

# Guide to Obtaining Veterinary Experience

This document is based on one developed by Washington State University as advice to pre-veterinary students about what sort of veterinary experience they should obtain before applying to veterinary school. Generally, all applicants to veterinary school should have more than 1,000 hours experience working with animals in a veterinary environment.

Veterinarians participate in a number of key aspects of our day-to-day lives, including but not limited to advancing knowledge through biomedical research, providing services for industry, investigating and diagnosing diseases in diagnostic laboratories, managing wildlife, engaging in regulatory oversight via state and federal agencies, promoting public health through ensuring the safety of food, delivering medical care to animals, providing health care for animals affiliated with the armed forces, and promoting the human-animal bond. They are members of a time-honored and noble profession that is held in high regard by the public. Personal and job satisfaction tend to be high among veterinarians.

The pursuit a Doctor of Veterinary Medicine (DVM) degree is not a trivial matter. It requires substantial personal investment. As you can imagine, it would be a tragedy for a student to invest a lot of time, physical and emotional energy, and financial resources toward an occupation he or she did not enjoy. Veterinary colleges want to be sure that prospective students have a clear picture of the career they are envisioning. Admissions committees look for evidence that candidates had a good exposure to the discipline before they apply to veterinary colleges.

This experience can be acquired in four main ways: through spending time in a private veterinary practice, by working with public health veterinarians, by working with a veterinary researcher, and by familiarity with handling animals in various settings.

Of these four, the most important is spending time in a veterinary practice. Your goal should be twofold: to get a good understanding of veterinary practice that will be evident in your interview and the essay that schools ask you to write as part of your application, and to get to know the practitioners well enough that one will write a strong letter of recommendation to go with your veterinary school application. This letter should have sufficient detail to document your experiences in the practice, and the sort of person you are. Too many students obtain letters from UW faculty members only. A strong letter of recommendation from an established veterinarian who knows you and believes you have the Right Stuff carries as much - if not more - weight as a letter from a professor.

## Experience working in a private veterinary practice

Acquiring an appreciation for the veterinary profession is called "seeing practice" or "pre-veterinary experience." The process begins by contacting a local or recommended veterinarian, expressing interest in pursuing a career in veterinary medicine, and asking for permission to spend time in his/her practice. Faculty members in the University of Wyoming will work with you to identify practices in the state or region that we think will suit your interests, and which will take the time to mentor you. In order to benefit from a shadowing experience in a veterinary clinic, you need to learn more than what the veterinarian does all day. You should observe how they put their day together, allow time for the unexpected, stay current in the profession, address uncertainties, and strike a balance between personal and professional time. There's a lot to learn. It is

in your best interest to be hired, in which case the veterinarian will expect you to do more than follow and observe. Some practices will pay you, but not all.

All veterinary schools agree that applicants should have a mixture of small and large animal clinical practice experience. Research, diagnostic, public health, industry and other experiences are supplemental and help build a strong application but are not acceptable alternatives to hands on experience in clinical practice. Like it or not, and career goals notwithstanding, they must obtain significant experience in practice. The quality of veterinary hours counts - so kennel work alone does not cut it. You should be able to cite specific examples of hands-on medical and/or surgical experiences in your application essay to your chosen veterinary school.

The following are things to note and questions you might pose as a typical day unfolds. These are questions you may be asked during an interview with a selection panel at a veterinary college. Panel personnel will want you to have thought about these issues.

Note: WICHE students from Wyoming generally don't do an interview if you go to one of the WICHE schools (Colorado State University; Washington State University; Oregon State University). But if you are a Wyoming resident going to a non-WICHE school, or if you are a non-Wyoming resident going to UW, you may. In addition to the questions below, our students have been asked about animal welfare versus animal rights issues, and your personal beliefs that might affect your take on this. Students have been asked about common diseases and surgical procedures, including familiarity with bovine viral diarrhea, bovine spongiform encephalopathy, canine distemper, influenza, abomasopexy, castration, and bovine vaccination schemes. The panel may ask you why you think you would make a good veterinarian and expect you to talk about yourself in detail; your hobbies, interests, past jobs. Some students have been asked to name their three favorite authors or books, and to discuss what they know about student loans and debt load on graduation from veterinary school

### **Basic aspects of veterinary practice**

1. What are some medical problems seen in a traditional practice?
2. What are some vaccines that comprise a preventative medicine program?
3. What are some common dewormers that comprise a preventative medicine program?
4. Not in great detail, but what antibiotics might a veterinarian use during a typical day? What are the responsibilities associated with their use?
5. What are some surgical problems seen in a traditional practice?
6. Why is it important to maintain sterility during surgery and what steps are taken to assure cleanliness?
7. What equipment do you tend to find in a surgical suite and for what might they be used? For example, why would it not be a great idea to heat you TV dinner in an autoclave?
8. Not in great detail, but what sorts of instruments do you tend to find in a surgical suite and for what are they used?
9. What is the relationship between the veterinarian and the clients? How important are good people skills for the veterinarian?

### **Big Picture questions**

1. What was the veterinarian's motivation for becoming a veterinarian?
2. How did the veterinarian manage time during veterinary school (studying, extracurricular and/or job-related activities)?
3. How did indebtedness factor into career choices (before/during/after veterinary school)?
4. What has the veterinarian learned about the profession that wasn't known before veterinary school but would have been valuable to have known before?
5. What is different about the practice of veterinary medicine today compared to when they started their

clinic?

6. In his or her estimation, what are some key challenges facing the veterinary profession today?
7. What are the realistic (hourly, weekly, monthly, annual) professional time demands?
8. How much does a private practice veterinarian earn?
9. What are the non-monetary rewards for the veterinarian?
10. How many veterinarians are there in the US, what is the range of their professional activities, how are veterinarians distributed among those activities, and how are veterinarians distributed geographically?
11. How many career-emphasis changes has the veterinarian made since becoming a veterinarian?
12. How easily, and how frequently does the veterinarian deal with serious ethical questions? [based upon examples from the veterinarian's own experiences]
13. What is, in the veterinarian's opinion, the economic outlook for the profession?
14. What are the advantages of belonging to a state veterinary medical organization?
15. Why might it be important to belong to a national organization, such as the AVMA?
16. How difficult is it for the veterinarian to remain current in their knowledge?
17. Would the veterinarian do it all again?

## Public Practice Experience

Veterinarians work in a number of public practice areas. This includes working for federal, state or local governmental agencies involved in animal health and animal disease control. Examples are working as a part-time student worker in this department, with the Wyoming State Veterinary Laboratory or with a veterinary researcher, with the Wyoming Livestock Board, the United States Department of Agriculture (USDA), the Centers for Disease Control and Prevention (CDC), the U.S. military, state departments of agriculture state, county, and city departments of public health, and municipal zoos. There are many international organizations involved in animal health and disease control. Many public practice positions utilize the clinical skills of the veterinarian. Others focus on the animal disease control and prevention expertise of veterinarians. These activities include disease surveillance, investigation of disease outbreaks, regulatory medicine, epidemiological studies of disease, prevention of disease, prevention of food-borne disease due to foods of animal origin, community education for animal disease prevention, and prevention of diseases transmitted from animals to people.

Again, if you work in such an area, be ready to answer questions from the admission's committee that address your recent experience.

### Basic aspects of public veterinary practice

1. What is the agency/organization the veterinarian works for? What is its mission and how does it relate to other public and private agencies and the community?
2. What is the role of the veterinarian in this agency and how does this role relate to other health professionals in the agency?
3. Does the veterinarian work primarily alone or on a team? What skills does the veterinarian bring to the agency/team?
4. Does the veterinarian do the same kinds of things every day or does the job keep changing? If the job varies from time to time, what is the range of the activities of the veterinarian?
5. Does the veterinarian have an advanced degree in addition to the DVM degree? Examples may include a Master of Public Health or an advanced degree in epidemiology (MS or PhD).
6. What are the opportunities for career advancement in this area?

## **Big Picture questions**

1. What made the veterinarian decide to pursue a public practice career?
2. What credentials did the veterinarian need beyond the DVM to obtain his/her current position?
3. How long did it take to get these credentials? If advanced degrees beyond the DVM were they paid for by stipends, training grants, etc.?
4. What is the veterinarian's motivation for continuing in a public practice career?
5. What does the veterinarian like most about his/her job? What does the veterinarian like least about his/her job?
6. Where does the veterinarian see him/herself in 5 years?
7. How many positions arise each year in the U.S. for these kinds of jobs?
8. What are the average salaries for veterinarians in various public practice jobs?
9. What non-monetary rewards are associated with a public practice career?
10. In the veterinarian's estimation, what are some key challenges facing the veterinary public practice sector today (depending on the veterinarian's area of expertise)?
11. What are the realistic time demands for the job?
12. If the veterinarian had it to do over again, what would he do differently in regard to his career?

## **Research Experience**

Biomedical research underpins most aspects of veterinary medicine. Exposure to the workings of a research laboratory can help prepare you for a veterinary curriculum, which is steeped in basic and applied science in the form of evidence-based medicine. Depending upon your level of participating in a research project, you may have the opportunity to acquire useful techniques, gain animal experience, learn a great deal about a particular subject area, and see how research questions are generated and investigated. The more fully students invest themselves in research projects, the better their appreciation will be for how advances in science are made. You may find that veterinary research is your forte, and that it interests you more than clinical veterinary medicine. It might be good to find that out early. Some colleges of veterinary medicine offer combined DVM/MS and DVM/PhD tracks, which aim to develop veterinary researchers at the start of their veterinary career.

Research experience can be gained by participating in a research laboratory as part of an undergraduate education. At some universities, course credit is awarded for participating in a research project as part of the undergraduate degree. To explore a research option, identify a subject area that interests you. Talk to the person who taught you the material. If the subject is not his/her area of expertise, a teacher might introduce you to a colleague who is researching that topic. A polite inquiry might be all you need to pique the interest of a research scientist - it is fun to have students in the laboratory, and everyone can benefit. You might be able to engage in research activities as part of your private practice experience. Research projects that involve interactions with live animals may prepare you better for a veterinary curriculum than those that do not. Applicants whose research experience does not involve live animals may wish to expand their animal experiences in other ways (below). The following are things you might notice while engaged in a research project:

### **Basic aspects of the research environment**

1. What is a hypothesis and how is it generated?

2. How does a hypothesis result in an experimental design?
3. How does the primary literature contribute to an experimental design?
4. How does an experimental design result in a protocol?
5. What is a control group?
6. What is a variable?
7. Why is it important to always do things the same way every time?
8. How can you relate what you learned in Statistics to a research project?
9. How does what you are doing (have done) contribute to the research project?

### **Big picture questions**

1. What made the researcher decide to pursue an advanced degree (DVM, PhD, or both)?
2. How long does it typically take a veterinarian to become a research scientist?
3. What does the researcher see as his/her motivation for continuing to engage in research?
4. How satisfying is an academic (research) career?
5. What are the realistic (daily, weekly, monthly, annually) time demands for a research scientist?
6. How many research positions arise in the US each year?
7. How much money does a successful primary researcher earn?
8. What non-monetary rewards are associated with a research career?
9. What, in the doctor's opinion, is the long and short-term economic outlook for funded research?
10. What is different about conducting research today compared to when (s)he embarked on earning an advanced degree?
11. In the veterinary researcher's estimation, what are some key challenges that are facing the research sector today? (An example might be the future of stem cell research.)
12. How easily and how frequently does the researcher deal with serious ethical questions? [based upon examples from the researcher's own experiences]
13. What are the advantages of belonging to a professional organization?
14. What was seeing his/her first manuscript in print like for the researcher?

## **Animal Experience**

Most people harbor deep respect, admiration, and affection for wild and domesticated animals. Discomfort with traditional farm species is becoming prevalent as we move away from a predominantly agrarian society. In addition, the care of these animals, i.e., feeding, watering, restraining, and treating (including potential euthanasia), does not appeal to everyone and could pose a challenge for some. Discovering one's abilities and level of comfort in caring for and interacting with a variety of domestic species is an essential step along the path toward becoming a veterinarian. Students who cared for and interacted with a range of animal species are best prepared for what they will encounter in our professional program. There are various ways to acquire basic animal husbandry skills. Companion animal experience can be gained by volunteering at a humane society shelter or animal control facility. In a similar fashion, agricultural and equine experience can be acquired at local farms or stables. At present in the US there is a shortage of food animal veterinarians, and it is becoming difficult to find students who have grown up with, and are used to handling, livestock. Students interested in a food animal/production career must have put in an appreciable number of animal hours and be able to list specific duties, responsibilities and tasks that define them as strong production medicine candidates. Saying "I grew up on a ranch" is not enough - you need to be able to demonstrate experience and skills if you are to be a credible food animal veterinary candidate. The Animal Science Department at the

University of Wyoming has multiple opportunities for students to get direct, practical hands on experience with animals, and also runs an excellent undergraduate internship program. Plenty of other opportunities exist as well, including care of your own animals. Demonstrating through time spent in the company of animals that you are comfortable with various species (food animal; horses; cats and dogs; wildlife) is beneficial to have on your transcript and in your essay when you apply to veterinary college.

*Based on an unsigned document prepared at Washington State University*