



Academy of Rural Veterinarians Newsletter

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Mission:

“To be proactive and provide information to encourage interest in the rewards of veterinary practice in rural America”

We Have Come A Long Way!

ARV has come a long way from the small organization we were a few years ago to what the organization represents today. Our most exciting time is upon us as ARV is successfully spreading the message that rural practice CAN BE a rewarding and lucrative career choice.

This past year alone we have attracted the attention of industry representatives, Deans who support our mission, assorted magazine and newspaper articles, and we have even managed to reach fellow practitioners, students and faculty as far away as Australia.

Dr. Bob Gentry, an ARV board member, is making arrangements to visit veterinary colleges as well as various private practices in Australia later this summer. Dr. Gentry has also visited The University of Glasgow speaking to students on behalf of ARV and promoting rural practice. Many of these students are American citizens who upon graduation will return to the United States to practice medicine.

Our success has resulted in an increase in membership over the past year. We have well over one hundred-forty registered mentors and are nearing 400 student members. This year we plan to hold a membership drive in August. It is our hope that all current member/mentors will tell a fellow practitioner about ARV and have them sign up and support our effort to promote rural practice.

As the Academy of Rural Veterinarians continues to make strides promoting rural practice, it is ultimately up to each of our members as to how successful we are as an organization. While we have come a long way, we still have a monumental task ahead of us. The future of our profession lies within each student and it is our belief that given the opportunity to gain experiences beyond the classroom and under the guidance of a good mentor, students will come to recognize the potential rural practice has to offer thereby making our mission a success!

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ARV Collaborates with AABP

The Academy of Rural Veterinarians has joined forces with AABP in an effort to increase the exposure of our mentorship program. Currently ARV is the only veterinary organization that provides contact information of veterinarians wishing to mentor students. The opportunity to

work with AABP has given our organization more exposure and will hopefully help students find mentors while providing a rewarding externship experience for both student and mentor. For more information on mentoring students please visit our website and sign up!



2006 School Visits: Our Most Successful Year To Date!

This school year the Academy of Rural Veterinarians visited 21 US veterinary colleges, the most schools we have had the opportunity to present at in a single year. We are thrilled to report that we have also had more student involvement than in the past and have begun forming student ARV chapters. This is one avenue we are beginning to explore in hopes of providing more interaction between our organization and students, faculty and practitioners.

As recognition of ARV continues to grow we are drawing new interest from both faculty and industry representatives who support our mission and wish to get involved. This year our school meetings attracted not only student attendance but many of the colleges deans and faculty were in attendance, with most staying through the question and answer session. As always, Intervet sponsored the meal at each event and also sent a representative to attend. This year we were also excited about our partnership with AABP who also sent representatives to many of our school meetings.

Each year coordinating these school visits proves to be an immense task. Contacting students, arranging a date and confirming a location has gotten easier over the last few years, however it has been challenging at times to find speakers for each event. This year proved to be different. Our speaker database has grown exponentially over the last few months and we are finding that more practitioners want to get involved and share their experiences with students as these meetings are proving to be equally rewarding to students as they are to those that present at them.

As successful as this year was for the organization it is our goal to not only meet but exceed this years number of schools by visiting every U.S. veterinary college this upcoming school year. We are currently recruiting speakers for these presentations. If you are interested in presenting please contact us for more information. It is through the cooperation and continued support of our members that these school visits are made possible.

2007 Student Externship Program

We are excited to announce a second opportunity to apply for our student externship grant. Please visit our website for more information.

As the 2006 student externships were coming to an end we rallied the troops and began accepting applications for the 2007 program. As always initial response was slow in coming however when the deadline was reached we had received more applicants this year than in the previous year. This is a great indicator that our program is working and students are recognizing the unique opportunity to participate in our externship program.

In mid April our externship selection committee awarded 40 students, from 20 universities, nearly \$32,000 in externship grants. Students who were selected will receive up to \$1000 to help defer expenses while visiting their host practice and again take part in our externship survey process.

This year we are excited to announce that additional funds have become available and we are offering a second opportunity to apply for the externship grant. Applications are now being accepted and our deadline for this round of applications is July 1, 2007. As always applications can be found on our website.

We encourage each of you to promote the externship program as it has proven to be a rewarding experience not only to the student but to the mentoring veterinarian as well. This is an opportunity to share your experiences with students and encourage them to consider rural practice.

ARV News

●Due statements will be sent out in early August. We will continue to offer individual memberships at \$100 and practice memberships at \$150. This year we encourage each member to have a fellow practitioner sign up!

●Soon we will be equipped to process due payments and donations by credit card through our website via PayPal.

●We would like to extend a note of thanks to Schering-Plough Animal Health for their recent donation and continued support of the Academy of Rural Veterinarians. Thank You!



●This summer, ARV representatives will be attending both the AABP conference in Vancouver and the AVMA convention in Washington D.C.

●The Board of Directors voted to award graduating veterinary students, who are student ARV members, a one year free membership. Congratulations to all the graduating Seniors!

●ARV would like to once again than Intervet for their continued support at school meetings. Intervet graciously sponsors meals for each event. Thank you!



●ARV is in the process of developing a web-based mentoring site. Stay tuned for updated on the status of this project!

●The Academy of Rural Veterinarians has applied for 501 (c) (3) tax exempt status. We are awaiting IRS approval.

●This August marks the two year anniversary and expiration of our current USDA grant. ARV has applied for a second USDA grant to help with funding and expect to get a response in the near future.

●The Academy of Rural Veterinarians next board meeting will be held in conjunction with AVC this August in Kansas City, MO.

●We would like to thank Steve Johnson and Steve McDonald for the recent website redesign.

●The deadline for the second round of extern applications is July 1. Please pass on the information to any student who might be interested in the program.

●Members can list current job openings on our website. Student resumes can also be viewed and posted online.



If you have news or photos related to ARV that you wish to be included in an upcoming newsletter please contact Magen at magenkasper@yahoo.com

Interested in becoming a member?

Please fill out the information below and submit it along with a check for \$100 for an individual membership or \$150 for a practice membership to the address below. It is through the continual support of our members and industry sponsors that makes it possible for us to carry our message to the nations veterinary colleges.

Name (s) _____

Practice Name _____

Street _____

Town/State/Zip _____

Phone (Work) _____

Phone (Home) _____

Email _____

2006 Externship Survey Results

We are mandated by our USDA grant to assess impact of our funded Rural Veterinary Externship Grant on student perceptions of rural practice. This is a two-year period of study, at the end of which we must submit our findings. We did a preliminary analysis of data we gathered the first year just to have an idea of how we were doing. While reading this, be aware results were influenced by “ceiling effect”; that is, 86% of students were upperclassmen and may already be sold on rural practice. Never the less, while statistical improvement in perceptions was made in two important areas, most perceptions were unchanged. The Grant recipients for 2007 are 60% 1st and 2nd yr, which will probably change the results at the end of the grant period. These experiences have a very profound effect on individual students, and those of you who participate are to be commended.

The data was analyzed and the following text written by George Diekhoff, PhD, Experimental Psychology, and has made his conclusions based on the data supplied. As a non-veterinarian, it is our hope that his comments are free of bias.

Survey Participant Statistics	<p><u>The Survey Methodology</u></p> <p>Two survey instruments, a Pre-Externship Survey and a Post-Externship Survey were administered before and after veterinary students completed their rural externships. The surveys collected information about demographics, background variables, and career interests. The post-externship survey also included items to enable participants to evaluate their externship experience.</p> <p><u>Participants</u></p> <p>Thirty participants were identified who completed both pre- and post-externship surveys and all subsequent analyses were performed using data from this sample. All participants expressed an interest in working with one or more types of large animal.</p> <p><u>Externship Effectiveness: Perceptions of Rural Practice</u></p> <p>Factor I is represented by rating scales that deal with business and professional considerations of rural practice ("Opportunities for professional growth; Quality of medicine you will be able to practice; Financial compensation; Availability of support staff; Economic stability in rural areas"). Factor II is represented by scales related to quality of life and work in a rural, agrarian practice ("Living in a lower population area; Small school systems; Potential for working with food animal production; Extensive case load in your area of interest"). Factor III is represented by items that focus on work load considerations ("On-call time commitment; Total work hours in a week; Physical demands of a practice involving large animals"). And Factor IV is represented by items reflecting the social aspects of rural practice ("Ability to interact with other young professionals in your age group; Recreational/leisure time activities; Opportunities for spouse").</p>
73% Female 27% Male	
53% 4 th year students 33% 3 rd year students 13% 2 nd year students	
57% Grew up on farm 43% Grew up in city	
73% Prior livestock experience 27% No livestock experience	

There were statistically significant improvements in perceptions of two of the four broad factors measured by the 15 rating scales. None of the negative changes were statistically significant. It should be noted, though, that many of the post-externship survey rating scale means reflect neutral to somewhat negative assessments of rural practice.

Externship Effectiveness: Viability and Likelihood of Rural Practice

In addition to changes in perceptions of rural practice, it was possible to evaluate changes in participants' career intentions from the pre- to post-externship surveys. In one relevant survey item, the 30 participants used a 1-3 scale in rating the degree to which they "consider rural practice a viable option for employment after graduation." It is important to note that scale ratings of 1 were positive ("definitely yes") and rat-

2006 Externship Survey Results Continued...

ings of 3 were negative ("definitely no"). The mean ratings were 1.23 on both the pre- and post-externship surveys at 1.23 (pre-externship SD = .430; post-externship SD = .774). It should be noted that despite the absence of improvement on this measure, participants had a very positive view of the viability of rural practice both before and after the externship and the absence of change can be attributed to this ceiling effect.

A second item asked the 30 participants to use a 1-5 scale in rating "how likely is it that you will pursue a career in rural veterinary practice after graduation (1 = "not at all likely;" 5 = "very likely"). The pre-externship mean rating was 4.43 (SD = .626); the post-externship mean rating was 4.73 (SD = .450). Although this is a relatively small improvement, a dependent-samples t-test found it to be statistically significant [$t(29) = -2.340$, $p = .026$]. Again, a ceiling effect limited the amount of improvement that could be seen on this outcome variable. Participants were already quite firm in their commitment to pursue rural veterinary practice before they took part in the externship.

Differential Program Effectiveness

Any program will be more effective with some participants than with others. In the case of the externship program, one can ask if the externship experience may have been more fruitful for some participants than others. There were no differences in program effectiveness as a function of year in school, sex, whether or not participants had a farm background, nor whether or not individuals had a background working with livestock. The program was more effective in changing the perceptions and intentions of participants who were not already strongly sold on the virtues of rural practice and committed to its pursuit.

Evaluation of Reactions to the Externship

Evaluating participants' reactions to the externship was accomplished by asking them to indicate, either "yes" or "no," to the question, "Has your concept of rural practice been significantly influenced by this externship?" Those who answered "yes" were asked to rate that influence on a 1-5 scale. The mean scale response was 4.03 (SD = .964) which corresponds to a "positive" evaluation.

Summary and Conclusions

One can draw the following conclusions about the effectiveness of the rural veterinary externship:

- The externship had a small but positive effect in improving participants' perceptions of rural veterinary practice. Participants completed the externship with a more positive impression of the financial aspects and physical demands of rural practice.
- Despite these limited improvements, perceptions of most aspects of rural practice remained neutral to negative.
- Participants showed a small, but significant, increase in their commitment to enter rural practice following graduation. Limiting this increase was the fact that most participants were strongly committed to working with large animals in a rural practice even before the externship.
- The opportunity to demonstrate program effectiveness was limited by ceiling effects. Most participants were strongly committed to rural practice even before the externship. The rural externship program was found to be more effective among students who, though leaning toward rural practice, were less committed beforehand. It may be that this group should form the target audience for future externships, at least if the goal of the externship program is to change perceptions and intentions.
- Participants were very positive about the externship, with the vast majority describing it as "positive" or "very positive."

The Academy of Rural Veterinarians appreciates the collaboration and well-done work of George Diekhoff, PhD in preparing this analysis.

Beware of Wizards, Witches, and Miracle Cures!

Steve McDonald, D.V.M.

Client education is a big part of what we do. This was written for a producer magazine.

(It's OK to have fun with it.)

Macbeth, Act 1, Scene III

Witch 1: "Where hast thou been, Sister?"

Witch 2: "Killing swine"

This is from Shakespeare's Macbeth, which was written several years before Madonna was a pup. The average guy at that time believed that witches killed pigs at night when the farmer was asleep out of pure cussed meanness. Now we know, or at least we think we know, about bacteria, viruses, and all that stuff that causes disease in our livestock and in us. It would help if we could actually see the little beggars rather than just bearing witness to the damage they cause. Potions, spells, witches and wizards linger in our collective memories to this day. The complicated relationship between disease and its host mostly goes on within the hosts body, and invisible to us.

The manager of the livestock supply store looked over his shoulder and lowered his voice. He described how to mix two over-the-counter drugs to make a cure-all antibiotic for bacterial pneumonia in calves. I was too inexperienced to know better, and followed his advice. I took the two drugs to a ranch that was having a bad outbreak of respiratory disease in some purchased stocker calves, and mixed the two products on the tailgate of my truck. When mixed together, the bottle warmed noticeably, a tendril of what appeared to be smoke wafted out of the bottle. I had an audience, two cowboys with glassy eyes and slack jaws at what they'd seen. The stuff had to be given IV, and if given too fast, the animal would stagger out of headgate and it would take a couple of minutes to recover. "OOOHH", said one of my new disciples, "That's really some strong medicine!" I never used it again; it frankly scared hell out of me. That was 18 years ago and those two guys still think I'm a witch doctor.

It's really all about how disease invades the body, how the host defends itself from this attack, and how we can help fight the infection with proper antibiotics and vaccination plans.

Most pathogenic or disease-causing organisms replicate themselves at a very high rate and will soon overwhelm the animal. If there is delay in treatment, the damage done is beyond repair. A good example is blackleg, which rapidly overwhelms the body's defenses. If caught early, plain old penicillin does a good job reversing blackleg's progression. A delay of just a few hours means the animal will become unresponsive to treatment, and will die.

There are many disease-causing organisms that are very different and many drugs tailored for them. Penicillin will be very effective against blackleg. Blackleg has a well-defined cell wall which penicillin ruptures. Penicillin is useless for anaplasmosis; that organism lacks a penicillin-sensitive cell wall. There are dozens of drugs and you have to know how they work and what they will be effective against, based on the chemical properties of the drug, and biological vulnerabilities of the organism.

Very few drugs are antivirals. Vaccinations against many viruses and some bacteria are effective, BUT the animal cannot already be sick, and the vaccine must be handled and given properly.

Beware of wizards, witches, and miracle cures. Remember that the only knowledge required to sell you drugs is how to run a cash register. This is not to say most drug salesmen do not try to do a good job representing their products, but you will do well to seek the advice of your local veterinarian, whom I hope you will establish a relationship with, if you haven't already. While being a witch is fun, life while practicing the "black arts" in Shakespeare's day could be a little dicey when the villagers gathered up their torches and pitchforks, and then came to visit. Nowadays, they just call you a quack.

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