

## ***A focus on Academic and Career Advising: Spring 2016.***

Department of Veterinary and Animal Sciences

### **Part One: “A Look in the Mirror”**

The Department of Veterinary and Animal Sciences (VAS), within the College of Natural Sciences, serves students interested in pursuing careers related to the medical care of animals via post graduate degrees in veterinary schools or veterinary technician programs, students interested in managing farms and businesses related to animal production or for recreation, and students interested in research methodologies as they apply to biotechnology or to managing animal colonies for research.

In terms of Academic Advising, the University accepts students into the Animal Science major and faculty advisors from our department meet with students during the scheduled new student orientation (NSO) period. They introduce students to the program, assist them with registration for first semester courses, and assign each student an academic advisor (see **Appendix** for complete list of information discussed at NSO). 100 percent of the students are assigned to a permanent advisor, who they meet during the fall advising week in November. VAS requires students to meet with their academic faculty advisor during all Fall/Spring registration periods. These meetings are scheduled for the week prior to the beginning of registration. Students are alerted via email to make appointments with their advisors two weeks prior to advising week. Advisors post their schedules with time slots of 20 or 30 minutes and students select times on a first-come first-serve basis. Students are reminded to review their academic advising report in SPIRE for accuracy, to be prepared with questions they might have regarding their academic/career goals, and plan of study for the upcoming semester. An Undergraduate Handbook with the suggested sequences of courses and a complete list of all courses and course descriptions is available in print and online on the departmental website (<http://www.vasci.umass.edu/course-catalog>). Upon completion of the advising appointment, the advisor removes the registration hold, allowing students to register for classes when their enrollment appointments begin. The department encourages students to meet with their faculty advisor to seek guidance about classes to take, as well as selecting career options, or talking about other concerns. Each student’s advisor is listed in the student center in their SPIRE account and advisors’ offices are listed in the undergraduate handbook, which is available in print or online.

Regarding Career Advising, our department follows a multi-pronged approach, which is consistent with the wide range of career interests our students develop during their time on campus. First, given that the great majority of our students express an interest in attending veterinary schools, starting at NSO and continuing from the first semester on campus and in our Animal Science introductory classes, students are reminded of the course sequence needed to complete veterinary school requirements and the need to maintain a high GPA. This early focus on Pre-Vet advising is also due to the tight schedule of courses students must complete to be able to apply to veterinary schools. The department also has a designated *Pre-veterinary advisor, Dr. Janice Telfer*, who routinely participates in webinars offered by the American Veterinary Medical Association regarding courses and procedures for students to gain admission to veterinary schools. Updates in veterinary school requirements are regularly incorporated in the notes available in our Undergraduate Handbook and on our website. The department also has a *Veterinary School Advisory committee* that includes the three veterinarians who are faculty in the department; members of the committee answer

questions regarding career choice, internships, and preparation to gain admission to veterinary schools. We also have a *Pre-Veterinary Club* that is directed by Dr. Gradil, who is a DVM. Club members suggest program topics and outside speakers and alumni are brought in to discuss their experience in getting into veterinary schools as well as discussing their experiences as practicing veterinarians.

For students interested in other careers related to animals, the bulk of the formal career advising is done in a required course that is recommended for sophomore students. This course, *AnSci. 392, Animal Sciences Career Seminar*, is taught by Carrie Chickering-Sears from UMass Extension and Dr. Susan Marston, a faculty member in our department. This seminar series includes feature presentations by agricultural and animal science professionals in the fields of animal health, behavior, biotechnology, wildlife and others. In addition, students are exposed to resume preparation, interview skills, internship opportunities, and web-based employment search guidelines (see complete *Syllabus* of the course in the **Appendix**). The objective of this course is to introduce students to a variety of possible careers in the field of animal science. Students have a unique opportunity to network with leaders in their field who provide introductions and internship possibilities, and prepare students for a real-life experience with gaining comfort and poise when speaking to potential employers.

Advisors also provide additional career advising when they offer academic advising, as students are confronted each semester with the challenges that a Pre-veterinary school curriculum poses. By the end of the sophomore year, and depending on the students' GPA, faculty advisors are strongly encouraged to start discussing career options with students if the possibility of attending veterinary school seems more remote due to GPA or change of heart.

General Academic and Career Advising in the department is delivered in two additional ways. The *Animal Science RAP* is open to all first-year students who have been admitted to the Animal Science major. Students share their living and learning experience with a community of peers who are all committed to working with animals and engaging in research on campus farms and in animal related research laboratories. Students live in Knowlton Hall in the Northeast residential area, room with another student in the RAP, and easily connect with classmates for study groups and class projects. VAS offers two Animal Science RAP sections that are also *First-year seminars* with a capacity of just 19 students and are taught by Dr. Sue Marston. Students are enrolled in a unique 1-credit seminar that introduces them to the range of academic opportunities available through the VAS department and facilitates a successful transition into the University.

The other form of more informal General Academic and Career Advising is done through the *Animal Science Peer Mentoring group*. Approximately 100 students are involved in this group. This group matches upper classmen in the major with underclassmen at a ratio of 1 mentor for 3 to 4 mentees. Mr. John Balise, the *Chief Undergraduate Advisor*, oversees these meetings and provides instruction to the mentors to avoid dissemination of wrong information. Meetings are held every other week and focus on various topics such as: developing good study habits, choosing laboratory courses, "surviving" on campus, campus life, the Commonwealth College, studying abroad, and how to get the best experience from participating in the animal management classes. The group also offers tutoring and social events including guest speakers, movie nights and dinners.

## **1-Strength and Weaknesses of Academic Advising in the Department of Veterinary and Animal Sciences.**

### Strengths:

- Personal knowledge of the student.
- Flexibility for additional appointments outside of the two annual scheduled appointments.
- Faculty awareness of department's teaching curriculum and requirements for career progression and graduation.
- Built-in real time career advising and curriculum adjustment to adapt to student performance and changes in long-term career interests.

### Weaknesses:

- Lack of uniformity in advising; some faculty are better advisors than others and vary in opinions regarding how students should proceed.
- Time consuming. Faculty must be trained prior to advising. In addition, each semester the Undergraduate Program Director updates all faculty regarding changes in curriculum, changes in course offerings, etc. Furthermore, there is an increased demand on advisors' time, as the request for letters of recommendations increases exponentially. Nevertheless, this is an important aspect of advising, as advisors in most cases are the most knowledgeable person regarding the student's academic record and potential.

## **2- Strengths and Weaknesses of Career Advising in the Department of Veterinary and Animal Sciences.**

### Strengths:

- Personal knowledge of the student and development of long-term trusting relationship with student.
- Continued career advising related to the student's academic performance and changes in long-term career interests as he/she proceeds through the major.
- Highly specialized personnel responsible for career advising. The majority of career advising in the department is delivered by faculty who are not only trained in advising but are also veterinarians, or researchers, or have worked in the different aspects of the animal sciences industry.

### Weaknesses:

- Need better information about summer and winter internship opportunities in industry, veterinary clinics, and farms, including contact information, description of the opportunities, etc.

-Better interaction and integration with the Campus Career Network and the office associated with the College of Natural Sciences.

### 3-Division of Labor/Usage of Personnel

- Our department does not have *professional staff* for advising, but instead every faculty member, either Lecturer or Tenure Track (TT), must advise. Incoming TT faculty members and lecturers are excused from advising during their first year/semester on Campus. During this time, new faculty receive FERPA Certification, SPIRE training, become familiar with our curriculum, and receive live training from the Undergraduate Program Director and/or the Chief Undergraduate Advisor. The department's undergraduate program office, under the direction of our program coordinator Ms. Lisa West, plays an important role in coordinating the advising process between faculty and students. Her office sends emails to undergraduate students alerting them about registering for advising appointments. She also shares with them updated advising notes with the latest changes in course requirements, a complete list of courses taught by the department for the upcoming semester (with meeting times), a thorough list of required courses offered by other departments (with meeting times) as well as suggested elective courses offered by our department or by other departments. She is also responsible for continuous updates of the online Undergraduate Handbook as well as updating once a year the printed version of the Undergraduate Handbook. See in the **Appendix** examples of the notes sent to students each semester prior to advising.
- As indicated above, all faculty in the department participate in academic advising. We feel strongly that by participating in some aspect of advising, faculty remain more involved and aware of the needs of students in our department. We have also found that while initially some faculty are reluctant to participate in the process, once they interact with students and realize how helpful their advice can be, they gladly accept the task. In the last 4 or 5 years we have slightly changed the distribution of advising among the faculty. Initially, lecturers were responsible for the majority of advising and each of them was responsible for advising between 40 to 60 students, whereas the majority of TT faculty advised between 10 to 15 undergraduate students. Over the last few years we have changed this, and lecturers are now capped at 35 advisees and TT faculty advise between 15 to 25 students. It is clear that not all faculty are equally good advisors, and perhaps some faculty should be better academic advisors whereas others might be better career advisors. Thus far we have stayed away from designating specific faculty for specific advising, as we believe one of the greatest advantages of our system is to build a long-term interaction between faculty advisor and advisee that helps to build a trusting relationship during the four years of each student's time on campus. Nevertheless, it might be worthwhile exploring some optimization in our current approach and designating a few faculty exclusively for academic and/or career advising.
- Our department has a Peer Mentoring group and our approach to this type of advising has been described above. Mentees eagerly become our mentors and this speaks to the many benefits of the program. Our only suggestion to improve this would be to offer more training for student mentors. Perhaps a group of senior mentors could be brought to Campus a week prior to the start of the Fall semester for additional training in upcoming changes in the majors, new opportunities, review of main academic points, etc.

#### **4- Data Analytics/Tracking**

- Flow of students in/out of the department

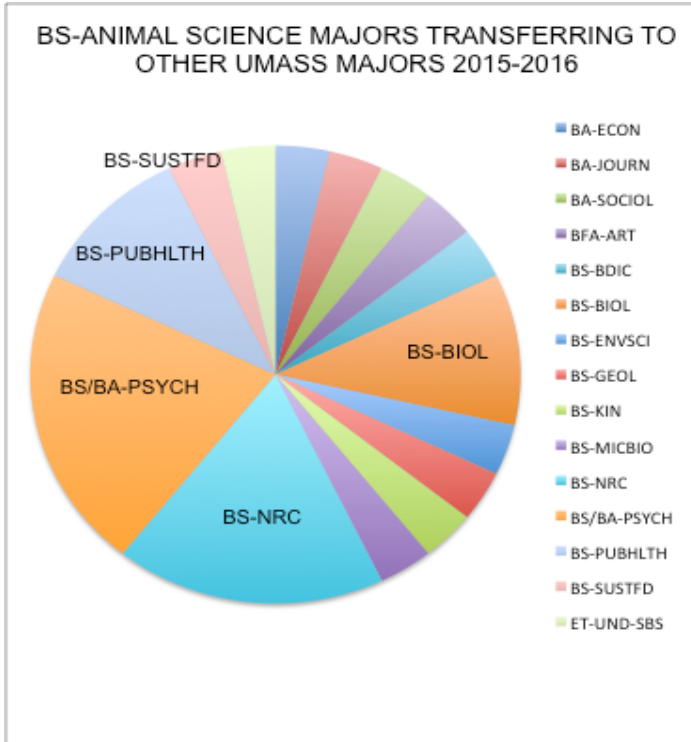
We currently track incoming freshmen and transfer students starting at the open houses and continuing with the NSO and Transfer advising sessions. Polling of students at the open houses confirms that 80-95% of admitted students plan on applying to veterinary schools at the end of the third year. As indicated, advisors experienced in new student and transfer advising issues advise each student at NSO. After they receive the initial advising session, 100 percent of the students are assigned to a permanent advisor.

We first rely on the advisee-permanent advisor point of contact to identify students in need of assistance. Advisors regularly advocate on behalf of their advisees to the university, the college, the major, and to faculty. Not all of our advisors know all of the answers to their advisees' questions immediately, but they diligently find out the answer and relay it to them. Many of the students who apply to graduate and veterinary medical and other professional schools ask their advisor to write their academic letter of recommendation. Because letters are only as effective as the recommender's knowledge of the candidate, these letters are better than that from a professor who has only known the candidate for one semester or from professional advising staff or a committee.

- Academic progress including GPA and timely progress towards degree completion

Our curriculum is designed so that students can graduate in 4 years, with a bachelor's of science in Animal Science or Pre-Veterinary Science. Students encountering unique obstacles (e.g. a required class not offered that semester or course conflicts) are granted substitutions or waivers so that they can remain on track for graduation. The main factor that slows our student's progress towards graduation is failure to earn a minimum grade in required science courses, so that students must retake a course in order to qualify to take the next semester in the series. The rationale for these prerequisites is that students with less than the minimum grade have not learned enough of the material to pass the next level class. Examples are Bio 151, in which students must earn a minimum grade of 'C' in order to be able to take Bio 152, and Chem 111, in which students must earn a minimum grade of 'C-'. Students can only repeat a course once without the permission of the academic dean. Difficulty in introductory biology and general chemistry does not augur well for performance in upper-level science courses or for success in a healthcare-related career. It is thus part of our advising message that students who earn less than the minimum grade for progression in early fundamental classes such as Bio 151/152/153 Introductory Biology and Chem 111/112 General Chemistry, or low grades in AnSci 101/103 Animal Science/Animal Management, should be actively investigating another major. The main difficulty lies in convincing students who believe that they need to stay in the major, even it means delaying their graduation and earning lower grades, in order to achieve their goal of becoming a veterinarian. One way we can counter this is through our class in Careers in Animal Science class, in which students are exposed to other career options for which they may be better suited. The most frequent change of major in 2015-2016 was BS/BA-PSYCH, followed by BS-NRC, BS-BIOL, and BS-PUBHLTH. It is of note that only one student out of 28 opted to change their major to BS-Sustainable Food and Farming (SUSTFD) (Fig. 1). Compared to the cohort of students entering the BS-ANIMAL SCIENCE major, students leaving the BS-ANIMAL SCIENCE major for other UMass majors are much more likely to have of a GPA of less than 3.0, to have earned a

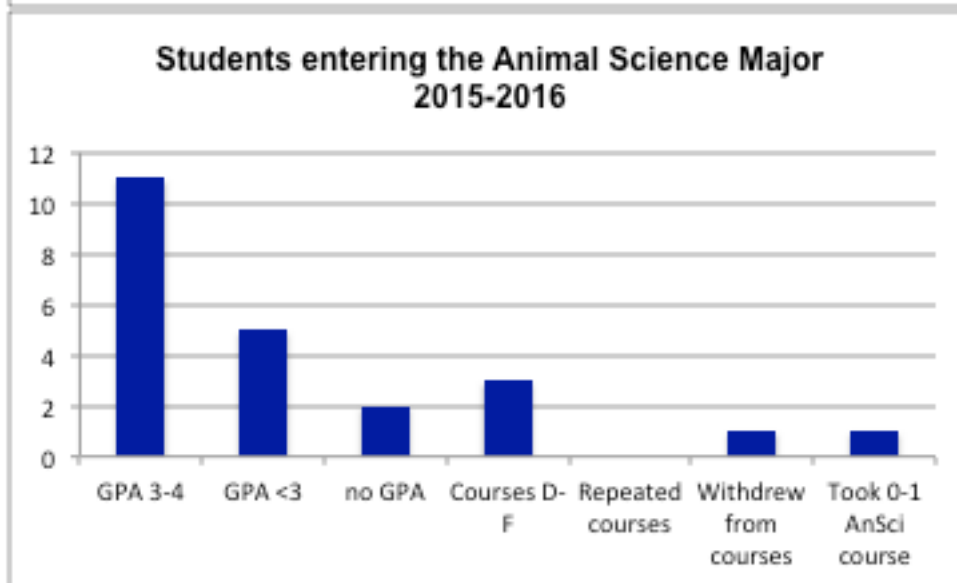
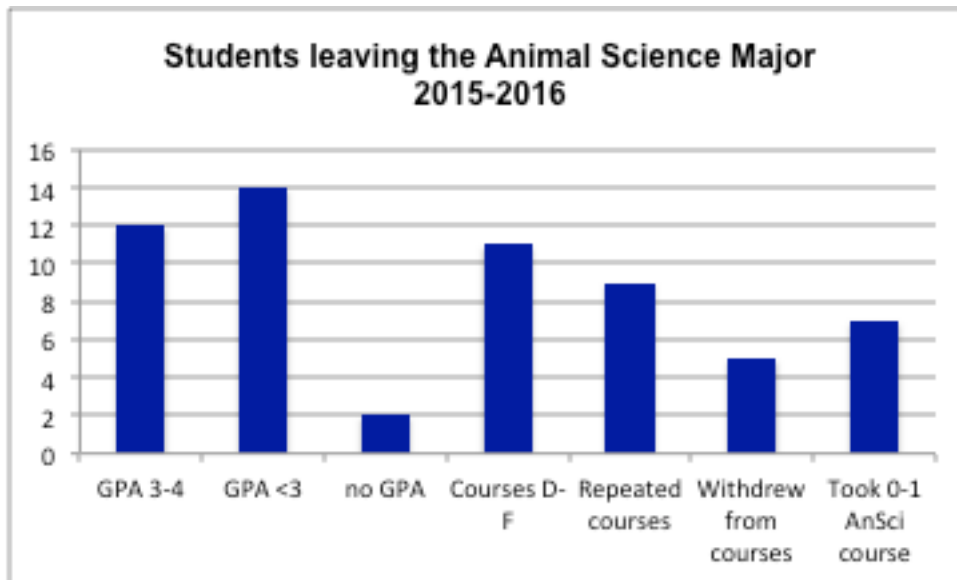
grade of D+-F in a required science course, and to have repeated or withdrawn from classes. Surprisingly, 25% of the students who left the major took 0 to 1 animal science courses of the two required in the first year, suggesting that they had been planning to leave the major for some time before they actually did.



**Fig. 1** 28 BS-ANIMAL SCIENCE majors transferred to other UMass majors in the period from August 1, 2015 to April 8, 2016. One student kept BS-ANIMAL SCIENCE as a secondary major.

to April 8, 2016.

**Fig. 2** Comparison of the student cohorts leaving and entering the BS-ANIMAL SCIENCE major in the period from August 1, 2015



- Intervention tools

In the fall of 2015, we used the EAB SSC platform to identify 45 students at risk of delays in their graduation. The criteria used were a cumulative GPA of less than 3.0, combined with a spring 2015 term GPA of less than 2.7. This was designed to look for students whose academic performance was on a downward trend, and whose cumulative GPA did not provide much of a “cushion” for a bad semester. We notified their advisor and supplied some template language to use to tell the students that we were concerned about them, as well as information to pass on about university academic and other support. Of those 45 students, 3 were listed with a non-Vet&AnSci faculty member, Dr. Cassandra Uricchio, as their advisor. Dr. Uricchio teaches in the Stockbridge 2-year equine industries program, and these students are enrolled in Stockbridge equine classes. Thus, they appear not to be pursuing the BS-Animal Science degree. Of the remaining 42 students on the campaign list, 4 changed majors, 1 withdrew from UMass for health reasons, and 2 were suspended after academic probation, which leaves 35 BS-Animal Science and BS-Pre-Veterinary Science majors

from the original campaign list. Rerunning the list with the criteria of a cumulative GPA of less than 3.0 and a Fall 2015 GPA of less than 2.7 yields 65 students out of a total count of 380 majors. 12 of these students are transfer students. The increase in numbers makes sense since the first campaign parameters using the spring 2015 term GPA did not count students in their first semester.

Twelve percent of our majors are transfer students (47 out of 380). However, 18 percent of the students with a cumulative GPA of less than 3.0 and a Fall 2015 GPA of less than 2.7 are transfer students. Transfer students are the most time intensive group of students to advise, partially because they often must take classes commonly taken by separate class levels at the same time, and these classes often conflict. They are also often hampered by inadequate science preparation, and thus it usually takes them at least three years to graduate in our major, even if they have completed two years at a community college. Our goal is to treat internal and external transfer students equally, and thus we have a policy to allow students to substitute a higher level elective for AnSci 101 Introduction to Animal Science, which is only offered in the fall semester. In the future, we will likely face more problems with transfer students anxious to graduate, but who do not qualify to elect to become BS-Pre-Veterinary Science majors, and who have not taken the classes necessary for graduation in the BS-Animal Science Animal Management or Biotechnology subplans.

Our pre-vet advising program faced several challenges last year in communicating VMCAS and veterinary medical school policy changes:

- Tufts joined the VMCAS common application portal.
- The VMCAS common application portal deadline moved up from the beginning of October, or the beginning of November for Tufts, to the middle of September. VMCAS counsels that the application should be submitted by the middle of August, so the majority of advising communications to the students were moved up to the preceding spring 2015 semester.
- New rules on study abroad transcripts- students had to be advised on whether they would need to hire a service to evaluate their study abroad transcripts.
- Veterinary medical schools continue to evaluate and change their prerequisites. For example, Communication/Public Speaking prerequisites have changed such that fewer schools require them and their definition of a course that fulfills their requirement has changed. Because VMCAS identifies the lack of prerequisites as the top reason that students are not admitted to veterinary medical school, we endeavor to communicate any changes to our students.

Our program continues to support our students in their initial goal of becoming a veterinarian, as well as to expose them to alternate careers. Students who do apply to veterinary school are successful in gaining admittance to veterinary schools in the US, Canada, the Caribbean, and Europe.

### **5-Experiential Opportunities**

- We currently support matching students with appropriate opportunities such as certificates, individualized programs, and community service through university and college programs.
- The Department supports student seeking double majors and minors through academic advising support. With the goal of facilitating the completion of the minor, the double major or degree, in a timely fashion, the curriculum committee supports substitutions or waivers of redundant requirements. We have a departmental honors coordinator who advises students on honors requirements.



- Competitive veterinary medical school applicants must have a “grasp of the profession”, which is gained from doing internships in small and large animal veterinary medical clinics, shelters, wildlife rehabilitation centers, zoos, aquaria, or biotech research companies. We also encourage our students to do internships to explore alternative careers, such as in human healthcare, animal behavior, or in biotech research. Students can earn credits for these experiences by enrolling in AnSci x98 practica classes. In addition, we have started a service dog training in class/internship, AnSci 398D, which has attracted considerable interest across the campus and the 5 colleges. We are currently working on getting documentation that students enrolled in these practica classes are covered by the University’s liability insurance, which will further facilitate student participation. We also are gathering contact information from our students, so that we can advise students on opportunities. These internship and/or employment-related practicum/experiential opportunities are not required by the major, but do contribute to the credits needed for graduation up to the maximum 18 credit limit set by the university.
- We strongly support research experiences for our majors via 1,2, or 3 credit discovery-based research tutorials that have a low faculty to student ratio. Students identify a UMass research mentor and complete a project with them, gaining marketable skills and practicing critical thinking and deductive reasoning skills.
- We support international opportunities by working with the International Program Office, We are currently working with them to codify curriculum exchange with the University of Melbourne.

## **Part Two. Goals for Academic and Career Advising and the student Experience**

### **A.**

- Every first year student will know during their first semester the “routes.” Freshmen in our department receive the name of their advisor during NSO and are encouraged to touch basis with their advisors their first week on campus. In addition, during the first week, many advisors send a welcome email to their new advisees indicating their availability and interest in meeting them. Freshmen students who are part of the Animal Science RAP receive additional information from Dr. Marston regarding the campus location of the department and its teaching rooms and farms, of the undergraduate program offices, and advisors’ office locations. Students in this class also have an orientation walk through the campus to point out buildings where other freshmen classes are taught. We are planning to extend this “College 101” introduction to all our freshmen. In our initial discussions we have identified the first week of laboratories of AnSci. 101, “Introduction to Animal Sciences” as the perfect setting for “Veterinary and Animal Sciences 101.” Lastly, during the first meeting of the Peer Mentoring Group, the Chair of the department and the Chief Undergraduate Advisor welcome students and highlight some of the ways students can request assistance in the department.
- Percentage of students who perform an internship or career preparation practicum/experience prior to graduation. Our department has a high student participation in these activities. For example, *the Senior Survey for 2015 shows 85.0% of our students performing a Practicum, internship, field or coop experience and/or clinical assignment. This is significantly higher than students*

for the College where 61.0% of the students indicate that they are exposed to those experiences. Our Department encourages students from the very first semester on campus to seek hands-on and one-on-one animal experience at the university as well as off-campus. Our freshman Introduction to Animal Sciences course, AnSci. 101, reinforces this concept. In addition, a significant proportion of our incoming students are aware of the need for internships and practical training to gain acceptance into veterinary schools. Our students have the advantage of our farms that provide an invaluable training ground. Students are also reminded to seek off-campus opportunities that will broaden their training experience. The Department can improve the work we are presently doing to increase student participation in internships and practica. To make this possible, we aim to prepare and make available a comprehensive list including contact information of: 1) veterinary practices, 2) farms and research institutions, and 3) biotech firms across the State that are interested in taking interns. Our intent is to encourage students beginning in their freshmen year to seek out these opportunities. We are confident that if we make this information available earlier in their careers, a greater number of students, close to 100%, would experience some sort of practical, technical and/or clinical experience prior to graduation, which should greatly facilitate their placement in the job market or decision about veterinary/graduate school.

- Identify goal for increasing students' satisfaction with Senior Survey items on Academic Advising and Career preparation. Our department is doing well in these areas. *For example, in terms of Academic Advising, 47% and 31% of our students are "Highly Satisfied" or "Somewhat Satisfied", respectively, which is comparable to the numbers for the College, which are 44% and 33%, respectively. Our department is significantly better than the College regarding Career Advising, where our numbers are 56% and 23% vs. 37% and 34%, respectively, for the College.* Despite these overall numbers, we feel our Academic Advising satisfaction should be higher, as we invest significant amount time and effort in training instructors and providing students with large amounts of information to make informed decisions. Towards this end, we plan to design and administer our own *Senior Survey* to request more detailed information from our students to elucidate areas where we can improve. A copy of the department's senior survey can be found in the **Appendix**. An important consideration in the evaluation of Academic Advising and Career Advising of our majors is the issue that nearly 100% of our incoming students intend to go to veterinary school. However, by the end of the spring semester of their sophomore year, approximately 40% of our students realize the academic aptitude required to earn grades competitive for admission and to succeed in veterinary medical school is above their initial expectations (it is not necessarily our curriculum that is too challenging but the high GPA, GRE scores and limited number of seats for vet school admission, plus the rigorous nature of the veterinary medical school curriculum). In the junior year, more students come to grips with the realization that veterinary medical school is not the best path for them, for reasons that include academic, financial and the positive reason that they have found another field that interest them more, such as research. Given that most of our majors will be giving up a long-held dream of becoming a veterinarian, it is truly remarkable that we score as well as we do in student satisfaction. Thus, a very important and challenging task for us is to identify those students early, guide them to the most appropriate career option while at the

same time keeping them motivated in school. How to accomplish these tasks so every student is well served by the major is one our most pressing challenges.

- Identify department's goal for utilization of the EAB SSC. Our goal in utilizing EAB SSC is to continue to use it to data mine, in order to serve our students better. As more parameters have been added, including more integration with SPIRE, it has become increasingly useful. There are still many aspects in which SPIRE does a better job, such as the new change of major since date query and the academic requirements report. On the other hand, SSC makes it easy to see D+-F courses, course repeats and withdrawals at a glance.
- What goals does the department have in supporting its students in how to articulate their undergraduate experience and preparation for a potential employer. In keeping with our goal to serve all students, especially those who came to the program with the notion of attending veterinary school but have changed their minds, we are focused on providing these students with marketable skills for future employment. To that end, we have designed a series of courses that provide hands-on experiences that represent a logical, progressive approach to build a portfolio of techniques and methods that are appealing to employers. For example for those students interested in *Biotechnology*, a sequence of laboratory courses has been prepared that offers comprehensive training in this discipline. The courses are:
  - ANIMLSCI 365 – Fundamentals in Veterinary and Biomedical Laboratory Techniques.
  - ANIMLSCI 385 - Introductory Biotechnology Lab.
  - ANIMLSCI 390A - Veterinary Microbiology Laboratory.
  - ANIMLSCI 455 - Research Animal Management I.
  - ANIMLSCI 490R - Research Animal Management II.
  - ANIMLSCI 291, 391, 491 M or C series. Biotech Research Independent Studies. Animal Models (M) Cellular and Molecular (C).

For those students interested in *Animal Management*, the following courses have been designed to offer practical and clinical training:

- ANIMLSCI 231/251—Dorset Sheep Management I and II.
- ANIMLSCI 232/252—Belted Galloway Management I and II.
- ANIMLSCI 233/253—Boer Goat Management I and II
- ANIMLSCI 234/254—Poultry Management I and II
- ANIMLSCI 297B-ST Artificial Insemination Certification
- ANIMLSCI 297DC/297D – Dairy Calf Management I and II
- ANIMLSCI 390A- Veterinary Microbiology Laboratory.
- ANIMLSCI 390C- Animal Business Management.
- ANIMLSCI 390L- Advanced Animal Health and Management.
- ANIMLSCI 392A- Careers in Animal Science.
- ANIMALSCI432- Advanced Nutrition
- ANIMLSCI 445A- Equine Reproduction.
- ANIMLSCI 497A- Equine Diseases & Health Management.
- ANIMLSCI 454- Dairy Herd Management.
- ANIMLSCI 497L- ST Winter Travelling Dairy

We believe the best articulation our students can make to an employer is to demonstrate they are well-trained and well-qualified to perform the job(s) they are applying for. A well-written letter of introduction and a professional resume that reflect their solid academic preparation and skill training must be part of the application. Students have access to this type of training in ANIMLSCI 392A-Careers in Animal Science and NATUSCI 387-Junior Writing. Nevertheless, we have identified this area as an area in which we can do more, and some of our ideas are presented in **Academic and Career Advising Action Plans**.

**B.** What types of information data would each Department like to be able to monitor so we can collectively hold ourselves accountable for the work being in academic and career advising.

It would be useful to have a query in SPIRE or in SSC for students who have been suspended after academic probation and who are returning after academic probation, so that we could notify their advisors. It's important that students thinking about changing majors change them quickly, rather than using up advisor time when they don't intend to continue. Ideally, we would be able to track veterinary medical school or graduate applications and the outcomes, as well as having a database of where our alumni are working. We currently try to collect some of this data ourselves, but it has been difficult.

### **Part Three. Academic and Career Advising Action Plans**

#### Academic Advising Action Plan

- To address the lack of uniformity of our current system, each semester a week prior to advising week we plan to offer General Advising sessions. These meetings will be offered separately according to progression in the major; i.e., one session will focus on freshmen, another on sophomores and so on. The Undergraduate Program Director, Chief Undergraduate Adviser and Chief Advisors for each subplan will conduct these sessions.
- We will create a Main Advisor position for each of the subplans within the Animal Science Major. Presently, we have only a Chief Pre-Vet advisor and comparable positions will be created for the Animal Management subplan as well as the Biotechnology subplan. The people in these positions will be the best informed in their respective subplans and will serve as consultants to the rest of the faculty and students interested in the particular subplan.
- We plan to use SSC statistics to assist us to act earlier with students who are underperforming. We are discussing strategies for implementing this additional intervention.
- Have dedicated advisors for transfer students.
- We plan to implement these actions within the next academic year and this will not require additional funding.
- We would like to offer training sessions for the senior members of our VASCI Peer Mentoring group a few days prior to the beginning of the Fall semester. This training would include updates on changes to our major requirements, new

opportunities for incoming students, and a review of pertinent campus procedures and policies. We estimate that implementing such a program will require additional funding.

#### Career Advising Action Plan

- Students interested in attending veterinary schools are well served by a combination of advising strategies such as having a Pre-Vet advisor, the Pre-Vet club and the Veterinary School Advising Committee. In the future, we plan on offering additional information on the financial aspects of veterinary medical school. A change suggested here is to implement additional training in terms of support with writing statements during the application process, as well as additional mock interviews for students who are selected for admission interviews. The implementation of these changes does not require funding. Further, better interaction and integration of some of these tasks with similar services offered by the Campus and College Career programs as well as with the Pre-Med advising program will help to create a more effective and specialized training for those students in the Pre-Vet and Pre-Med fields.
- We plan to create a Training Opportunities Handbook for our undergraduates detailing best practices on how to prepare a resume, interview etiquette, examples of letters of application to job/internships, and a complete list of places where our students can apply for internships, Practica, laboratory and/or clinical rotations. The list will contain the name(s) and contact information of the hiring department for the particular unit. We aim to have this in place for the summer of 2018.
- To expand the list of outside speakers for the ANIMLSCI 392A-Careers in Animal Science class and for the Pre-Vet Club. With limited resources, our current list of speakers is largely limited to local professionals. We would like to have some additional resources to bring people from other disciplines and other states. Additional funds will be needed to cover travel and lodging expenses.
- We will add more sections to 365 and 390A, which exposes and trains students in employable skills. This will require additional resources.
- Increase coordination with the Director of Constituent and Alumni relations of CNS to increase employment, internship opportunities and relevant career fair participation.