Veterinary Interest Areas of Students Enrolled in a PreVeterinary Track Professional Development Course
Shweta Trivedi, Jodie Joseph, Brandon K. Maddox and Dustin C. Orr
Department of Animal Science, North Carolina State University, Raleigh, NC 27695

Abstract
A unique professional development course for PreVeterinary track students (ANS 495) was developed in the Animal Science Department at the NC State University in 2011. It was offered to the Pre Vet students during with the two-fold objectives (a) educating students about the expense of veterinary profession and (b) assist students in developing an understanding of the DVM application procedure. Students were surveyed for their choice of veterinary interest areas as a future veterinarian in Spring 2011 (43 students) and Spring 2012 (52 students) at the beginning of the course (Pre-test). The students were also surveyed on the level of confidence in their decision to apply to veterinary school and become a veterinarian. The highest response rate for the veterinary interest areas was identified by two categories, namely, small animal veterinarian and exotic/wildlife veterinarian. In 2011, 32% of total student responses indicated that they wanted to be small animal veterinarians while 25% aspired to be an exotic/wildlife veterinarian. In 2012, 30% of total responses indicated small animal veterinarian and another 22% for exotic/wildlife veterinarian. However, after enrolling in the course, the response rates shifted. 29% of students became interested in "other" fields such as lab animal medicine, research, military, and public health. In both the years, 66% students cited feeling extremely confident about their decision to be a veterinarian. Recognizing these interests in diverse aspects of veterinary medicine is key in comprehending the choices that the Pre-Veterinary track students make while planning their undergraduate curriculum, internships, and extra-curricular experiences.

Methods and Development
Step 1: Brainstormed lesson plans that would introduce students to the expense of the veterinary profession, the admissions process, and how to strengthen their individual portfolio
Step 2: Drafted lesson plans and invited guest speakers to present individual lectures and share their ‘expertise’ on corresponding topics
Step 3: Developed associated assignments that cemented the general message of the lesson plan and gauge student learning
Step 4: Generated a retrospective pre/post-survey containing questions assessing students’ perception of what DVM admissions committees look for in applicants
Step 5: Obtained IRB approval for the pre/post-survey (IRB#: 1191-09-10)
Step 6: Received student consent and administered pre-surveys to student participants before the lecture series
Step 7: Implemented the lesson plan series over a period of fourteen weeks
Step 8: Received student consent and administered post-surveys to student participants after the lecture series
Step 9: Administered a critical reflection to assess student learning throughout the course, as well as receive student feedback on how the course may have affected their professional development.

Course Outline

Course Objectives
To develop a 14-week professional development course targeting pre-veterinary track individuals, so as to:

a) Introduce students to the scope of veterinary profession, including current issues affecting the veterinary profession.
b) Assist students in gaining a detailed understanding of the veterinary school application procedure, as well as ways to diversify and strengthen their individual portfolios.

Course Structure

• 1 credit hour (Friday 12:25-1.15p, Spring only)
• Lectures, seminars, field visits
• 2 Teaching Assistants (current applicants)
• Weekly Assessments + Final Paper

Background
In 2009 there were 87,098 veterinarians, with 60,895 in private practice, 15,179 in public/corporate, 15,092 employment unknown
The greatest veterinarian shortages are in the food, public health, and lab animal sectors.
Is there currently an overall shortage of veterinarians? The National Research Council’s project “Assessing the Current and Future Workforce Needs in Veterinary Medicine” is in progress.
Eight schools have 80 slots or less; Ten schools have 80-100 slots; Two schools have over 100 slots.

Data Analysis
Document analysis:
• Documents from the pre-veterinary student professional development course include: weekly assignments, a final critical reflection on the course, as well as IRB approved pre/post-surveys.
• Weekly assignments and critical reflection analyzed to gauge student responses and learnings; pre/post-survey used to measure student perceptions on admissions criteria.
• Questionnaire included: What kind of veterinarian do you want to become?
• Some students gave multiple answers.
• Common responses included: small, large/food, exotic/wildlife, equine, mixed animal practitioner.
• How confident are you in your decision to become a veterinarian?
• Response choices included: Extremely confident, reasonably confident, somewhat confident, and not confident at all.

Interpretation
• Overall, the class's confidence about becoming veterinarians did not significantly change.
• However, 3% of students considered changing career focus.
• "Other" is defined as research, academia, military, public health, and lab animal medicine.
• There was a 6-fold increase in total response rate for “other” career opportunities after being enrolled in the course.
• There was a 17% decrease in total response rate for small animal medicine.
• There was an 18% decrease in total response rate for exotic/wildlife interest.

Conclusions
After enrolling in the Pre-Veterinary track development course, many students shifted their interests away from the original small and exotic animal major and towards other fields. Three students are now considering lab animal medicine, compared to zero in the pre-test. This suggests that being enrolled in this course has a positive association with changing one’s initial interests.

Reading the final critical reflections may explain this relationship. A majority of students’ shifts occurred due to the impact of guest speakers and exposure to unique opportunities outside of their original interests. Exposing pre-vets to the scope of the veterinary field through professional development courses may help fill gaps in shortage areas.

Works Cited
1) Bristol, DVM David "Veterinary Shortage Areas"