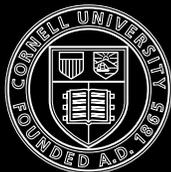


# Cornell Career Services

## Animal Health Professions

### Exploration and Planning Guide



Cornell University

2013/2014

[career.cornell.edu](http://career.cornell.edu)

# Animal Health Professions Exploration and Planning Guide

## Table of Contents

Introduction.....	2
Preparing for a Career in Health Care.....	5
Curricular Planning .....	6
Suggested Cornell Courses Required or Recommended by Colleges of Veterinary Medicine	8
Extracurricular Planning.....	9
Documenting Experiences Through Letters of Recommendation.....	10
Critical Aspects of Applying to Professional Schools.....	14
Guidance and Support.....	19
A Question-Based Guide to Planning Your Career in Animal Health.....	21
How to Get from Here – Student – to There – Professional.....	22
The Spectrum of Health Careers.....	23
Steps to Career Discovery.....	24
Year-By-Year Guidelines.....	25
Searches for Animal Health Careers Information.....	28
Books in the Career Services Library, 103 Barnes Hall.....	28
Appendix.....	29

This guide was prepared by Janet Snoyer, Program Director, Health Professions Advising Program, with the assistance of Kristine Goggan, intern Christina Zhang '15, and the Cornell Health Careers Advising Network.

# Introduction

The undergraduate years are a time for exploration as well as preparation for future careers. There is no place better than Cornell for curricular exploration. The first year of college marks the beginning of a path with many branches available to the curious and open-minded student. Many people enter Cornell feeling certain that they want to use their education to develop strong credentials for a health career. This manual will guide you through the early years of decision making to the point where you are ready to apply for advanced training in a particular health profession.

Students often enter Cornell with a career as a veterinarian in mind. Academic advisors in the Colleges of Human Ecology, Agriculture and Life Sciences, Arts and Sciences, and Engineering, as well as the Office of Undergraduate Biology will guide you in course selection to prepare you for any career you now have as your goal. You will have the opportunity to learn here that the healthcare field offers a rich array of varying careers. As a first or second year student, you can apply for the Extern program, which gives you the opportunity to shadow Cornell alumni that live near your hometown over your breaks. Speakers from different healthcare fields come to campus frequently and make presentations to students about their fields of work. Graduate schools that prepare students for health careers also visit Cornell frequently to share information with our students. Through these and other opportunities in and out of the classroom, including undergraduate research and extracurricular activities, you may decide along the way, as many do, that other careers look more attractive and are better suited to your strengths, temperament, and life goals than is the career of a veterinarian. At Cornell, anything is possible.

In the first year, the best way to prepare for any animal-based health career is by focusing on two things: forming support networks and managing your academic life. Each is equally important. A strong support system makes it easier to navigate the initially unfamiliar and often unexpectedly rigorous intellectual terrain. Similarly, a strong start in academics brings confidence and facilitates building a strong support system. Simply stated, you need to take your coursework seriously from the first day to the end of each semester, and you need to give yourself the benefit of all the help and guidance available at Cornell.

What does a support system look like? Your family wants to be a first line resource for you. Stay connected with home to let your family know how life is going at Cornell. You will

meet students in your own class year and those who are further along in their studies. Make friends with people with similar and different career aspirations and you can support and teach each other about things you learn incidentally. You will also meet faculty members, teaching assistants, tutors, and graduate students. Connect meaningfully with these people and develop friendly professional relationships. They have much to teach you both in and out of their classrooms. Residential housing units have advisors—both upper-level undergraduate students and professionals—dedicated to help you navigate Cornell. College offices are staffed with professional advisors who can guide you individually and through their websites, publications, list serves, newsletters, and web databases, like CCNet, which notifies you of internship, summer jobs, and other opportunities, based on your interest profile. Cornell Career Services has advisors to help you prepare to be a strong candidate for schools that train students in healthcare fields. After the first semester of your freshman year, you can use an electronic portfolio system, AdviseStream, designed for upper level students planning a health career. AdviseStream helps you to archive your accomplishments and develop a comprehensive understanding of the planning process involved in preparing for a career in health care. Reach out and make friends with the people who work and study at Cornell. Those relationships will help you to grow and develop. They will serve you in challenging times and help you to flourish personally and academically.

While we want everyone to succeed academically from the start at Cornell, it sometimes takes a semester or two to figure out how to do that here. The more help you get, the sooner you will achieve this. In fact, it is common for a student's early academic performance to improve over time. It is important to assume the perspective that the occasional difficulty, a poor exam grade or a period of confusion over course material is part of the process of learning, and not a reason to alter your life goals. Admissions committees for all fields of professional study understand that people are not perfect, that they make mistakes, that college is a time for growth in every way. While you need to take your studies seriously, you don't need to call yourself out for every mistake. Be confident, and if you find your confidence flagging, seek counsel. Talk to someone about it as soon as you can. Talk to your family, your professor, your friends, your faculty advisor, or any supportive adult at Cornell until you begin to rightly believe in yourself and your life goals again.

Many health professions are based in a service ethic. You gain the qualities required for a service-based career both in and out of the classroom, through study groups, research labs, and the many extracurricular activities Cornell makes available to you. We recommend that you reflect on these experiences as you engage in them, for you will be asked years from now, on applications and interviews to give evidence on the ways you developed such qualities as life balance, service-mindedness, personal responsibility, altruism, integrity and ethics, an understanding of the health care field, professionalism, problem solving, as well as your communication skills, oral, written and interpersonal.

The undergraduate path to a career in animal health requires preparation, planning, documenting, reflection, self-assessment and the ability to seek guidance and support at important decision points. The serious student makes time for all these things and can confidently expect a successful and enjoyable journey to a health professions career.

# Preparing for a Career in Animal Health

Effective preparation for a healthcare profession involves a sequence of steps:

1. Planning
2. Doing what you planned
3. Self-Assessing
4. Reflecting

Consider this: Each semester you will take four or five courses. Many of them will have a lab. In addition you will be drawn to an irresistible array of extracurricular offerings. Some of you are EMTs and will serve shifts on Cornell's EMS. Some are recruited athletes who will spend more than twenty hours a week at your sport. Some of you will spend that much time in your research lab. Others will found, lead, and participate in intensive service activities. You will have a social life. Many of you will work at student jobs ten or fifteen hours a week. You will need to find time to eat, sleep, and exercise. You will be busy people and have a lot to balance and fit in to your day. In order to accomplish all this while exploring the universe of opportunities that is Cornell, you will have to learn to plan well and be very comfortable asking for help, when warranted, on how to manage your life well.

During your first semester at Cornell, try to hold back on joining things and instead "tag along" with others to see what they are doing. You don't want to get involved while you are trying to build a support network here and mastering your coursework. If you get too involved, your presence may become essential to an organization and it will be awkward for you to discontinue it, even if it's not for you. Be more of a watcher than a doer your first semester.

When you are ready to get involved, you will need to know what competencies will be expected of you when you apply to veterinary school or other graduate training in animal health. To some degree, you will then plan your engagements in order to learn and develop these competencies.

Assessment is critical to your development as a person and someone aiming for any particular career. It includes documenting your experiences. One way of documenting is to keep a spreadsheet. The rows correspond to types of activity, such as prerequisite courses taken, interesting electives taken, and experiences in healthcare. The columns indicate date started, date ended, hours spent, and advisor or professor name and contact information. Another way of documenting is to request a reference from the club advisor or course instructor. Letters will be

critical to your success as an applicant years from now, and it is important to gather them when experiences are fresh in the mind of the person writing the letter. Your spreadsheet will come in handy as a way to remind the letter writer of the history of your association with him or her.

Self-assessment means thinking about the meaningfulness of an activity. When an engagement begins to feel dry or unsatisfying, when you feel frustrated or stuck, you can figure out why this is. You can then decide to try to transform the experience or to disengage. The latter can be hard, especially when you have made friends with other people in the organization. This happens all the time in the undergraduate years as you sift through the things that really matter to you. Sometimes it helps to talk over your ambivalence with a counselor, faculty advisor to the organization, or another adult you trust. This will help you discern when to move on when you should, or stay committed even when times get challenging.

Reflection is a critical step that articulates meaning and brings closure to your engagements both inside and outside the curriculum. It is important to communicate frequently about what you are doing and what it means to your present well-being and your future life goals. Making meaning in a deliberate way prevents burnout and overachievement fatigue. You can do this in AdviseStream, which is set up to include this crucial final step, which follows from the planning, doing, and self-assessing. You can also keep a journal. Facebook and Twitter, texting and phone calls home are not a substitute for this kind of deep reflection. It is best to reflect in writing, so you can fully process your experience and then look back at it later when you are feeling differently. In this way you learn how to manage your life in a way that brings greater meaning to all your activities.

## Curricular Planning

Cornell undergraduates from nearly every major and certainly every college have gone on to work with animals as veterinarians and in many other animal care-related fields. Some majors have course requirements that overlap with those for graduate training programs in healthcare; others do not. For example, it is easier to plan a path to veterinary school from a Biology or Animal Science major than from one in Plant Science. Most students need to explore for a semester or two, find out what interests them, and then pick a major. For some students, the veterinary school requirements are part of the electives they take at Cornell. College pre-health advisors can provide invaluable guidance to you as you plan your courses.

At the present time, even within specific health-related professions, curricular requirements and recommendations vary. Veterinary schools differ in the Cornell prerequisites they require and recommend. Some require specific courses (e.g., Introductory Biology). Others recommend courses, which may leave the student wondering what “recommend” really means in a competitive admissions process. The Association of American Veterinary Medical Colleges annually publishes lists of course prerequisites.

Cornell advisors currently provide generalized lists of prerequisites. On the next page is a summary sheet of the prerequisites for veterinary medicine. Check [www.aavmc.org](http://www.aavmc.org) for updates to individual school’s course prerequisites. While Cornell permits students to earn credit for high school AP courses, it is important to check with college advisors as to the advisability of using these credits if one intends to go on to study veterinary medicine. Some veterinary schools accept AP credit, but many will not accept science AP credit. Each school has its own policy and the policies vary greatly. It is the applicant’s responsibility to make sure that his or her record of coursework suffices for a particular school of interest.

It is not necessary to earn an official double major or a minor concentration; simply learning something of personal interest through successively more in-depth courses demonstrates many compelling qualities about a candidate. The goal is to meet the requirements over the four years of college, not to take them all in the first year or two. These are rigorous and time-consuming courses. They need to be spread out in order to optimize your learning with your performance in the courses.

### Suggested Cornell Courses Required or Recommended by Colleges of Veterinary Medicine

Always check with the Veterinary Medical School Admissions Requirements Guide (VMSAR) as well as a pre-vet advisor before choosing one of these courses. Requirements vary dramatically among schools.

Subject	Cornell Courses
Biology/Animal Science	ANSC1100 Domestic Animal Biology Biology Option 1 BIOG 1500 Investigative Biology Laboratory and BIOMG 1350 Introductory Biology: Cell and Developmental Biology and BIOG 1440 or 1445: Introductory Biology: Comparative Physiology (*1445 is a personalized instruction format alternative) Biology Option 2 BIOG 1107 Introductory Biology I: From Atom to Cell (summer) and BIOG 1108 Introductory Biology II: From Cell to Biosphere (summer) and BIOG 1500 Investigative Biology Laboratory
Physics	PHYS 1101 & 1102, Individualized Instruction, not calculus-based, or PHYS 2207 & 2208, calculus-based, or PHYS 1112 & 2208, calculus-based, or PHYS 1112 & 2213 & 2214 for Engineering College students
Biochemistry	1. BIOMG 3310 Principles of Biochemistry: Proteins and Metabolism and BIOMG 3320 Principles of Biochemistry: Molecular Biology 2. BIOMG 3300 Biochemistry, Individualized Instruction 3. BIOMG 3350 Principles of Biochemistry: Proteins, Metabolism, and Molecular Biology 4. NS 3200 Introduction to Human Biochemistry 5. BIOMG 3330 Principles of Biochemistry:
General Chemistry	CHEM 2070 & 2080 General Chemistry (laboratory included) or CHEM 2150, ( <b>see Premedical Advisor regarding this option</b> ) and is an accelerated one-semester course leading directly to Organic Chemistry or CHEM 2090 (for Engineering College students only) & 2080
Organic Chemistry	CHEM 3570 & 3580 (lecture sequence) & 2510 (laboratory) or CHEM 3590 & 3600 (advanced lecture sequence) & 2510 (laboratory)
Mathematics/Statistics	One semester of calculus or statistics
English/Composition	The First-Year Writing Seminar sequence usually satisfies this. For the rare exceptions, see the VMSAR.
Humanities & Social Sciences	Electives in this area are too numerous to mention.
Genetics	BIOMG 2800 - Lectures in Genetics and Genomics BIOMG 2801 - Laboratory in Genetics and Genomics
Microbiology	BIOMI 2900 - General Microbiology Lectures BIOMI 2901 - General Microbiology Laboratory
Upper Level Science	Electives in this area are too numerous to mention.
Oral Communication	COMM 2010 Oral Communication
Cell Biology	BIOAP 3160 Cellular Physiology
Systemic Physiology	BIOAP 3110 Principles of Animal Physiology
Nutrition	ANSC 212- Animal Nutrition

## Extracurricular Planning

A person preparing for a career in animal health is naturally drawn to experiences with animals. During your undergraduate years, you will want to expand your exposure to animals from personal to professional experience. This professional experience will give you an understanding of what it means to work with animals as well as their owners and to work on behalf of animal welfare.

These experiences can include research engagements, voluntary service, externships and internships (short and long term job shadowing). They can be voluntary or paid. All experiences need to be documented. You can use a journal, a spreadsheet, or AdviseStream (an electronic portfolio for health career-bound undergraduates) to track, archive, and document these experiences.

Cornell's College of Veterinary Medicine and the Cornell University Hospital for Animals provide abundant experiences for gaining experience in veterinary care. Other experiences include small animal practice, zoos, farms, public health governmental and non-profit institutions, factories, and wildlife settings. Your career prospects will improve commensurate with your willingness to observe and learn about settings where animals are healed, managed, bred, cared for, studied under experimental conditions, exhibited, sacrificed, euthanized, and even slaughtered, as important preparation for understanding the range and scope of animal health care in this country.

Try to get hands-on experience for sustained periods of time (such as a semester, academic year or semester, or a span that continues over many school breaks) in many different settings so you can present evidence of your commitment to the people who allow you to serve in their settings, as well as to demonstrate the breadth and depth of your engagements. Work towards developing and enhancing your resume as you gain greater responsibility over the years. Set a goal to develop your skills, reliability, dependability, maturity, and professionalism. You will want to gain increasingly greater independence over projects and to develop your leadership skills.

You will want a letter from supervisors, mentors or professional colleagues from each of these stints. The letters, in addition to your own tracking and archiving, provide solid evidence of your curiosity about the field of animal health care.

# Documenting Experiences Through Letters of Recommendation

All professionals have depended on references to advance their careers. For admission to health career fields, the personal letter, typed on letterhead and signed by the writer, then transmitted electronically or by postal mail, is the exclusive, established form for endorsing an applicant. A telephone conversation or email correspondence will not substitute, although each of these is frequently the acceptable or even preferred medium for other fields and work opportunities. Admissions committees place their trust in these letters and give them considerable weight throughout their deliberations.

The applicant's ability to secure a useful letter signifies his or her capacity to initiate, build, and sustain meaningful professional relationships, qualities that are essential to the effective practice of medicine. When an established professional speaks to your intellectual and human potential, it documents your impact. Letters provide information and insight on personal qualities, such as professionalism, and the academic record.

Reference letters provide an objective, authoritative, and supportive external viewpoint on an applicant. They are called "recommendations" because they are expected to appreciate the candidate's strengths. A truly candid letter may comment on low points, unfortunate experiences, adversity, and obstacles, even negative qualities observed in the applicant. The supportive letter writer will point out these imperfections in the context of the positive qualities the applicant exhibits. When a letter writer is candid, the letter gains credibility. It does not hurt the applicant; it may even help. No one is perfect and the consummate letter writer acknowledges this while substantively supporting the applicant with anecdotes to back up general comments.

Letter writers often refer to the fit between the applicant's strengths and healthcare professions. Healthcare delivery requires professionals of good character who can work effectively under conditions of self-regulation, impeccable character standards, personal responsibility, and absolutely confidential interpersonal communication.

The optimal reference letter writers, or referees, have certain important attributes. They know you from different areas of your life in addition to school: Clinical experiences, research labs, employment, and other volunteer work. They are knowledgeable and experienced in assessing pre-health professions students. They know more about you than your academic

performance in one course. They are able to compare you with other Cornellians. Finally, they are able to write well.

As you collect letters, you will begin to build different sets of letters that you can use for different purposes. One important question for later is: Which set of referees can help you build a balanced profile of your credentials and relevant experiences? One person will not be able to authoritatively discuss all your qualities. Taken together, your letters can cover many aspects. Good sources of letters generally include a faculty member, either science or non-science discipline, your faculty advisor for more than a semester, a professor for whom you've worked, an employer, club advisor, supervisor of voluntary activity or research experience, camp director, chaplain, coach, or other mentor. The most useful and valuable letters comment substantively on your intellectual, interpersonal and intrapersonal qualities as well as your motivation for an animal health career.

Here are some questions you can address to help your letter writer compose the best letter.

- How have you carefully considered a career in animal health?
- What evidence makes it likely you will do well during the academic and clinical training?
- What are the most important qualities in someone who practices this profession?
- How do you know you possess the qualities that matter to the profession's practice?
- What do you have to contribute to the profession?
- What have you accomplished that prepares you for success in this profession?
- What do you hope will be your contributions to/impact on society and its problems?

If you are applying for a seat in veterinary school, you must collect simple letters from all your animal health experiences. These are letters that certify and document your precise tasks, range of independence, duration of time, and the depth of experience. You will need to keep track of your hours categorized in each distinct veterinary setting. Even if you are not applying for veterinary school, this is a great thing to track.

Sometimes one loses sight of one's skills and qualities at the point of requesting a letter and hopes that the letter writer will come up with them on their own. Without engaging in boasting or arrogance, it is better to offer them directly and humbly to the letter writer. Since there are different skills required of different animal-health related professions, do some research

and personal reflection before approaching the letter writer. Find out what the schools indicate that they expect of applicants with regard to the qualities they have developed.

In general, it is good to ask at least one instructor from the college years to write one of your letters. This referee's letter will demonstrate that you have your university's academic support. A letter from a teaching or laboratory assistant is sufficient, but not optimal. If a graduate student writes the letter, s/he can ask the faculty member in charge of the course or lab to ratify and cosign it. Alternatively, if a professor does not know you well, you may ask a TA to submit notes to the professor on which s/he can base the letter.

When you ask someone to write you a letter, you will make a decision to waive or retain your right to access the letter. The Family Educational Rights and Privacy Act, commonly known as FERPA, guarantees this right. FERPA guarantees important rights to students, including the right to inspect one's education records, the right to challenge incorrect information in those records, and the right to disclose or not disclose one's education records.

Because FERPA guarantees these rights, neither Cornell University nor other institutions or organizations can require one to waive these rights. University policy on access and release of student records is stated at the CU policy website. Make sure to review Cornell's interpretation of these rights. To find it, google: Cornell FERPA policy.

When you establish a file for letters of recommendation, consider your FERPA right to access each letter. If you decide to waive access, which is the norm, it is a courtesy to inform the letter writer that you have chosen to do so. If you do not raise the subject with the writer, the FERPA right is retained and you may review the letter. FERPA does not give students the right to change a letter or to have a copy in their possession. While FERPA does not require it, it is a professional courtesy that students discuss a decision to retain the right to view a letter with the letter writer when you are asking for the letter.

Since waiving FERPA is the norm, students often ask why one would retain rights to view the letter. It is useful to know what each writer has included in letters. By reviewing the letter, you enhance your preparation for interviews with people who have read the letter. Reviewing your letter gives you feedback on how you are seen by others. Finally, reviewing the letter allows you to detect any factual or typographical errors in the letter before it goes out. Most university letter writers are busy. As you know, even a writer with the best intentions can make mistakes.

When a student waives access to a letter, s/he is trusting that the writer will compose a knowing, caring, supportive, and accurate letter. Most of the time, this is the case. Letter writers may expect that everyone routinely waives FERPA, as that has been common practice at universities since FERPA came into effect. If a potential recommender agrees to write a letter that will be retained and is uncomfortable with the student's choice, s/he can choose to write a brief and uninformative letter for a student who does not waive FERPA. This is a rare scenario. If that were to happen, the student would review the letter and can invoke his/her FERPA right not to disclose it. It is more likely that in the conversation between letter writer and student, when the letter writer resists FERPA retention, the student accedes his or her FERPA rights to avoid conflict and because s/he trusts the referee.

FERPA does not require or recommend that receiving institutions be informed of a student's choice to waive or to retain. Some institutions do inform receiving schools of the student's choice. It is a good idea to ask about this when making the decision to waive or to retain.

You can have these letters archived at a credentials storage service. Many Cornell students open accounts for this purpose at Interfolio, a web-based company.

In conclusion, people who know you well and have shown that they care about you are the best candidates for recommenders. If in doubt about whom to ask or how to ask for a letter, consult a health careers or faculty advisor. You can also get good information from on-campus briefings held during the academic year, which are recorded and posted at the Career Services web site. Letters matter greatly and it is important to think about making relationships with the professionals in your life from the beginning, and throughout your college years.

# Critical Aspects of Applying to Professional Schools

Over the past forty years of observing the ever-changing health professions admissions landscape, Cornell's health professions advising program has identified the two criteria that predict a successful admissions outcome. These criteria are interdependent.

1. The timing of the application: Dependability in an applicant is measured to some degree by filing the application early in the cycle, not close to the deadline.
2. The applicant's preparation must fulfill holistic admissions standards.

Holistic review standards do not vary much among health career schools, although all use undergraduate GPA and most use standardized test scores. The other standards essential to a holistically sound preparation include extracurricular activities and personal competencies. A third criterion that applies to some, but not all applicants, and affects readiness, is assessment of a person's character and integrity.

Along with timing, an applicant's level of preparation in these areas determines his or her readiness. Using these criteria, an advisor can help potential applicants form a valid and reliable perspective on individual admissions prospects. Knowing realistically which cycle gives you the best chance for success is part of the skill of applying, and a good basis for discussion with an advisor.

About half of all applicants – Cornell and nationally – commonly apply before they have graduated from college or finished all their application course prerequisites. Applicants who have shown their adjustment to Cornell's rigor by a steadily improving academic performance optimize their chances of success by finishing college before applying, thus earning the best possible GPA. Showing an upward trend when starting with a suboptimal standardized test score is not a good strategy, although it can be effective. You are expected to take standardized tests once only, if possible, demonstrating that you can judge when you are ready to get your best score. Graduate standardized test taking norms differ from SAT administration in high school, where multiple attempts are the norm.

Most schools admit applicants on a rolling admissions basis. The timing factor most directly relates to standardized tests and completion of the application. Incompletes (I grades) on the transcript can be an obstacle to one's readiness to apply. Since a healthy portion of applicants is completing undergraduate degrees at the time of application, applicants do not need to

complete a school's curricular prerequisites before applying. Completion of prerequisite coursework is not generally a significant factor in the timing issue.

### *Holistic Review*

The holistic review system in healthcare admissions necessitates preparation in many different areas. Three personal factors are essential to readiness to apply. These are evidence-based. The applicant must be able to document that s/he has worked and developed himself/herself in these areas. They are

1. Service to other people,
2. Exposure/experience in the world of clinical healthcare, and
3. The ability to communicate well interpersonally.

The latter includes professionalism, sensitivity to interpersonal cues, as well as the ability to listen well and to share one's knowledge with others effectively.

### *Evidence-based Selection*

Documentation and personal reflection are required elements of primary and secondary applications. Applicants need to provide accurate evidence that they have made time to serve others and to reflect on the personal meaning of those service experiences. Clinical experience enables applicants to understand how and why they are suited to a health care profession. For veterinary medicine, a professional who observed your work must document the animal health experience. Applicants are asked in written form and in the interview to demonstrate that they understand not only what any medical career entails, but also how healthcare reforms will affect their own careers. Finally, they must be able to talk comfortably in response to a wide range of questions about their own personal reasons for pursuing this career.

### *Professionalism, Ethics and Integrity*

Demonstrating personal integrity and ethical conduct is essential in a health care professional. Looking for signs of professional integrity is part of every admissions process. Medical sociologists have studied the pre-determinants of medical misconduct. Patterns of lateness, missing deadlines, frequent requests for extensions and lack of preparation for assignments, tests, and performance-based clinical exercises have all been linked to professional misconduct in health care professionals. Thus, these seemingly unimportant behaviors are of great interest to admissions professionals.

Most human beings have behaved poorly at some point in their lives, personally or professionally, and are forgiven for it. When poor behavior gains the attention of university and civil authorities, admissions committees want to know what happened. They want to understand the institutional action in context. The applicant is expected always to report these things when asked about them on an application. It is tempting from the applicant's perspective not to report an incidence of institutional action. Conclusions drawn from the facts of an institutional action are the province of the admissions office, not the applicant. Admission of an institutional action is unlikely to keep an applicant out of the medical profession, but misrepresenting it, minimizing it or even directly lying about it rather than finding a way to reflect meaningfully and contextually upon the situation and integrate the experience into one's life narrative, will almost assuredly have a seriously negative effect on one's admissions outlook.

Cornell applicants have sometimes had oral or written warnings from the Judicial Administrator regarding underage drinking or breaking residential house rules. Cornellians using forged IDs have been caught by local police. Advisors have learned that people with these transgressions need not fear that their hopes of becoming professionals in health care fields are ended. However, intentionally misrepresenting the transgression does represent a lack of integrity and ethical weakness to the admissions office.

When a potential concern about the applicant comes indirectly to the attention of an admissions office, and the candidate has not previously disclosed and explained the situation in context, it creates incongruence in the admissions review process. For example, an applicant may resist admitting to a seemingly trivial offense for which he or she was cited, such as being in the same room as someone engaged in underage drinking. Since the citation may be a matter of record only until the student graduates, the student may be tempted not to admit to the infraction. Some admissions offices routinely request Dean's Letters, which attest to any institutional action on the part of the University with regard to the student. Students voluntarily release this information to complete their application at these schools. When such information reaches the admissions office in this way, and the candidate has not mentioned it, this can cast unresolvable doubt on the integrity of the applicant and doom the application. The Health Professions Advising Program recommends that applicants explain in their application materials even minor or long-resolved situations in which they were involved and reflect on what they learned from each incident.

Applicants must balance their intention to present themselves well with the imperative that they maintain unimpeachable ethical conduct. Seemingly innocent statements may later, in the admissions context, be deemed evidence of ethical weakness. A common example is showing a pattern of lateness in submission of materials, accompanied by excuses, or claiming an honor or publication before it has actually become a matter of record. Likewise, an applicant may predict that a personal experience will happen in the future, such as a community volunteer activity, due to one's confidence that it will occur before the admissions office reviews the application. If an experience has not happened, it may not actually ever happen. The ethical and strategic approach is to omit mention of the impending news and send a supplementary letter when it has happened, as an update to the application.

Some schools may require applicants to submit a letter issued by the College Dean or Registrar. The intent of this letter is to corroborate the applicant's statement regarding the presence or absence of any Cornell academic integrity violations or other university disciplinary action, such as that carried out by the Judicial Administrator's office.

An advisor can provide guidance on how to present matters that may cause concern in an admissions review. One of the first considerations will be how much time has passed since an infraction occurred. If one occurred in the year before applying, it is best to wait for a subsequent cycle to establish distance from the offense. If more than one offense has occurred – of the same or different kinds – it is imperative not only to establish distance, but also to find ways to establish definitively that the applicant has resolutely taken responsibility for the offending actions and deliberately reformed his or her behavior. If any of the above situations apply, it is essential that the applicant seek the confidential counsel of an advisor about how and when to proceed.

### *Standardized Tests*

Different professions require different standardized tests. The purpose of the standardized test from the admissions viewpoint is to establish one requirement that all applicants must meet, by which applicants can be compared fairly. Usually these tests are administered several times a year on a computer at a testing center. Many alternatives for test preparation are available, commercial and non-commercial. Cornell advisors recommend that the optimal timing of test administration take into account the following critical variables.

Complete the courses that prepare you for the material on the test before taking the test.

Engage in self-directed learning on topics you have not yet studied. For focused test preparation, consider topical review at a free tutorial website such as Khan Academy or Coursera, and one of the four commercial test preparation/review courses available: The Berkeley Review, Examcrackers, Kaplan and Princeton Review.

Do not plan to take the test during known periods of high academic demand or when you have many competing priorities. For example, a May administration date may seem like a good choice from the perspective of one of the above variables, but sometimes scores suffer. Cornell undergraduates may be mentally exhausted during and soon after their spring semester exams and projects are completed. In addition, the strategic preparation schedule planned for the spring may give way to more immediate priorities, like papers and projects, in late April and May.

Take the test with sufficient lead time on the application cycle that you know your score before you choose the schools where you will apply.

## Guidance and Support

The Colleges of Agriculture and Life Sciences (CAL S), Arts and Sciences (A&S), Engineering (ENG), and Human Ecology (HE) have advisors with expertise in helping you plan the optimal course schedule. Most of the questions freshman, sophomore, and junior transfer students pose relate to academic requirements. The college advisors are:

CALS	Cate Thompson	Roberts Hall
A&S	Ana Adinolfi	Goldwin Smith Hall
ENG	Beth Howland	Olin Hall
HE	Paula Jacobs	Martha Van Rensselaer Hall

You cannot seek advising at a different college office than your home college. For course advising, the first stop is your home college, unless you are in AAP, ILR, or Hotel.

The Office of Undergraduate Biology (OUB) will advise any Cornell student on healthcare professional objectives, regardless of their home college. Cornell Career Services (CCS) has a health careers advisor who meets with students from all colleges.

OUB	Bonnie Comella Wendy Aquadro Jeff McCaffrey Colleen Kearns Peer Advisors	Stimson Hall
CCS	Janet Snoyer	Barnes Hall

Pre-health advisors post the answers to common issues and questions on their websites and through publications such as this one. Address your questions to advisors in your home college after you have checked the college website for relevant information. By keeping yourself well-informed, you will be able to have more meaningful and individualized advising appointments. Nearly all commonly asked questions have answers on the website.

Cornell puts a great deal of authoritative information in your hands as a student. The Career Library in 103 Barnes Hall, which is open during regular business hours, offers extensive resources, on site and online. In addition, Cornellians can view notebooks in the Career Library or access online our surveys of past applicants' experiences and outcomes (with net ID and password). The Keyword Search feature at the Career Services website allows convenient access to its electronic resources.

To learn more about the many health professions that Cornellians pursue, you can enroll in CCNET at the Cornell Career Services website. This is a web database that will send you notices and reminders about internships, campus speakers, and advisor presentations and programs for students interested in health careers. The CCS Extern program matches students with alumni in an array of careers for short, exploratory shadowing opportunities, usually during your semester breaks and close to your home if possible. The 2013-2014 Health Careers Calendar on the inner cover of this booklet is a handy reference. All but one program refers to schools of human medicine, which is a more popular profession among Cornellians than are the animal health careers. All are applicable to animal health careers. We encourage you to attend ones that interest you and to ask your animal health related questions when the sessions end, or make an advising appointment with the speaker to follow up with questions on your own career aspirations.

# A Question-Based Guide to Planning Your Career in Animal Health

**The Childhood Dream:** What career did you have in mind when you chose Animal Science? What did you want to be when you grew up?

**The Economics:** How much time and money can you realistically enjoy and afford to spend in/on school, including your Cornell undergraduate years?

**The Passion:** What basic activities (helping people, managing people, teaching people, investigating basic science issues, diagnosing and treating animals, finding solutions to systemic healthcare problems through research and writing) would you enjoy spending 8-10 hours a day doing?

**The Motivation:** A motivation is a state or process in the mind or “heart” that stimulates, promotes and guides action towards a particular goal. What is your cognitive motivation for pursuing a life science-based career? What is your emotional motivation?

**Your Strengths, Talents and Skills:** What will be your distinctive contribution to any career that you enter?

# How to Get from Here –Student – to There – Professional

Clarify your motivations. Here are seven top motivators. Please rank them in the order that they apply to you. If you cannot differentiate the rank at the end, try to pick at least your top three. Feel free to rephrase the statement so it is true for you just below the printed statement.

- \_\_\_\_\_ My interests and aptitudes are a natural fit for the field.
- \_\_\_\_\_ My career must provide a secure future (financial security and a relatively high income).
- \_\_\_\_\_ I want a career that lets me work independently.
- \_\_\_\_\_ I want my career to allow me to have influence and impact on the healthcare system.
- \_\_\_\_\_ My career must allow me to connect with animals/people and to improve their lives.
- \_\_\_\_\_ I want working conditions that allow me to have a rich personal life (family, manageable hours, etc.)
- \_\_\_\_\_ I want to do what others I know/love have done, to stand on their shoulders or follow their footsteps.

In the space below, write a statement that describes and ranks your motivations for a career in health care with animals.

# The Spectrum of Animal Health Careers

Health-Related Careers working with animals vary along many of the following dimensions:

**Education and Training Post BA/BS:**

Zero (community health worker) to training certificate (Veterinary Technician [like a human hospital Nurse]) to 4 years (Veterinarian, Animal Science or Public Health PhD)

**Selectivity:**

GPA is most important for the most competitive, degree-issuing training programs, least important for most certificate-based training programs. Relevance of extracurricular engagements also varies a lot in how much they affect successful admissions to different fields.

**Education and Training After Receiving the Terminal Degree:**

Zero (Veterinary Pharmacologist or Pharmacist, MPH) to many years (DVM/PhD or VMD/PhD)

**Evidence of Knowledge and Interest in the Field Through Volunteering and Internships as an Admissions Prerequisite:**

Zero (animal trainer certification) to 1200 hours (Veterinarian)

**Entry-level Salary:**

\$30,000 (Community Public Health Educator, pet or show animal breeder) to \$60,000 (Veterinarian)

**Interdependence of Practice Environment:**

Solo, independent private practice (Breeder, Animal Acupuncturist, Farrier, Small Animal Veterinarian) to Clinic (Animal Behavior Consultant) to hospital-sponsored complex setting (Clinical Faculty or Administrator in an Animal Hospital situated in a research and training institution, like Cornell)

**Opportunity for Professional Growth in Impact, Salary and Lifelong Learning:**

Low (Farmhand, Animal Handler) to High (Animal Science or Public Health PhD)

# Steps to Career Discovery

Take time to explore different careers and to find your way through healthy reflection to one that will make you happy and allow you to make a contribution to society.

1. Your undergraduate academic career is most important. Learn as much as you can in your coursework and maintain your motivation to excel academically.
2. Learn about yourself and what really matters to you. Develop the habit of reflection. Write about what you are learning in a journal or post your thoughts and accomplishments in an electronic portfolio such as AdviseStream, Mahara, or Digication, all software applications available to you as a Cornell student. See a Cornell Career Counselor in your home college or Cornell Career Services to assess your strengths, talents, and task proclivities through interesting diagnostic career assessment tools.
3. Look for opportunities to serve. Most health careers require an innate love of service.
4. Learn about yourself. What activities energize you, what kinds drain you?
5. Investigate careers through Cornell Career Services libraries and online.
6. Set up spreadsheet to compare costs and benefits of different careers, the length of training, and their financial compensation with respect to the strength of your motivations. This is an easy and revealing online research. The information will guide you to a good decision.
7. Consider the pros and cons of careers with similar appeal to you. Some categories to consider are work-life balance, range of impact, social networks of the career, job security and, most important, personal satisfaction that will sustain you when work is hard.
8. Identify training programs that appeal to you.
9. Make sure you are meeting the course requirements for training programs that appeal to you.
10. Inform yourself of the selection criteria and the overall selectivity of training programs.
11. Talk to people practicing in your career fields of interest. The Cornell Extern Program is a great way to do this.

# Year-by-Year Guidelines

All animal health care pre-professionals are encouraged to use the materials in the Career Library, 103 Barnes Hall, and on the web to determine specific requirements for course work, standardized tests, and application procedures. The following guideline is a good general framework for most animal health careers.

## *Throughout Your Undergraduate Career*

- Plan your course schedule in consultation with an academic advisor.
- Create a CCNet profile at [career.cornell.edu](http://career.cornell.edu). Within “Career Preferences,” select “Health Careers Notices” in the “Career Services Desired” menu in order to receive health careers program information. Consult “Upcoming Events” for program announcements.
- Attend programs featuring professional school admissions speakers, practitioners, and others.
- To learn about specific schools & programs, attend special programs offered annually:
  - "Open House" at the College of Veterinary Medicine at Cornell, held each spring.
  - "Grad and Professional School Day," every fall.
- Check out student health career organizations, volunteer and research opportunities, summer jobs, and internships to test and develop your career interests.
- Start searching for summer opportunities during the fall semester for the following summer.
- Develop and frequently update an alternative career option to pursue if you don't go to a health professional school or want a gap year or two.

## *Freshman Year or First Transfer Year*

- Attend Freshman Orientation for freshmen and first-year transfer students interested in animal health careers during Orientation Week, or listen to the audio if you are unable to attend.
- Meet with your faculty advisor and/or student academic advisors, and the pre-health careers advisor in your college to plan a four-year program to include college requirements, major requirements, and animal health career school requirements.

- Get to know your teachers and advisors. You'll learn more, enjoy Cornell more, and lay the groundwork for future letters of recommendation needed when you apply.
- Consider study abroad or other programs that require time away from campus early in your academic career.

### *Sophomore Year*

- If you haven't already, open an AdviseStream account to explore, prepare for, and learn about health careers.
- Plan your prerequisite course sequence in order to complete the necessary requirements before taking standardized admission tests.
- Seek out job or internship opportunities that involve working with animals.
- Continue getting to know teachers, advisors, and others who might write your letters of recommendation.
- Use the Career Library online keyword search tool to locate resources. Become familiar with informational resources, especially those that list specific requirements at schools, in the Career Library at 103 Barnes Hall.
- Research the professional schools that will prepare you for your career in animal healthcare.
- Review your progress in required course sequences for veterinary or other professional schools, your major, college requirements, and your graduation plan.

### *The Academic Year Before You Apply (varies depending on when you plan to matriculate)*

- Revisit your career goals with professionals in your field of interest.
- Meet with an advisor to create or review a timeline for your application process.
- Refer to the latest online version of the "Summary of Course Prerequisites" published by the Association of American Veterinary Medical Colleges. Create a spreadsheet detailing requirements, deadlines, and other important information about professional schools you are interested in.
- Access online information about any standardized test required. Decide when to take your tests.

- In the Career Library and on the Health Careers web pages, consult information provided by past Cornell applicants.
- Schedule a mock interview with a health career advisor, faculty advisor, or other knowledgeable professional. Practice interview strategies with your peers.

### *Your Application Year*

- Update your spreadsheet regularly to ensure all materials are submitted on time.
- Interviews at vet schools can begin late fall and go into the early spring. Acceptances usually arrive spring semester. If you have not been invited to any interviews by January, consult a health careers advisor.
- Use your AdviseStream or other e-portfolio and/or spreadsheet to consider follow-up options at individual schools. If you are unsure how to proceed, consult an advisor.
- After you graduate, the professional relationships you made at Cornell remain. Cornell advising is also available to alumni. You are always welcome to stay in touch and seek advice when it is needed!

## Searches for Animal Health Careers Information

All the key words below in combination can lead you to good information about the field of animal health and its many different professional opportunities

- Animal health careers or professions
- Veterinary medical education
- AAVMC
- VMSAR
- VMCAS
- Research animal nutrition
- Wildlife biologist
- Zoo director
- Feed grain broker buyer
- Livestock transportation services
- Farrier
- Veterinary pharmaceutical sales representative
- Equine dental technician
- Animal insurance agent pet or equine

## Books and Resources in 103 Barnes Hall, the Cornell Career Services Library

*The Helping Professions, A Careers Sourcebook*

*Career Diary of a Veterinarian*

*Vault Guide to Veterinary & Animal Careers*

*Extraordinary Jobs With Animals*

*Ferguson's Careers in Focus, Animal Care*

*Working with Animals*

*The Everything Guide to Working with Animals*

*Veterinary Medical School Admissions Requirements*

*Getting Into Veterinary School: Insights by an Admissions Expert*

Other book resources can be found at Career libraries on campus as well as Mann Library general holdings.

# Appendix

Information on the Cornell University College of Veterinary Medicine for pre-applicants

## Class Profile

	<b>Class of 2013</b>	<b>Class of 2014</b>	<b>Class of 2015</b>	<b>Class of 2016</b>	<b>Class of 2017</b>
<b>Median Age</b>	21	21	22	21	21
<b>Median GPA</b>	3.72	3.70	3.72	3.75	3.7
<b>Median Yrs. of Ed.</b>	4	4	5	5	5
<b>Median GRE Total</b>	1335	1330	1320	1350	312
<b>GRE-Verbal</b>	600	600	590	620	162
<b>GRE-Quant.</b>	735	730	730	730	159
<b>Male</b>	20	15	24	20	16
<b>Female</b>	72	74	78	82	83
<b>New York</b>	50	56	55	54	60
<b>Contract</b>	0	0	0	0	0
<b>Other</b>	42	33	47	48	39
<b>Cornell</b>	30	22	23	21	17
<b>Non-Cornell</b>	62	68	79	81	82
<b>Biology</b>	43	40	46	40	47
<b>Ag./Animal Science</b>	37	32	33	30	24
<b>Other</b>	12	17	23	32	28

## Applications

	<b>2008-2009</b>	<b>2009-2010</b>	<b>2010-2011</b>	<b>2011-2012</b>	<b>2012-2013</b>
<b>STATE</b>					
<b>New York</b>	234	210	261	261	287
<b>Contract (NJ/ NH)</b>	10*	18*	0	0	0
<b>Other</b>	657	647	685	656	782
<b>TOTAL</b>	901	875	946	917	1069

\* New Hampshire Only

## CVMCU Early Acceptance Program

The Early Acceptance Program gives exceptionally well qualified applicants the opportunity to obtain admission to veterinary school after completing their sophomore year. With admissions to the Cornell University College of Veterinary Medicine secured, the successful applicant may use the time between acceptance and matriculation to pursue experience in areas of personal interest. Entry into the professional curriculum is expected after completion of the junior year. Admission to the program is based on outstanding academic performance in the first two years of college and the applicant's plan for the intended use of the third year in college. Completion of a baccalaureate degree prior to matriculation is not required.

Criteria for admission to this program are rigorous. Generally, applicants for this program have a GPA of 3.7 or better and GRE Verbal and Quantitative scores above the 80% percentile. It is expected that the GRE's will be taken by April 1st of the application year to ensure the scores will be delivered from ETS by the application deadline. Applicants must have also completed at least one semester of organic chemistry and one semester of an upper level biology, biochemistry or physics course.

Additionally, applicants must submit a written plan describing how the time between acceptance and matriculation will be used. Examples of how the time may be spent include study in challenging courses in areas of interest, initiation or completion of a research project, or time spent in a unique life experience. This program is not intended to delay matriculation for reasons of economics, illness, or other personal hardships.

Additional requirements for the application process can be found at the following URL: [www.vet.cornell.edu/admissions/howtoapply.htm](http://www.vet.cornell.edu/admissions/howtoapply.htm). Applications for the Early Acceptance Program should not be sent through VMCAS.

The application and evaluation process for the program are as follows:

- College sophomores are eligible to apply at the end of the spring term of their second year for admission after their third year.
- Applications are available in March each year with a deadline of June 1. Supplemental information, such as letters of evaluation and transcripts from all colleges are required. Visit the College of Veterinary Medicine's admissions web site for details [www.vet.cornell.edu/admissions](http://www.vet.cornell.edu/admissions) or email us at: [vet\\_admissions@cornell.edu](mailto:vet_admissions@cornell.edu).

- The application and prerequisite requirements are the same as for the other applicants, except that all prerequisite courses must have been completed with a grade of B or better. Students who have not satisfied all of the prerequisite coursework must complete it before the end of spring term prior to matriculation.
- The GRE or MCAT must be in the admissions office by the June 1st deadline. Cornell's GRE code number is 2549. MCAT code number is 993.
- The evaluation process is the same as for other applicants except for the timetable which is:
  - • June 1                      Deadline for applications
  - • July 15                      Notification of decision
- Any questions? Contact the Office of DVM Admissions (607) 253-3700 or [vet\\_admissions@cornell.edu](mailto:vet_admissions@cornell.edu).

# **Cornell Career Services**

103 Barnes Hall • 255-5296 • [career.cornell.edu](http://career.cornell.edu)