

## Chapter 21

### Summary of Focus Group Results

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Seven focus groups were conducted as a part of the research program that explored the supply of food animal veterinarians. Focus group participants included both faculty and students in separate studies. Focus groups were conducted at Kansas State University, University of California – Davis, Iowa State University, University of Georgia, and North Carolina State University. Institutions were selected based upon having a high level of involvement in some aspect of food animal medicine. Discussion guides for each focus group are included in an appendix. The following pages report on the purpose of each focus group, the methodology employed, and the findings. Focus group results were used in the overall research program to understand the phenomenon of interest from the point of view of the participants, to create survey items for the quantitative stage of the research, and to flesh out and more fully understand the quantitative results.

This chapter is organized by each university where a focus group was conducted. Each section that describes the focus group at the university contains an introduction, methodology, thematic analysis, and recommendations. We begin with the focus groups conducted at Kansas State University and the University of California at Davis, and then follow with the focus groups at Iowa State University, the University of Georgia, and end with North Carolina State University.

It should be noted that the focus group methodology is qualitative and exploratory in nature and is not intended to provide data that are generalizable to a stated universe.

Focus groups are designed to elicit reactions from participants about a particular topic and to generate ideas and concepts that will help the client understand the subject area under study. The output from a focus group study is typically used as preliminary data helpful in putting together more conclusive, quantitative studies involving a larger number of respondents. The output is also used to supplement, amplify and illustrate constructs from the quantitative findings that are based upon large samples from well defined populations. Occasionally, the focus group findings were in contrast to the quantitative results that were based upon systematic evidence.

The results from focus group research should never be considered representative of any population segment or a point of view of a specific target universe. The nonrandom method of recruitment and the small size of the sample do not permit this type of generalizability. Nevertheless, results of the focus groups reported here can provide a great deal of rich insight into the relevant aspects of the issues discussed and should be used accordingly.

**Kansas State University  
University of California – Davis**

**Focus Group Discussion**

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**INTRODUCTION**

One student and one faculty focus group was conducted at each of these universities. The purpose of these four focus group interviews is to provide initial insight into the existing and emerging factors, both societal and economic, affecting the applicant pool of students attracted to food supply veterinary medicine. Specifically we sought to better understand the factors that influence student’s career path focus (i.e., a food animal career focus versus other options such as companion animals and equine). The focus group interviews at Kansas State University and the University of California at Davis had four specific objectives:

1. To gain insight into the factors influencing students’ career focus decisions.
2. To gain insight into the level of knowledge students have about food animal careers in veterinary medicine and the image of those careers.
3. To gain insight into potential initiatives that may serve to build interest in food supply veterinary medicine.
4. To use the insights from this study to develop survey items for a questionnaire.

A pervasive theme throughout this entire research project is a strong focus on understanding the phenomenon from the perspective of the “customer.” As such, in this particular study, we seek to gain insight to these career focus issues by directly asking for

the opinions of students and of faculty who have unique insight into student motivations because of their exposure to a broad cross-section of students and their ability to observe them over time.

## METHODOLOGY

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Two focus groups were conducted on August 20<sup>th</sup>, 2004 at the Kansas State University College of Veterinary Medicine. The first focus group consisted of 12 students in the first month of their veterinary school education and the second group was comprised of 11 veterinary medical school faculty representing a variety of disciplines. Two additional focus groups were conducted on October 4<sup>th</sup>, 2004 at the University of California Davis, College of Veterinary Medicine. As with the first two focus groups at Kansas State University, one UC-Davis focus group consisted of 12 students in the first month of their veterinary school education and the other was comprised of 11 veterinary medical school faculty representing a variety of disciplines. These two schools were selected because they had major food animal programs in beef cattle and dairy cattle and reside in states with a strong agricultural industry and tradition in beef cattle and dairy cattle industry.

All four focus groups were audio and video taped and lasted between 60 and 85 minutes. Each participant received a bookstore gift certificate as compensation for their time. The tapes were transcribed and the transcripts used in the data analysis. A discussion guide was created for both the faculty and student focus group sessions (see appendix). Discussion was guided around the factors influencing career focus decisions among students, student knowledge of food supply veterinarian medicine careers, images and perceptions of different career choices, and the effectiveness of methods for building interest among students for food supply veterinary medicine. The discussion guide served as the blueprint for the focus group session, although we strayed from the guide when interesting discussions emerged that lead to useful insights.

## THEMATIC ANALYSIS

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This section of the report presents findings from the focus group interviews in the form of a summary of what respondents said in response to specific questions. The information in this section represents the researchers' interpretation based upon: (1) notes made during the focus group meetings, (2) a review of the audio and video recordings, and (3) a content analysis of the typed transcripts from the three meetings.

### **Factors Influencing Career Focus**

Focus group participants identified the following factors as the primary issues that influence the initial career focus of students as they enter into veterinary medical school:

**Experiences in Life.** Experiences gained in high school and even earlier were mentioned by students as having a profound influence on the type of career they pictured for themselves. Students, as might be expected, tend to be drawn to what they are familiar with in their childhood. Experiences in internships, growing up on a farm, and raising animals all contributed to their current preference in career focus. The faculty focus group members echoed the notion of early experiences shaping student interest. They also added that 4-H programs, television shows such as Animal Planet, and their family veterinarian all serve as early influences that help to point them in a particular career focus. A faculty focus group respondent suggested that he thought that most of those that decided to go into large animal practices had that in mind when they arrived at school.

*Illustrative quotations from the focus groups.*

“I think the Animal Planet is responsible for the interest in exotic animals. I think most of them model what they want to do after, if you ask them where they want to be in 5 years after graduation, they describe what is their family veterinarian currently, whatever that person does, that is what they want to do except those that spend a lot of time watching Animal Planet.” (faculty)

“I grew up doing 4-H and raising sheep and pigs and cows and chickens and rabbits and I’ve always loved that whole transition from raising them to butchering them to eating them and I grew up with that mentality and then have worked at a lot of dairies and beef industries and the people....I love the people. I love cow people.” (student)

“I’m interested in equine and large and food animal. And, the basis of that is a lot from my history, again 4-H, FFA, a big influence in my life. I did grow up on about an acre of land and was able to have a lot of animals in my presence, so that was like the initial start to it.” (student)

“Well, for me, I mean I’m small animal track oriented and that’s mostly because I’ve never really had that much experience with large food animals. I’ve lived in the suburbs or internationally and they’re just not where you are” (student)

“I think that their experiences prior to vet school are what make them think that they want to be a vet and they have an idea of what phase of veterinary medicine they might want to go into.” (faculty)

**Concern over School Debt and Salary.** Student focus group members were aware that a substantial student-debt load would need to be serviced upon graduation. Further, students reported that they were generally aware that they needed a high paying career in order to pay down the debt in a reasonable amount of time, although they were not in agreement as to what level of salary they had to earn. In general, there was a perception that a small animal practice career and/or specialization (e.g., ophthalmology) would pay more than large animal practice careers. In contrast, faculty focus group participants did not generally perceive money as a very important factor influencing student career choice

at this early stage in their veterinary education. However, some faculty did suggest that financial concerns become a larger factor as students approach graduation.

*Illustrative quotations from the focus groups.*

“I think I’ll be graduated with roughly \$150,000 in loans. This is undergraduate plus graduate and it’s stifling to the point that I feel like I absolutely need to get into something that pays well whether it be a specialty or you know whatever but I need to make a good sum of money to pay that back. I don’t want to be saddled the rest of my life. So, I’m heavily motivated by money.” (student)

“I think that there’s a number who think their going to go back to their hometowns in a smaller, rural, not country, but small town environment and realize that they cannot afford to and therefore go to the west coast, or to Kansas City or to Omaha or to Wichita in a small animal practice rather than a mixed practice where they thought they would go when they started veterinary college. It’s a compromised decision.” (faculty)

“All the statistics that we’ve even been shown since we’ve been here like in the doctoring class when we first started out, they were showing how the incomes were changing and for the most part going down and how the livestock industry and how the food animal industry is considerably lower than the small animal practice and the equine practices and those that specialize in research and it’s almost like well why would I want to go that direction [food animal] to come out of school and stay in debt and be impoverished...I could do that now.” (student)

“...when you get out it’s like unless you do like the hardship plan where you’re paying over 30 years at 92% interest...the payment was like \$1,200 a month and I’m thinking okay that’s my loan payment where do I eat? It’s like I’m going to have to walk to work you know carry my tools on my back and live in the box that I’ve pasted together from you know all the supplies that I’ve purchased. It doesn’t seem appealing to me to spend all this time in school just to get out there and be average.” (student)

“...you know we’re going to be trying to tell [employers] that we need more [money] than this but at the same time we’re going to be so desperate coming out being so poor that we’re going to have to take whatever it is they give us and if we start out at \$35,000 a year or \$45,000 or whatever, it’s like I shouldn’t have even gone to vet school...it’s like that bad.” (student)

“Applicants I would say that probably less than 5% of them think about money at all. If they did they probably wouldn’t apply. But, it very rarely comes out in the applicant narratives or in interviews or anything that money’s a concern. In fact, quite the opposite. In fact, many of them realize that their decision to enter

veterinary medicine will not necessarily make them rich, but they're prepared to make that sacrifice. We hear that all the time. And so, at that stage I would say no, it's not a big thing." (faculty)

"I think a lot of people don't even have any idea of what they could make in veterinary medicine or what they could make else where. My experience, but also just in talking to students in general, it seems it's a non-issue." (faculty)

"It's interesting because we start talking to them about that and even in pre-vet, but certainly in the first year of the veterinary curriculum we even have to talk about budgets and it just is kind of a glazed look, even though its talked about early in the semester before they get covered up with everything else. But the panic doesn't happen until about a third of the way or half way through their senior year, and all of the sudden they realize what their going to have to live on and what their going to have to use to service their debt and it scares them." (faculty)

**Important and Interesting Work.** Some student focus group members brought out the idea that the potential to do work that is personally meaningful is motivating them to go into a particular career focus. Similarly, a few members indicated that their interest in the subject was a larger driver than their interest in making money. Another idea under this category was the notion that specializing in a particular niche might allow one to make a name for themselves and achieve recognition among their peers. The ability to use interesting technological equipment was also cited as a factor influencing career choice.

*Illustrative quotations from the focus groups.*

"But really I guess what would motivate me to specialize is that I would be one of a few and I would also have the ability to expand the borders of that profession. Small animal practice...I mean there's not much else you can do...you practice and you go and the medicine is pretty much the same and you know there's this and that; but ophthalmology ....there's only 233 ophthalmologists in this whole country. So it's providing me with an area that I can make a name for myself, because I'm also interested in research where I can hopefully discover something." (student)

"Well, I guess the main point of that is just the human animal bond is something that is a really, I don't know it's a rewarding thing to facilitate. When you are able to see a lot of different types of people

coming into your offices and you're helping facilitate keeping a relationship in their life that is very important to them, that's really rewarding." (student)

"I'll probably do companion animals for a few reasons. One is that pets are just becoming bigger and bigger parts of people's lives. They are really important to a lot of people." (student)

**Family Considerations.** The student focus group participants indicated that family issues would likely influence their career choice at some point in the future (many did not have a family at this point). Women in the group expressed concerns that the additional time needed in school to seek a specialization would take away from their time to raise a family. Other concerns under this area included a desire to limit the amount of family relocation and the need for a spouse to find a job. One student expressed the idea that running your own private practice provides the opportunity for one's family to work with them. Faculty focus group members also reported that student concerns over the availability of adequate work for their spouse influenced their career focus decision, however many thought this did not influence students until late in their education as they start to look for a job.

*Illustrative quotations from the focus groups.*

"I know quite a few female vets who have done it you know they take you know their little back-packy thing with their kid in it and hook it to the fence (laughter)...but they are in there helping the cows while the little kid is just kind of sitting there chilling and I think that that's pretty dang neat to be able to have the opportunity to take your children to those places where it might not be quite so acceptable in a small animal clinic type practice, so I think that's going to be really fun." (student)

"I'd ideally like to go into exotics, particularly zoo animal and big cats but that profession is so limited, so competitive. I'm worried it's something I won't be able to do given that I'd like to start a family, have kids, and I wouldn't be able to pick them up and move across the country you know for the one job opening. So, that's definitely a factor." (student)

“For him [future spouse] we have to be near a decent airport for him....a decent sized airport for him to have a decent job. And, if I were in large animal I think that that would be too limiting.” (student)

“In our minority group applicants we see that the parents and other mentors often guide them away from veterinary medicine into human medicine. They say, ‘why would you want to do that, we want you to be a doctor.’ And they get pushed and pushed into that. So, on the minority side it’s looking at maybe prestige, lifestyle, economics, pushing the very bright students that way rather than letting them accept roles and interests in vet medicine.” (faculty)

“I would say that large animal practice in general has not adapted to the feminization of the profession and doesn’t accommodate the family lifestyles....both folks in the relationship working” (faculty)

**Perceptions of Job Availability.** Student focus group members reported that their perception of the number of available jobs in a particular career focus influences their choice. Some mentioned going into a veterinarian specialty as a way to succeed due to the lack of competitors. Others mentioned that rural practice opportunities are plentiful and available for those interested in them. Large corporate farms were mentioned as an opportunity for more jobs for food animal veterinarians. However, others in both the student and faculty groups raised concerns that the tasks traditionally done by food animal veterinarians were often being done less expensively by non-veterinarians because of the profit orientation of food animal producers.

*Illustrative quotations from the focus groups.*

“I think there’s probably 75 percent more small animal veterinarians than there are rural veterinarians. I think that the opportunities out there are wide or more available for people interested in rural practice.” (student)

“[An animal science] graduate ...he’s probably going to be doing most of the things that you know we’re taught graduating here...your c-section, all your animal health care, stuff like that. On the ranch you can’t afford to outsource that to a veterinarian and pay those kinds of costs.” (student)

**Physical Demands of the Job.** A few students expressed concerns over the perceived physical demands of the food animal veterinarian career. This was discussed as becoming a larger issue as one grows older. Faculty focus group participants also expressed this factor as one that influences students to choose a companion animal career focus over a food animal career focus. Faculty suggested that students' safety concerns (i.e., will I be injured in the job) were more of an issue over one's ability to physically manage large animals. Some faculty thought that once students started working with large animals they found it even more difficult than they expected it to be, while others suggested the physical demands were related to how you work rather than how physical strength. Similar to the student concerns, faculty members suggested that students consider the physical demand issue as a long-term, ongoing concern. That is, will they be able to perform the required tasks of the job when they are older.

*Illustrative quotations from the focus groups.*

“That was a primary consideration for me when I was in vet school because I loved horses but I didn't want to go into equine practice because I didn't want to be exposed to all those unfamiliar horses and have the opportunity for being injured. I didn't know that much about horses and I felt like I would have loved to have practiced with horses but it was too dangerous. So I didn't pursue that as a career option.” (faculty)

“It's just hard because with large animals it depends so much on strength and you know after getting out of school and everything how many good years do I have left before [I can't work with large animals anymore]” (student)

“I enjoy being outside in the field, in the weather...I'm okay with all that, but to the point where it's going to be so physically taxing that it's actually going to possibly end my career in that area it was like I need to take another look at exactly how this is going to go.” (student)

“I'm personally afraid of breaking a bone and getting my head kicked in; whereas you know I can get bit in a clinic, but it's generally not the end of the world.” (student)

“I hear students concerned about the time that they could be in large animal medicine, even though they really like handling the large animals and the equine and food animal rotations are very popular, I think they worry because they’ve seen people who’ve gotten hurt or think that they wouldn’t be able to maintain it over time.” (faculty)

**Lifestyle Issues (time and geography).** Another factor influencing the initial career choice of students entering into veterinary medical school could be termed lifestyle issues. Two elements of this surfaced: geographic preferences and hours spent on the job. Geographic preferences led people both toward food animal careers (i.e., some were interested in living in a rural community) as well as away from a food animal career (i.e., desire to live in a large urban center). However, there was not a strong consensus on the strength of this factor as many focus group respondents in the student groups indicated that they would go wherever they needed to practice the type of career they selected. Thus, for that sub-set of students career choice influenced location choice rather than the other way around.

The faculty input around the lifestyle factor was more focused on perceptions of students work life preferences. Specifically, faculty focus group participants suggested that concern over the amount of time spent at work and the time of day that work was performed influenced students’ career focus. Companion animal practices were mentioned as a way for students to have a more constant and controllable work life in terms of the number of hours worked and the time of day (or night) those hours are worked. Some faculty members discussed this as a generational issue with the availability of more free time being a much more critical factor for the current generation graduating from veterinary medical colleges than it was for past generations of graduates.

Another idea generated by the faculty focus group was that the importance of hours spent working may have regional differences, with Midwest students finding this factor less influential on their career choices.

*Illustrative quotations from the focus groups.*

“I just don’t see myself living in a city especially if I find a wife and have kids. I don’t want them growing up in a city. I guess I’m just basically going back to where I came from and it’s because of where I grew up I had a great life growing up.” (Student).

“I think geography is really important too. I think that people want to go where there’s recreational potential and things outside of veterinary medicine that would interest them whether it’s a big city or whether its rural . I think people kind of pick an area of the country first and not a specific city or type of practice.” (faculty)

“I found that food animal medicine and sometimes public health tends to be geographically limited; whereas, if I’m a companion animal vet I can pretty much do it anywhere, so if I change my mind about where I want live, it’s portable” (student)

“I think with small animal one of the big reasons that I took it in going into veterinary medicine, I felt like it was stable. You can have job stability and you can move anywhere. I like the freedom of knowing that I can go anywhere that I want in the United States pretty much at any point in my life.” (student)

“When students are telling me about their new jobs they’ll say, its 3 days a week, 10 hours a day and I don’t have to do emergency every other weekend. They don’t say is it a 4 man practice, they have this kind of equipment. The first thing they tell me is I’m working 4 days a week and every other Saturday.” (faculty)

“I would say from my exposure to the students, the biggest detriment to choosing a career upon graduation is for people in large animal to switch to small animal is the lifestyle. It’s just the hours they have to put in and one and two people practices with no real time off and working you know 24-7 versus small animal you know where there’s substantially more flexibility.” (faculty)

**Animal Care Mentality.** A small group of student participants brought up the concept of animal welfare in influencing their career choices. These students expressed a strong interest in “repairing broken animals” which they felt was at odds with the bottom-line,

production orientation that is necessary with food animal veterinarians. Faculty also suggested that students often enter school with either an “individual patient” or “herd production” mentality that influences their career focus decisions.

*Illustrative quotations from the focus groups.*

“That’s completely why I couldn’t do it. Hands down. Because you have 2000 head of cattle, and one doesn’t matter, but it matters to me.” (student)

“I think most our students need to handle those animals, touch those animals, hug the owners, and cry with them when there’s a problem. And I don’t think you can do that with sheep, with herd animals, you just kind of look at them....how are they doing? And you just don’t have those special interactions with them.” (faculty)

“I mean I enjoy the work that I do with the animals but I would prefer the interaction with people as opposed to one person who owns 5,000 hens.” (student)

“...if you’ve got 5,000 head and you’ve got a cow down with something that could be fixed you know it’s like send her off instead of doing something about it and I want to do something about it instead of just a bunch of vaccinations.” (student)

“I would suggest that probably 50% of our applicants have kind of a naïve desire to save the planet. They love animals and so they’re going into veterinary medicine as a way to minister to animals and to protect their health and welfare in whatever environment that may be.” (faculty)

“Another decision factor in my opinion is whether or not you’re of the mindset that you want to treat an individual patient or if you want to treat the population, and in my opinion they are very different approaches and people that like the details and the intricacies of treating an individual patient will go more into small animals for obvious reasons. And, if you’re more of the mindset of treating the population as a whole then you will go into that kind of medicine, and I think that plays a very important part of the decision.” (faculty)

**Experiences in School.** Experiences in school were mentioned predominantly by the faculty as a motivation for entering into a particular career focus. This is not surprising, as the students in the focus group had not yet experienced veterinary medical school and

thus were unable to comment extensively on its influence. While this motivation is not as applicable to what influences career choice on new students, it is worth noting that it was mentioned in the faculty focus group that students' final in-school experiences often led them to consider small animal careers due to the exposure to exciting clinical teaching faculty and residents in the ICU.

*Illustrative quotations from the focus groups.*

“There are some things I haven't seen yet that through these 4 years I will see and I have to have an open mind because aside from money, passion is the other thing that makes you want to be a veterinarian and you have to do what you like.”  
(student)

“But ultimately your experience has everything to do with what you're going to go into and when we are here, we are going to get the experience to be exposed to things that we've never been exposed to, so somebody that's from a city that's been in a small animal practice their whole life might go out and work on a farm and say “oh I kind of like the way this goes.” I like having the freedom of doing things the way I want to do them and there's a lot of things that you could see [in vet school] that you didn't have the opportunity to see in undergrad.” (student)

“I think that the clinical teaching faculty have a fantastic influence on our students. I think it's our interns and our residents that are excited and engaged. They're with them sometimes at 14-16 hours at a stretch. And it's almost an acting out of the emergency vet portion of Animal Planet. And I think that in the ICU there is a problem solving activity that takes place that has a greater weight on the final career decision because it's the last hoorah, it's the last go around on their final career decisions. I don't know why that is, but I think there's more excitement and more challenge in small animal than there is in large animal [in the clinics]. That's the perception.” (faculty)

“I think that I'd agree definitely that the past experiences really shape what they think they're going to do going into vet school, but then during vet school I think that there's a lot...a lot of experience and exposure that will affect that.” (faculty)

“I think we can thank sometimes some of the negative experiences that people have in veterinary school...the long hours and clinics and you know the intense experiences that they have in other species and they look to poultry in a lot of ways for [better] lifestyle, [and better] job opportunities, which all influence why people would go into poultry.” (faculty)

## **Student Knowledge and Image of FSVM Careers**

Generally, students reported having a lack of knowledge about food supply veterinary medicine careers. This is especially true for those without a rural upbringing. Some had a view of FSVM as entailing long hours of hard physical labor and low pay. Those with this perspective were primarily focused on the rural practice aspect of the career. Negative images of FSVM were expressed by some students including: FSVM is most appropriate for tall, strong males; the work environment is not very clean; FSVM involves a lot of driving from job to job; there is not much interaction with other people in FSVM; not much teamwork; and long hours. One of the female faculty focus group respondents discussed that her experience in looking for a job in swine and dairy practices led her to believe that FSVM clients were not as receptive to having a female veterinarian as they were to having a male veterinarian.

On the positive image side, it was expressed that FSVM veterinarians are resourceful and independent, have a lot of freedom (not trapped in an office all day), and can develop deeper relationships with their clients. Almost without exception, student's perceptions of FSVM practitioners tended to be in reference to the stereotypical rural veterinarian, as opposed to food supply veterinarian careers in academia, industry, or government. Faculty shared similar ideas about the general lack of FSVM knowledge among entering students, particularly in the expanding areas of security, technology and food safety. Faculty respondents discussed that they conduct a lecture series that focuses on non-traditional veterinary careers, but that it represents only a small part of the entire curriculum.

## Methods for Building Interest in FSVM

**Reserve Class Slots.** The idea of holding class slots specifically for students interested in FSVM was met with a mixed, but mostly negative, reaction. Many students thought this would be unfair to other applicants because of the reduction in the number of seats available for non-food animal students. Because of the highly competitive nature of the veterinary school selection process, some student focus group participants suggested that students would feign interest in food animal veterinary medicine as a way to get into the program, but then not end up in that type of practice. Other students suggested that because students often change their mind about their career focus during school, locking them in too early to a particular career focus would do them a disservice. In the faculty focus group, it was also mentioned that the current admissions process would need to be changed to accommodate holding slots open and perhaps curriculum changes as well. Some faculty suggested that finding students interested in becoming food supply veterinarians was not difficult, but that most of those identified were not academically qualified (i.e., GPAs and test scores) for the program. However, the notion of early admissions targeted toward qualified, food supply students was suggested.

### *Illustrative quotations from the focus groups.*

“You will get people that want to increase their chances [of admission] and say ‘yeah I want to go into food animal’ and then when the fourth year rolls around, ‘ohhh actually I’m going to take an extra internal medicine rotation.’ ” (student)

“You know we conducted an experiment here to try and encourage people...fast track people into veterinary school and food safety...by taking undergraduate majors out of food science and technology, and we were successful to the extent that we identified a number of students every year [but we] couldn’t get [them] into vet school [they] didn’t have the grades, academically [they] couldn’t make it.” (faculty)

“The reality is if they don’t have the GPA at that level, they won’t make it through veterinary school.” (faculty)

“We can’t let somebody in that won’t get out. That’s what the whole emphasis on exams is” (faculty)

“I don’t think [holding slots for FSVM students] is fair at all.” (student)

“You’d have to change the whole admissions process and that’s the problem. You can identify this person but there’s no guarantee they’ll get in with the current admissions process.” (faculty)

**Scholarships for FSVM Students.** Financial assistance was mentioned overwhelmingly by the student focus group participants. Student focus group participants brought up ideas such as scholarships and loan repayment for going into FSVM. However, few were aware of the National Veterinary Services Act. The notion of working in a particular field and location for a period of time in exchange for debt relief was well received. Faculty mentioned the National Veterinary Services Act as a motivator for future students to go into food supply veterinary medicine.

*Illustrative quotations from the focus groups.*

“Scholarships or continuing scholarships of some substantial form...not \$1000 or \$2000, it has to be in relation to what we’re paying out for school debt. And in turn there should be some sort of commitment maybe [from the student].” (Student)

“I would completely be interested [in specializing in food supply medicine for a full ride scholarship]” (student)”

“But yeah if I had a full-ride scholarship for food animal...hands down [I would do it]” (student)

“I think that if there were monetary incentives like scholarships that sort of thing...I think that would make a huge difference. I would sign up.” (student)

“...if [FSVM] scholarships were to be offered while you’re going to school and continually reevaluate or interview for those [who remain interested in FSVM].

You could still have the opportunity to change your mind, but then you'd lose the scholarship.” (student)

**Help Starting a FSVM Career.** Another idea emerging from the student focus groups was that more students may go into FSVM careers if they received some assistance in starting that type of career. Examples given included providing help in setting up their business, assistance in purchasing equipment, providing information to them that documented the geographic areas where FSVM shortages exist, and providing job placement services to eliminate the uncertainty associated with going into the career.

*Illustrative quotations from the focus groups.*

“Also, maybe providing assistance in setting up a clinic or something like that or help purchasing equipment and so forth. Or, possibly if they were to do studies about where there were shortages of veterinarians in a market so that they could talk to a person coming out of vet school and say well if you were to go to this part of Nebraska then you would most likely have a whole lot of clients right away and we'll help you set up a practice there and you'll immediately be making money.” (student)

“[Programs that say] we'll have a job for you in this place if you want....you know something like that. Just kind of allowing it to be more certain I think. Because I think a lot of times the uncertainty scares people along with facing 4 years of essentially medical school.” (student)

**Develop Early Interest.** The development of early interest in food animal veterinary medicine was viewed as a crucial method for developing more food animal veterinarians. Most felt that attempting to shift an individual's career focus into large animals must be done prior to their entry into veterinary medical college. Focus group participants suggested starting FSVM exposure in high school, especially to those without a farm background. Another suggestion was for the creation of a list of what veterinarians in

different FSVM careers do on a daily basis, including the names of contact people to talk with about the career. Other suggestions included the development of a video game or movie to capture kids' attention, and the production of a show to compete with "emergency vets" called "farm vets." A program to help high school students easily find FSVM veterinarians to shadow or to serve as mentors was also suggested. Several student focus group participants reported difficulty in finding veterinarians that would allow them to shadow or volunteer due to insurance/liability issues.

*Illustrative quotations from the focus groups.*

"I think that if AVMA could get more information out on large animal or food animal vets. When you really look at it there are a lot of different career choices even in food animal. You can be a bovine practitioner; you could be a swine practitioner. I know a guy by up around my area that specializes in AI in cows. There is just so much that I really didn't know getting into this that food animal can do. I just think that the AVMA or somebody should try and get some more information out to attract kids at a younger age because if I didn't have the influence of growing up on a farm, if I didn't have the influence of my dad saying hey you should go into something ag-related you know I don't think I'd probably end up as a large animal vet." (student)

"The vet that I worked for wouldn't do it for insurance reasons .... I had to work for a people hospital because every vet clinic within 30 or 50 miles of my house was like I'm sorry we won't even take you as a volunteer." (student)

"I always had the trouble with the small animal vets because they all had insurance policies that wouldn't let people volunteer; whereas, the large animal vets oh yeah come along in the truck." (student)

"With the rural based population shrinking, I think that a lot more students are coming from metropolitan areas which is why I think we have less and less people wanting to go into large animal stuff because they've never experienced that stuff and I think that's something that's important and starting in elementary school up through high school that people in metropolitan areas actually understand where their food comes from and they have these experiences. Because from my experiences, people that I've met up here at K-State and taken back to where I've grown up....they totally love that stuff once they get their hands on it and get to experience that." (student)

“I think one of the things I found very important was in your pre-vet year they’re required to spend a month, or summer in various internships before they choose a veterinary school and because once they come in there, then of course they’re on this treadmill. But before they come in, and again I’m back to real world, for even a short period of time. I don’t mean a day; I don’t even mean a week. I’m thinking along the line of a longer time period. I think that would be very valuable for the ones that require it.” (faculty)

“I’d go out and contact the food animal veterinarians and say we need some more of these home grown. If you need veterinarians out in western Kansas then have those veterinarians identify some high school kids and get them fired up so they will go back there.” (faculty)

“My concern on some of these things was unless your really going to go ahead and highlight the really exciting technology that they know, the stuff, that still kind of the black box stuff, that these students are not going to see excitement that they might see in say a small animal practice and where they’re applying this technology right now. And I think that it’s something that we haven’t made sexy enough to be quite honest with you. And they really need to be exposed to that kind of cutting edge technology that is applied say in food safety.” (faculty)”

“I’m concerned that if we use only the role model and the mentoring then we’ve got only a graying, aging, rural America that we might prepare them for the past rather than the future, and it is not a way to get them excited. But I don’t know how to get them from that excitement because a lot of time we have role models right now and we say don’t come back here guys or gals. This isn’t going to be a place where you can be living, because now the average age is 60 instead of 40, and now its 63 and now the stores close and there’s no town, and I can’t sell my practice.” (faculty)

“What I would love to see is a list, a list of things that food animal people do, or any kind of veterinarian because honestly I don’t know what they do. I don’t know...I mean I understand herd health and I hear catch phrases here and there but I really don’t understand what it means but if I could see a list with some contacts’ names on it with people to go talk about or maybe like a short description of certain jobs that people have gotten once they’ve graduated from school or what may be available that would be very interesting to me.” (student)

“I’ve noticed that in our handling [of animals] there are a lot of people that are very, very intimidated by equine, by large animals, by cattle, by anything just because of the fact that they have not been around it and once they get to vet school in a sense for them it might be too late. Just because we take them up and show them how to halter a horse doesn’t mean that they’re going to be comfortable you know going through everything that you have to go through to take care of a horse in veterinary medicine.” (student)

“...it sounds cheesy but it’s so true...either just make like a video game or like a movie that’s actually appealing to people because I mean with the way technology is going that’s the only way to get kids to do anything or watch anything is to have either a celebrity endorse it or a cartoon or something you know the Pokeman veterinary video...it sounds almost like a sellout but it would get their attention.” (student)

“I don’t mean to sound too controversial, but there are a lot of animal rights groups out there and they’re really, really good at targeting young children because they have very, very emotional campaigns and I remember in high school hearing all kinds of false information about what is done to animals and everything else and so I think we really need to get out there earlier if we’re going to still save face and have people interested in food animal medicine, you’ve got to show that it’s a positive career aspect and that a lot of this information that’s being put out by other groups is false.” (student)

**Exposure in Veterinary Medicine College.** Some felt that it was not too late to gain exposure, and thus develop an interest, once students had reached the first year of their veterinary program. Suggestions included an orientation session to be exposed to different areas before classes started. One student suggested this should be mandatory. Other suggestions included exposure to being around and handling large animals. Mentoring by FSVM faculty is another suggested strategy for developing interest in FSVM.

*Illustrative quotations from the focus groups.*

“I think for me it would be nice even at this stage when I’m still you know I can still change my mind...to be able to have a one on one with someone like that where I follow them around. You know it’s like take your vet student to work day. But, so you actually get a really good idea of what they do.” (student)

“I actually still don’t really completely know what a vet actually does on a farm. It would be nice before we even started the program if we had like a week or two where people could choose say maybe two or three things that they would want to go see before school starts, before it gets all crazy and you don’t have the time to go and explore your options. That might be something that might actually motivate people to get into a different type of practice than they think they want to do.” (student)

“I did the one on one with food animals and that right there kind of changed my perspective a little bit. It turned me back toward food animal because when I went in that night it just so happened that there were a couple of cows that were in surgery and you know some really interesting things that were going on and then I could see the possibilities of some individual care that was going on. The one on ones I think maybe could be expanded and those might, especially in the first or second year when you still can make the decision as to what track you want to go into.” (student)

“I’ve also seen a number of students who are very thrilled once they get to the clinics and while they were always planning to do a Ph.D. then they change their mind and want to focus on clinical experiences. And, I think it depends on the cases they see in the hospital and the people that they’re exposed to fairly early on with their experiences.” (faculty)

“It depends on their experience and who they’ve talked to [about income]. If they’ve talked to Dr. . . . , then he’ll convince them that the most lucrative area of veterinarian medicine is food animal medicine. So I think again a lot of that comes back to mentors and people that they’ve worked with either before vet school or during vet school, sometimes faculty, but often practitioners who they’ve worked with.” (faculty)

“You have to find students mentors who are happy with what they do, demonstrate they’re happy with what they do, and have lifestyles the students want to emulate. If you show them a mentor who’s ripped all their hair out, is divorced, or had a heart attack already by 50, they’re not going to do that. You need individuals. . . you need to get them in the group practices that are progressive. You need to get them seeing people working but still enjoying their life. They’re not on call every night and they’re doing interesting disease investigations. Things that are going to turn the students on. . . and, if you get people mentored by the right individual that’s very powerful.” (faculty)

**Implement Tracking Programs.** Some students discussed how curriculum tracks would somewhat force students to decide about an area early on and perhaps, combined with scholarship money, motivate some veterinary students to go into FSVM. However, many preferred being in a program without rigid tracks as it allowed for the maximum amount of flexibility for them to decide the type of career they wanted as they progressed through their education. Faculty focus group members also discussed various aspects of tracking under the context of motivating individuals to pursue careers in food animal medicine.

Those against the idea spoke of the lack of career flexibility tracking provides to students, licensing issues that may result from lack of knowledge in a particular area, and that there is still a need, although declining, for a veterinarian generalist in rural practice.

In support of the tracking idea, some faculty suggest that as veterinary medicine continues to become more and more complex focusing in one area makes a lot of sense. It was suggested that this may lead to a change in how schools are organized. Specifically, because of scarce resources an individual school would not be able to offer all possible tracks and they may need to selectively pick the areas they will emphasize while leaving other areas to be filled by other veterinary colleges.

*Illustrative quotations from the focus groups.*

“That’s something that K-State is very unique for because most other vet schools around the country actually allow tracking which means that we right now, if we were so interested in orthopedics, we would take classes and we would go straight down to it and we would miss all those other opportunities and K-State makes sure to keep that open. I think they allow the greatest opportunity for someone to change their mind or to actually go into rural veterinary practice.” (student)

“I think [tracking] would be hugely popular but the discussion goes back to what we want to do with this profession. And there are a lot of people who are very grateful by the time they’re seniors because of the lack of tracking because they’ve changed their mind and they’re happier.” (faculty)

“Yeah, but there’s still a lot of people who maintain that they wished that they had tracking when they were seniors and I think that the discussion that I’ve been involved in always comes back to licensing and if the profession doesn’t change its licensing mechanism then people worry if a student tracks they won’t be able to get licensing because they won’t know enough about some of those other areas.” (faculty)

There are a number of issues there and some of those go back to what some of them have in their minds when they say tracking. We currently have a large lockstep curriculum and when a lot of people say tracking they think its still a lockstep curriculum. It’s just 3 or 4 different ones as opposed to the engineer setting where there are a core set of skills and abilities that if you’re an engineer you know some things about thermodynamics but if you’re a double E then you

know quite a bit about circuit theory and all of those kinds of things and maybe nothing about materials where as if you're a civil engineer you know a lot about material and very little about circuits. One possibility within the veterinarian curriculum is to introduce more flexibility and allow those students to just gravitate where ever they will. ” (faculty)

And if you kind of extend that engineering model and compare and contrast it to veterinary thinking when a building is built you have multiple engineers working on the building but we still think as veterinarians that we need to be able to do it all. And I think the building is too complex anymore to be able to do it all. ” (faculty)

**FSVM Externships.** The existence of well publicized and appropriately paid summer externships in FSVM was also mentioned by many students as a way to increase interest in food supply veterinary medicine. The ideal experience was described as being meaningful (i.e., not just laborer type work), well compensated, and lasting about 6 weeks.

*Illustrative quotations from the focus groups.*

“I got an email talking about externship possibilities with the USDA for the summer and you get like 15 bucks and hour, but I mean if you guys are really trying to recruit people it seems like you'd want to have a lot of these kinds of summer externships. ...you know I grew up in the middle of LA so I don't really know that much about these things but they are kind of cool so I think a lot of us would kind of be interested in taking people up on those externships...you know I never went to Kansas or Iowa or those kind of places so I think a lot of us would be, even people that aren't [overtly] interested in food animal, would be interested in those kinds of opportunities.” (student)

“[They should] provide an externship where not only is it a good experience but you feel respected in the way that you're being compensated for what you're doing I think will motivate people to want to pursue those kinds of [careers]” (student)

“The FDA or USDA program asks for 2 summer commitments plus time during the year. That's a lot to commit to for something you're unsure about.” (student)

“For years we've recognized as a faculty that because small animal practice is so dominant in the clinical environment... that we had to provide opportunities for them once they get into to veterinary school to get over that fear about how big

[the animals are] and they don't know anything about it. And, we've got scholarships to assist that. It's about a 6 to 8 week summer scholarship. The first year they're just working on a ranch or a dairy and the second year they may start riding with a veterinarian." (faculty)

## SUMMARY AND RECOMMENDATIONS FOR QUANTITATIVE SURVEY

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Several insights were gained from the student and faculty focus group sessions regarding insights into students' motivations for selecting a particular career focus. We organize our summary around the four focus group objectives.

*Objective 1: To gain insight into the factors influencing students' career focus decisions.*

The themes identified from both student and faculty suggest that some of the most important factors influencing students' career focus decisions are: (1) their life experiences with animals prior to applying for veterinary medical school, (2) their concerns over repaying student loans and making a high enough salary to lead the type of lifestyle they desire, (3) their desire to do enter into a career they find personally meaningful and interesting, (4) their concerns related to raising a family and allowing for a spouse's career, (5) their concerns about the availability of good jobs in a particular field, (6) their concerns about getting physically injured on the job and their ability to maintain a certain level of physical exertion throughout their career, (7) their desire to have adequate free time away from work and the ability to live in appealing geographical locations, (8) their orientation toward individual animal care or herd animal care, (9) their experiences while in veterinary medical school (which, by definition, will shape career focus decisions subsequent to application).

*Objective 2: To gain insight into the level of knowledge students have about food animal careers in veterinary medicine and the image of those careers.*

The focus group data suggests that veterinary students when entering the program have very little knowledge of the career opportunities available for food animal veterinarians. The knowledge that they do have tends to be either anecdotal or, in some cases, based upon their own personal observations growing up in a rural environment. However, this knowledge and their image of a food animal veterinarian are largely focused on the rural practitioners. Few have insight into other areas of opportunity. The image of the rural veterinarian practitioners is mixed, with many holding very negative pictures of this type of career.

*Objective 3: To gain insight into potential initiatives that may serve to build interest in food supply veterinary medicine.*

A variety of initiatives were suggested by focus group members for increasing the number of students who enter veterinary medical school with an interest in food supply veterinary medicine. Some ideas were also presented for developing this interest once attending veterinary school. The initiatives focus on the following themes: (1) reserving a certain number of seats in each class for those students specifically interested in food supply veterinary medicine, (2) provide scholarships for students that will commit to food supply veterinary medicine, (3) provide assistance in starting a career in food animal veterinary medicine, (4) promote food animal veterinary medicine to prospective students as early in their lives as possible, (5) provide a variety of opportunities for veterinary students to be exposed to the actual day-to-day work done by food animal veterinarians, (6) continued development

of educational tracking programs in veterinary college that focus student learning into specialized areas, (7) provide paid externship programs for veterinary students that provide a meaningful preview of careers in food supply veterinary medicine.

*Objective 4: To use the insights from this study to develop survey items for a questionnaire.*

Based on the focus group results the following recommendations are made for the first year student career path survey:

1. Develop survey items to tap each of the 9 themes identified as motivating a student's career focus. Emphasis should be placed on identifying the most important motivating forces.
2. Develop items that measure student knowledge of food supply veterinarian careers. This measure should be used in multiple surveys that sample students at different points in their veterinary educations to understand how this knowledge develops as they progress through school.
3. Develop survey items around the 7 identified themes dealing with creating more interest in FSVM. Specifically, questions should be created that assess student perceptions of the efficacy of identified initiatives for recruiting students with a FSVM focus and initiatives for encouraging this focus among existing veterinary students with the goal of prioritizing the list of possible initiatives.
4. Track survey respondent gender in order to tease out gender differences among the motivations. Further, develop items that assess the degree to which women feel comfortable pursuing FSVM careers and the rationale for discomfort if that perception exists.
5. Develop items to assess the degree to which students perceive gaining a level of specialization within a particular field serves as a method for combating the perceived low salary.
6. Develop items to assess the perceived prestige level for various veterinary career options. Explore differences on this construct by gender, race, and geography.

7. Develop items to assess the role of taking the state licensing exams play for students in selecting courses in veterinary medical school.

**Iowa State University**  
**Focus Group Discussion**

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**INTRODUCTION**

The purpose of this focus group interview was to provide insights to build upon the quantitative survey results and gain an in-depth view of the factors that drive veterinary career focus. The focus group interviews had three specific objectives:

5. To gain insight into the factors influencing students' career focus decisions.
6. To understand career focus switching behavior that occurs while in veterinary college.
7. To gain further insight into potential initiatives that may serve to build interest in food supply veterinary medicine.

## METHODOLOGY

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A focus group was conducted on April 1<sup>st</sup>, 2005 at Iowa State University in Ames, Iowa. The focus group consisted of 12 students in the first year of their veterinary school education. The Iowa State University was selected to provide regional diversity to the panels and because of its well regarded swine program.

The focus group was audio and video taped and lasted approximately 75 minutes. Each participant received a bookstore gift certificate as compensation for their time. The tapes were transcribed and the transcripts used in the data analysis. A discussion guide was created for the student focus group session (see appendix). Discussion was guided around the factors influencing career focus decisions among students, issues surrounding the switching to another career focus while in veterinary college, and the effectiveness of different methods for building interest among students for careers in food supply veterinary medicine. The discussion guide served as the blueprint for the focus group session, although the direction was allowed to stray from the guide when interesting discussions emerged that lead to useful insights.

## THEMATIC ANALYSIS

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This section of the report presents findings from the focus group interviews in the form of a summary of what respondents said in response to specific questions. The information in this section represents the researchers' interpretation based upon: (1) notes made during the focus group meetings, (2) a review of the audio and video recordings, and (3) a content analysis of the typed transcripts from the meeting.

### Factors Influencing Career Focus

Student focus group participants identified the following factors as the primary issues that had influenced their initial selection of a career focus area in veterinary medical school.

**Exposure to Food Animals in Youth.** Food animal experiences that students had growing up had made them more familiar with and comfortable working around large animals. Also not having that experience had shaped the initial expectations of some students.

*Illustrative quotations from the focus groups.*

“I have an interest in small animals and I think lack of exposure to the food animal side of it is part of why I’m not going into that because for me I loved animals and I loved science, so if 4-H had been an option my parents would have supported me in a heartbeat, but it wasn’t even available in my town.”

“I guess probably for me it was growing up on a cattle ranch and we used horses for all our cow work, we raised horses as well, and I really liked economics and working with ranchers as far as production animal medicine goes, but I also had a strong surgical interest and I think working with horses offered the opportunity to view some of the more advanced medicines and use more exam skills.”

“I was decent in biology and there was a vet farmer that was very accessible to me throughout my whole years growing up. He was always willing to let me come and ride along with him. When he’d come to my farm, he’d answer all the questions I had for him. It was a combination of all those things that led me to pursue this.”

**Exposure to Food Animals in College.** Some of the focus group respondents had exposure to food animals while in their undergraduate programs. Many felt that this exposure had positively shaped their current interest in this area.

*Illustrative quotations from the focus groups.*

“Undergrad animal science classes I think have really prepared me more for production animal medicine versus some of the other degrees that people get in undergrad school.”

“Once I started school, I started spending time with veterinarians and I didn’t spend any time with them before vet school and when I started to I just hung out with some veterinarians that liked to do surgery and that’s when I started realizing how much I enjoyed it as well.”

**Enjoy Being Around Agriculture Based People.** Consistent with focus groups conducted at other colleges, respondents suggested that the types of people employed in agricultural positions were something they enjoyed being associated with on a daily basis. They felt comfortable around individuals engaged in food production. When probed for more detailed answers, they would describe them as down to earth and friendly people and state that rural people were very enjoyable.

*Illustrative quotations from the focus groups.*

“Well, I grew up in a rural area and when I went to college and explored my career options I found that I always came back to a career base where I could be around agricultural-based people. I just found that I really enjoyed them and related to them well.”

**Enjoy the Outdoors.** A few respondents expressed that the ability to work outside in food animal veterinary medicine careers had attracted them to that field.

*Illustrative quotations from the focus groups.*

“I really enjoy people, I like the countryside, and I like the wild.”

**Helping to Increase Producer Profitability.** Some respondents expressed the desire to help food producers improve their business and become more profitable as a motivation for selecting a food animal veterinary career.

*Illustrative quotations from the focus groups.*

“I came back to a production animal medicine again because I liked the economics that was involved, the business aspect that most veterinarians need to know to make reasonable medical choices that are going to influence profitability and also the neat relationship you have with the farm as far as being a consultant that you can come in and you can work with these businessmen and help their profitability.”

**Work-Family Balance.** Many respondents discussed different aspects of achieving a balance between work and family in thinking about their selection of a career focus area. The nature of on-call work and the potential to live in a rural area while single were suggested as negative influences in selecting a food animal career focus. Other suggested that long hours were a concern to them and that their selection of a career would take into account the career’s ability to provide them with adequate time to be with family.

*Illustrative quotations from the focus groups.*

“I had toyed with the idea of veterinary medicine as an undergrad but I was under the impression that you’d be on call your whole life and my father wasn’t around a whole lot either, so it didn’t strike me as something that was real good.”

“There is a lot of work to be done so in almost all of the practices that I’ve gone to those guys are very busy. That’s fine, but I see that as a challenge to be able to balance learning my first year and family and having to put in the same amount of time that I’d seen them put in before in their past careers.”

“I’m not opposed to long hours and long days and what not, but my personality is such that I’m always doing something and I think it would be a challenge for me, like he was saying, to achieve balance, not so much for myself but for my family.”

“It depends if you want to start a family. Some wives are willing to start a family, stay at home and are not worried so much about a career. If that’s your case, a rural setting works out really well. It could be the opposite. If you’re a female veterinarian and your spouse is willing to be the stay at home dad that can work out as well.”

“Somewhat conversely to that, for single people the rural areas aren’t as appealing. To go to a really small town where you’re coming into a place where the young appealing single people are usually married off at my age. I need to go someplace where there is more of a population. Not a huge population, but just younger people to interact with.”

**Meaningful Work.** A few focus group respondents suggested that they desired to do work that had meaning. To them this meant actually using their medical skills as opposed to the variety of work that they perceive government veterinarians as performing. These jobs, correctly or not, had the image of “desk” jobs that involve a lot of paper work. These respondents wanted careers that would allow them more opportunity to get hands-on work caring for animals.

*Illustrative quotations from the focus groups.*

“(I don’t want) to work for the government. You would have to spend most of your time doing worthless stuff like paperwork and what not. In your small practice it seems like your time makes a difference.”

“I would say that the government positions later on in your career would be an option, once you’ve gone through private practice you could go on to government.”

“As a new graduate you want to use the knowledge you have to get better at it and if you went to (government work) straight out of school I think it would be a real de-motivator just because you forget half of what you learned just from that thing.”

**Starting Salaries/Debt Load.** Concern over repayment of student loans was expressed by several focus group members. Tied into this was the issue of starting salaries.

Respondents indicated a desire to live comfortably after all of the time spent on their education. This was cited as an issue they would consider when selecting a career area.

*Illustrative quotations from the focus groups.*

“I think right now student debt loan is an issue but I think that we’re fortunate now coming out that interest rates are definitely in our favor. If it was 8, 9, 10% interest rates I think it would be a way bigger issue.”

“It’s not just student debt loan either, when you come out you don’t have the income so you also leverage yourself with a house or car with your earnings so that interest rates, not just with student loans, but with car loans, house loans, buying into the practice, those are all necessary right now as well.”

“I think we put in seven, eight, nine years of schooling and I don’t think anyone is going to be real greedy when they get out, but I think we have put in the time and we want a decent lifestyle, we want to be compensated fairly for it.”

“I don’t want to be in the top 10% of the richest people by any means, but I don’t want to be at the bottom either.”

“For you guys to determine how important salary is to us is difficult because we can sit here and say that salary is very important but you have to understand that you’re talking to a group of people that have already decided by our career choices that salary isn’t all that important. We could have gone to an 8-year school and made a lot more money doing something else. Collectively we’ve already said salary is not that important.”

## **Switching Career Focus While in School**

**Experiences While in School.** Student focus group respondents cited experiences gained while in veterinary college as the most prominent factor influencing their decision

to change from their original career focus area. Most often this occurred when students were exposed to opportunities that they had not considered before or that they did not fully appreciate until they gained first hand experience in that area.

*Illustrative quotations from the focus groups.*

“I really enjoyed research and how to treat infectious disease and so that’s what I was kind of focused on my first year of school and then I did a summer research program and decided that I didn’t like it as much anymore. At the same time, I started getting more clinical experience and more medicine experience and started to realize that I did like that side of veterinary medicine.”

“I think a couple of people may have changed their focus somewhat just because they didn’t realize the opportunities or how much they would enjoy it. Maybe they grew up in a rural background and didn’t realize how much they would enjoy working around small animals and some of the opportunities that are there.”

“I think maybe they came from the suburban/urban background and then being here and having exposure to what goes on in large animal medicine has completely changed their focus.”

**Lack of Variety/Use of Knowledge.** Another factor that caused some focus group respondents to switch was dissatisfaction with the small variety of tasks they would typically perform in their original career focus area or the level of cognitive effort required. This second part often expressed in terms of not being able to fully utilize the technical skills they had learned in veterinary college.

*Illustrative quotations from the focus groups.*

“I’m really excited about beef production and I like equine as well but I’m afraid that in those two fields I won’t get the variety or the chance to really exercise my mind as I might in a small animal practice.”

### **Staying Committed to a Food Animal Career**

Students discussed a variety of issues that would likely lead them to lead a long career in food animal medicine. These included health issues, work load issues in the form of veterinary technician utilization and working in group practices, as well as being adequately trained in food animal medicine with sufficient case loads in school.

**Good Physical and Mental Health.** Remaining healthy in a physical job was an often mentioned issue that might constrain someone from remaining in a food animal practice their entire career. One respondent mentioned both physical and emotional health as factors.

*Illustrative quotations from the focus groups.*

“It’s not so much the physical demand, but I would see that as the primary reason for leaving food animal practice.”

“I’d say health on the mental side because you’re talking about the number of hours that a lot of rural practitioners are putting in. Dan was saying about how busy they are and balancing lifestyle and work. Some of those places I think it gets to be that they’re trying to do so much that eventually the hour commitment is too much and they just can’t do it anymore.”

**Vet tech Utilization.** Several focus group respondents discussed how proper utilization of veterinary technicians could prolong the career of a food animal veterinarian. It was suggested that veterinarian technicians were underutilized in practice and were more difficult to supervise in food animal practices compared to companion animal practices.

*Illustrative quotations from the focus groups.*

“I think that especially in a rural community that they are underutilized. The veterinarian tries to take too much on himself and doesn’t utilize tech support whether they think they’re making more money working more hours and if they’re willing to sacrifice pay. Paying a good tech may not make your salary as much in the end, but you are maybe going to be working considerably less hours

if you can utilize tech support. I think that a lot of rural practitioners fail to utilize them.”

“A large animal setting in veterinary tech is a lot different than a small animal. In a small animal clinic everyone is there and it’s easy for a clinician to supervise a technician. On a large animal operation, the farms are separated by distance and there is a lot of grey area about what supervision means when you’re working the technician relationship. I just think that hasn’t been very well explored because our predecessors have been motivated to work those long, long hours and not have to hire a technician.”

**Group Practices.** Group practices were viewed by many respondents as a good solution to some of the negative issues discussed earlier that have been associated with food animal medicine. Specifically, heavy on-call hours leading to difficulty in managing a balance between work and other interests in one’s life. Further, it was suggested as a way to broaden the knowledge/expertise base of the practice. It was thought that a group practice model would allow for the less desirable aspects of the veterinarian work load to be shared. However, it was acknowledged by respondents that group practices did not make sense in all settings.

*Illustrative quotations from the focus groups.*

“I think you’ll see (group practices) more in Iowa too because you have your older generation vets that are retiring here and two and three men practices are going to start falling by the wayside. I think already they’re combining practices, call schedules, to mainly lighten up their on-calls.”

“I don’t think there will be mixed animal practitioners anymore. It will be really tough for an individual to stay proficient at every species with all the new technology. I think what you’ll see more is mixed animal practices where they’ll have the small animal specialist, they’ll have the large animal specialist and they’ll all come together to form a mixed animal practice. Then they’ll be able to divide up the weekends where they’ll all do the emergencies.”

“I think (group practices are) more difficult as you get more rural, though. There are a lot of places, like in Eastern Montana, where the nearest clinic to us is about sixty miles away so there are a lot of places in the country where we’re still going

to have to do a little bit of everything. You're not able to consolidate at that point because it's so far away."

"One thing that I don't know if it's been explored as much in large animal as in small animal is where you're getting alternating work weeks so that all five guys aren't there five or six days a week so on any given day maybe there are only three people working. I think as time goes on to justify the lifestyles that younger vets want – more time off, but to still handle the practice load."

**Case Load/Training.** Some respondents suggested that to commit to a lifetime in food animal medicine they needed proper training in the field and that this training was hampered by an inadequate food animal case load in their veterinary college experience.

*Illustrative quotations from the focus groups.*

"I spent two weeks on food animal but I don't see the cases so it's really not a requirement but it's an opportunity for me to interact with food animals - there are just not food animals to work on. Secondly, the production design itself in the Midwest is that food animals don't come to the university so I can't work on swine farms and on other production systems because it's impractical to take the patients here."

## **Methods for Building Interest in FSVM**

Students were asked for ideas that might be implemented by veterinary colleges or professional veterinary associations that would lead to greater student interest in food animal medicine.

**Set Admission Quotas.** One respondent suggested that quotas be set for the number of individuals admitted into veterinary colleges based upon their stated career focus. This might be particularly true for those areas having shortages.

*Illustrative quotations from the focus groups.*

"I think it's kind of odd that they set quotas based on cultural diversity; they also set quotas on where you're from in the state. Iowa State has a quota for the

number of students coming in that are from Iowa. Why can't you set a quota for practice orientation?"

**Expose Youth to FSVM.** Many respondents noted that early exposure was critical to developing interests in food animal medicine since a large number of the applicants to veterinary colleges are from urban environments and lack experience and familiarity with production animals. It was suggested that engaging students in high school and even elementary school would be appropriate to build awareness for the animals and the careers available.

*Illustrative quotations from the focus groups.*

“Here at Iowa State another thing that this school has done is there has been a student group started that is concerned about the lack of food animal veterinarians in the future and they've started to advertise and recruit students that are in college and high school for possibilities in veterinary medicine.”

“I think advertising and exposure of the veterinary field and what it has to do to get people out there, you know, if you live in a city just going out to see a farm and what they do and how it runs and that kind of stuff.”

“That (exposure between undergraduate program and veterinary college) would be good for getting a career idea before you went into vet school, but that might not be soon enough to make a decision. At that point you already know if you're into vet school or not so doing that in late high school or early undergrad would be the time that you want to decide if you want to go into food animal veterinary medicine. Getting your large animal/food animal exposure ahead of time would be critical at those points.”

“Oregon State's agricultural department puts together “Ag in the classroom” which is kind of an Oregon thing, I don't know if it's in other states or not. We'd work with Ag teachers or we'd go up to Portland metro and go to all of the schools and we would do, in addition to educating inner-city kids about the beef industry, we'd do career options and things like that in agriculture. They do that all over Oregon and in fact in my home town, the vet that I work for – we do that. We go to all the grade schools and put on a science day for them. It's all cattle and veterinary medicine type stuff.”

**More Exposure in Undergraduate Programs.** Following the exposure theme, suggestions were made to provide food animal exposure opportunities to students during their undergraduate education. Classes were suggested that would expose students to a variety of career options in food animal veterinary medicine.

*Illustrative quotations from the focus groups.*

“I think you have to target the undergrads early on because you have to get through all your basic sciences and you need to know if you want to get here, to get through those. Even the first couple years here are like a continuation of that so as far as the career options they need to be exposed before they make that decision.”

“I had animal science in undergrad and I was involved in two classes where we went to the farms and looked at all this stuff. That might be a good opportunity to create exposure – making sure that a person understands the spectrum of career opportunities that they’re going to have as they come to vet school.”

“If you choose to be a microbiology major you don’t have to take animal science classes and you don’t have to take anything besides the prerequisites to get into vet school. If they made it a prerequisite, part of the required classes that you would have to take in these rotational shifts through different things, you could probably gather those kids up from other rotations or other degree options.”

**More Exposure Early in Veterinary College.** It was also felt by focus group respondents that it was not too late even in the early years of the veterinary curriculum to expose students to food animal careers. The suggestion was made to expose students to not only careers in this area, but to do a better job in incorporating large animal examples/cases into the first two years of course work when student career area preferences will be solidifying.

*Illustrative quotations from the focus groups.*

“There is a class that they started here that was an elective our first year and now it’s a requirement for the current first years. It is called clinical foundation. They

go every week to a different type of career setting. I think they went to a hog farm and a dairy and I think maybe if there were classes available like that in undergrad people could get a better idea of what is out there.”

“I think as far as vet education, once you get into a vet school, a lot of models for the beginning classes are small animal-oriented, a lot of them are taught by those who are interested in small animal research projects or something like that.”

“In Illinois we had to wait until the last year of book learning to get into any type of food animal interest for everyone. It’s not that it’s geared toward us, it’s just that that was the first time it was presented for us to learn from. Otherwise, it was the dog has failure, the dog or cat has this or that or just showing lab rats or something else.”

**Tracking.** The notion of tracking was not well received among most focus group respondents. They suggested that the lack of exposure, as discussed above, made student track selection a difficult prospect. Further, there was the perception that a tracking system would limit their ability to change career fields in the future.

*Illustrative quotations from the focus groups.*

“I guess it’s just being exposed to things, so I think if you would assign a tracking system to make one decision or another really early it would be detrimental to choosing later, once you’ve been exposed. I know that we’re looking at that as an option because no matter what field you go into you need more expertise to really become competent in that.”

“The other thing about tracking is that if something happens to you – let’s say I tracked all the way with food animal and I’m doing a C-section on a cow and she kicks me and I stab my arm and now can’t do large anymore, I don’t know anything about small animals so I’m officially out of a career, basically, unless I want to sit behind a desk.”

“I don’t like tracking partly because of the lack of exposure. I’ve learned so much about agriculture since coming here and I actually really enjoy bovine medicine. I love learning about it, it’s fascinating to me. The only reason I’m not doing it is because the production animal thing is not why I’m here. Basically, that’s it. I think that would have been a big loss on my part if I hadn’t been exposed to that.”

**Parental Influence.** One focus group respondent noted that not only the student, but also his or her parents might need to be convinced of a veterinary education. As such, thinking broadly about the appeal of this career to both the student and the appeal of this career to others that may influence his or her decision is important.

*Illustrative quotations from the focus groups.*

“I think the tuition thing is a big deal because we just did a panel last weekend to the pre-vet symposium and they asked us – someone’s dad asked us “hey, how much does it cost for you to go to vet school” and when I told him I’m going to have \$150,000 of debt when I graduate he looked at his daughter like “choose a different career, honey, because we’re not paying for that kind of thing.” There is going to be parental influence too on some of these kids that are undecided.”

**Scholarships for Food Animal Students.** Students were generally supportive of scholarships for food animal students, but cautioned that some may try to manipulate the process by claiming an interest in food animal medicine just to get funding to pay tuition and fees. The idea of making them accountable after graduation to receive student loan payoffs was viewed as a potential solution to curb students that may not be completely forthcoming about their true career intentions.

*Illustrative quotations from the focus groups.*

“People work that system, too, where if you have people saying on the application that if I’m a food animal person I’ll have a better shot at getting into vet school, you’ll have small animal people coming through and writing that they’re in food animal. They’ll get into vet school and bam- they are tracked into small animal.”

“(Comment in response to the idea of a system where students must work in a rural area for some specified time period in order to have their student loans paid off.) That’s a great idea. It would have to be when you graduate because otherwise people are going to cheat the system for sure.”

## SUMMARY

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Several insights were gained from the student focus group session regarding insights into students' motivations for selecting a particular career focus, switching behavior, and strategies for food animal student recruitment. We organize our summary around the three focus group objectives.

*Objective 1: To gain insight into the factors influencing students' career focus decisions.*

The themes identified from the students suggest that some of the most important factors influencing students to select food animal careers are: (1) exposure to food animals during grade school and high school, (2) exposure to food animals during the undergraduate program, (3) the desire to work with food production clientele who are enjoyable, (4) the opportunity to work outside, (5) the opportunity to aid in increasing the profitability of the producer, (6) the perceived ability to achieve a work-family balance, and (7) the desire to do meaningful work.

*Objective 2: To understand career focus switching behavior that occurs while in veterinary college*

Focus group respondents indicate that students switch career focus while in school primarily because they are exposed to a new area with which they were originally unfamiliar. The new area captured their interest and they put their focus in that direction. Notably, it was not the negative aspects of the original career focus area that drives people away, but rather their interest in a new area. The one exception mentioned to this basic idea is that some students may come to realize that their original career focus area may lack sufficient variety and the ability to fully utilize their medical knowledge. Thus,

they begin to seek new challenges. In terms of issues surrounding making a lifetime commitment to food animal medicine, subjects indicated that they would be more likely to stay in that career if they were able to remain healthy, sufficiently spread the work load through the use of veterinary technicians and working in group practices, and if they were adequately trained for the career while attending veterinary medical college.

*Objective 3: To gain further insight into potential initiatives that may serve to build interest in food supply veterinary medicine.*

A variety of initiatives were suggested by focus group members for increasing the number of students who enter veterinary medical school with an interest in food supply veterinary medicine. Some ideas were also presented for developing this interest once in school. Overall, the suggestions follow a common theme of increased exposure to those that might not otherwise consider food animal medicine. The initiatives focus on the following themes: (1) Reserve a specified number of positions in each entering class for students based upon their stated career area orientation, (2) Expose more people to food animals and food animal careers during their youth, during undergraduate program, and early in veterinary college, (3) Educate not only potential veterinary students but also their parents regarding the benefits of the career, and (4) provide scholarships for food animal students, but make them accountable to actually entering a food animal career upon graduation.

# University of Georgia

## Focus Group Discussion

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### INTRODUCTION

The purpose of this focus group interview was to provide insights that build upon the quantitative survey results and gain an in-depth view of the factors that drive veterinary career focus. The focus group interviews had two specific objectives:

8. To gain further insight into the factors influencing students' career focus decisions leveraging off the quantitative survey.
9. To gain further insight into potential initiatives that may serve to build interest in food supply veterinary medicine.

## METHODOLOGY

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A focus group was conducted on April 11<sup>th</sup>, 2005 at the University of Georgia College of Veterinary Medicine in Athens, Georgia. The focus group consisted of 8 students in the first year of their veterinary school education. The University of Georgia was selected to provide regional diversity to the panels and because of its well regarded poultry program.

The focus group was audio and video taped and lasted 60 minutes. Each participant received a bookstore gift certificate as compensation for their time. The tapes were transcribed and the transcripts used in the data analysis. A discussion guide was created for the student focus group session (see appendix). Discussion was guided around the factors influencing career focus decisions among students, and the effectiveness of different methods for building interest among students for careers in food supply veterinary medicine. The discussion guide served as the blueprint for the focus group session, although the direction was allowed to stray from the guide when interesting discussions emerged that lead to useful insights.

## THEMATIC ANALYSIS

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This section of the report presents findings from the focus group interviews in the form of a summary of what respondents said in response to specific questions. The information in this section represents the researchers' interpretation based upon: (1) notes made during the focus group meetings, (2) a review of the audio and video recordings, and (3) a content analysis of the typed transcripts from the meeting.

### Factors Influencing Career Focus

First year student focus group participants identified the following factors as the primary issues that had influenced their initial selection of a career focus area in veterinary medical school.

**Variety/to Combat Boredom.** Some students reported that they desired variety in their careers and felt that a mixed animal practice would provide them sufficient variety of tasks and work timing such that they would not become bored in their job.

#### *Illustrative quotations from the focus groups.*

“I’m a mixed animal track and I want to go down that track so I can have a wide variety in my day. I want to see both small animals and large animals. I can’t see being stuck in a building all day, so it’s very important to me that I’m able to get out and go to the farms and see the patients out there.”

“Boredom. I don’t want to get bored inside a clinic and I don’t want to be bored just in a truck.”

“One thing I didn’t hear anyone say is that I like the action of large animal practice. I’m not a big fan of getting hurt or anything like that, but it’s something you definitely don’t get inside working with small animals.”

**Small Town Feeling/Lifestyle/Work Outside on Farms.** Some student focus group members indicated that the lifestyle associated with working in a small town and outside on farms appealed to them and drove their initial career choice.

*Illustrative quotations from the focus groups.*

“It’s the lifestyle, the clientele and being able to work outside and being able to work on farms.”

“I enjoy the small town feeling – you get to know your neighbors, you can call them, you know other business owners in the area and they are there to help you and support you. That is very important as a small business owner – that you are able to have contact and support from the local community.”

**Clientele/Peer Respect.** Many focus group respondents talked about the benefits of working with food animal producers as having a positive influence on their career choice. They are described as “fun” and “good” people. Further, it is thought that the career brings a level of respect from peers and clients.

*Illustrative quotations from the focus groups.*

“All of my family is farmers; I didn’t grow up on a farm, but all my family did. They are good people.”

“I grew up in a small town and really like it. Working with farmers and producers – they are just a lot of fun to work with.”

“They (the producers) are good people; you really enjoy getting to know these people.”

“Peer respect and lifestyle influences my choice”

**Food Animal Experience Growing Up.** A few focus group respondents reported that the experiences they had in their youth were a large influence in their decision to go into food animal medicine. These included influences prior to college as well as the influence of their undergraduate curriculum.

*Illustrative quotations from the focus groups.*

“I think (food animal experiences in youth) dictated my track in undergraduate, which was animal science. That set me up for this.”

“My uncle did it (food animal veterinarian)- I’ve been around it my whole life so when I started high school I knew it was what I wanted to do.”

**Help Producers, Economy/Food Safety.** Many respondents expressed an altruistic motivation for entering into food animal medicine. They enjoyed the feeling that their efforts would be helpful in the life of others or that they might play a role in protecting the nation’s food supply.

*Illustrative quotations from the focus groups.*

“You have to make management decisions and help make them more profitable so they can have a good life.”

“I think that’s the most important thing for me is you’re helping – you’re doing a service for someone else and so that’s why I really wanted to focus on that.”

“...our role as food animal veterinarians are becoming increasingly more important and we need to be on the front line for that if we’re going to protect our economy and all of the far-reaching implications that it has in other industries.”

**Family.** Influences from a desire to raise a family were mixed. Some respondents felt that this would not be an easy task in a private food animal practice and as a result were considering government careers. Others felt that raising a family was consistent with a food animal veterinary career.

*Illustrative quotations from the focus groups.*

“I started out as food animal and was advised not to pursue that as my only option or my only track because I wouldn’t be able to pay my debt and I wouldn’t be able to have a family, so I started to look at how I could implement both and when I heard about the public health officer positions in the public health core, pretty much you get to go out and see the herd, do the same things as a large animal vet, but you get the government benefits in hours and pay.”

“I work with two mixed animal vets who do a lot of large animal work and they manage to have a very good family lifestyle.”

**Use of Medical Skills.** One respondent mentioned that many students had told her that small animal medicine allowed for a higher use of one’s medical skills and not being able to use this knowledge drove some away from large animal medicine.

*Illustrative quotations from the focus groups.*

I’ve heard a lot of people say this - that the thing I think the most people probably agree on is that small animal medicine is more medically involved because you do things like hip replacements and ophthalmology, whereas with a cow you’re just going to put it down if it requires something like that. I’ve heard a lot of people say that they want to go into small animal medicine because there is more medicine in small animal than there is in large animal. That’s one thing I’ve heard.

**Unimportant Issues.** Several issues that have been anecdotally and empirically discussed in the veterinary literature as influencing career selection were explored by the focus group, but deemed not to be an influence in discouraging food animal careers among focus group respondents. Specifically, this group of first year students was not influenced by issues related to their spouse finding employment, salary levels in different career options, or the physical demands present in some large animal veterinary medicine careers.

*Illustrative quotations from the focus groups.*

**Spouse employment not a concern**

“My wife works for a pharmaceutical company now and she just wants to be a stay at home mom when I graduate. That works for me.”

**Salary levels not a concern**

“Salaries between equine, small animal, mixed animal. It’s all pretty similar in the long run. Some people start off making more, some people make more in the end.”

**Physical demands not a concern**

“I don’t worry about getting hurt, no. When you’re a kid you get hurt; it doesn’t bother me. Physically on my body, over the long run, that’s part of why I’m doing mixed because when I’m 50 or 60 years old I can’t go out and pull calves anymore, I just can’t do it.”

## **Methods for Building Interest in FSVM**

**More Hands on With Animals / More Exposure to Potential Careers.** Some

respondents suggested that early exposure working with food animals during the first year of veterinary college would be a useful way to build interest in a career in that area.

Many students do not have much large animal exposure while growing up and this would be one way to overcome that lack of familiarity. Beyond just familiarity with the animals, student focus group respondents also suggested the veterinary schools could help to increase familiarity with career options in food animal medicine.

*Illustrative quotations from the focus groups.*

“We get a little bit in labs here and there, but I don’t know if that’s enough to draw interest. People that already like it don’t really care about the hands-on, but people that don’t like it need more hands-on. Some people might like it, but they just haven’t done it yet.”

“There are a lot of people in our classes that don’t know much and they need some basics. Some people just don’t know anything. I think earlier is better.”

“I think some of our classmates are a little intimidated because they don’t know anything about it and it’s just like “here’s a large animal, put a halter on it” – that kind of thing, but I think they are intimidated by the lack of their knowledge.”

“As far as hand-on, we’re having to go out and search, to look for these things to do, whereas like in Kansas or something it’s everywhere so you have more opportunity. I think it’s kind of scary for some people to take that route when they don’t see the light at the end of the tunnel.”

“We have a careers class where you get to see the public health and research portion of it, but there was nothing for food animal or large animal or even small animal medicine in clinical practice. I guess that has to do with that most people know these and they don’t have any influence in any of the other areas, but there was nothing.”

“I’m going to actually defend the school, here. I think that careers course is actually more for really alternative careers in veterinary medicine – like really off the wall, just things you really don’t normally think of, like working for the CDC and things like that. At the same time, they may be overlooking the fact that we hear so little about food animal that it’s getting to be one of those careers around here. “

**Focus on “Most Likely” Students.** Some focus group respondents suggested that veterinary schools should focus on those students that might be most likely to be interested in food animal medical careers. Specifically, they mentioned those students enrolled in undergraduate degree programs emphasizing food production. Also, it was recommended to encourage students in other common veterinary school feeder programs, such as biology, to take food animal related courses as electives to see if a seed of interest might be planted among students in those programs.

*Illustrative quotations from the focus groups.*

“I think students that have had an animal science degree, not to say that people that don’t have one don’t go into large animal, but they’ve seen and usually enjoy – our department over there is very small, there are only like two or three hundred students versus biology that has thousands and I think that would be a way to attract students.”

“Even encouraging biological majors that maybe have some animal sciences, maybe encouraging them to take some food animal classes because that’s really where I’ve developed my passion, just working with beef herds, checking cows. You are encouraged to take the classes that aren’t just for biological science majors and be exposed to it, but be exposed to it in a longer lasting environment and really enjoy it; they will develop a passion for it.”

**Paid Externships.** Some students suggested that paid externships in food animal medicine would encourage more students to explore food animal medicine as a career. However, there were also some that thought that a student already committed to other career areas would be unlikely to pursue such options. As such, they might be most effective in influencing that uncommitted student with limited food animal experience.

*Illustrative quotations from the focus groups.*

“I think that’s what (paid externships) has to happen.”

“I don’t think a small animal person would jump to food animal just because they got a paid externship. They probably wouldn’t even apply for a paid externship.”

“Maybe grant the doctors in the field who are taking on students or summer employment so that you can get more people involved. A lot of these guys can’t afford to pay for summer employment.”

**Faculty Mentors.** The idea of faculty mentorship was addressed by some members of the student focus group. The idea was simply that an appropriate mentor would be able to guide students in educational and career choices. However, mentors should be easy to identify and perhaps even a formal mentoring system put in place.

*Illustrative quotations from the focus groups.*

“When I first got here I wanted to do food animal before I was admitted and when I got here, I asked “who are the food animal faculty?” I actually had to search out the names of people. I walked into the admissions office and asked “who is food animal?” and they said, “these people are kind of food animal”.

**Emphasis on the Positive Aspects of a Public Health Career.** Focus group respondents indicated that public health careers often have a poor image among students. It was suggested that more educational/ publicity efforts be used to balance the negative image with the positive benefits of such careers.

*Illustrative quotations from the focus groups.*

“I think in the public health sector you have to wear a suit and speak in big words.”

“I think that’s the problem that the words are all big, but it’s really not that – that’s what I thought, too. I was like infectious diseases, yuck, but if you think about it everyone here is going to be exposed to zoonotic diseases. There is no way you can avoid it and you will be forced to be a part of that solution to the problem.”

“We have a whole class devoted to it (public health). It may spark interest because of the research they have to do. I like the broad spectrum of the career positions.”

“I took a public health relations class – that was good. There were speakers from all aspects that came. We were definitely exposed to it.”

**Food Animal Admissions Slots Unpopular.** The idea of reserving a set number of admission slots for students interested in food animal medicine was not a popular suggestion among the focus group members. The general consensus was that admission to veterinary college should be based upon qualifications/ability. Further, students were concerned that some applicants would be tempted to misrepresent their career interests in order to receive admission to the school, given the highly competitive nature of the veterinary college admissions process. If this strategy was undertaken it was suggested that schools develop a method of making the students admitted accountable to that decision based upon their food animal interest.

*Illustrative quotations from the focus groups.*

“Admission should be for those who are best qualified across the board. That’s the way I feel about that.”

“You’re going to get a lot of people saying they’re food animal to get in.”

“You need the commitment if you say you’re going to do – be food animal.”

## SUMMARY

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Several insights were gained from the student focus group session regarding insights into students' motivations for selecting a particular career focus. We organize our summary around the two focus group objectives.

*Objective 1:* To gain further insight into the factors influencing students' career focus decisions leveraging off the quantitative survey

The themes identified from the students suggest that some of the most important factors influencing students' career focus decisions are: (1) the desire to have an interesting career with a sufficient variety of tasks, (2) the desire to live a small town lifestyle with a high frequency of outdoor work, (3) the desire to work with clientele who are enjoyable to work with and respect their contributions, (4) their life experiences with animals prior to applying for veterinary medical school, (5) the desire to help producers become more profitable and the opportunity to assist in safeguarding the nation's food supply, (6) their concerns related to raising a family, (7) adequate use of veterinary medical skills in their profession.

*Objective 2:* To gain further insight into potential initiatives that may serve to build interest in food supply veterinary medicine.

A variety of initiatives were suggested by focus group members for increasing the number of students who enter veterinary medical school with an interest in food supply veterinary medicine. Some ideas were also presented for developing this interest once in school. Overall, the suggestions follow a common theme of increased exposure to those that might not otherwise consider food animal medicine. The initiatives focus on the following themes: (1) early contact with food animals in veterinary school, (2) increased

exposure to the wide variety of food animal career options, (3) focusing recruitment efforts on those students most likely to be interested in food animal medicine, (4) promoting paid food animal externships for added exposure and experience, (5) facilitating the appointment of a faculty mentor for interested students, and (6) emphasizing the positive aspects of careers in public health.

# North Carolina State University

## Focus Group Discussion

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### INTRODUCTION

The purpose of this focus group interview was to provide insights to build upon the quantitative survey results and gain an in-depth view of the factors that drive veterinary career focus. The focus group interviews had three specific objectives:

10. Gain insights into the factors keeping students committed to a particular career focus area.
11. To understand career focus switching behavior that occurs while in veterinary college.
12. To gain further insight into potential initiatives that may serve to build interest in food supply veterinary medicine.

## METHODOLOGY

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A focus group was conducted on April 12<sup>th</sup>, 2005 at North Carolina State University in Raleigh, North Carolina. The focus group consisted of 17 students in the third and fourth years of their veterinary school education. North Carolina State University was selected to provide regional diversity to the panels and because of its well regarded swine program.

The focus group was audio and video taped and lasted approximately 70 minutes. Each participant received a bookstore gift certificate as compensation for their time. The tapes were transcribed and the transcripts used in the data analysis. A discussion guide was created for the student focus group session (see appendix). Discussion was guided around the factors that will keep students committed to a particular career area and issues surrounding the switching of career focus while in veterinary college. The discussion guide served as the blueprint for the focus group session, although the direction was allowed to stray from the guide when interesting discussions emerged that lead to useful insights.

## THEMATIC ANALYSIS

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This section of the report presents findings from the focus group interviews in the form of a summary of what respondents said in response to specific questions. The information in this section represents the researchers' interpretation based upon: (1) notes made during the focus group meetings, (2) a review of the audio and video recordings, and (3) a content analysis of the typed transcripts from the meeting.

### **Factors Influencing Career Area Commitment**

Student focus group participants identified the following factors as the primary issues that would influence their commitment to a particular career area.

**Variety.** Focus group respondents indicated that they prefer careers that offer a variety of tasks. They are more likely to commit to a particular career for the long term if it offers sufficient variety.

*Illustrative quotations from the focus groups.*

“I think a dynamic environment is good to have – something that’s not monotonous.”

“Maybe not going to the same farm everyday or working with different species or different types of people.”

“You can enjoy working inside with the old lady or the kid with his frog and then you can work with the production folks, too, and it’s just the – for me, it’s that variety that is with the job.”

“There is a lot of diversity or variability in what you do each day. My background is more mixed instead of strictly dairy or strictly beef or whatever, so that will hopefully allow me to see more interesting things within a week’s time.”

“I would also like to be in the situation where I can ask questions and potentially do some research. I want to be able to do something other than just going to farms.”

**Work/Family Balance.** A pervasive theme among our focus group participants was the idea that they did not want work to become an all consuming activity in their lives.

These students seek balance with respect to work, family time, recreation time, and other personal pursuits.

*Illustrative quotations from the focus groups.*

“The old cliché: a proper mix of work, leisure and family time. Not being on call all the time. Being able to have a well-rounded life.”

“I think time is going to be the most important thing. I’m not saying that I don’t want to work, but I want to live my life.”

“It’s not that I don’t have the motivation – I can do it, but I don’t want to be married to a job and be frustrated. I just really want to work and do what I do best. Making money- I’ve been poor for a long time and its okay, I’m okay with it, but I just want to do what I really like.”

“I’d like to work in a practice where there are maybe not a whole slew of people, but enough people that you can rotate on your emergencies and maybe have a weekday off.”

**Helping Clients.** Focus group participants indicated a strong desire to have a career that involved assisting others and forming lasting relationships with their clients. Students report being more likely to commit to careers that provide these attributes.

*Illustrative quotations from the focus groups.*

“It’s feeling that what you’re doing is affecting others and that what you’re doing is making a difference, like seeing that that person is in production and that’s their annual income and seeing the animals in some measurable capacity rather than just giving the animal attention.”

“I feel like I’m giving back in a rural setting because it’s where I come from and I feel like I really understand where they’re coming from and a lot of the producers you know first hand.”

“I think it’s the ability to develop relationships with animal owners or caretakers, if you’re doing wildlife, and feel like we are improving their lives.”

“I think just like you were talking about with relationships – the producers are so much easier to work with than the small animal clients.”

**Community.** Some respondents mentioned that a sense of community in the area they worked and a career that allowed them to participate in the life of the community would lead them to commit to a career. They found the positive aspects of being an involved leader in their community as important to their long-term career.

*Illustrative quotations from the focus groups.*

“I spent two weeks with a guy in Montana and everybody knew him. Everybody at the school knew him and he helped the kids in the community. We sat down to eat and everybody knew him. You can contribute more than one way in the end. No matter who saw him, they all knew him. You have more of a community role; you can mentor, do 4-H and things like that outside of just doing your job.”

**Health.** Many of the participants in the focus group were concerned that their physical health would become an issue and impact their ability to stay in some veterinary career areas for the long term.

*Illustrative quotations from the focus groups.*

“As long as you stay healthy and there is the possibility of having good health insurance to back us up if we have hard times, if we get hurt. As long as I don’t get hurt, I think I could continue.”

“It’s just a tradeoff and there’s always a possibility [of getting hurt], but I could be driving to a small animal clinic where I stay inside and the air is re-circulated and I never breathe anything but mold and I could have a wreck and break my neck just the same way I could if I was out driving the truck.”

“My plan is do a few years of beef and when I get beat up enough, even when I get older I can still handle – I could do dairy goats and meat goats and everything and not worry about being physically overtaxed and still include that food animal part in my career.”

“I’ve seen some food animal practitioners who aren’t as physically able to do some of the harder stuff, but they create a niche over their lifetime of vet medicine and become very proficient at a few things and then they just do those things that they can still do as they get older and they do them well.”

**Working Outside.** The idea of working in an outdoor setting had great appeal to many students and several mentioned that they would be more likely to commit to careers that would allow them to work outside.

*Illustrative quotations from the focus groups.*

“We like to being outside, there are times when it’s crappy in February and you’re pulling a calf, but there are also the days when you get to watch the sunrise and there is just some really beneficial – I just like being able to work outside.”

“I like it because it’s outdoors. I love being outside, outdoors and I’d go nuts sitting in a hospital everyday.”

**Respect.** Having the respect of their peers and members of the public was mentioned as a factor that might cause someone to abandon their commitment to a particular career area.

*Illustrative quotations from the focus groups.*

“There is a lot of scrutiny because of the way we’re raised and as far as public perception - there may not be as much respect for swine production veterinarians. I think that is becoming – it is a big issue. If they are not respected in the field by the public, it may force some of them to move to other fields.”

**Income.** Only a few students discussed the notion that income levels would influence their ability to commit to a particular career area. For those that discussed this factor, the

premise was that they needed to be able to make an adequate living rather than seeking a career that would make them wealthy.

*Illustrative quotations from the focus groups.*

“I wanted to say that not just making money for me, but I have nothing saved for retirement and I at least want to be able to save for retirement. I’d like someone to have a 401K program or have enough money left over every month that I could put some money in that and not be scrimping.”

## **Switching Career Focus While in School**

Focus group respondents offered the following insights on why a student might switch career focus areas while they are in veterinary medical school.

**Exposure to New Area.** Student focus group respondents reported that the experiences gained in school during their veterinary education created new interests for students and that this was a primary reason that students may switch to a focus area that is different from their initial plans.

*Illustrative quotations from the focus groups.*

“I think some people – like me, I came from a very urban background and to me I went to college and I was just fascinated in the classes about large animals and I think some people these days, when you grow up in a rural background, they may not want to go home and work with large animals that they grew up with. They want to work in the city and they want to work with small animals. And that’s how it was with me, just in the other direction.”

“I was predominantly equine coming into school with – I figured I’d do mostly equine and a little bit of food animal – and having come into school and the professors at this school and the experiences that I’ve had I’ve been completely reversed. Now I pretty much want to do food animal with a little bit of equine on the side. That was definitely a changer for me.”

**Small Animal Focus in School.** Focus group respondents suggested that the heavy emphasis on small animal medicine in the early years of the veterinary curriculum led many students to lean towards that area even if they had other thoughts upon entering. In other words, they pursue what they become comfortable with and know. Students report a lack of food animal cases and courses that tend to de-emphasize food animal related content.

*Illustrative quotations from the focus groups.*

“The curriculum exercise in small animal - you become more confident in those exercises.”

“I think that with the dairy here in North Carolina, we see a lot less food animal cases in this hospital, so when you graduate a lot of times you don’t feel like you have as much experience doing clinical cases.”

“Just to go back one second about this semester, we’ve had large animal surgery and I find that besides companion animal being emphasized at school, equine is a lot and we did maybe one surgery on the goats and that’s it.”

“I think that drives people away from some of the food animal aspects because you see all the allure of all these diagnostic tests and technology.”

“We didn’t start to emphasize food animal, really, until third year. For two years and three years it was all small animals and I hadn’t seen or heard about taking food animal classes.”

“And it’s just one semester and you get small animal for two whole years with medicine and surgery and you get one semester for all these other species. That’s just not emphasized.”

“It’s just frustrating especially because in a lot of our classes we’ll cover something on small animal and equine and then we’ll get to the food animal part and they’ll be like ‘we’re just going to skip that; if you’re interested, just read it on your own’.”

“We need to know that, but at the same time, they aren’t going to test us on it because they just figure that most people are going to do small animal and aren’t going to bother wasting they’re time going over this. So that in itself is kind of discouraging and annoying because they don’t even bother to mention it.”

“I think that as soon as students come in here on day one, they start getting a lot of small animal-oriented information. I think they need to be mixing in a lot of food animal.”

**Few Large Animal Case Load/Experiences.** Related to the above factor, focus group respondents report a lack of large animal opportunities. This includes case loads to practice on, outside of school experiences, and the timing of when this information occurs during school. Participants suggest that while small animal students have a good model / preview of what their career will look like, the large animal students do not due to the lack of experiential opportunities. This results in few students switching into a food animal area and may lead some to switch out.

*Illustrative quotations from the focus groups.*

“I think that it would be better if we could have opportunities to either go with practitioners or use animals that we were using for other reasons to learn how to do procedures on the food animals, but you don’t get that many.”

“It would be nice to be able to do hands-on surgical procedures with large animals in real life instead of waiting until I get into the practice and get that. I personally don’t want to go into practice and not have ever castrated an adult bovine, but that’s what I want to do.”

“I’m not able to work in any large animal practices during the summer because I just cannot live on that amount of money in my apartment for the summer.”

“I’m worried about being in a truck by myself. I don’t feel like at this point in time I’ve had nearly enough experience to be confident walking onto a farm and knowing all of the different – I might be able to pull a couple of different tools out of my pocket for this down cow or whatever, but I’m not confident at all that I know all the things I need to know.”

“You don’t want the farmer to know more than you do. You definitely don’t want that.”

“I think that the small animal facility here facilitates to the small animal students very well. When they go into a small animal hospital, they’re going to kind of get to see what their lives are going to be like for a little while. They get a glimpse of “I’m going to go in and talk to a client, this is what I’m going to do: I’m going to

bring it back, fix it up and send it home”. There’s a pretty good transition from classroom to working in the hospital. There is not a block that I can take where I’m going to be in the truck with a veterinarian everyday.”

“In the bovine health block we might get to go out and see a few dairies, but they just don’t have a good, realistic, “this is what your life is going to be like” and I think that’s a big problem because if I’m going to and that’s what I’m going to be for the next however many years, I think there should be a good setup here – if you’re going to go work on pigs, you need to be able to go to a pig farm, do what you’re going to do and see it and be in the situation that you’re going to be in and I just don’t think they have that for a lot of the food animal people.”

“I think one of the bigger things is that the small animal people have access to more opportunities that are easier to access while they’re in school, whereas it’s somewhat difficult to find the time and a place to go to do large animal activities and still be in school because there is really nowhere to go.”

“Our very last semester we get swine medicines for a few weeks in that very last semester – we’re going through it right now – if anybody even remotely was interested in it they’re not going to have a chance now to do it. Food courses should maybe be moved up.”

**Spouse.** A limited number of focus group participants suggested that students switch career areas due to pressure from their spouse.

*Illustrative quotations from the focus groups.*

“People get here and spend four years and get married and stuff – that changes your mind, things like that - when you are twenty-one and want to get out to Montana and then you’re twenty-four and married and you aren’t going to Montana, most likely.”

**Salary Concerns.** Although not mentioned as a factor in committing to a career area, salary issues were brought up by the focus group participants as a reason that students switch career areas during veterinary school. Specifically, students switching from lower paying career areas into higher paying career areas.

*Illustrative quotations from the focus groups.*

“When we get here that’s one of the first things they tell us is – they’ll throw a big chart on the board and show that if you go into small animal you’ll make more money than you would if you go into large animal.”

“There is a poultry scholarship that, in the past, it has always been that they can go to undergrad and they know they have a spot in vet school and I think a lot of them see more money in small animal in the long term than in poultry, whether that’s reality or perception.”

“So a lot of people come in and they’re open book, just like we talked about in this meeting we were just in. It’s like when you come to vet school you’re a blank piece of paper and while you’re here you’re going to write everything on it and that’s what you’re going to be. A lot of people come in like that – they know little to nothing about what they’re going to do – they come in and they get it all while they’re here. Well, if the first person they see or the first person they listen to says “this chart here and this study say that you’ll make more money as a small animal practitioner”, they will be a small animal practitioner. If somebody says “if a cat comes in with this problem, you should do this to it”, that’s exactly what they’re going to do to it. I think if you look at most of the food animal people that are in school, they have a different mindset. They say “okay, that’s your opinion. Now I’ll give you my opinion”. My opinion is that yes, you may make more money being a small animal practitioner, but you’re going to pay it out in different places. If you’re a large animal person you might make a little less, but the bottom line is pretty much going to be the same because of the lower amount of expenses in the rural areas and things like that.”

“And with things like the fact that the amount of student loans goes up every year and the amount that you are getting compensated doesn’t go up as much. That’s kind of the way I see it. We’re paying more and more to get an education and it doesn’t seem like we are quite getting more out of what we’re going to do when we get out.”

**Peer Pressure.** Food animal focus group participants report that students in other areas look down on their career choice and discourage further exploration of food animal topics in the classroom. Some felt that this leads people to switch out of food animal careers and certainly does not encourage others to consider food animal career fields.

*Illustrative quotations from the focus groups.*

“I like goats, so for the last two and a half years anytime I had a question about a goat during lab I just shut my mouth because of peer pressure from the twenty people who wanted to go home twenty minutes early, just glaring at you – it even shuts me up and that’s pretty hard.”

“The majority of students coming into veterinary programs aren’t from farm backgrounds, so their perceptions are basically the public’s perceptions, maybe what they’ve read in the news, maybe influenced by some animal activists groups that are very effective, so they come into these vet programs and they have these preconceived notions that food animal production is bad – really I think it’s a lack of knowledge and when these students come in, these are the students that instead of blowing off being food animal veterinarians, these are the students that you really need to focus on making them understand so that they can at least respect us as veterinarians.”

“They look down on us because we’re looking to do something that’s not normal. I guess I’m kind of – my wife is a companion animal vet, so I kind of see her side of it, too, but I definitely get the feeling from a lot of students that they think we’re nuts for wanting to do food animal.”

“They say “why would you want to go and do that for less money? Why would you want to work on cows and pigs and stuff and get paid less when you can stay in an air conditioned room and work on dogs and cats and get your pockets lined?” I think a lot of people don’t think about it. They came in with a closed mind, thinking “this is what I’m going to do, why would you want to do that?” I just think they don’t think about it.”

“One thing I was going to say about how the other class members view us is that we do have several outspoken animal rights people.”

“When I came in I was doing small animal and hearing people say “I don’t like the swine industry” and “I don’t agree with the swine industry” and “I don’t think animals should be in captivity”, but I think we do need vets, so it was kind of tough to hear people talk about food animal people.”

## **Methods for Building Interest in FSVM**

Students were asked for ideas that might be implemented by veterinary colleges or professional veterinary associations that would lead to greater student interest in food animal medicine.

**Application Process.** Some respondents suggested that the application process should be altered to highlight the contribution that potential food animal focused students could

make to the program. Specifically, it was suggested that a heavier emphasis on interviewing applicants would be helpful.

*Illustrative quotations from the focus groups.*

“I think a big problem in the past is the fact that the way they select students to come into the school gears more toward people who do research and small animal medicine. In the past, they had an interview process so the food animal students typically, not always, have slightly lower grades, more experience with animals and, I guess I’m bias, but more personable skills, people skills. In the past they had the interview process – you may not have done so well on the application, but you come in and sit down and talk to someone and they can figure out what kind of person you are and how good you’re going to be. They’ve gone away from the interview process and it has gone more to what you put on paper and anybody can go to a farm and put on their application that they had experience being on a farm. That’s really not farm experience, you know what I mean? People can make themselves look very good on paper and that is how they are getting in.”

**Positive Food Animal Faculty Role Models.** Having role models in the faculty that take an active role in mentoring students was thought to be a critical factor in encouraging more students to consider food animal careers.

*Illustrative quotations from the focus groups.*

“I really believe that every school needs a good voice for the food animal side. We have a couple – you go and talk to them and they’ll really help you out, but they don’t really step forward. I think each school should have a person – when that first person comes in and says “this is how much you’re going to make, this is how much you’re going to make as a food animal, this is what’s attractive about small animal medicine”, which is really what you get, there should be someone standing in line right behind them to say “this is what you can get from food animal, from this side of it”.”

“I lucked out and have an excellent mentor that I just kind of randomly picked, but not everyone – there are a lot of people that have not had good experiences.”

**Additional Insights.**

Several other issues emerged from the focus group discussions that do not neatly fit into the above categories. Students discussed the potential for using veterinary technicians, public health careers, and tracking.

**Veterinary Technicians.** The use of veterinary technicians was viewed as a useful tactic for improving the work environment for food animal veterinarians.

*Illustrative quotations from the focus groups.*

“I’ve seen a couple of different kinds of setups and I definitely prefer the vets that ride with maybe not a registered technician, but someone who has some experience handling animals and I think comes back to the safety issue. We are tending to be more women and you have to use your brain a little bit more to learn how to handle some of these animals.”

“I think behind every good veterinarian there are a couple of good vet techs. It’s just the better your techs are, the better you are. No matter how much you do and know, if the people under you don’t know what they’re supposed to be doing, nothing will get done.”

**Public Health Careers.** Public health careers received mixed reviews from the focus group participants. While some liked the investigative role, meaningful work, and job security aspects of a public health career, others preferred careers that they perceived they would have a closer hands-on working relationship with animals.

*Illustrative quotations from the focus groups.*

“The benefits, not having to be in a situation where you have to run your own company. It’s kind of self-rewarding to work in public health.”

“I think you are kind of in the middle of the action, too, if something happens. Some people like being a contributor to something going on.”

“I wouldn’t want to do it because you don’t get to do what you really want to do. It’s not what I went into veterinary medicine for. I want to clinically treat animals and establish relationships with people; it’s just not the line that I want to go

down. Maybe in ten years I'll change my mind and it will look very appealing, but right now it's not something that I'd want to do, at least not right away."

"From what I understand, you, as a vet, would be advising many people who are trained to do it, but when it comes down to it, you will be the one filling out the forms and making sure all the I's are dotted and the T's are crossed. It's more of an administrative type of position rather than using your skills."

"I have an opinion about the food inspection job. I guess it could be boring and monotonous, but you are kind of like on an investigative level. You have to be a good manager and the food has to be safe for the public. If you have a problem, you have to correct it appropriately and then you have to go back down to the source. It's kind of like investigative work."

"The appeal is job security and benefits, maybe not the best pay as in a practice, but job security."

**Tracking.** Focus group participants expressed concern about tracking programs. They like the idea of knowing all areas of veterinary medicine and the security that provides them should they desire to change their career focus at some point in the future.

*Illustrative quotations from the focus groups.*

"We've talked about tracking, but I guess what it really comes down to is that if you want to do food animal, tracking would be an advantage, but if you change your mind, that would be bad."

"Boards are the big thing. I know when I'm fifty, I'll probably be doing a lot of small animal and I want to know enough – that's probably why I want to do mixed, so I can keep my proficiency in that. If you get kicked one day, you can be out of the equation for large animal and then you have to know the small animal because what are you going to do? You can't come back to school and say "I'm going to get my small animal now"."

"I don't think I'd want to track all four years even though I am food animal all the way, but I still think as a veterinarian you need to have an array of knowledge. I can do a swine bit, but if my neighbor asks me about their dog I don't want to

stand there and look dumb and say “well, I don’t know – I never took small animal medicine and I don’t know the first thing about dogs”.”

“And I just want to be well-rounded. I’m one of the people that is taking the mixed animal focus, but you have to choose mixed if your inclination is in food animal. You just never know what is going to happen in your life – if you get hurt, anything like that – you have to be prepared for anything.”

## SUMMARY

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Several insights were gained from the student focus group session. We organize our summary around the two focus group objectives.

*Objective 1:* Gain insights into the factors keeping students committed to a particular career focus area.

The themes identified from the students suggest that some of the most important factors keeping students committed to a particular career focus area are: (1) a variety of tasks in the career, (2) a balance between work and family, (3) the ability to help others and build relationships with clients, (4) a sense of community, (5) the ability to maintain one's health, (6) the opportunity to work outside, (7) a career that commands respect from others, and (8) a career that provides adequate income for a comfortable life.

*Objective 2:* To understand career focus switching behavior that occurs while in veterinary college.

Focus group participants suggested the following factors influenced a student to switch their career focus area while in school: (1) exposure to a new area through course work and other school experiences, (2) a heavy small animal focus in the curriculum (3) a lack of large animal cases and experiences in veterinary college, (4) pressures from their spouse, (5) moving to careers that offer higher salary levels, and (6) negative peer pressure from other students.

*Objective 3:* To gain further insight into potential initiatives that may serve to build interest in food supply veterinary medicine.

Focus group participants suggested that emphasizing the personal interview in the application process and the presence of positive food animal faculty role models would serve to attract more students to food animal medicine.