The Pre-Veterinary Experience:

What You Need to Know

Honors Thesis

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Description of a Veterinarian

A veterinarian pursues a challenging and diverse career of medicine while filling the role of an important connection between the animal and human worlds. Society is changing and the role of animals is shifting from primarily work to companion. According to the Bureau of Labor Statistics, the employment for veterinarians is expected to increase by 33 percent over the 2008-2018 decade. Many different careers of veterinary medicine can be chosen including careers that support food and animal safety and those that involve researching and controlling national diseases. Veterinarians who are directly related to human medicine enforce food safety laws, perform inspections, research diseases and antibiotics, and initiate new methods to prevent disease transfer (Bureau 2008). One can also enroll in the army and practice medicine on the working dogs or research animals. Specialties including pathology, emergency, surgery, optometry, oncology, and dermatology are also options for graduating veterinarians.

Small, large, and mixed animal private practices are the most common careers with 80% veterinarians working in that sector (Bureau 2008). Small animal practice involves working with companion animals while large animal practice involves working with large animals including horses, cows, and sheep. Mixed animal practice is a combination of small and large. These veterinarians administer vaccinations, run diagnostics, medicate, perform surgeries, dress wounds, and practice preventative work. Most veterinarians work with a variety of species, and while it provides challenging and fascinating cases, the work day is exhausting both physically and psychologically. As many pre-veterinary students discover, not all people are prepared to take on this work load.

Veterinary school is extremely competitive within the United States since there are only 28 veterinary schools. According to the American Veterinary Medical Association (AVMA) on average, only 40% of the over 6,250 applicants received acceptance into a US veterinary school in 2009.
Consideration and preparation of the applicants are essential to becoming a competitive candidate. Also key is to begin the decision-making process as soon as possible. Some start their journey as early as high school and utilize suggested coursework and extracurricular activities as well as some unique opportunities to gain a competitive edge. Unfortunately, incoming pre-veterinary students believe that the only thing they need to become a great veterinarian is a devote love of animals. Even though this characteristic is essential, many other factors, both academic and non-academic play into a well-rounded and prepared applicant.

**How I Became Interested**

My outgoing and fearless personality has facilitated my pursuit of the field of veterinary medicine, and my tenacity has kept me progressing on this path. Starting in seventh grade, I decided the best career choice for me would be veterinary medicine, combining my fascination of science and medicine with my love of animals. As soon as I was old enough to drive, I began calling local clinics, persevering until I finally found a 24-hour emergency and specialty clinic who accepted volunteers. This establishment was particularly interesting because it was the only facility within a 300 mile radius that was open 24/7/365 to care for suffering small animals and exotics. I made the 25-minute one-way commute as often as I could, finding time around high school involvements such as sport practices and games and homework because it was an escape for me. I fell in love with almost every aspect of the profession: assist feeding week-day old puppies, watching tibial plateau leveling osteotomy surgeries, placing catheters, running bloodwork and trying to decipher what is wrong, and even the cleaning and laundry! During slow periods, I would research common terms such as brachycardiadic, DV, VD, and jaundice as well as diseases such as pulmonary edema, leptospirosis, hemorrhagic gastroenteritis, and gastration dilation and volvulus, so I could clearly update the oncoming staff and veterinarians on new
cases and treatments. Even though I was younger than everyone at the clinic, I refused to let my initial intimidation of the fast-paced atmosphere and older staff hold me back.

The pre-veterinary track in undergraduate school is full of planning, early decisions, rigorous course schedules, and prerequisites! I took initiative early in my college career to learn about the field on my own. I would check out every book in the library that had anything to do with veterinary medicine or animal health, search online resources, and go to school late to watch and pick my local veterinarian’s brain when he made a farm call to my house. My parents, teachers, high school guidance counselor, and college advisors helped me in any way they could, but I had to ask many questions of current veterinary students and veterinarians about the actual atmosphere that I would be experiencing. I wanted to know how the heavy the workload was, how hard it was to find a job, how much hands-on experience they experienced in veterinary school, and if they were happy and thought their schooling had been worth it. I soon realized I needed more than just a love for animals to successfully become a veterinarian. I had to have tenacity to stay with my decision, good time-management and organizational skills, stress-relieving tactics, self-motivation, and good communication and leadership abilities.

I learned the essential academic information from my guidance counselor such as each pre-veterinary student typically has a science-based major and is required to take classes from a wide array of fields. I discovered in college that all of the veterinary schools have their own list of prerequisites which is mostly includes a base scientific core except some schools require additional classes such as public speaking or animal nutrition and sometimes give general advice such as veterinary experiences one should consider and what the admissions process is like, but they do not provide a combined list of suggestions, activities, timelines, and interview tips. My project will provide a basic website with a
host of information, activities, and resources, essentially “anything a pre-veterinary student needs to know.”

Steps to generating a website

I knew what questions I had about the pre-veterinary profession when I first started. I wanted to know what classes everyone took, what experiences I needed, how I could get the experiences in Oxford, what a personal statement was, and what test I had to take to get into veterinary school. I wanted expand the basic questions I set out to answer with this website and asked for the opinions of current Pre-Veterinary Club members. I composed a short survey using SurveyMonkey.com in the spring of 2009 with the following questions:

1. What year are you?

2. What is your major?

3. How long have you wanted to be a veterinarian?

4. What kind of veterinarian would you like to be?

5. What topics would you like to know more about, or what questions do you have about the pre-veterinary journey (i.e. featured programs for vet school universities, different volunteer opportunities, the application process, etc.)?

6. What sort of veterinary experiences have you had and what was your favorite?

7. What was the best advice you have received over the years?

Using the very helpful feedback I received from the survey, I realized that the information I needed to include in the website were a timeline/checklist during the pre-veterinary years, an
explanation of the application/interview process, featured programs of the veterinary schools, current events in the United States, and volunteer opportunities available around Oxford. To begin, I developed a timeline of my undergraduate career and some of the information I learned along the way. I also drew information from my own experiences and discussions with my guidance counselor in high school, academic counselors at Miami and the pre-veterinary advisors Dr. Hoffman and Dr. Sherman, admissions staff of the Ohio State, Purdue, Colorado, and Mississippi veterinary schools, and a host of veterinarians that I had worked with over the past 8 years to develop the webpages.

I was the secretary of the Pre-Vet club during my junior and senior years, and at that time, I generated a Pre-Vet alumni database to encourage communication with the 30 alumni I was able to contact. All of the alumni who responded were very enthusiastic about the website and noted that they would have loved to have alumni as a resource when they were going through the interview process. I entered the responses from alumni in a Microsoft Access file and included it in my webpage, so anyone could have access to Miami Pre-Veterinary alumni if he/she has specific questions about vet school.

I began to format the website in January 2010. I started using Webstarts.com, but ran into some issues when I was prompted to upgrade to access certain applications such as more than 5 main webpages. I sought the help of Kristy Burton in the Honors Program who suggested that I work with Google.sites instead which proved much more helpful. I was able to make main pages within the site as well as subpages under certain topics such as “Extracurricular Activities.” The program allowed me to do minimal formatting and to insert hyperlinks and pictures.

I planned to present my website to the Pre-Vet Club at our final meeting in April when we usually talked about different strategies for getting into veterinary school and what the graduating
seniors will do after graduation. My website will complement these ideas very well because in it I already talk about the prerequisites to take at Miami, veterinary experience requirements and opportunities around Oxford, a pre-veterinary timeline, and the application and interview processes. I hope the information in the website will supplement that discussion and give the younger club members a tangible resource to utilize during their undergraduate career.

What I learned

Throughout this whole process, I had the opportunity to talk with several outstanding veterinarians about the different paths they took to gain admission into veterinary school. Some of the stories of creative measures that were taken at 2am when a cow was having trouble birthing or the challenges and rewards of starting your own veterinary business were amazing and filled me with hope that my career would turn out equally as successful. The words of wisdom and advice I received over the past eight years have helped me realize what a supportive and caring community the veterinary professionals provide. For example, one veterinarian that I worked with in North Carolina told me that I needed to work for the owner just as much as for their animal. He taught me the importance of establishing long-lasting relationships and being willing to work with those who cannot always compensate in monetary values because people can pay you in other ways. He gave examples about how he received free freezers from one client, a discounted car deal from another, and much needed support and baked goods during personal catastrophes. Another veterinarian told me to “work like you owned the business.” Even if starting my own practice is not in my future, I learned that acting like it is and working for progress and acceptance among clients will make my career much more pleasant and rewarding. I am very excited to form personal relationships with clients, staff, and other veterinarians as I learn and grow in the veterinary field.
I have also realized the power of a small town. When I decided I wanted to pursue a veterinary career in middle school and began to tell my friends and family, the community went out of its way to help me. Multiple people informed me that their brother, sister, uncle, or father was a veterinarian and would gladly let me stay with the family and shadow him/her for however long I wanted. My family saved newspaper clippings about current events or opportunities within the veterinary field to keep me well-informed. I had a very supportive network to help me pursue my dreams, and I did not realize how rare this was until I talked to other veterinary applicants. As mentioned previously, many pre-veterinary students were never advised on what requirements or personality qualities they needed to possess in order to achieve success within the field. I wanted to give these students a central location to find all this information, and I hope many people will take advantage of it.

I will advertise the website through the Pre-Vet Club and add a link to it from the main Blackboard site. I will give the site password to next year’s technology officer and instruct him/her about the need to update the website periodically with new current events, statistics and requirements, and opportunities. I also will bring it back to my hometown and give the address to my high school guidance counselor, so she can be better prepared to help high school students start early on their pre-veterinary path.

I learned where I could make free websites on the internet and how to use them. I found that Google.sites was difficult to manipulate unless I formatted the text in a Microsoft Word document first. I began to use this strategy on my last few pages and had great success. The software program did not allow me to be very creative with flashy text or animations, but it did provide the basic functions of creating text and simple formatting that I needed to compose the website.
My plan for the Pre-Veterinary Alumni Database is that next year’s Pre-Vet Club executive officers will set up a buddy system or simply remind the younger members that everyone in the Alumni Database has expressed interest in helping the younger students and answering whatever questions they have.

My final senior thesis is a tangible, functional object that I can take away with me long after graduation. It successfully combines my love of veterinary medicine with my organizational, leadership, and communication skills. My own preveterinary journey has been a struggle, marked with laughter and tears and forming me into a stronger person, but it has all paid off. I am currently enrolled in veterinary school; I have made it. I hope to pass on the wisdom and knowledge I gained to the younger generation and provide those who do not have a strong support system such as me with a central resource to take initiative themselves by learning what they need to do to be competitive then contacting local veterinarians to shadow or their academic advisor to ensure they are taking the correct courses. My confidence and communication skills have positively developed during my preveterinary career, and I hope I have been able to help future pre-veterinary students as much as others (i.e. veterinarians, veterinary students, advisors, parents, etc) have helped me.
Website address

http://sites.google.com/site/prevet101/
Interested in a medical career?

Love animals and teaching people about their pets?

If you are thinking about a career in veterinary medicine, it is very important for you to know what is involved in your journey. Acceptance into veterinary colleges is very competitive, so the purpose of this website is to provide you with almost all of the information you will need to know.

Do you know all the different types of veterinarians?

- Small animal veterinarians
- Mixed animal primary veterinarians
- Large animal primary veterinarians
- Governmental
- Corporate veterinarian (poultry, swine, beef, dairy)
- Army
- Wildlife
Other Requirements

VMCAS

The VMCAS is the Veterinary Medical College Application Service. It is an online application that becomes available in the very beginning of July and is due October 1st of the same year. This application calls for personal information, past employments, veterinary experiences, animal experiences, awards, and other information. The best advice is to start this application EARLY and submit it at least 2 weeks before the deadline. More often than not, everyone waits until the last minute to submit, and some applications have trouble processing. If you do not submit your entire application (application, letters of recommendation, personal statement, fee, etc.), it will not be processed and you will not be able to apply to veterinary school that year.

Personal Statement

The personal statement is a requirement of the VMCAS, and it is an opportunity for you to show your unique personality and your love of veterinary medicine. The prompt for 2009 was:

"Discuss briefly the development of your interest in veterinary medicine. Discuss those activities and unique experiences that have contributed to your preparation for a professional program. Discuss your understanding of the veterinary medical profession, and discuss your career goals and objectives.

Try to make your personal statement one that the readers will remember by telling a story or elaborating on a unique"
Extracurricular Activities

Almost every veterinary school requires hours with a registered veterinarian whether this means shadowing, volunteering, or working with one. So take initiative and inquire at your local veterinary clinics for volunteer opportunities.

- Once you have the opportunity, be sure to keep a JOURNAL and RECORD your hours. You will be asked about your experiences and the number of hours you volunteered later, so make sure you take good records. Your journal entries should include the date, the symptoms of the patient, its diagnosis, treatment, and take-home medication and instructions.

- If you have the opportunity, explore a variety of veterinary experiences. Veterinary schools look highly upon applicants who have explored multiple aspects of the field besides just your local small animal clinic.

Get INVOLVED! Veterinary schools are interested in much more than just your veterinary experiences. They want to see that you have evidence of a strong work ethic, leadership potential, and strong interpersonal characteristics. At Miami, the MEGA Fair occurs twice a year, in the Fall and Spring, and it is an opportunity for you to explore the majority of student organizations offered. Sign up to get email updates for clubs you never saw yourself being a part of like the Miami Drop Ins (skid/logging club) or the Miami Anthropology Club.

*You can say any fool thing to a dog, and the dog will give you this look that says, ‘My God, you’re*
Leadership

Veterinary colleges are looking for candidates that have good communication skills and the ability to lead others. It is a great idea to take on leadership roles within one of your organizations, in work, or for a service. Miami University also offers other opportunities to learn about leadership such as LeaderShape and the Scholar Leader Program. Refer to the university’s website for more information.

Teamwork

Working with others is very important within veterinary medicine. Many claim they want to be a veterinarian to avoid contact with people; however, veterinarians interact with many people on a daily basis such as owners, veterinary assistants, other veterinarians, and administrative staff. One of the prerequisites for many veterinary schools is 'Public Speaking' to directly address the importance of communication and working with team members.

Lead by Teaching

Teaching is a great way to improve your communication skills and confidence. There are many opportunities around Oxford to practice your teaching skills. You can join Adopt a School where you tutor elementary, middle, or high school students once or twice a week. You can also contact the Rainelle Tutoring Center to apply for a job to tutor in your chosen subject(s). Teaching others will help you understand the subject matter better and gain the skills of teaching others about their pet’s health.

Research

Research is a great way to get involved in your university. You can:
- get to know faculty members
- actively learn – put classroom learning to practical use
- get an in-depth feel for the intellectual processes behind a discipline
- improve problem solving and communication skills understand the importance of life-long learning

First you can contact the professor and ask him/her if there are any positions available for undergraduates in the lab and request to set up an appointment to talk. Then be sure to interview several professors to get a feel for the different atmospheres of the labs.

Consider research opportunities in other areas of research such as the Microbiology, Botany, and Chemistry/Biochemistry departments. Read description of experiments in the Zoology department at http://zoology.muohio.edu/zooresearch/ or in the Chemistry/Biochemistry department at http://chemistry.muohio.edu/index.php/programs/undergraduate-program/71-research-opportunities

Contact the Directory of Laboratory Animal Research at Miami University, Linda Zeehler at mailto:zeehlerl@muohio.edu to inquire about lab animal volunteer positions.

Learn more about Undergraduate Research at Miami University’s website at http://www.units.muohio.edu/orap-undergrad-research/
References


Appendix

Maintenance

The future Pre-Vet Club’s webmaster will need to update the website periodically to keep it up to date. He/she will need to update the following items at the beginning of each school year:

- Current Events page
- The Pre-Vet Veterinary Colleges Packet
  - Update entering class statistics annually
- The “Ask the Experts” candidates’ email addresses and information
- Any changes in the Miami curriculum from the “Coursework” page
- Additional opportunities around Oxford

Expansion

The new webmaster will also have the opportunity to expand this website to incorporate more information. Some ideas are:

- More stories
- Example excepts from pre-veterinary students’ journals
- More specific information about the VMCAS application (the exact information needed, common mistakes, advice, etc.)
- Sample personal statements