Veterinary Technologist and Technician Career Path Exploration

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Introduction

The purpose of this article is to give detailed and precise information to those who are potentially interested in pursuing a career as a veterinary technologist or technician. This article will assist in developing a deeper understanding of the intricacies of a career as a veterinary technologist and technician. Topics explored in this article include: responsibilities of a veterinary technologists and technician, how to become one, the pay and benefits and the job outlook.

Responsibilities of Veterinary Technologists and Technicians

The main responsibility of veterinary technologists and technicians is to care for animals through observing their behaviors and conditions. They also work to provide care or aide to recovering and injured animals. This care and aide includes bathing the animals, maintaining the animal's hair or clipping their nails. Veterinary technologists and technicians can also assist the veterinarian. This assistance involves conducting a variety of procedures and research (Department of Labor, 2015).

Both technologists and technicians assist the veterinarian with a variety of tasks. These tasks consist of restraining animals during examination or other procedures, as well as administering anesthesia and monitoring the animals' responses. They also assist the veterinarian when he or she is not looking after an animal. This assistance consists of conducting laboratory work on samples, such as blood, taking and developing x-rays, preparing animals and instruments for surgery, and collecting and recording an animals' health history. Not only can veterinary technologists and technicians assist a veterinarian, but they can also assist scientists. When working with scientists, technologists and technicians make sure that the animals are handled with care and are treated humanely. They also help the scientist conduct research for biomedical, disaster preparedness and food safety purposes (Department of Labor, 2015).

The tasks for veterinary technologists and technicians rely heavily on advancements in technology. Without technology, many of the practices used for the care of animals and for conducting research could be considered inhumane. Some tools and technology associated with a veterinary related career path can be medical software for various species of animal, emergency medical devices, equipment to catch animals without harming them and equipment to improve the care and well-being of animals (Veterinary Technologists and Technicians, 2015).

Veterinary Technologists
Veterinary technologists are responsible for more advanced research conducted with animals. They mainly work with veterinarians and/or scientists in a laboratory setting. They administer medication, prepare samples for examination, and record information about an animals' signs of pain, weight, diet and genealogy.

Veterinary Technicians
Veterinary technicians are responsible in assisting a veterinarian either through laboratory duties or through the examination of an animal (U.S. Department of Labor, 2015). This may include helping animals who are in the hospital and assisting veterinarians with surgeries or tests performed on animals (Sanders, 2010). Technicians also get a chance to communicate with pet owners. They explain pet diagnoses and how to properly administer medication prescribed by the veterinarian (Department of Labor, 2015).

How to Become a Veterinary Technologist and Technician
Completing high school with some courses in biology and mathematics and postsecondary education is necessary for both occupations. Apprenticeships and/or internships are highly recommended to gain experience while pursuing an education. Being a technologist or technician is dependent on how long one wishes to attend postsecondary school. Veterinary technicians must complete two years of postsecondary education for an associate's degree in veterinary technology. Veterinary technologists must obtain a bachelor's degree in veterinary technology (Department of Labor, 2015). While in postsecondary school, technologists and technicians may have the opportunity to focus their studies and become specialized in one or more of these areas: avian medicine, biomedical research, clinical pathology, clinic supervision, dentistry, emergency medicine, exotics, large animals, small animals and surgery (Veterinary Technician Job Description and Duties, 2016). Both technologists and technicians also must complete and pass a credential exam called the Veterinary Technician National Examination proctored by the American Association of Veterinary State Boards. Certification is not mandatory but can be beneficial to finding employment. Not only does someone need to possess the drive to complete an education and pass an exam for this career path, but candidates must possess certain skills to be successful. These skills include: compassion for both humans and animals, communication, problem-solving, manual dexterity and focus on details (Department of Labor, 2015). Communication and problem-solving skills are especially essential for veterinary technicians because they work more directly with animals and need to have an understanding of what the animal needs and what the owner needs if applicable (Sanders, 2010).

One organization, the American Association for Laboratory Animal Science (AALAS), offers certification for technologists and technicians who would like to work in research. These certifications are called Laboratory Animal Technician and Laboratory Animal Technologist (Department of Labor, 2015). This organization also offers a certification called Assistant Laboratory Animal Technician. The AALAS also offers educational and

membership opportunities that allow one to be well informed about the technological and academic advancements in laboratory animal science (AALAS, 2014).

The work environment should be considered when pursuing a career as a veterinary technician or technologists because there are some dangers to be aware of in this career field. This career can be demanding both physically and emotionally. The physical demands can include standing for long periods of time, cleaning animal cages and holding animals. The emotional demands can include witnessing the abuse of animals and assisting in the euthanasia of animals. Following euthanasia, additional physical and emotional demands include lifting the animal's body, breaking its bones, and saving ashes and bones for the owners of the animal (Sanders, 2010). Injury and/or illness incidents occur at a higher rate than the national average of all careers for veterinary technologist and technician. Injuries can occur when working with aggressive or frightened animals. The work schedule for technicians and technologists varies. Most laboratories and veterinary clinics operate 24 hours a day, making scheduling for work dependent on the availability of the staff. Working weekends and holidays is required (Department of Labor, 2015).

Pay and Benefits for Veterinary Technologists and Technicians

Salary and wage information has been available since May 2014 through the U.S Department of Labor (2015). The median annual salary for all employees in 2014 was $35,540. Meanwhile the observed median annual salary for veterinary technologists and technicians in 2014 was $31,070. The range of salary for employees in this particular occupation from the lowest ten percent to the highest ten percent was $21,390 to $45,710 (Department of Labor, 2015). According to a report provided by U.S.News.com (2016) the average annual salary in 2014 was $32,350. It should be noted that a veterinary technologists and technicians that work in full-time research positions earn a higher salary (Department of Labor, 2015). This career path's benefits include personal and sick days, paid vacations, and health insurance, and clinics tend to pay for uniforms and offer discounts for their employees. Additionally, veterinary technologists and technicians can often continue their veterinary education, and the clinics will fund it ("Veterinary Technician Job", n.d.).

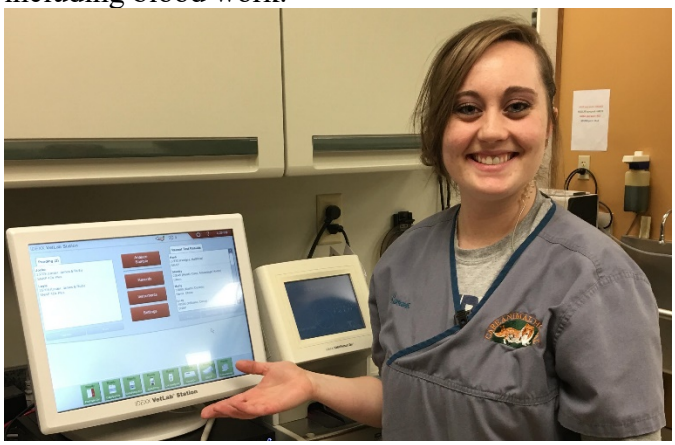
Job Outlook for Veterinary Technologists and Technicians

Veterinary technologists and technicians have a projected rate of 19% employment growth from 2014 to 2024. This is much faster than the average rate of all occupations in the U.S. economy. In 2014, the Department of Labor reported that there are a total of 95,600 veterinary technologists and technicians. It is projected that a 19% growth rate will increase the number of available positions to 113,600. This is a total of 17,900 new positions from 2014 to 2024. The overall outlook for finding employment is very good, especially in rural areas that are in need of veterinarians and technologists and technicians. It is important to keep in mind that with the large growth of demand for veterinary technologists and technicians, a number of postsecondary schools are

supporting such programs and graduation rates are increasing, resulting in a competitive job market (Department of Labor, 2015).

Interview with Sarah Snider at the Care Animal Hospital in Muncie, Indiana
Sarah Snider is a veterinary technician with the Care Animal Hospital in Muncie, Indiana. (See Figure 1.). Sarah Snider was interviewed by Dr. Edward J. Lazaros, Angela Gervais, and Mary Pat Stemnock on April 5, 2016. To read more about the Care Animal Hospital, visit http://care-animal.com/about-us/. The following section details the questions that Sarah was asked about her career, along with read her responses:

Figure 1. Sarah Snider displaying the computer used to view diagnostic test results including blood work.



What is your daily routine as a veterinary technician?
"The first thing we do when we arrive in the morning is come in and set up for the day. We begin by logging in to the computers, checking patients, and then moving into our treatment area. We do vital signs on the patients that stayed overnight and give them medications. Our main goal at the beginning of the day is to make sure everybody who stayed the night is doing well. Then, we set up for appointments and get the day prepared, which includes things like pulling up any vaccines or drugs that we may need. Every day is about getting into a routine.

In order to know what each day will be like, we have a computerized schedule. It's a breakdown of who's coming in for each hour of the day. We see appointments from 8 until 6:30, which adds up to around 20-30 per day. We have two doctors that often run out of time because we're so busy. Sometimes we have three patients here at a time. We also have a whiteboard that lists treatments for the day and night to keep us organized" (S. Snider, personal communication, April 5, 2016).

What is the best part of being a veterinary technician?
"Obviously, it's fun to see animals come in each day, but you also get a reward from helping them. It's rewarding when you have a sick patient come in, and two days later

they're walking out to see their owners. The look on their owners face makes it worth it. They're their children.

When I was a child, I enjoyed watching television like Animal Planet and was upset by ASPCA commercials—I've always been an animal lover. The animals don't have a voice and you have to speak for them. There's an animal that's hurting and you have to figure out how to fix it. That's what I'm here for" (S. Snider, personal communication, April 5, 2016).

How do you diagnose an animal?
"Asking questions is important to give a proper diagnosis. We start by asking the owner what they think is wrong. First we check on eating and drinking, because there's a clear problem if the animal is not eating or drinking. Then we start to break it down—is it their arm? Do they put pressure on it? Where does it hurt? More answers can also from diagnostics. We take x-rays, do blood work, and find out concrete answers if need be" (S. Snider, personal communication, April 5, 2016).

What kinds of fun technology do veterinary technicians get to use?
*"The digital x-ray machine allows us to get a better idea of what is wrong with a patient (*See Figures 2 and 3*). The machine breaks down the scanning area by column so only the affected area gets the radiation. You can increase or decrease the amount of radiation. Once the image is taken, it immediately appears on another computer"* (S. Snider, personal communication, April 5, 2016).

Figure 2. Sarah Snider demonstrating how to select an area by column on the digital x-ray.

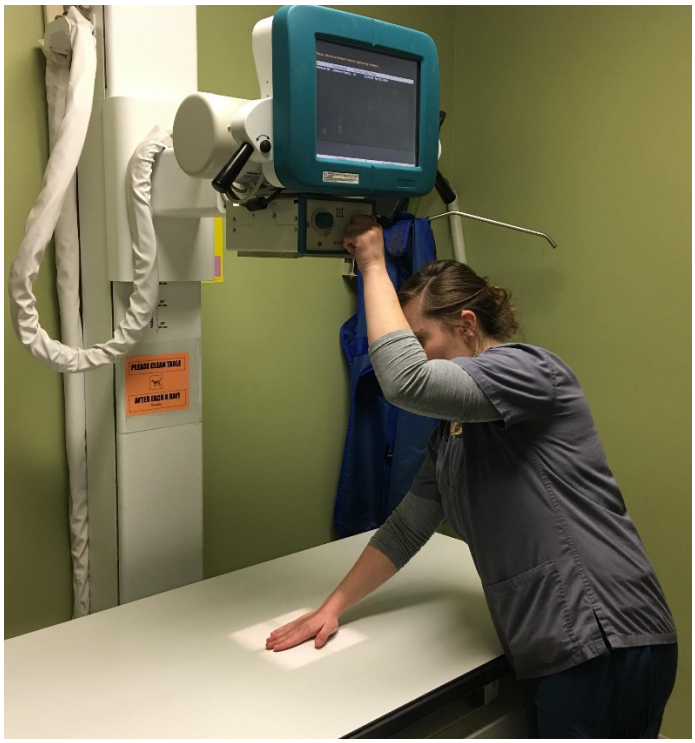


Figure 3. Sarah Snider showing images that can be displayed on the digital x-ray screen.

"The dental x-ray machine is used to look at a patients mouth, including their gums and teeth (See Figures 4, 5, and 6). *A black piece is inserted into the patient's mouth to take the image. Then, the image appears on the television screen. You can use the images to*

decipher what is wrong with each section of the mouth" (S. Snider, personal communication, April 5, 2016).

Figure 4. Sarah Snider adjusting the dental x-ray machine.

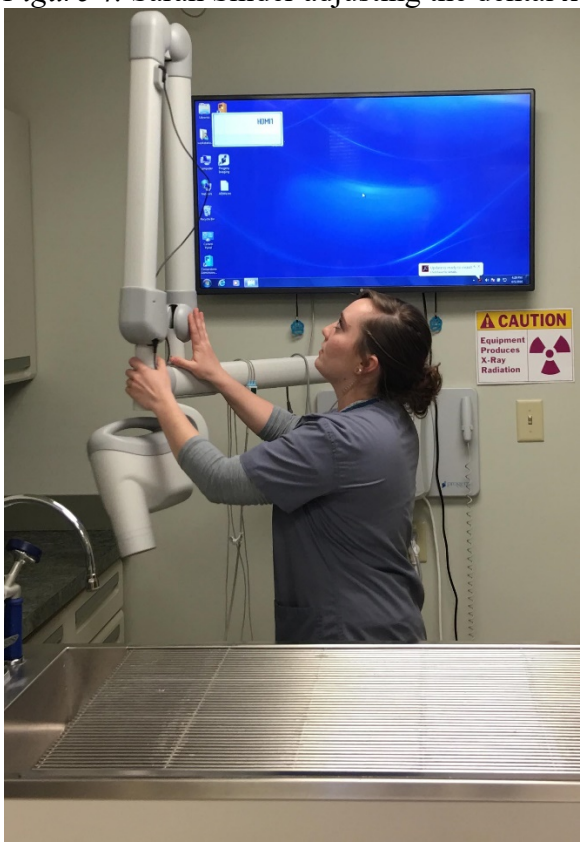
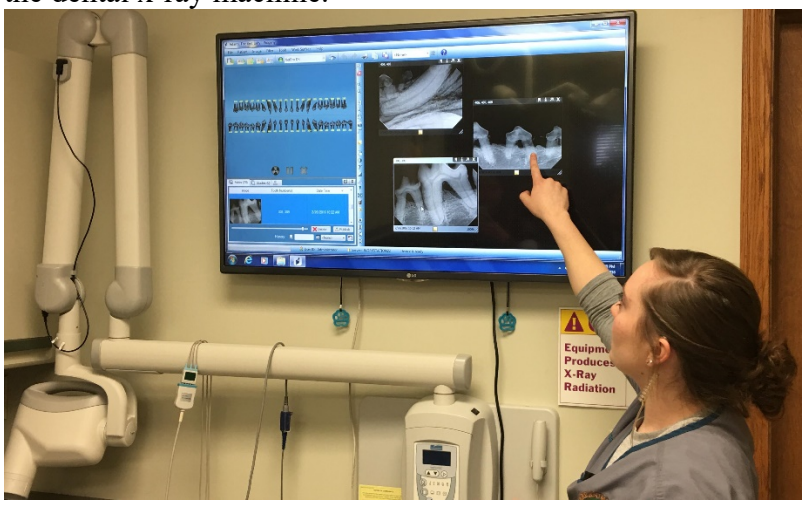


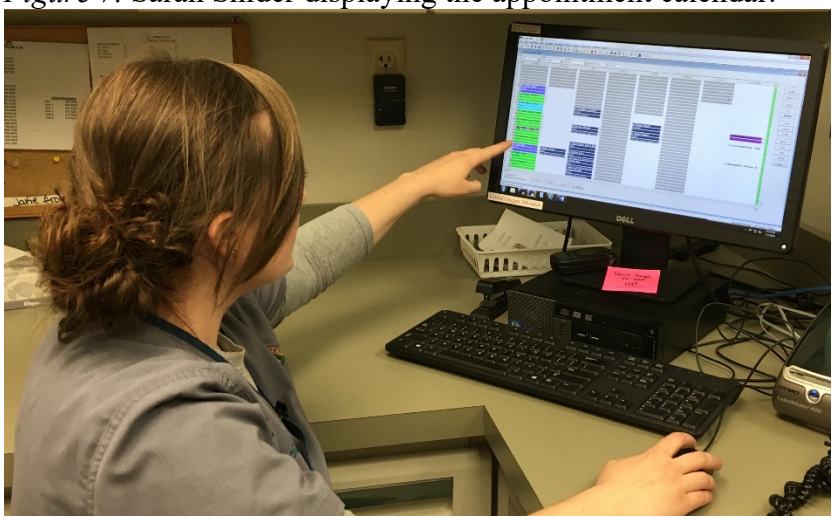
Figure 5. Sarah Snider showing images taken by the dental x-ray machine.

Figure 6. Sarah Snider examining and addressing the medical issues in an image taken by the dental x-ray machine.



"This the computer we use for our calendar and patient charts (See Figure 7). *The calendar is color coded and marked for each type of appointment. Our charts are also stored here. The charts contain all of the information about a patient and should be accessible to all employees"* (S. Snider, personal communication, April 5, 2016).

Figure 7. Sarah Snider displaying the appointment calendar.



"The laser therapy machine is used to treat animals dealing with pain (See Figures 8 and 9). *It can be rolled over a muscle or other area such as an ear for relief. The laser therapy machine is essentially a massage for our patients. It does wonders"* (S. Snider, personal communication, April 5, 2016).

Figure 8. Sarah Snider demonstrating how to use the laser therapy machine.

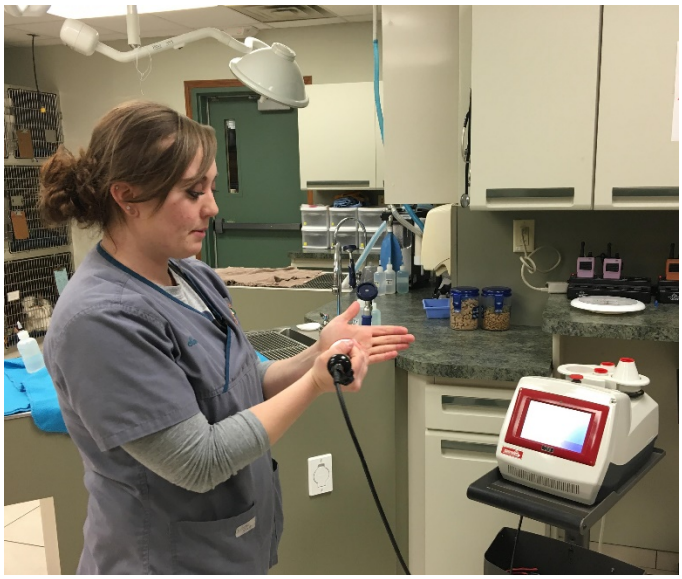


Figure 9. The laser therapy machine screen and applicator.

"We have a few types of x-rays. We have digital x-rays and dental x-rays. X-rays are useful because you can see what you can't when you're just looking at the animal. For example, the dental x-rays allow us to see below the gum line to see if a tooth needs to get pulled. With x-rays, we can catch things earlier.

Another type of technology we have is a laser therapy machine. It is used to reduce pain faster. If an arthritic dog comes in and it's limping, we can take the laser therapy machine and go over the affected area with heat. The next thing you know, they're walking. We also do a lot of things for ears with the laser therapy. The cats and dogs

enjoy it. It's therapeutic and its helps faster. It's also not medication, which some owners cannot give. It's much less invasive than surgery as well.

We also chart our patients on the computer. Each animal that walks in for an appointment gets a chart. The process we use to fill out the chart is called SOAP: subject, objective, assessment, and plan.

The subject category includes the history you get for each animal. This tells you more about them and their medical records. After reviewing the subject, you move on to the objective category. This includes looking and seeing what's going on with the patient. The objective category includes taking note of the patient's mouth, teeth, body weight, and other observable aspects. The assessment comes from observation including notes, vital signs, and diagnostics, or other data. Once all of this has been completed, you create a plan of treatment for the patient" (S. Snider, personal communication, April 5, 2016).

What will be the most challenging thing a recent graduate will encounter when trying to break into this industry?
"The hardest thing to do is to build a relationship with the clients. You have to talk to people about what's going on with your pet, which can be difficult. You have to figure out how to talk to them and build that relationship and that trust.

Being able to communicate is something that school doesn't prepare you for. Experience, like talking on the phone and what questions to ask, comes with practice. They teach you in class that clients can ask questions that might not make sense. When this happens, you have to be able to answer that question quickly and confidently to show that you know what you're talking about.
The relationships are also the most rewarding thing, though. I get to see older people and talk to them and have a conversation, which is really nice. Talking about their animals and how cute they are is fun.

Experience is what teaches you. I've been in the field for a year, and I'm still getting used to answering questions. It's hard to learn to know what to do in certain situations. You don't get to face an emergency in school. We take walk-ins, so you'll have situations where dogs get hit by cars and you have to know what to do to make the animal comfortable right now. You have to be able to talk to the client, comfort them, and give them a game plan" (S. Snider, personal communication, April 5, 2016).

Conclusion
Veterinary technologists and technicians help man's best friend and other pets recover from medical issues and conduct research to solve medical issues for animals. Becoming a veterinary technologist or technician could be the right choice for those who have a passion for animals and are willing to invest in postsecondary education. It is also important to find opportunities to participate in internships or apprenticeships to gain

experience in the field. The job growth rate in this field is high, meaning the job market will be competitive. Having something unique on one's resume, such as some type of specialization, can make one a good candidate for a position. It is important to consider all aspects of this career path before committing to it.

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