Veterinary School

Thoughts on the application process

N W Dyer, DVM, MS, Diplomate ACVP
NDSU Pre-veterinary advisor

My philosophy about pursing a veterinary career has changed over the years. I still believe it’s a wonderful profession with lots of opportunity, but I have different ideas about the process of getting trained. First of all, make sure you have the desire for a career in animal health. It will take a minimum of 7 years to complete the academic training. While you may have a strong feeling about the veterinary profession coming out of high school, use your undergraduate experience to confirm this feeling. Your undergraduate performance and commitment to continue an additional four years of veterinary school will give you a solid concept of your real desire to become a veterinarian. This is your first hurdle – the “want to”. Once you know you want to be a veterinarian, consider the cost involved. Higher education costs rise every year making it difficult to reach academic goals without significant debt. Do everything you can to minimize that debt. Starting salaries for veterinarians are not high enough to make most debt repayment easy, particularly in the first few years after veterinary school.

A recent article from the AVMA website gave the current state of starting salaries and debt for new graduates:

**AVMA survey indicates most starting salaries are up for new veterinarians**

**Schaumburg, IL**

— The results of an annual survey conducted by the American Veterinary Medical Association (AVMA) reveal an economic mixed bag when it comes to what new veterinary graduates encountered in 2009.


"There's good news, and there's not-so-good news in the survey," said Dr. W. Ron DeHaven, AVMA chief executive officer. "While most starting salaries are up, there are some areas that saw declines. And while the vast majority of these new veterinarians are getting jobs, we saw a drop this year in the number of graduates who received job offers by the time they graduated. That is a serious concern, considering that educational debt continues to climb."

According to the survey, 79.5 percent of respondents received an offer of employment or advanced education by their graduation date, down about 11.5 percent from the class of 2008, most likely due to the economy. Of those who received an offer, nearly half
received more than one. Eighty-four percent of those seeking employment accepted an offer. When it comes to salaries for these new hires, the average starting salary among all employer types combined increased 0.7 percent, from $48,328 in 2008 to $48,684 in 2009. Excluding those who continued their education through advanced study, the average starting salary increased 5.2 percent, from $61,633 in 2008 to $64,826 in 2009.

The average starting salary in the public-corporate sector decreased 7.3 percent in 2009, while the average starting salary in all types of private practice increased 6 percent. Average starting salaries in the private sector, excluding those for equine practices, ranged from a low of $63,172 for food animal predominant positions to a high of $72,318 for food animal exclusive positions (emphasis mine).

Graduates entering equine practice, according to the survey, continued to earn less than their counterparts in other types of private practice, with equine practices offering an average starting salary of $37,854 in 2009. That's a decrease of 9.1 percent from last year's starting salaries in the equine field. In contrast, the average starting salary in companion animal exclusive practices was $69,154 (emphasis mine), which was second highest only to food animal exclusive starting salaries.

While more than half of veterinary graduates sought employment immediately following graduation, many others decided to continue their education through internships, residencies or the pursuit of other degrees, such as a master's or PhD. The proportion of graduates seeking advanced education increased by 9 percent from 2008.

Other graduates sought postgraduate education or training in an AVMA-recognized, board-certified specialty. Over a third of graduates, or 38.1 percent, indicated in the survey that they were planning on seeking diplomate status with such entities as the American College of Internal Medicine, the American College of Veterinary Surgeons, the American College of Emergency and Critical Care and the American Board of Veterinary Practitioners, among others.

Most of the news coming out of the 2009 senior survey paints a positive picture for those entering the profession, but the AVMA remains concerned about student debt upon graduation.

According to the survey results, 88.6 percent of students had debt at the time of their graduation from veterinary school, and all but 9.6 percent of that debt was incurred while the students were in veterinary school. Average debt increased 8.5 percent between 2008 and 2009, with student debt averaging $129,976 in 2009, compared with $119,803 in 2008. Nearly a third of the students had an average debt above $150,000 (emphasis mine).

"Student debt continues to rise each year," DeHaven said, "and the AVMA, along with the Association of American Veterinary Medical Colleges and other veterinary groups, are working hard to find ways to alleviate some of the financial burden these new graduates carry with them out of veterinary school."
"Most students graduate college with debt," DeHaven continued. "That's a reality of life. But we need to focus on ways to help students minimize and manage that debt while also working to increase their starting salaries. This is especially true for new veterinarians who commit to working in some of the nation's most underserved areas."

http://www.avma.org/press/releases/090901_starting_salaries_survey.asp

The highest starting salary listed, that of food animal exclusive practitioners was just shy of $75,000.00. This is roughly half of the student debt that 33% of the new graduates accrued during their training. It is clear that the debt load of most new graduates is becoming prohibitive in terms of career goals.

Therefore, I would offer the following suggestions. They will not apply to everyone, but they may work for some. Some planning in the early stages may help reduce your debt, and give you the freedom to look for employment in a variety of places.

a) Consider completing the first two years of your pre-veterinary work at a smaller state school. Nearly all the classes will transfer (check on this when you are looking at schools because some veterinary colleges will place less emphasis on grades from a two-year institution) and you can save on tuition, as well as room and board. You will very likely have to transfer to a larger university your third year to complete some of the upper level required pre-veterinary courses such as genetics, biochemistry and microbiology.

b) Take advanced placement (AP) or college credit coursework during your senior year in high school (see Section I). This will allow you to eliminate some of the generals from your freshman undergraduate curriculum, and begin to move into the upper level courses more quickly. It may also save you money (undergraduate loans) and lighten your semester credit loads. Advanced placement coursework is not for everyone, but for some students it can be a help.

c) Begin to get some exposure to the veterinary profession if possible. This will help you decide if veterinary medicine is a career choice you really want. It will also establish a veterinary contact to serve as a reference when you are applying to veterinary school.

d) Take chemistry, biology and physics courses in high school. You will encounter all of these classes in your pre-veterinary curriculum. Having seen them in high school will help your college grade point average (GPA).

e) If your state has a veterinary college then the most economical route to a veterinary degree is at that college. Veterinary schools will reserve more seats for their own residents, and charge them an in-state price. If you apply to an out-of-state school it will be more expensive (roughly twice the cost) and you will be competing against a much larger pool of applicants for a small number of seats. If your state does not have a veterinary school, check with your pre-vet advisor and find out which states offer reciprocity or contract agreements with nearby veterinary schools (North Dakota has arrangements which allow
I. Getting ready for pre-veterinary coursework

Since you will take several semesters of chemistry, physics and biology in your pre-veterinary coursework, it will help to get as much exposure to these disciplines as possible in high school. If you have some experience with the topic in high school, it should improve your grade in the college course. Whatever you can do to help your GPA in college will improve your chances of admission to veterinary school. What should your GPA be? I tell students to use 3.5 as a target. You don’t need straight A’s to get into veterinary school, but you don’t want straight B’s either. The closer you get to a 3.0, the harder it becomes to compete against other applicants. Stay as close to a 3.5 as possible, and you will be competitive.

A. High school preparatory science coursework to consider:

Chemistry because most veterinary schools require two semesters of inorganic chemistry, one or two semesters of organic chemistry and a semester of biochemistry.

Physics because you will need a two semester sequence of physics. (The exception for North Dakota applicants is ISU which now requires only one semester of physics. However, since other veterinary schools and most science-related undergraduate majors require two semesters, I recommend taking both.)

Biology because you will need a two semester sequence of biology.

B. If possible, AP courses, or courses for college credit are worth consideration:

Check AP offerings and local college catalogs. If it fits your schedule and workload, any coursework you can complete for college credit before you begin your pre-veterinary undergraduate experience may help defray college costs, and potentially accelerate your pre-vet program.

Advanced placement (AP) testing

http://www.collegeboard.com/student/testing/ap/about.html
College level examination program (CLEP)

http://www.collegeboard.com/student/testing/clep/about.html

C. The summer before your freshman undergraduate year:

Begin now to work and save for your college education. Higher education is expensive, and a veterinary medical education is very expensive. Unless you have access to another source of money, you will have to borrow for your veterinary training. Do everything you can to minimize the amount you will have to borrow. Though you may not realize it now, you will be glad for every penny you do not have to repay. For example, if that means living at home, and working two jobs then think about doing it to keep your debt load down. If you want veterinary medicine as a career you’ll need to make some sacrifices.

II. College coursework you can expect your freshman year (Classes can vary depending upon available sections, and AP courses taken or college credit earned while in high school).

The course load you take as a pre-veterinary student is up to you. The rule of thumb that I try to follow is based on the level at which you perform best. If taking an extra course means that your grade point average will drop, then taking that class is not in your best interest. With that in mind, you need to take the number of credits which gives you the best result. This is somewhat dependent on your lifestyle (i.e. do you have a part or full time job, do you have a family, do you have additional responsibilities). Your advisor should help you arrive at the best fit between lifestyle and credit load. Obviously, your time through the pre-veterinary program will be quicker if you are able to take more credits; however, be cautious when setting up your schedule. The following classes are typically completed during one’s Freshman year.

- English (2 semesters)
- Math (minimum of college algebra and possibly either trigonometry or calculus. At NDSU trigonometry or calculus are required prerequisites for physics.)
- Biology (2 semesters)
- Inorganic chemistry (2 semesters)
- Humanities course(s)
- Social science courses(s)
- Speech
A. If you can do it:

Get a part time job during the year. Any money you can save towards your veterinary education will reduce the amount of money you will repay. BUT – don’t work if it will hurt your grades. You need a competitive GPA to apply, and if work affects that GPA, then don’t work.

Check out scholarship/grant opportunities at the university where you do your undergraduate work, particularly the college and department where your major is offered. In addition, look at the state higher education website and see if there are any scholarships available. Commodity groups, such as beef cattle producers, may sponsor scholarships as well. Take a look at their websites for those commodity groups. Check with the state veterinary medical association as well. Be diligent in looking for scholarships, I have worked with students over the years that have come across some very helpful opportunities by doing this.

For NDSU:

http://www.ag.ndsu.edu/academics/coaschol.htm

B. During the summer after your first undergraduate year

Again, work and save.

Think about getting some veterinary experience, specifically in a veterinary clinic. Maybe you will be fortunate enough to get a paid position, but even if this is not possible, make arrangements to spend enough time volunteering or observing to be able to use the practitioner(s) as a reference when you are applying to veterinary school. Varied experience is best. In other words, get some exposure to small and large animal practice so that you have a good idea what both entail. In addition, experience in other areas such as a stables, a kennel, a zoo, a pet store, and so forth, can help with your background. Keep rough track of the hours worked, your experiences because you will include that information in your veterinary application personal statement.

III. Coursework you can expect your second year

Organic chemistry (1 or 2 semesters)

Microbiology
Genetics

Humanities course(s)

Social science course(s)

Anatomy

Coursework pertaining to your chosen major

Remember that pre-veterinary studies is not a major course of study. You cannot get a degree in pre-veterinary studies. Therefore, we strongly urge you to choose a major during your freshman year and begin to work towards that degree. Why? Because you want a “Plan B” if you do not get into veterinary school, or if you change your mind about applying to veterinary school. You do not want to come to the end of 3 or 4 years with a bunch of classes and no plan for a degree. A list of possible majors would include microbiology, biology, zoology, animal science, chemistry, veterinary technology, equine studies and biotechnology. However, as long as you complete the required pre-veterinary courses, you can choose any major you like.

A. During the summer after your second undergraduate year

1) Work and save

2) Obtain veterinary clinic experience

3) Begin your VMCAS application. All veterinary schools have an application deadline on or around October 1 of the year you are applying.

   http://www.aavmc.org/vmcas/vmcas.htm

4) Take the GRE exam. I recommend taking the exam the summer between your second and third years of pre-veterinary studies. It has been my experience that most students do not do as well on the verbal section of the GRE as they do on the analytical and written sections. If you think you might struggle in the verbal section consider taking an additional literature course or a first year course in Latin or Greek to strengthen your vocabulary skills. Building word power takes time, so give yourself several months to do this. You may have to be creative in how you do this since no one wants to read the dictionary.

   http://www.gre.org/
5) North Dakota residents register with the Professional Student Exchange Program (PSEP). You must register with the State Board of Higher Education (SBHE) by **October 15 in the year that you are applying to veterinary school.** Don’t miss this deadline because you will not be on the list of accepted students eligible for a contract. It is an expensive deadline to miss!

www.wiche.edu/sep/psep/index.asp

**IV. Coursework you can expect your third year**

Statistics (1 semester)

Biochemistry (1 semester)

Physics (2 semesters)

Coursework toward you chosen major

If you apply to veterinary school during your junior year and are accepted you have some options. You can accept the offer and go to veterinary school the following fall. You do not need to complete your undergraduate degree. If you do want to complete your undergraduate degree you may be able to defer your attendance to veterinary school by a year (contact the veterinary school making the offer to make sure this is possible). This would allow you to complete your undergraduate degree before beginning veterinary school. In some circumstances, you might be able to complete your undergraduate degree while attending veterinary school (again, check with the veterinary school you are attending to make sure this is possible). Completion of your undergraduate degree will allow you to pursue postgraduate work after veterinary school. You may not want to think about that now, but as you progress through your veterinary training you find things that generate your interest.

A. During the summer

Work and save

Check scholarship/grant opportunities at the veterinary college you will be attending (particularly those for incoming freshman).

If you graduated from a North Dakota high school, and have been accepted to a North American college of veterinary medicine, you are eligible for some excellent scholarship opportunities. Check them out on the NDVMA website. **Note the deadlines and make sure you apply.**
Check on affordable housing. Take a little extra time and explore what is available for student housing. Sometimes outlying communities can offer a good deal if the commute isn’t too bad.

B. If you can do it

Work part-time while you are in veterinary school. Opinions vary on this suggestion. I am of the feeling that if you are academically sound enough to get into veterinary school, you will not suddenly begin to perform poorly. A part-time job outside the coursework can be very therapeutic, and can provide some needed funds. Often there are many jobs available right at the veterinary school which may lead to further career interests.

Keep your options open. Some veterinary schools offer dual degrees such as a Doctor of Veterinary Medicine and a Masters degree in Public Health (U of MN). This takes a bit more academic time, but it can give you a real edge in the job market if you have an interest in that area. As you go through veterinary school you are going to run across things that pique your interest. A veterinary career presents with you with many different options including practice, diagnostic work, academic medicine, regulatory work (state and federal), military, pharmaceutical industry, and research to name only a few. They all present different career opportunities.

V. Pre-veterinary requirements for the Colleges of Veterinary medicine most commonly applied to by North Dakota and Minnesota residents.

Kansas State University

http://www.vet.ksu.edu/admit/requirements.htm

Iowa State University

http://vetmed.iastate.edu/academics/prospective-students/admissions/academic-requirements

http://vetmed.iastate.edu/academics/prospective-students/admissions/
To establish North Dakota residency:
http://www.ndus.nodak.edu/policies/ndus-policies/subpolicy.asp?ref=2518

VI. Other options you have if North American veterinary schools do not work out:

You should at least be aware of the opportunities presented by Caribbean veterinary schools. Typically these schools train students for three years in the islands, then send them to selected veterinary schools in the United States for the fourth year. While they are not currently accredited by the AVMA, there are numerous Caribbean graduates practicing in the United States following the appropriate testing. Caribbean schools are not for everyone for a variety of reasons (expense, travel, living in a foreign country), but they do provide an option for some students. Information can be obtained at the following websites.

St. George’s School of Veterinary Medicine
http://www.sgu.edu/school-of-veterinary-medicine/admissions-prevet.html

Ross University School of Veterinary Medicine
http://www.rossu.edu/veterinary-school/admissions/getstarted.cfm

St. Matthew’s School of Veterinary Medicine
http://www.stmatthews.edu/vet_admissions_admissions-requirements.shtml
VII. Additional considerations for the application process:

A. Personal statement
   a. Your personal statement is essentially an exercise in marketing. You are charged with writing a concise document detailing who you are, what your background consists of, and what your career goals are. In doing this you want to present a positive image of your assets, your experiences and your plans as a veterinarian. Committees do not want to hear lengthy discourses on your love for animals and a list of pets you have had. Make sure your statement is well written and contains information germane to the task at hand. Plan on going through a few editions to arrive at something that accomplishes your purpose. Have someone objective (not your parents) read and critique it before finalizing your statement. A good personal statement can really stand out in a crowd of applications.

B. The interview
   a. Not all veterinary schools conduct interviews. North Dakota and Minnesota residents can expect interviews at the University of Minnesota, Iowa State University and Kansas State University. An interview generally lasts 30 to 45 minutes with a committee of 3 to 6 people. You are applying to a professional school, so look professional. Men should wear a suit or pants and a dress shirt and tie. Women should wear a suit or slacks/skirt/dress and an appropriate top. Be somewhat conservative in your choices. You do not need to draw excess attention to your appearance. You want to look appropriate, and have the attention focused on the content of your answers. It is unlikely that you will be asked questions about specific topics from your undergraduate education, but be prepared to answer questions about your leadership roles, ways of handling adversity, current events, animal experience, veterinary experience, problem-solving, and the like. If you need a moment to collect your thoughts, fine, do just that. It’s better to pause briefly than plunge into an answer and sound unprepared. You can ask to have a question restated if you don’t understand it. If you don’t know, say so. If you want to think through a problem verbally, that’s fine, some committee members like to
follow your thought process. Don’t take things personally and let your emotions get ahead of you. The committee should be a benign group who is trying to get an idea about your suitability for veterinary training.

C. Reapplication (In the event that you are unsuccessful on your first application attempt)
   a. GRE score
      i. If you think you can improve your GRE score significantly (at least 50 points) in a section, then go ahead and retake it. Otherwise you are wasting money and time. Make sure you do some study and practice before the retake.

   b. Animal Experience
      i. If you are deficient in animal/veterinary experience then it is appropriate to amend that deficiency. This can be done through employment or volunteer work in a veterinary setting. Again, you want to spend enough time in a clinical setting to allow the veterinarian you are working with to write you a letter of recommendation. Check into the clinics around your home or university for opportunities.

   c. Repeating courses
      i. This depends upon a lot of factors. I would repeat any D’s in required pre-vet courses. A D in an elective might be something you can live with if the rest of your grades are good. Repeating C’s is another matter. I, personally, would not repeat one C in a required course. If I had several C’s and they were affecting my GPA, then I could consider repeating some of them; but not necessarily all of them. Work with your advisor on this.

   d. Graduate school
      i. If you are unsuccessful in your first attempt at applying to veterinary school, then graduate school is certainly an option to consider. I think being in or completing a graduate program makes you a stronger candidate. It also continues your academic training and helps focus your area of interest. While graduate school is not for everyone, it can be a good fit for some people.
D. Application through the military
   a. There are some great opportunities available through the Army Veterinary Corps. Contact a recruiter with specific questions and work through your college veterinary advisor.

NDSU Pre-veterinary contact:

Dr. Neil Dyer
701-231-7521
Neil.dyer@ndsu.edu