the diploma. If the diploma has been lost or destroyed please contact AVTAA for other acceptable verification options.

Canceled checks and other documents will not be accepted as proof of license or diploma.

Save your license as **yourfirstname.lastname.license** and diploma (if applicable) as **yourfirstname.lastname.diploma**. These files can be saved as jpg, doc(x), or pdf files.

Legal Documentation for Name Change

If your last name is different on any document submitted for the pre-application then please 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. Save this file as **yourfirstname.legal**. This file can be saved as jpg or pdf.

Below are the acceptable credentials we will accept from a country outside of the USA. Please contact AVTAA to find out specific information about credentialing if your country is not listed. A letter of good standing is required from the regulating body for international applicants.

United Kingdom (UK):	must submit a copy of the RCVS certificate. Candidates must hold
	a license to practice as an RVN and be in good standings with the
	RCVS. At this time the RCVS diploma is not required.
Australia:	must submit a copy of the Certificate IV in veterinary nursing or a
	Bachelor of Applied Science in Veterinary Technology. At this
	time a diploma in veterinary nursing is not required.
Canada:	must be legally credentialed to work as a veterinary technician in
	your province. This requires that you passed the VTNE and hold
	an active license to practice.

Case Log

Candidates must submit a case log of <u>at least</u> **50** cases (but not more than 60) completed from **January 01, 2019** – **December 31, 2019** that meet the AVTAA definition of anesthesia care.

The first 50 cases in the case logs are considered your core logs. There must be at minimum 50 acceptable cases. You may choose to submit an additional 10 cases that will be used if some of your 50 core cases are thrown out. If only 50 cases are submitted, a single unacceptable case could result in the application being rejected. Submitting only 50 case logs is NOT advised! The case logs should be used to demonstrate your experience in advanced anesthesia case management and your mastery of anesthesia skills. All 60 case logs may be used to demonstrate your mastery of the core and supplemental skills.

The case log should provide a brief summary of the anesthesia care you provided to the patient (e.g., drugs administered, abnormal monitored parameters and steps taken to correct (if needed), procedures performed (local/regional blocks, arterial catheters, CRIs, etc.) and how you dealt with co-existing diseases, anesthetic or procedural complications). The logs must reflect the applicant's advanced anesthesia knowledge and skills through all phases of anesthesia care. Proper medical terminology should be used to describe conditions when necessary. **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).

The logs must include a variety of patients and procedures with an ASA physical status of I-V. Only 25% of the case logs (**12 cases**) should be ASA I or II, including ASA IE and ASA IIE cases. The remainder of the case logs should contain cases that qualify as ASA III or higher (including emergencies in these categories). The **first 4 pages (12 cases)** of the logs should be used to provide the **ASA I, ASA II, ASA IE and ASA IIE** cases. With the exception of "skills only" case logs (see next page), these ASA ratings should NOT be present anywhere else in the case log document. The remaining cases (ASA III and higher) may be entered into the log in a manner which you choose (e.g., random, by date, by ASA status, etc.). It is acceptable to submit less than 12 ASA I and ASA II (including emergencies) cases if you would rather use these slots to submit ASA III and higher cases.

The case log should reflect the diversity of species and procedures to which you have experience providing anesthesia care. Drug protocols should be tailored to the patient based on the patient evaluation (history, physical exam, diagnostic tests) rather than clinical routine. The log should include the following: date of procedure; ASA status; species/breed, age, sex, weight; duration of anesthesia (defined as the length of time

that the patient does not respond to stimuli under the influence of inhalant or injectable pharmaceuticals); summary of care (pertinent information from pre-, intra- and post-op); equipment and monitoring methods used; reason for anesthesia and diagnosis (state procedure, diagnosis and include pertinent information from patient evaluation to justify ASA classification); and facility where procedure was performed. Incomplete case logs will not be accepted. If you use a case log to show a particular skill you MUST describe the skill (e.g. list the context in which you used the skill) in the case log. The case summary is the most common location but if the skill applies to equipment then you can use the equipment section. Likewise, if the skill applies to the patient evaluation it can be described in the reason for anesthesia and diagnosis section.

If you chose "more than 50% of my experience in providing anesthesia care is to large animal patients" on the Professional History and Experience Form, then your case log and case reports should primarily contain large animal patients. Likewise, if you selected "small animal" then the majority of your case logs and case reports should be small animals. If you anesthetize both 'large animal' and 'small animal' patients, then both groups can be reflected in your case log but the majority (>50%) of the case logs and at least 3 case reports should come from the group you selected on Professional History and Experience Form.

The case log form will hold 3 cases per page. The case summaries should be brief and to the point. Use critical thinking skills to only provide the pertinent information about the case. All drugs can be abbreviated with the first few letters of the name (e.g. hydro for hydromorphone, ace for acepromazine, etc). Be careful to not abbreviate a drug so much that it can be confused with another drug (e.g. dex could indicate dexmedetomidine, dextrose or dexamethasone). Common medical abbreviations (e.g. WNL, BID, PRN, etc.) can be used for the case summaries. An approved abbreviation page is located with the application documents. It is also included as the last page in the case log document. We recommend utilizing this abbreviation page and minimize other abbreviations to avoid confusion. If other abbreviations are used and the content cannot be verified it could lead to the rejection of that case log. Use generic names for ALL drugs aside from a few exceptions (e.g. Telazol, Zoletil, Simbadol, Nocita, Vetstarch). All drugs should be listed as dose (mg or mcg) or dosage (mg/kg or mcg/kg). Do not just list the mL volume! Appropriate units MUST be present for all drugs, fluids, CRIs, monitored parameters and blood work.

Skills Only Case logs

You may list a case in your log that was **not** anesthetized by you if it is needed to represent a skill from the skills list. An example would be if you performed an epidural on a patient, but your co-worker was the primary anesthetist for the patient. These cases are designated "skills only" case logs and **should ONLY**

appear in case logs 51-60. These cases MUST qualify as anesthesia cases rather than critical care cases. Fill out the case log completely and put "Skills Only" at the start of the case summary. State your involvement with the case and provide enough information in order to help justify the skill(s) you performed. The skill(s) MUST be described in the context in which it was used during the case. "Skills Only" cases can be any ASA status. **These cases will NOT count towards the 50 required case logs but they do count towards the maximum total of 60 case logs.** Therefore, it is recommended that you only use a few of these logs for "skills only" so that the others can be used as replacement case logs, if needed.

Use the **BLANK** case log form included in the 2020 application packet. Only download this form using **Adobe Reader**. This form can be saved to your desktop. It is designed to hold the maximum number of case logs that can be submitted. Extra copies or additional case logs will not be accepted. **DO NOT alter the formatting of this form or change any settings; doing so may result in rejection of the entire form.** It is recommended that you print out the case log form after you have completely filled it in. Verify that all information in each section of every case log is visible on the printed copy. The credentials committee will only evaluate information that is visible on the printed copy of the case log form.

Save this document frequently as you fill it in.

Save as yourfirstname.lastname.caselog.pdf.

WARNING: MAC computers do not handle .pdf documents very well. If using a MAC, verify ALL fields are present and filled in correctly. Compare your copy to the example case log form located in the instruction packet.

Name:	Case Log					
Case Log #: 31 Date: 06/02/17 ASA Rating: IV Duration: 110 mins Species/Breed Canine/Sheepdog Weight: 43 kg Sex: M/C Age: 8y	Reason for anesthesia and diagnosis: Exploratory Laparatomy for liver lobectomy. Hepatic mass identified via ultrasound; abdominocentesis revealed hemoabdomen. Patient presented lethargic, tachycardic and hypotensive. Stablized in ICU with Normosol-R and started whole blood transfusion prior to sx. Anemic at 23% (37-55), hypoalbuminemic at 1.9g/dL (2.3-4.0), PT/aPTT WNL. Facility where performed: Pays Well Veterinary Clinic					
-	Equipment and monitoring methods: Drager anes machine w ventilator, rebreathing circle circuit, 3L reservoir bag, laryngoscope, 11mm ET tube, 2nd venous catheter, arterial catheter, Hot Dog warmer, ECG, RR, MM, CRT, SpO2, ETCO2, BP (Doppler), IBP, temp, esophageal stethoscope, ISTAT,					
Summary of Care Premed w/8.5mg mida & 4.4mg hydro IV. Induced w/ 110mg prop IV; connected to rebreathing circuit. Maintained on 2.5% Sevo in 100% O2. Norm-R started at 5mL/kg/hr, continued whole blood transfusion. Bradycardia (HR:40bpm) and hypotensive (SAP: 70mmHg) after induction.Gave 0.2mg glyco IV, anticholinergic, blocks ACH, expect incr in HR. HR did incr to 80bpm but no change in BP. Assessed depth and decr sevo to 2%, gave 5mL/kg Vetstarch bolus; ETCO2: 40-43mmHg. Moved to OR, started fentanyl CRI 0.1mcg/kg/min. Utilized hypotensive resuscitation till bleeding was controlled (MAP:55-60mmHg); Liver mass adhered to diaphragm, started vent at 12bpm w/ Vt 650mL. PCV 17%, TP: 3g/dL, started 2nd unit of whole blood. PaCO2: 45-47mmHg, PaO2: 320mmHg, no change made to vent. Incr rate of whole blood once bleeding was controlled, MAP incr btw 64-67mmHg for remainder of						
Case Log #: 32 Date: 06/08/17	, uneventful recovery, hypothermic (97.2F), place Bair hugger, temp WNL w/in 2hours. Reason for anesthesia and diagnosis:					
ASA Rating: Duration:230 mins Species/Breed Feline/DSH	CT, rhinoscopy and bulla osteotomy due to aural adenocarcinoma; slight head tilt with nystagmus and vestibular dysfunction noted during neuo exam. HR:160bpm, RR:24brpm, Temp:102 F, MM: pink, CRT: 2 sec, PCV: 32%, TP: 7.6g/dL, Glucose: 97mg/dL, Lactate: 0.9mmol/L. Heart ascultated WNL w/ no pulse deficits. Lungs ascultated WNL.					
Weight: ^{3.9} kg Sex: M/N Age: 12y	Facility where performed: Pays Well Veterinary Clinic					
	B circuit, 0.5L reservoir bag, laryngoscope, stylet, 4mm ET tube, Hot Dog warmer, Bair stethoscope, BP (Doppler), MM, CRT, RR, ETCO2					
Summary of Care Premed w/ 0.2mg hydro & 1mg midaz IV; robena 8mg SQ, induced w/ 8mg alfax IV, smooth induction. Connect to NRB circuit, maintained on 1.5% iso in 100% O2. IV LRS 3mL/kg/hr. Uneventful anes during CT & scope, SAP 90-100mmHg, HR130-140bpm, ETCO2 43-47mmHg; Moved to OR; started ket CRI at 10mcg/kg/min. Depth good for sx stim (medial ventral eye position, no palpebral, slight jaw tone); SAP incr to 120mmHg once sx started. Gave 8mcg fent bolus, started CRI at 0.1mcg/kg/min. ETCO2 35-38mmHg with spont vent. SAP incr to 140mmHg, HR incr to 230bpm, gave 8mcg fent bolus, incr fent CRI to 0.2mcg/kg/min; SAP incr to 180mmHg, attribute to pain, gave 1mcg/kg dexmed IV. HR decr to 110bpm, BP stayed elevated for 20min, then decr to 120mmHg (norm physiologic response for dexmed), decr Iso to 1% (dexmed MAC sparing). Good recovery, normothermic (100.2 F).						
Case Log #: 33 Date: 06/09/17 ASA Rating: _{IV E} Duration:260 mins Species/Breed Equine/Quarter Horse Weight:597 kg Sex: M Age: _{4v}	Reason for anesthesia and diagnosis: Exploratory Lapartomy due to colic w/ 6 hour duration of onset. Patient depressed, sweating and extremely painful on presentation. Multiple doses of detomidine (10mg) admin along w/ flunixin meglumine (600mg). HR 76bpm, RR 34brpm, Temp 98F. Spontaneous nasogastric reflux observed from both nostrils. PCV 58% TP 7.4g/dL					
	Facility where performed: Pays Well Veterinary Clinic					
Equipment and monitoring methods: Anesco anes machine and ventilator, rebreathing circuit, gas analyzer, 26mm ET tube, ECG, IBP, ETCO2, ET ISO, CRT, MM, RR, ISTAT, PCV/TP, 2nd jugular catheter, arterial catheter placed in facial artery, Nasal gastric tube						
Summary of Care Agitated in induction stall. Premed w/ 300mg xyla & 10mg butor IV. Induced w/ 1400mg ket & 55mg diaz IV, induction slow but smooth. Connected to rebreathing circuit & maint on 2.5% iso in 100% O2. Started vent at 5bpm, Vt 4L, PIP 30cmH2O; IV LRS started at 20mL/kg/hr, placed NG tube. ETCO2 43mmHg, PaCO2 68mmHg, incr gradient likely d/t V/Q mismatch, PaO2 198mmHg; incr Vt 4.5L but PIP 40cmH20 so decr Vt to 4L & incr RR to 8bpm. Once abdomen open, incr Vt to 6L, PaCO2 decr to 55mmHg & PaO2 incr to 258mmHg. IBP indicated hypotension (MAP 55mmHg); started dobut CRI 1drop/sec (62.5mg dobut added to 250mL NaCI); used to incr myocardial contractility by stim beta-1 receptors. MAP maintained above 70mmHg for remainder of procedure. 1.5hr into sx, MAP incr to 98mmHg, depth adequate, 10mg butor admin for analgesia. Horse appeared in resp. distress after extubation, airway swollen, admin phenylephrine spray, placed 16mm ET tube in each nostril. Rope recovery uneventful.						

Advanced Anesthesia Skills

The AVTAA requires that a veterinarian who is board certified by an American or European College, a veterinarian who is board eligible (residency trained) or a VTS who has mastered the skill themselves, attest to your ability to perform and master each task. Your testifier(s) **must** sign the last page of the form to validate their initials throughout the form. Initials will only be accepted if they are *hand written*; do not type initials on the skills form. Skills will be rejected if a signature is not present on the last page to confirm the initials throughout the 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 that the applicant has performed the task in a wide variety of patients and situations. The testifier should only initial a skill if they feel the applicant has met the definition of mastery. All signed skills must be considered mastered by the time the applicant uses them in the case logs for the application. A skill should NOT be performed for the first time in a case used as a case log.**

The applicant must demonstrate mastery of **90%** of the skills in the <u>core</u> section and **50%** in the <u>supplemental</u> section of the small animal OR large animal combined skills lists. ONLY submit the combined skills list that matches the majority of your experience indicated on the Professional History and Experience Form (e.g., if you marked small animal, then only submit the small animal combined skills list). DO NOT include both large and small animal skills list if you perform anesthesia on both groups. **ALL signatures must be presented on ONE skills form.** Multiple forms with skills signed by different testifiers will NOT be accepted.

The skills you have mastered must be described in the case logs.

Simply listing a particular skill in a case log is NOT acceptable and the skill will not be counted as mastered. Select ONE case log that best represents each mastered skill. You **must** include the case log number in the allotted space on the skills list. If the skill is not properly described in the designated case log then it may be rejected even if the skill is described elsewhere in the application (e.g. case reports). Do NOT put "ALL" in the column for skills that are done on every patient. **For each mastered skill select** <u>ONE</u> of the following **methods to describe the skill within the context of the case summary.** If appropriate, skills may also be described in the reason for anesthesia and diagnosis section and equipment section.

1) Physiological effect the skill had on the patient

Example: XXmcg dexmed IM premed; bradycardia (HR:40bpm) & 2nd degree AV HB noted on ECG 20 min post-inject; BP remained WNL, no tx indicated, norm effect of drug.

2) Rationale for using the skill in the case

Example: Xmcg dexmed, Xmg hydro IM premed; dexmed selected for sedation & analgesic properties; multi-modal analgesia when combined with opioid.

3) Troubleshooting a problem or adverse event and what was done to solve the issue

Example: SpO2 88-90% w/ probe placed on tongue; confirmed normal PaO2 and SaO2 via blood gas, low SpO2 likely due to vasoconstriction from dexmed.

4) Role that the skill played in the overall management of the case

Example: Xmcg dexmed, Xmg morphine premed IM; easily restrained for IV cath, iso at 1% after intubation, dexmed decr MAC of inhalant. Patient panting, depth appeared appropriate, gave Xmg morphine, no change; added1mcg/kg dexmed IV, patient started to take more regular deeper breaths. Intra-op dexmed used to smooth out maintenance period while inhalant % kept low.

5) Set up of equipment

Example: Pressure transducer used for direct BP monitoring; attached to art cath via low-volume ext tubing; placed at level of apex of heart and zeroed before use.

6) Information about performing skill

Example: Aseptically placed Xmg PF morp + Xmg bupiv epidural @L7-S1 using a 20g x 2.5" spinal needle; located inj site by feeling cranial aspect of ilial wings and palpating caudal along spine.

If a skill was mastered at a prior place of employment that is listed in your employment history (within the last 5 years), it must be validated by that board certified veterinarian/VTS via signature on the skills form AND by a letter detailing the mastery of the skill(s). **A maximum of 3 skills can be used in this manner.** The letter must describe the skill(s) in detail using specific case examples to demonstrate that the applicant has met the definition of mastery. The letter MUST be signed by the board certified veterinarian/VTS attesting to the mastery. For the representative case log on the skills form write "see skills letter". Failure to include this letter will result in an automatic rejection of the skill(s) notated in this manner. Save this letter as a separate document calling the file **yourfirstname.lastname.skillsletter** It can be saved as a .doc or .pdf.

There are 6 skills listed at the end of the skills list that do not require a representative case log. All 6 skills **must** be demonstrated throughout the entirety of the case logs and case reports. The credentials committee will consider these skills mastered based on the overall presentation of cases in the case logs and case reports.

The case log numbers can be typed (preferred method) or hand written on the skills form. If they are hand written make sure all numbers are legible. Illegible numbers may result in the wrong case log being used to validate a skill and may result in rejection of that skill. Verify that all signed skills with a blank line have the required information either typed or hand written (e.g. Indicate inhalant: <u>Sevoflurane</u>).

The combined skills form will need to be scanned once all signatures have been obtained. Save this document as **ONE pdf file** consisting of ALL pages of the combined skills list (core and supplemental). **Ensure signature page is signed by all testifiers AND included as the last page.** Name the file **yourfirstname.lastname.skills**. Example: betty.smith.skills.pdf **Do NOT submit the skills list as a jpeg file.** Failure to include the signature page will result in automatic rejection of the skills.



Continuing Education

Applicant must submit a **minimum** of forty hours of advanced continuing education that pertains to anesthesia, anesthesia case management or peri-operative analgesia. More than 40 hours of CE may be submitted in order to compensate for any hours being rejected but will only be evaluated if additional hours are needed. CE hours MUST be presented by a VTS member (in any of the NAVTA approved specialty academies), a veterinary diplomat (any diplomat of an American or European college or AVMA approved specialty board), a Fellow from Australia or New Zealand (FANZCVS) or a veterinary resident in training (anesthesia, ECC or surgery). AVTAA will also accept CE presented by boarded human anesthesiologists, surgeons or criticalists providing that the CE can be directly related to veterinary anesthesia topics. You must list the CE provider's **diplomat / credential** status (DACVAA, DACVS, DACVECC, VTS (Anes & Analgesia), etc.) on the CE form. Failure to include the speaker's credentials will result in those hours being rejected. All VTS members must be from a NAVTA approved VTS academy.

We will **NOT** accept CE that is provided by people who **only** hold the following credentials: DVM, MRCVS, MANZCVS (MACVSc), DAAPM, CVPP, CCRP, SRA, LVMT, LVT, RVT, CVT.

You must use the **AVTAA CE Form** to submit only the continuing education (CE) attended by the applicant from **January 1, 2015 to December 31, 2019**. CE hours will ONLY count after you become a credentialed veterinary technician/nurse.

The CE certificate provided by the organization or speaker **MUST** be provided as proof of attendance for each conference attended. Cancelled checks or other documents will not be accepted as proof of attendance. A letter can be used as proof of attendance for in-house and externships provided appropriate information is included in the letter (see details located under CE descriptions).

Use the AVTAA's definition of continuing education to determine whether or not your CE meets the requirements regarding content. If the title of the CE does not provide enough information to show that the CE was related to anesthesia care, you **MUST** submit scanned copies of the lecture description or lecture notes provided by the organization providing the CE. AVTAA reserves the right to ask for additional information on lecture titles that do not provide enough information to show it is related to anesthesia case management. Examples of CE titles that would require a description include "Nursing the Neurological Patient" or "Management of the Acute Abdomen". **Failure to provide documentation of how the CE relates to anesthesia may result in rejection of those CE hours.** Examples of CE that will **not** be accepted include "Practical Wound Management", "Advanced Feeding Tube Management", "How to Interpret Radiographs",

"Rehabilitation for the Orthopedic Patient", and "Management of Chronic Pain."

Each meeting attended should be listed on a **separate** copy of the CE form. For a particular meeting, each lecture attended should be listed on the form. Indicate the type of CE at the bottom of the form. Length of CE is indicated in minutes and will be automatically tallied at the bottom of the form as it is entered.

In evaluating the CE resources, the credential committee is looking for diversity in the percentage of CE obtained from in-house, online, externship, and meeting/conference attendance. Therefore, **no more than 50%** (**20 hours**) of in-house, online, externship and journal articles combined CE will be accepted. An externship may count for 10 of these 20 hours, if applicable. If more than 20 hours total of in-house, online, externship or journal article CE are submitted, they will **NOT** contribute towards the total hours needed. **This means that it is MANDATORY that at least 20 hours of acceptable CE come from national, state or local meetings by approved speakers.**

The CE form(s) for each individual conference AND the proof of attendance should be saved as ONE pdf file. For example, if you have two pages of lectures from IVECCS then you will need to scan and save both these pages PLUS the proof of attendance for this conference as ONE pdf file.

Save these files as yourfirstname.lastname.CE1; yourfirstname.lastname.CE2; yourfirstname.lastname.CE3, etc. until you have scanned and saved all your CE documents for the application. Example: betty.smith.CE1.pdf, betty.smith.CE2.pdf, etc.

Continuing Education Definitions

Nationally recognized meeting:

A gathering of people for the purpose of providing continuing education in the field of veterinary medicine. National meetings are advertised in numerous journals and other publications 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**: some speakers providing lecture or labs may not meet the AVTAA requirements for acceptable CE.

Local meeting:

A gathering of people for the purpose of providing continuing education in the field of veterinary medicine. Local meetings are announced 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:** some speakers providing lecture or labs may not meet the AVTAA requirements for

acceptable CE.

NOTE: Special anesthesia programs such as Dr. Gaynor's Anesthesia Bootcamp must have individual lectures listed out along with the presenters and their credentials. Failure to list out each individual lecture will result in rejection of the CE hours associated with the program.

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 inhouse training. You may hire an outside speaker to come talk to your practice as part of in-house training.

Please be aware: some instructors providing lecture or hands on training may not meet the AVTAA requirements for acceptable CE.

Extra Requirement: 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 diplomat status of the CE provider, the objectives and goals, a statement of your satisfactory performance and the total hours provided. (1 hour of lecture or hands on training = 1 hour of CE)

On-Line training:

Several companies provide on-line CE where a participant must meet certain requirements in order to receive a CE certificate. Examples of companies include VSPN, VetMedTeam, Vetbloom, On the Floor @ Dove, VETgirl, etc. This type of CE requires an official CE certificate issued by the company hosting the course on-line. (1 CE credit = 1hour CE)

Please be aware: some instructors providing on-line CE may not meet the AVTAA requirements for acceptable CE.

Externship:

Continuing education from an AVTAA approved program in which a person pays a monetary fee to spend time at another facility (specialty or university) and participates in multiple round sessions as well as hands on experience. This type of continuing education is not open to the veterinary profession at large and is usually restricted to 1-2 participants at a time.

AVTAA must be contacted at least 30 days prior to attending the externship for approval **BEFORE** including it in your application packet.

In order to obtain approval for an externship the following criteria must be met:

- DACVAA or VTS (Anesthesia & Analgesia) employed at facility and overseeing externship
- Must spend a minimum of 1 week (36 40hr) at location
- Attend a minimum of 5 hours of anesthesia/analgesia lectures or round topics presented by a DACVAA or VTS (Anesthesia & Analgesia)
- Submit written statement describing the objective and goals of the externship

Please be aware: some instructors providing lectures or hands on training during the externship may not meet the AVTAA requirements for acceptable CE.

Extra Requirement: This type of CE requires a **signed** letter from the person supervising your attendance to the program. The letter should detail where and when the training took place, the name and diplomat status of the CE provider(s), a list of the lecture/round topics attended by applicant, a statement of satisfactory performance and the total hours the applicant was present for the externship.

Note: AVTAA will accept a maximum of 10 hours of CE from an externship program. The activities performed during the externship will **not** be acceptable for proof of mastery on the applicant's skills list. Cases performed by the applicant during the externship **cannot** be used for the case logs or case reports.

Journal/Magazine articles:

Journal or magazine articles authored by diplomat veterinarians or VTS members within the last 10 years (2010 to current) that pertain to anesthesia or perioperative analgesia and read by the applicant will count as acceptable CE. Each article will count as 0.25 CE hours; therefore 4 articles will count as 1 CE hour. We will **not** accept more than **3 CE** hours from this type of CE, and these hours will be included as part of the in-house, online and externship hours (which cannot exceed 20 hours in total). **A scanned copy of the title page of the article must be provided.** We must be able to verify the author and their credentials, the title of the article and the full reference from where the article came from. Failure to provide this information will result in the CE hours being rejected. Conference proceedings and book chapters do NOT qualify as journal/magazine articles and therefore are not acceptable forms of CE for the AVTAA application.

NARKOVET Consulting[®] LLC & Vetbloom Certificate Course (<u>http://registernvc.vetbloom.com/</u>) Principle Techniques of Small Animal Anesthesia, Perioperative Analgesia & Critical Patient Care

This course consists of 4 modules taught by ACVAA or AVTAA instructors utilizing in-person, laboratory/workshop and online webinar based learning. Successful completion of all 4 modules will count as all 40 hours of CE needed for the application. If individual modules are completed then the individual lectures will be tallied based on the type of CE presented (e.g. local meeting attended in person or online webinar) and will follow the same requirements outlined in the application instructions. *All lectures/labs and webinars attended should be recorded on the CE forms*. Use individual forms for each type of learning (e.g. 1 form for all in-person lectures, 1 form for all webinars, 1 form for all labs). A certificate of completion is required in order to have all 40 hours count on the application. Attendance in the program will be verified.

NARKOVET Consulting[®] LLC & Vetbloom Certificate Course (<u>http://registernvc.vetbloom.com/</u>) Equine Anesthesia, Analgesia & Perioperative Care

This course consists of 3 modules taught by ACVAA or AVTAA instructors utilizing in-person, laboratory/workshop and online webinar based learning. Successful completion of all 3 modules will count as all 40 hours of CE needed for the application. If individual modules are completed then the individual lectures will be tallied based on the type of CE presented (e.g. local meeting attended in person or online webinar) and will follow the same requirements outlined in the application instructions. CE lectures, labs and webinars should be recorded in the same manner that is outlined above for the small animal course.

Date(s) of Conference: 1/8/14 - 1/15/14

Name of conference, meeting, etc.: North American Veterinary Conference

Organization or Person providing the CE: NAVC

Speaker Name	Credentials	Title of Presentation	Minutes
O.R. Thopedic	<u>DACVS</u>	Anesthetic Considerations for Thoracic Surgery	<u>60</u>
I.M. Edicine	<u>DACVIM</u>	Importance of Acid-Base and Electrolytes during Anesthesia	<u>50</u>
G.O. Tosleep	DAVCAA	Geriatric Anesthesia	<u>60</u>

Total Time 170 mins

Type of CE: National Meeting

Continuing Education lectures MUST be presented by a VTS member (in any NAVTA approved specialty academy), a veterinary diplomat of an American or European college/board, Australian/New Zealand Fellow or human anesthesiologist, surgeon or criticalist. You MUST list the CE provider's diplomat/credential status (DACVS, DACVAA, DECVECC, VTS (Anes & Analgesia), etc.) on the CE form. We will NOT accept CE that is provided by people who **only** hold the following credentials: DVM, MRCVS, MANZCVS (MACVSc), DAAPM, CVPP, CCRP, SRA, LVMT, LVT, RVT, CVT. Failure to include the speaker's credentials will result in those hours being rejected.

Application Waiver, Release and Indemnity Agreement

This form must be signed and included in your application submission. Failure to sign and include this form will cause your application to be rejected.

After signing the form, it should be scanned and saved as a pdf file.

Save the file as yourfirstname.lastname.waiver. Example: betty.smith.waiver.pdf.

Waiver, Release and Indemnity

I hereby submit my credentials to the Academy of Veterinary Technicians in Anesthesia and Analgesia 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 AVTAA Board of Regents 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 Board of Regents and thereby voluntarily release, discharge, waive and relinquish any and all actions or causes of actions against the Academy of Veterinary Technicians in Anesthesia and Analgesia and each and all of its members, regents, 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 Technicians in Anesthesia and Analgesia, and each and all of its members, regents, 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 Technicians in Anesthesia and Analgesia.

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)

Case Reports

Select four cases from your case log that best demonstrate your expertise in anesthesia case management to submit as case reports. A complete case log **must** be filled out for each of the four case reports. The case log number that pertains to the report should be documented at the top of the report. This information will be used to confirm that the case is entered as part of your case log. The case reports should demonstrate your knowledge, skills and abilities in **advanced** anesthesia case management. The case reports **must** be written on cases that classify as ASA III or higher. All drug amounts should be listed as dose (mg or mcg) or dosage (mg/kg or mcg/kg). All values included in the reports should contain the appropriate units (e.g. HR: 56bpm, MAP: 84mmHg, TP: 7.6g/dL, etc.)

The case report should describe, in detail, how the patient was evaluated and managed during all phases of anesthesia (e.g. pre-anesthetic, induction, maintenance, recovery). It is important that the information in your case report be clearly understood. Present each case in a logical manner, check the spelling and grammar; ONLY use generic drug names; use proper medical terminology, and define any abbreviations, e.g. positive end expiratory pressure (PEEP) the first time that it is used in the report. It is important to show that 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 observations, physical examination and history taking assisted the veterinarian with the development of an anesthesia drug protocol.
- 2. Explain why an observation was important or why you asked a certain question during the anesthesia period.
- 3. Describe how an observation and response by you helped to avoid an anesthetic complication.
- 4. Describe the procedures you performed or with which you assisted. Explain why the procedure was performed.
- 5. Explain your reasoning for the physiological monitoring used.
- 6. Explain how you helped determine whether the patient's anesthetic plan and pain management strategy was effective.
- 7. Explain how your observations and monitoring helped the veterinarian modify the patient's anesthetic plan or treatment.
- 8. Explain your role in planning the patient's anesthesia care.
- 9. Briefly show your understanding of the problem(s) being treated.
- 10. Explain your contingency plans for all anticipated problems.

Required format for case reports: Times New Roman font, **no less than** 10-point font size and 1.5 line spacing; **no less than** 0.5-inch page margins and; no more than five 8.5 x 11 inch pages in length. Reports should be written in either American or British English using proper spelling & grammar. **Case reports that do not meet these requirements will be rejected**. The case reports must be the original work of the applicant. These are professional reports so spelling and grammar factor into the overall evaluation. If excessive spelling and/or grammar errors are present that take away from the ability to evaluate the content of the report, it could result in rejection of the case report.

Include a legible, scanned **copy of the anesthesia record** for each of the four case reports. The anesthesia record can be added immediately following the 5-page report or it can be saved as a separate document. You may use your facility's record, or the one provided on the AVTAA website. If you choose to use your facility's record it must provide the same data as the AVTAA anesthesia record. **Please be careful to BLACK OUT / DELETE any personal client data such as owner name, address, phone numbers, etc.** There must be proof on the anesthesia records that you were involved in the cases. The anesthesia records must be legible to read all the information contained on the record. Illegible records may be rejected.

NOTE: Compare your facility's anesthesia record to AVTAA's anesthesia record early in the process of starting the application. If there are significant differences, it is advised that you use the AVTAA anesthesia record for any case used in the application. For legal reasons, it is not advised to copy the information to a different form after the case has been performed. The original record used to record information during the case should be submitted with each case report.

The case reports should be saved as **yourfirstname.lastname.casereport1-4** to correspond to each report. Save these reports as word files. Example: betty.smith.casereport1.docx, betty.smith.casereport2.docx, etc. **Do NOT submit case reports as PDF files.** Save each case report +/- anesthesia record as an individual file. Do not combine all 4 reports as one document.

If you save the anesthesia records separately they should be called yourfirstname.lastname.anesrecord1-4 to correspond with each report. Each anesthesia record should be saved as an individual file. Save these files as .doc(x) or .pdf. Example: betty.smith.anesrecord1.docx, betty.smith.anesrecord2.docx, etc. Do NOT submit anesthesia records as jpeg files.

Case Report Layout

1. Applicant Name Date of anesthesia Case log number Patient Name and/or ID# (put this information in the header or make a text box on the 1st page for your case reports)

Patient Signalment: (Species, Age, Sex, Weight) and Reason for presentation

2. Summary of the patient's physical status on presentation.

Pertinent physical examination findings Pertinent laboratory test results (provide reference ranges for all values listed) Pertinent previous history (e.g. past anesthetic complications, drug reactions, etc.) Current history of presenting complaint (e.g. duration of onset, procedures performed at referring DVM, etc.) Current medication(s) Diagnosis

ASA physical status rating (III – V +/- E)

3. Reason for anesthesia.

4. Anticipated patient complications

Detail what problems you anticipated the patient may experience from the anesthetic drugs. Detail how you thought the patient's co-existing conditions or diseases might affect the anesthetic plan. Detail what problems you anticipated the patient may experience from the operative procedure.

5. Anesthesia plan

Anesthetic drugs

Detail the drugs you planned to use. Record all drugs in milligrams (mg) or micrograms (mcg) or provide the dosage (mg/kg or mcg/kg).

Explain the reasoning for specific drug(s) chosen for this patient.

Explain fluid therapy plan during procedure.

Detail the pain management strategy during all stages of anesthesia (pre-op, intra-op, post-op).

Indicate approval of the anesthesia plan by the overseeing clinician and any changes made at this time Patient physiological monitoring and equipment

Explain choice for anesthesia equipment used during case

Detail the parameter(s) you intend to monitor; provide normal ranges you expect to see.

Explain how you planned to assess the parameter(s).

Explain how the information from this parameter(s) would aid in the management of the patient. Additional procedures

Detail any special procedures performed on the patient in order to facilitate the anesthesia and pain management plan (i.e., epidural injection, nerve blocks, jugular catheter, arterial catheter placement, etc.).

6. Anesthesia Care/Patient support

Detail events of the case.

Explain how you were able to provide physiological support to the patient during the anesthesia period. Explain any problems encountered by the patient and how you analyzed them and responded to the patient's needs.

Explain any discrepancies between the original plan and what actually happened during the case (if applicable).

7. Post anesthesia recovery

Explain in detail your plan to evaluate the patient's pain level and plan to provide post procedure analgesia. Explain what you did to support the patient through the post anesthesia period.

Detail the quality of the patient's recovery and any complications.

8. Case Reflection (optional)

Use this section to indicate your thoughts about the case overall.

Was there something you would do differently next time if you are presented a similar case in the future? Was there a valuable skill or concept that you learned during the case that can be applied to future cases?

Include a copy of the anesthesia record immediately after the report or save it as a separate document.

Case Report Example

Patient Signalment: Equine-Quarter Horse, Stallion, 6yrs, 545kg.

"Tiger" presented to Washington State University Veterinary Teaching Hospital (WSU VTH) with 5-hour duration of severe abdominal pain that was unresponsive to medical management.

Summary of patient's physical status on presentation

"Tiger" was depressed, sweating and shaking on arrival to WSU VTH. His temperature, pulse and respiration were 99.4°F, 72bpm, and 32brpm, respectively. His mucous membranes were pale, tacky and exhibited a toxic line along the gums and the capillary refill time (CRT) was 3 seconds. The packed cell volume (PCV) was 48% (32-53%) and the total protein (TP) was 6.6g/dL (6-7.7g/dL). He was estimated to be about 5-7% dehydrated with a mild skin tent. Gastrointestinal sounds were absent in all four quadrants upon auscultation. "Tiger's" abdomen appeared greatly distended and trocarization relieved a large amount of gas. Spontaneous nasogastric reflux was observed from both nostrils but passage of a nasogastric tube produced little reflux. Trans-rectal palpation revealed severely distended large colon extending back to the pelvic inlet. A complete blood count (CBC) and chemistry panel revealed (normal range values): lymphopenia 1305 (1500-7700), monocytosis 174 (<100), thrombocytopenia 77,000 (102,000-198,000), elevated AST 893 IU/L (184-375), elevated AP 265 IU/L (97-196), elevated CK 1436 IU/L (126-536), elevated creatinine 4.4mg/dL (0.7-1.5), hypernatremia 156mEq/L (135-141), hyperkalemia 4.8mEq/L (3.2-4.5) and hyperchloridemia 109mEq/L (93-98).

"Tiger" began exhibiting signs of colic around 1:00pm on June 23 2004. The owner noticed that he was rolling more than normal but no sweating was observed. The referring veterinarian gave 600mg flunixin meglumine and 10mg detomidine intravenously (IV) around 1:30pm. Two additional doses of 10mg detomidine IV were administered one hour apart with the last dose given at 4:30pm. He received 2 liters of hypertonic saline once he arrived at WSU VTH. "Tiger" was switched from poor quality hay to higher quality hay the night before he started exhibiting signs of colic. He is current on all vaccinations and was given his last booster for West Nile in March 2004. Aside from lameness that was diagnosed to the front feet in 2001, "Tiger" does not have any other history of surgery or illness. Based on the findings from the physical exam, blood work and unresponsiveness to medical management, I categorized "Tiger" as an ASA physical status IV E.

Reason for anesthesia

"Tiger" was anesthetized for an exploratory laparotomy to identify the underlying cause of the colic symptoms. Surgery revealed 360^o torsion of the ventral colon. An enterotomy was performed to relieve bowel distention.

Anticipated patient complications

- 1. Positioning the patient in dorsal recumbency impedes normal pulmonary function.
- 2. Myopathy can occur due to the poor muscle perfusion, prolonged anesthesia period, hypoxia and acidosis.
- 3. Uncontrollable pain may make induction rough and it may be difficult to manage intra-operatively.
- 4. Abdominal distention impedes movement of the diaphragm and reduces venous return to the heart leading to compromised ventilation and decreased cardiac output, respectively.
- 5. Hypoventilation and hypoxia are common in horses anesthetized for colic.
- 6. Endotoxemia can cause vasodilation and decreased myocardial contractility, which leads to hypotension and decreased cardiac output.
- 7. Hypotension and hypo-perfusion are common in horses with colic because of profound hypovolemia associated with gastrointestinal disruption.
- 8. Stomach and/or intestinal rupture can occur at induction.
- 9. Hypovolemia and decreased cardiac output can lead to prolonged onset time of the anesthetic drugs, which increases drug circulation time to the brain.

Anesthetic plan

"Tiger's" condition warranted emergency surgery upon arrival to WSU VTH. He was in a state of shock and becoming difficult to control because of pain. I decided to use xylazine 0.4mg/kg IV for sedation. Xylazine is an alpha-2 agonist and provides dose dependent sedation and analgesia. Xylazine has a biphasic effect on blood pressure in that it initially causes vasoconstriction and hypertension but then shortly thereafter blood pressure normalizes; bradycardia and decreased cardiac output are common when this drug is used. I also plan to administer the opioid, butorphanol 0.02mg/kg IV prior to induction. Butorphanol, unlike the pure opioid agonists, does not produce excitement in horses and it provides good visceral analgesia. I will use a combination of ketamine 2.2mg/kg IV and diazepam 0.1mg/kg IV for induction. Ketamine is a dissociative agent and will increase sympathetic tone, which helps counteract the negative cardiovascular effects of endotoxemia. Diazepam is a benzodiazepine and is often given in conjunction with ketamine to provide muscle relaxation. After induction the horse will be intubated, hoisted to the surgery table and connected to a rebreathing circuit and mechanical ventilator. I plan to use isoflurane in 100% oxygen for the inhalant. Isoflurane has a low solubility in the blood, which leads to a faster recovery time once the inhalant is turned off. When isoflurane is compared to halothane it appears that isoflurane allows for greater cardiac output making it the inhalant of choice to use in horses with colic. Fluid therapy will be managed with Lactated Ringer's Solution (LRS). LRS is an isotonic, balanced electrolyte solution that will be used as a replacement fluid. I suspect this horse is hypovolemic so I would like to administer the fluids at a rate of 30mL/kg/hr. Hypotension is a major concern under anesthesia because of cardiovascular compromise so I plan to use a dobutamine continuous rate infusion (CRI) to help maintain adequate

blood pressure. Dobutamine is a positive inotrope that stimulates beta₁ receptors resulting in increased myocardial contractility. The dobutamine CRI will be made by adding 62.5mg (5mL) dobutamine to a 250mL bag of sodium chloride (NaCl) and dripped to effect. During the procedure I plan to monitor heart rate, pulse quality, blood pressure, respiratory rate, tissue perfusion, end tidal carbon dioxide (ETCO₂), end tidal isoflurane (ET ISO) and arterial blood gases. Electrodes from an electrocardiogram (ECG) will be attached to the patient to monitor heart rate and rhythm. The heart rate will also be taken manually by palpating the pulse to note pulse quality. Ideally, I would like the heart rate to maintain between 30-45bpm. An elevated heart rate may indicate pain or hypovolemia if it's associated with hypotension. Blood pressure will be measured directly via an arterial catheter attached to a pressure transducer. This is the most accurate form of blood pressure monitoring and displays values for systolic, diastolic and mean arterial pressures (MAP). Under anesthesia I would like to maintain MAP above 70mmHg. This ensures adequate perfusion to the vital organs and muscle. Respiratory rate will be controlled using a mechanical ventilator. I plan to keep the respiratory rate between 6-10brpm and the tidal volume between 10-15mL/kg. A sampling line will be attached to the breathing circuit and a gas analyzer to evaluate ETCO₂, ET ISO and inspired oxygen concentration. ETCO₂ helps assess adequate ventilation and is an indirect measurement of carbon dioxide in arterial blood. Ideally, I would like the ETCO₂ to be between 35-45mmHg. ET ISO gives an estimate of the concentration of inhalant the horse is exhaling and allows for precise administration of the inhalant. Tissue perfusion will be assessed indirectly by observing the mucous membrane color and CRT. Blood gas analysis will be performed to determine adequate ventilation, oxygenation, and electrolyte and acid-base status.

This case was performed as an after-hour emergency so I did not get to speak with the anesthesiologist until after the patient was anesthetized and the surgical procedure had started. During our phone conversation we discussed the results of the blood gases and how to manage hypotension. The anesthesiologist agreed that a dobutamine CRI was reasonable to start in an attempt to increase blood pressure but fluid loading was the best way to treat hypotension in the face of hypovolemia. She was happy with my plan of action so no other changes were made at that time.

Anesthesia care/Patient support

"Tiger" was brought to the induction stall around 6:30pm. His temperature, pulse and respiration were 99.6^oF, 72bpm, and 30brpm, respectively. The mucous membrane color was brick red with a toxic line and CRT was 3 seconds. The abdomen appeared very distended. A jugular catheter was already placed and it was patent. I sedated "Tiger" with 200mg xylazine and 10mg butorphanol. A nasogastric tube was placed and his mouth was rinsed with water. Induction with 1200mg ketamine and
50mg diazepam IV occurred 5 minutes later. Once in lateral recumbency, I was unable to palpate a pulse and no respiration was noted. I intubated 'Tiger' with a 26mm endotracheal tube and he was quickly hoisted to the surgical table. The patient was attached to a rebreathing circuit, the cuff was inflated and 100% oxygen was administered at a rate of 6L/minute. Isoflurane was not administered at this time. Mechanical ventilation was started at a tidal volume of 3 liters, respiratory rate of 8brpm and peak inspiratory pressure (PIP) of 40cmH₂O. I was still unable to palpate a pulse but was able to auscultate a faint heartbeat with a stethoscope for a rate of 44bpm. A second jugular catheter was aseptically placed and secured. An arterial catheter was aseptically placed in the facial artery and secured in place. Isoflurane was started approximately 7minutes after ventilation began and administered at 2.5% via a precision vaporizer. "Tiger" was moved to the surgical suite at 6:50pm. Fluids were started at a rate of 30mL/kg/hr and the patient received 15 liters of LRS during the first hour of anesthesia. The MAP was 53mmHg once the arterial line was attached to the pressure transducer so the dobutamine CRI was started at 2drops/second. The ETCO₂ was 54mmHg and the blood gas results at 6:55pm were: pH: 7.1, PaCO₂: 81.8mmHg, PaO₂: 77mmHg, HCO₃: 26, TCO₂: 29, BE: -3, O₂Sat: 89%, Na⁺: 147, K⁺: 4.8, iCa⁺⁺: 1.23, glucose: 88mg/dL. I was concerned that if I increased tidal volume and inspiratory pressure any more I might cause alveolar damage and decreased cardiac output so I increased the respiratory rate to 10brpm in an effort to decrease the PaCO₂ until surgery started. "Tiger" maintained a brisk palpebral reflex and "bucked" the ventilator most of the procedure. It was difficult to determine if the "bucking" was due to hypoxic drive since the PaO2 was low or because he was in a light plane of anesthesia. He never got nystagmus or attempted to move so I decided to keep the isoflurane concentration as low as possible. Surgery began at 7:05pm and the MAP increased to 70mmHg for about 15 minutes. Another blood gas at 7:15pm was similar to the first except that the PaCO₂ increased to 88.1mmHg and K⁺ increased to 5.1mEq/L. Around 7:20pm the bowel was exposed enough that I could increase volume expansion of the lungs so I changed the tidal volume from 3 liters to 5 liters which made the peak inspiratory pressure $30 \text{ cmH}_2\text{O}$. The third blood gas at 7:45pm revealed these results: pH: 7.24, PaCO₂: 65.1mmHg, PaO₂: 201mmHg, HCO⁻₃: 28, TCO₂: 30, BE: 1, O₂Sat: 100%, Na⁺: 143, K⁺: 6.1, iCa⁺⁺: 1.2, glucose: 77mg/dL. I was happy with the results for ventilation and oxygenation but the increasing potassium concerned me so I called the anesthesiologist and we discussed the possible causes and options for treating hyperkalemia. One thought was that this horse was Impressive bred and might have the disease hyperkalemic periodic paralysis (HYPP). Other causes of hyperkalemia are renal disease, hypovolemia with renal failure, vigorous exercise, diabetes and Addison's disease. We decided to administer 10mL of calcium chloride to improve contractility and protect the heart from arrhythmias. At 8:00pm the MAP began to drop and got as low as 40mmHg, I spoke with the surgeons and they informed me that they had just untwisted the bowel. I correlated this with the body's response to endotoxemia. I turned down the vaporizer to 1.5% and increased the dobutamine CRI to 4 drops/second. I began to see an increase in heart rate and no change in blood

pressure and I attributed that to the increase in rate of the dobutamine CRI. I decided to discontinue the dobutamine CRI and give an IV bolus of 15mg ephedrine. Ephedrine acts as an indirect sympathomimetic by stimulating the release of norepinephrine and therefore helps increase blood pressure. The blood gas at 8:05pm was very similar to the last except that potassium increased to 6.7mEq/L and glucose dropped to 66mg/dL. I decided to change the fluids to NaCl to try and dilute out the potassium in the blood. I also supplemented with 5% dextrose at a rate of 1drop/second to treat the hypoglycemia. After 15 minutes the ephedrine did not appear to be working as no increase in blood pressure was noted so I decided to start the dobutamine CRI at 1drop/second despite the fact that it also caused tachycardia. The last blood gas was taken at 8:25pm and revealed these results: pH: 7.3, PaCO₂: 60.5mmHg, PaO₂: 191mmHg, HCO⁻₃: 30, TCO₂: 32, BE: 3, O₂Sat: 100%, Na⁺: 141, K⁺: 7, iCa⁺⁺: 1.2, glucose: 65mg/dL. The surgery ended at 8:40pm and the horse was moved to the recovery stall.

Post anesthesia recovery

"Tiger" had a very poor, prolonged recovery. He began spontaneously breathing immediately once he was hoisted to the recovery mat. I supplemented him with 100% oxygen via a demand valve until extubation at 9:00pm. Nystagmus started at 9:45pm and the horse began to move his legs but did not attempt to stand. At 11:35pm a venous blood sample was taken for blood gas analysis and revealed the following results: glucose: <20mg/dl, K⁺: 4.0mEq/L, BUN: 22, Na⁺: 144. "Tiger" was given 5 liters of LRS with 250mL calcium gluconate over 30 minutes and bolused 4 liters of 5% dextrose over one hour. He made several attempts to stand but none were successful and he appeared weak and exhausted. At 1:15am the doctors basically pulled him to his feet. Once standing his temperature was 90.3⁰F, heart rate was 54bpm, respiration was 18bpm, mucous membranes were pale and CRT was greater than 3 seconds. The glucometer reading two hours after the dextrose was given was 300mg/dL. "Tiger" remained hypothermic for most of the day and his condition continued to deteriorate. At 6:00pm he began to show signs of endotoxic shock and the owners opted for euthanasia. Necropsy was performed and showed that most of the large colon was necrotic.

Case Reflections

In discussing this case with the anesthesiologist the next day one area where I could have been more proactive was supplementing dextrose. I should have started the dextrose drip when the 3rd blood gas indicated a downward trend in the glucose. The low glucose and slow rate of dextrose delivery likely played a contributing role in the prolonged recovery of this patient.

A copy of the anesthesia record should immediately follow the case report or be saved as a separate document.

ANESTHESIA RECORD



42 540 dextrose. 1:15am pured to standing by doctors.

Letters of Recommendation

You must obtain **two letters** of recommendation from people who can attest to your advanced knowledge and skills in veterinary anesthesia and peri-operative analgesia.

One letter must be from a **diplomat** of an American or European Veterinary College, Fellow from Australia or New Zealand or a technician that holds a VTS credential from any academy. The second letter can be from your supervising veterinarian, direct supervisor, a different diplomat DVM, resident in training, or another technician who holds the VTS credential.

The letters should include details on training, ethical behavior and quality of anesthesia knowledge and skills. ALL letters of recommendation MUST be signed by the letter writer.

If the letter writer chooses, they may submit their letter of recommendation directly to the AVTAA by uploading it to the Dropbox on the AVTAA website. The letter should be signed and scanned or have a digital signature. Save the letter as a .doc(x) or .pdf files. Subject line for Dropbox should say "LOR for {name of person} AVTAA Application."

If the applicant submits the letters of recommendation then they should be saved as **yourfirstname.lastname.letter1**, **yourfirstname.lastname.letter2**. These files can be saved as .doc(x) or .pdf files. These letters must be signed and scanned. A digital signature will NOT be accepted.

Regardless of how they are submitted, letters will be rejected if NOT signed by the letter writer.

Statement of Purpose

Please provide a brief letter that describes who you are; why you are interested in becoming an AVTAA member; what you feel you can contribute to AVTAA 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, with 12pt, Times New Roman font and 1 inch margins.

The statement of purpose serves the same function that a cover letter would if you were applying for a job. Please treat this as a professional document. **This letter should contain your signature to authenticate the document.**

Name the file **yourfirstname.lastname.purpose** and save as a .doc(x) or .pdf file.

Final Instructions

The AVTAA designed the application forms so you can complete the forms using your computer. **Do not modify or change the formatting of any form**. Forms may be rejected if they have been altered. **All dates on forms should be written in month/day/year format.** With exception to signatures, skills list and anesthesia records, all forms must be typed or word-processed. Hand written forms will not be accepted. Remember, this is a professional application; spelling/grammar and overall presentation will be considered when the application is reviewed. If submitting the completed application using a MAC computer, please ensure that all .pdf files are complete and are not missing any information.

Check all scanned documents to make sure orientation is correct. They should **NOT** be upside down or sideways. The skills list and anesthesia records should **NOT** be saved as .jpeg files when scanned.

The AVTAA reserves the right to contact the applicant and ask for additional documentation to verify information contained in the application. This includes, but is not limited to, all anesthesia records of cases provided in the case logs and additional information regarding CE lectures.

You must submit your application packet **online** by using the DROP BOX on the Application Page of the AVTAA website.

Please see the last page of the application packet for specific guidelines on how to submit the parts of your application. If you have trouble with the online process, please contact us through the website contact page. Problems encountered on May 31 (pre-application) or Dec 31 (complete application) may not be solved in a timely manner and may result in your application being rejected if not submitted by **11:59:59 pm Eastern Time**. **Please do not wait until the last minute to submit your pre-application or complete application packet**.

There is a \$25.00 pre-application fee AND a \$25.00 complete application fee. Both fees should be paid individually using the PayPal link located on the AVTAA website. A copy of the PayPal receipt (with date) for the pre-application should be included with the pre-application documents submitted no later than May 31, 2019. A copy of the PayPal receipt (with date) for the complete application should be included with the complete application documents submitted no later than Dec 31, 2019. If someone else, besides the applicant, is paying the pre-application or application fee please indicate the applicant's name on the PayPal receipt. The AVTAA receipt of payment emailed by the treasurer after payment is also an acceptable form of proof of payment for both the pre-application and complete application. Please contact the AVTAA early if paying through PayPal is not an option. Additional

forms of payment (e.g. check) must be received before the pre-application or complete application is processed. A delay in payment could result in rejection of the pre-application or complete application.

The **Pre-Application documents** must be in the DROP BOX on or before **11:59:59 pm Eastern Time**, **May 31, 2019.** All pre-application documents, including the pre-application PayPal receipt, must be submitted as ONE zipped folder. Follow the instructions contained in this packet to properly name each file that should be contained in the pre-application zipped folder. Documents uploaded to Drop Box and time stamped after 11:59:59 pm Eastern Time, May 31, 2019 will not be accepted and will result in an automatic rejection. Failure to receive approval on the preapplication documents will mean that you are NOT eligible to submit an application packet in December 2019.

AVTAA **mentors** are available to assist an applicant with putting together the complete application. Information on how to request a mentor will be provided in the pre-application approval email. **Mentors are only available to applicants who successfully complete the pre-application process.** Obtaining a mentor is entirely voluntary and NOT a requirement for submitting the complete application in December.

The **Complete Application documents** must be in the DROP BOX on or before **11:59:59 pm Eastern Time, December 31, 2019**. Complete applications uploaded to Drop Box and time stamped after **11:59:59 pm Eastern Time** on December 31 2019 will not be accepted and will result in an automatic rejection. There are NO exceptions for the December 31 deadline! **All application submissions in December are final.** Nothing may be added or exchanged to an application after it has been received.

All application documents, including the application PayPal receipt, MUST be submitted as ONE zipped folder. Aside from individual letters of recommendation submitted by the letter writer, **no single files** will be accepted in Drop Box. Use the checklist located at the end of this application packet to ensure you have included every required document before creating a zipped folder and submitting it to Drop Box. Please ensure all files contained in the zipped folder are the <u>final copy of each document</u> (e.g. no track changes in word documents, no file that contains incomplete case logs, etc.). **Incomplete applications will be automatically rejected and will not be processed or reviewed.**

All files submitted in December for the complete application will be opened and **quickly checked** for formatting issues at the time they are received in Drop Box. If it is noted that requirements set forth in the instruction packet for any document were not followed, the application will be

automatically rejected and not reviewed by the credentials committee. For example, if it is noted that a case report is single spaced then the entire application may be rejected without review by the credentials committee. <u>Please take all requirements seriously and strictly adhere to them for each individual document contained in the application.</u>

A confirmation email will be sent to the applicant once the complete application has been received in the Drop Box. Please allow 24-48hr to receive this email before contacting us. Confirmation emails may be delayed for applications submitted on December 31 2019.

In fairness to all applicants completing this process, time extensions for the pre-application and complete application deadlines are NOT allowed. Please plan ahead to ensure you have met all requirements well before the deadlines. It is recommended that you submit the pre-application documents as soon as possible if you plan to apply this year. If your pre-application was approved then a reasonable goal would be to submit the complete application no later than Dec 25. Again, NO extensions will be granted for either deadline.

Unless otherwise noted, you will receive notification of your eligibility to participate in the certification exam no later than March 30, 2020. You may take the examination a total of 3 times in 3 **consecutive** 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 emailed to the appeals chair noted in the rejection letter. All rejected applications are provided an **overview** of the application deficiencies. Please be advised that this is a brief overview and may not be reflective off ALL examples of deficiencies within the application.

If you have questions concerning the appeal process or the rejection overview please contact the credentials chair, Jessica Konzer-Birdwell, at <u>jkonzer@utk.edu</u> or the executive secretary, Darci Palmer, at <u>dpalmerrvt@hotmail.com</u>.

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.

All appeal letters MUST be written by the applicant.

A letter written on the applicant's behalf will NOT be included as documentation for the appeals process but AVTAA will address any concerns that are brought forth. To protect applicant confidentiality AVTAA will address concerns directly with the applicant rather than a third party.

NOTE: Applicants who submit an appeal will have an extension until June 15th 2020 to submit preapplication documents for the next 2021 application packet should the appeal not overturn the original decision of the credentials committee.

AVTAA Definition of Anesthesia

In collaboration with a veterinarian, a VTS (Anesthesia & Analgesia) practice according to their expertise, state statutes or regulations, and institutional policy. VTS (Anesthesia & Analgesia) technicians administer anesthesia and anesthesia-related care in four general categories:

- (1) Pre-anesthetic preparation and evaluation
- (2) Anesthesia induction, maintenance and emergence
- (3) Post-anesthesia care
- (4) Anesthetic equipment maintenance.

A VTS (Anesthesia & Analgesia) technician scope of practice includes, but is not limited to, the following:

- (a) Performing and documenting a pre-anesthetic assessment and evaluation of the patient, including in collaboration with a veterinarian, requesting consultations and diagnostic studies, administering preanesthetic medications and fluids.
- (b) In collaboration with a veterinarian developing and implementing an anesthetic drug plan.
- (c) In collaboration with a veterinarian selecting and initiating the planned anesthetic technique which may include: general, regional, local anesthesia and/or intravenous sedation.
- (d) In collaboration with a veterinarian selecting, obtaining, or administering the anesthetics, adjuvant drugs, accessory drugs, and fluids necessary to manage the anesthetic, to maintain the patient's physiologic homeostasis, and to correct abnormal responses to the anesthesia or procedure.
- (e) In collaboration with a veterinarian selecting, applying, or inserting appropriate non-invasive and invasive monitoring modalities for collecting and interpreting patient physiological data.
- (f) Managing a patient's airway and pulmonary status using endotracheal intubation, mechanical ventilation, pharmacological support, respiratory therapy, and extubation.
- (g) Managing emergence and recovery from anesthesia by administering medications, fluids, or ventilatory support in order to maintain homeostasis, to provide relief from pain and anesthesia side effects, or to prevent or manage complications.
- (h) Releasing or discharging patients from a post-anesthesia care area. In collaboration with veterinarian providing post-anesthesia follow-up evaluation and care related to anesthesia side effects or complications.
- (i) Assessing and managing an appropriate perioperative pain management protocol.
- (j) In collaboration with a veterinarian respond to emergency situations by providing airway management, administration of emergency fluids or drugs, or using basic or advanced cardiac life support techniques.
- (k) Inspect the anesthesia machine, endotracheal tubes and other anesthesia equipment before and after use assuring that the anesthetic machine and all other equipment is in proper working order.

American Society of Anesthesiologists (ASA) Physical Status Scale

Class I

Minimal Risk Normal healthy animal, no underlying disease Working Definition: "Young, healthy patient for elective procedure"

Class II

Slight risk, minor disease present

Animal with slight to mild systemic disturbance, animal able to compensate

Neonate or geriatric animals, obesity

Working Definition: "Healthy patient that needs a procedure"

Class III

Moderate risk, obvious disease present

Animal with moderate systemic disease or disturbances

Anemia, moderate dehydration, fever, low-grade heart murmur or cardiac disease, emaciation

Working Definition: "Systemic disease complicates anesthesia"

Class IV

High risk, significantly compromised by disease

Animals with preexisting systemic disease or disturbances of a severe nature

Severe dehydration, shock, uremia, or toxemia, high fever, uncompensated heart disease, uncompensated diabetes, pulmonary disease

Working Definition: "Systemic disease jeopardizes anesthesia"

Class V

Extreme risk, moribund

Surgery often performed in desperation on animal with life threatening systemic disease

Advance cases of heart, kidney, liver or endocrine disease, profound shock, major head injury, severe

trauma, pulmonary embolus, terminal malignancy

Working Definition: "Patient will likely die with or without the procedure"

"E" denotes emergency and can be added to any of the above classes that require immediate intervention or surgery.

AVTAA Application Submission Checklist

Email any questions to jkonzer@utk.edu or dpalmerrvt@hotmail.com

Pre-Application (Approval needed to become an official AVTAA applicant)

- Submit pre-application documents to Drop Box located on AVTAA website as a compressed zipped folder saved as **yourfirstname.lastname.applicant2020.zip**
- Pay \$25.00 pre-application fee using PayPal link on AVTAA website

Submit Pre-Application Documents before 11:59:59pm Eastern Time, May 31 2019	
Professional History and Experience	yourfirstname.lastname.history. (pdf or doc(x))
Current, in-date license (scanned copy)	yourfirstname.lastname.license. (jpg or pdf)
Letter of Good Standing (obtained from Veterinary Medical Board)	yourfirstname.lastname.standing. (doc(x) or pdf)
Diploma, if applicable (scanned copy)	yourfirstname.lastname.diploma. (jpg or pdf)
NAVTA Membership documentation	yourfirstname.lastname.NAVTA. (jpg or pdf)
Legal Document for name change, if applicable (scanned copy)	yourfirstname.lastname.legal. (jpg or pdf)
PayPal Receipt for Pre-Application Fee	yourfirstname.lastname.receipt. (doc(x) or pdf)

Complete Application (Approval of pre-application required to be eligible to submit complete application)

- Submit complete application documents to Drop Box located on AVTAA website as a compressed zipped folder saved as **yourfirstname.lastname.AVTAA2020.zip**
- Pay \$25.00 application fee using PayPal link on AVTAA website

Submit the Complete Application no later than 11:59:59 pm Eastern Time, December 31, 2019 All submissions are FINAL!

Statement of Purpose	yourfirstname.lastname.purpose.(doc(x) or pdf)
Current license (ONLY if expires before December 2019)	yourfirstname.lastname.license2. (jpg or pdf)
Application Waiver, Release and Indemnity Agreement	yourfirstname.lastname.waiver.pdf
Case Logs: minimum of 50 / maximum 60 cases	yourfirstname.lastname.caselog.pdf
Combined skills list (all pages for selected group of animals)	yourfirstname.lastname.skills.pdf
Two letters of reference (if not sent by letter writer)	yourfirstname.lastname.letter1-2. (doc(x), pdf)
Four Case reports (submitted separately)	yourfirstname.lastname.casereport1-4. (doc(x))
Anesthesia records (<i>if not saved with case reports</i>) you	urfirstname.lastname.anesrecord1-4. (pdf, doc(x))
CE forms AND proof yourfirstname.lastnam	e.CE1.pdf; yourfirstname.lastname.CE2.pdf; etc.
PayPal Receipt for Application Fee	yourfirstname.lastname.receipt2 (doc(x), pdf)