GENERAL PRACTICE

Strategies To Attract Today’s New Graduate General Practitioner

Veterinary medicine is a continuously evolving field. There are so many variables involved with this dynamic profession that it is difficult to make generalizations about the implications of these in rapidly changing times. Salaries, new technologies, shortages, gender shifts, and costs of education are key variables in this ever-changing profession. These changes affect all involved. Students, private practitioners, college faculty members, and clients are affected.

Shortage of Rural Veterinary Practitioners

There has been a lot of news coverage dedicated to the issue of shortages of private practitioners in less populated or rural areas. Recently, related stories have made the front page of the New York Times. It is alarming and unfortunate that many practices will close their doors because the retiring practitioner has been unable (often for several years) to attract the next generation of veterinarians into the practice. Unfortunately, blame for the proposed causes (if understood at all) has been misdirected and misplaced against the various colleges of veterinary medicine. Much of the scrutiny is related to not “letting the rural kids” into the DVM programs. There has also been some blame placed on the feminization of the profession. Veterinary medicine is not isolated on this change. The change in gender is seen in other
professional programs as well. As a former general practitioner who had the privilege of working with two of the brightest female general practitioners, I can vouch for the merits of this shift in gender.

I frequently get calls from practitioners wishing to fill an associate position. Unfortunately, some are not in tune with current trends, and this will only lead to further disappointment and frustration. I have also talked to those that will pay top dollar but cannot accept the fact that many of these students have different goals and priorities than many of the practitioners actively seeking new graduate veterinarians. Many of these new DVMs place more value on quality and quantity of life away from work (e.g., family time away from work) and are simply not eager to work 80 hours a week, every weekend, and take calls 80 percent of the time, for example. These students are not intimidated by hard work and most have physically active lifestyles. Some are up at the gym at 5:00 a.m., preparing for another day of intense learning at the same time.

Strategies To Hire Rural Veterinary Practitioners

How is it that quite a few veterinarians can hire almost every time they have an opening? With that in mind, is there truly a shortage of graduating veterinarians willing to go work in rural practice or is there an abundance of practices that are not attractive to today’s graduates? Is this a difficult topic to broach with many frustrated practitioners. With so many opportunities for today’s graduating veterinarians, it is important to acknowledge that there are in fact practices that can seemingly hire at will.

When I think about many of the practitioners who I keep in touch with that seem to be able to hire new or recent graduates with regularity, I realize they have similar attributes. Most are: 1) active in organized veterinary medicine, 2) participate in various VMA committees, 3) maintain a working relationship with the College of Veterinary Medicine, 4) speak at student club meetings/wet labs, 5) host externships, 6) offer summer employment, 7) visit the school/students a couple of times a year, 8) work with the Academy of Rural Veterinarians, and 9) have a balance of life away from veterinary medicine.

Recently, a rural general practitioner was in town for a daughter’s athletic event and dropped by the Large Animal Hospital with kolaches for the students in the Food Animal Ward. He visited with several and ultimately interviewed a couple of students that same day.

Stay in touch with the faculty. These folks are genuinely concerned about the state of rural practice and have a tremendous influence on these students. They are often asked about job opportunities. Keeping a strong, open relationship with the faculty might help efforts to recruit that precious commodity. Make an effort to reconnect with the college. Find out when student groups are having meetings. Offer to come and give a presentation. The students want to hear your stories. They want to share your experiences. Help show them that it simply doesn’t get any better than life as a general practitioner! The College of Veterinary Medicine recently hosted an extremely successful AAEP student/practitioner wet lab. Veterinary students came from all over the U.S. and were able to visit with scores of private practitioners from all types of practices. Plans are being made right now for a similar food animal wet lab and practitioner event.

The pipeline is loaded with scores of students with rural backgrounds with ambitions of becoming mixed animal or rural practitioners. The trick is offering the right support to keep them interested and motivated to enter that area of practice when they graduate. It is a team effort. Currently, the Texas A&M Food Animal Section faculty is working with first-year students to provide the mentor support and guidance that will hopefully keep more of these students attracted to rural/mixed practice. Similarly, private practitioner support is very important to the recruitment and retention of these professional students. Come to the school and meet these bright, talented, and enthusiastic future doctors. They are yearning for practitioner stories and mentorship.

Mentorship To Train Rural Veterinary Practitioners

Today’s professional students are also more sophisticated than in years past. They are more likely to negotiate a better position on a contract as they have many opportunities from which to choose. Months ago I heard about a practitioner who had gone to interview some students and was heard to say: “I was not interviewing them. They were interviewing me!” Students are expecting more because their contemporaries are getting more. Now it is more and more common to hear of signing bonuses as an item in an employee’s compensation package.

Some of these students will turn down a few thousand dollars to go work in a practice that has solid support and mentorship. Gone are the days of “tossing the keys to the rookie vet” the week after graduation as you set out the door on a 10-day cruise. I had a classmate that had a similar experience and he left the practice within the first few months. When today’s students are asked about the kind of practice that they aspire to work in, a typical reply is “a practice that will provide me with excellent mentoring.” Unfortunately, the quantity of clinical exposures afforded to today’s professional students is often times limited. This is a direct result.
of the increasing levels of sophisti-
cation in the referral base of private
practitioners with expanding surgical
and medical skills referring only the
most complicated cases. There is also
some effect related to the popularity
of the internship and residency pro-
grams. The net result is that much of
the early clinical training and techni-
cal proficiencies will be provided by
the first employer. The support and
mentorship afforded the new prac-
titioner by the employer goes a long
way to determine the new graduate
veternarian’s early professional confi-
dence and ultimately their level of job
satisfaction.

Those veterinarians that are suc-
cessful in attracting today’s new grad-
uate general practitioners are contin-
ually raising the level of expectations
for the future classes of DVMs. It
 behooves us all to stay in touch with
current trends and critically evalu-
ate what types of opportunities these
students are facing. Doing so allows
practitioners to remain competitive
and hopefully be one of the mentors
who “passes the test” and is chosen
for this treasured opportunity.

From John M. Davidson, DVM. Clinical Assistant
Professor, Department of Large Animal Clinical
Sciences, Texas A&M University, College Station,
Texas 77843.

New Web Site for Extension
Veterinary Medicine,
The Texas A&M System

Our Extension Veterinary Medi-
cine Unit has changed its Web site
address. You can now find us at
http://aevm.tamu.edu. On our Web
site you will find current news and
reports, slide presentations, publica-
tions and blogs, FAQs, archives of
the VQR newsletter, and much more.
If you have any questions please feel
free to contact Angie Dement at
adement@cvm.tamu.edu.

From Angela I. Dement, Extension Assistant for
Veterinary Medicine, Texas AgriLife Extension
Service, The Texas A&M System, College Station,
Texas 77843-2487.

Early Confirmed Anthrax
Case Prompts Livestock
Vaccination

The anthrax season near Del Rio
started a little early this year, with a
case confirmed March 31 in a five-
year-old male goat. The Texas Animal
Health Commission (TAHC) is advis-
ning owners in the area to vaccinate live-
stock to prevent additional death losses.

“We usually see cases of anthrax
occuring in summer when the tem-
peratures rise, but this spring has been
quite warm. Anthrax occurs world-
wide, but in Texas, cases are typically
found in a triangle bounded by Uvalde,
Ozona, and Eagle Pass. This area
encompasses portions of Crockett,
Val Verde, Sutton, Edwards, Kinney,
Uvalde, and Maverick counties,” said
Dr. Hillman.

He explained that anthrax bacteria
lies dormant in the ground, and ger-
mination is triggered by appropriate
moisture and warmth. As the bacteria
migrates to the surface, it contami-
nates grass and soil, where it is picked
up by grazing animals.

“Ranchers in the vicinity of anthrax
cases routinely vaccinate each spring,
or initiate vaccination for their cattle,
sheep, goats, horses or other grazing
animals as soon as a season’s first case
is reported,” he said. “The injected
vaccine is very effective, but there is
no approved method for administer-
ing vaccine to free-ranging deer that
can’t be rounded up and restrained in
a chute.”

“We don’t want anthrax-infected
animals to die in transit or on a new
premise and then have carcasses mis-
handled,” said Dr. Hillman. “Therefore,
TAHC regulations require that ani-
mals on an infected premises be quar-
tantined for at least 10 days after all the
livestock have been vaccinated against
the disease. During this time, anthrax-
exposed animals will die from the dis-
ease without contaminating new areas,
while healthy, vaccinated animals will
develop immunity.”

“We also are concerned about
proper disposal of anthrax-infected
carcasses,” he noted. Prior to release
of a TAHC quarantine, carcasses of
infected animals, animal bedding, and
nearby manure must be burned thor-
oughly to prevent anthrax bacteria
from leaching into the soil, where it
can remain dormant for decades. This
also prevents wild pigs, coyotes, dogs,
or other predators from dragging car-
casses (and the accompanying anthrax
bacteria) from one pasture to another.

“When burning potentially infect-
ed carcasses, or vaccinating livestock
against anthrax, ranchers should wear
long sleeves and gloves to avoid con-
taminating sores on arms or hands,”
cautioned Dr. Hillman. “Anthrax in-
fection of the skin can cause a nasty
sore that requires appropriate anti-
biotic treatment, so practice good gen-
eral sanitation procedures. Wash your
hands and clothes after burning car-
casses or vaccinating animals. Con-
sider disinfecting equipment used to
move bedding, potentially infected
manure, or fuel. Keep pets away from
carcasses, and avoid picking up bones,
horns, or antlers from dead animals.
Healthy animals should be moved
from anthrax-contaminated areas
during an outbreak.”

All anthrax cases—suspected or
laboratory confirmed—must be re-
ported to the TAHC. The regulatory
agency operates a 24-hour hotline at
(800) 550-8242 to contact state or fed-
eral regulatory veterinarians. They are
available at all times to take calls and
work with private veterinary practitio-
ners and producers.

“Hunters often ask us about an-
thrax and risks associated with har-
vesting animals,” commented Dr.
Hillman. “Fortunately, by the time
hunting season starts, cool weather
usually puts an end to a season’s out-
break. Always harvest only healthy-
looking animals. If a deer has ingested
anthrax bacteria, within hours it will
stagger, tremble or exhibit convul-
sions, and death is inevitable.”
Antibiotic Facts Sheet and Video Available

You can download the Texas AgriLife Extension Service fact sheet L-5402, “Antibiotic” (August 2001, 4 pages), from http://agrilifefactstore.org or purchase it for $2. The publication describes symptoms in livestock, deer, and people. It also explains how the diagnosis is made.

The AgriLife Extension video SP-128, “Antibiotic Bacillus anthracis” (April 2002, 8 minutes) is also available from http://agrilifefactstore.org for $9.95. Seasonal outbreaks of anthrax in animals from June through October are common in several southwest Texas counties each year. This videotape answers basic questions about anthrax and has information to help ranchers and hunters understand precautionary measures they should take to prevent exposure to anthrax.

From Bruce Lawhorn, DVM, MS, Visiting Professor, Swine Practice, Food Animal Section, Department of Veterinary Large Animal Clinical Sciences, College of Veterinary Medicine and Biomedical Sciences, The Texas A&M System, College Station, Texas 77845-4475.

“Antibiotic is not a danger to travelers or vacationers in an area where cases have occurred,” he stressed. “We advise tourists to avoid touching carcasses or collecting bones or antlers, and they won’t have to worry about the bacteria. Anthrax has been with us for hundreds of years. While cases are noteworthy because of the death loss in our wildlife and livestock, and because of the need to vaccinate, they are not alarming.”

Adapted from April 2, 2008 news release “It’s Time to Vaccinate Livestock Against Anthrax, First Confirmed Case Detected Near Del Rio,” Carla Everett, information officer, Texas Animal Health Commission (TAHC), Box I2966, Austin, Texas 78711. Dr. Bob Hillman, Executive Director, (800) 550-8242 ext. 710, FAX (512) 719-0719. For more information, contact Carla Everett, information officer, at 18005508242, ext. 710, or coverett@tahc.state.tx.us.

**Veterinary Continuing Education Seminars,**
College of Veterinary Medicine and Biomedical Sciences
Texas A&M University, 2008-2009

- June 6-8, 2008 ................................................................. 17th Annual Veterinary Technician Conference
  (Dr. Lewis Dingess)
- July 11-13, 2008 .............................................................. Practical Veterinary Dentistry
  (Dr. Bert Dodd)
- August 8-10, 2008 ............................................................ 2nd Annual Dermatology Conference
  (Dr. Christine Rees)
- October 24-26, 2008 ...................................................... Annual Equine Conference
  (Dr. Keith Chaffin)
- November 14-16, 2008 .................................................. Small Animal Emergency Medicine & Critical Care
  (Dr. David Nelson)
- November 21-23, 2008 .................................................... Clinical Neurology Conference
  (Dr. Jonathan Levine)
- December 5-6, 2008 ...................................................... Annual Exotic Pets Conference
  (Dr. Sharman Hoppes)
- February 6-8, 2009 ...................................................... 16th Annual Veterinary Technician Conference
  (Ms. Lori Atkins and Candide McKay)
- February 20-22, 2009 .................................................... Pain and Physical Rehabilitation Seminar
  (Dr. Gwendolyn Carroll)
- April 24-26, 2009 ......................................................... Annual Feline Medicine Symposium
  (Dr. John August)

*Confirmed.
Calendar is subject to revision.
For more information, please contact us at 979-845-9102; (fax) 979-862-2832; (email) ceoffice@cvm.tamu.edu.
From the Office of Veterinary Continuing Education, Texas Veterinary Medical Center, College Station, Texas.

**SWINE PRACTICE**

**Baytril® 100 (Enrofloxacin) Injectable Recently FDA-Approved for the Treatment and Control of Bacterial Swine Respiratory Disease**

Bayer Animal Health has just announced the FDA-approval of Baytril® 100 (enrofloxacin, 100mg/ml) injectable for the treatment and control of swine respiratory disease associated with Actinobacillus pleuropneumoniae, Pasteurella multocida, Haemophilus parasuis, and Streptococcus suis. Baytril® 100 is administered as a once-dose only subcutaneous injection (7.5 mg/kg or 3.4 mg/lb of body weight) behind the ear, with a maximum of 5 ml per injection site. Animals intended for human consumption must not be slaughtered within 5 days of receiving a single-injection dose.

Note that Quinolone-class drugs (which include enrofloxacin) have been shown to produce erosions of cartilage of weight-bearing joints and other signs or arthropathy in immature animals of various species.

A safety study was conducted in 32 pigs weighing about 57 kg (125 lb) using single doses of 5, 15, and 25 mg/kg daily for 15 consecutive days. Incidental lameness of short duration was observed in all groups, including the saline-treated controls. Musculoskeletal stiffness was observed following the 15- and 25 mg/kg treatments with clinical signs appearing during the second week of treatment. Clinical signs of lameness improved after treatment ceased, and most animals were clinically normal at necropsy.
A second study was conducted in two pigs weighing about 23 kg (50 lb) and treated with 50 mg/kg for 5 consecutive days. There were no clinical signs of toxicity or pathological changes.

An injection site study conducted in pigs demonstrated that the formulation may induce a transient reaction in the subcutaneous tissue. No painful responses to administration were observed.

In humans, avoid contact with eyes. In case of contact, immediately flush eyes with copious amounts of water for 15 minutes. In case of dermal contact, wash the skin with soap and water. Consult a physician if irritation persists following ocular or dermal exposures. Individuals with a history of hypersensitivity to quinolones should avoid this product. In humans, there is a risk of user photosensitization within a few hours after excessive exposure to quinolones. If excessive or accidental exposure occurs, avoid direct sunlight. For customer service or to obtain product information, including Material Safety Data Sheet, call (800) 633-3796. For medical emergencies or to report adverse reactions, call (800) 422-9874.

From “Baytril” 100” (enrofloxacin) technical bulletin, Bayer HealthCare LLC, Animal Health Division, Shawnee Mission, Kansas 66201, January 2008.

### EQUINE PRACTICE

#### First 2008 WNV Positive Mosquito Pools Recently Detected in Harris County

The first West Nile Virus (WNV) positive mosquito pools were detected in Harris county during the week of April 28. This is the first evidence of WNV activity in Texas for 2008 and is a good indicator that infected mosquitoes may already be in other areas of the state. It is also an early reminder to take precautions to prevent WNV infections in humans, horses and other animals by the following:

- Draining standing water
- Cutting grass and weeds short to discourage mosquito accumulation
- Wearing clothing to discourage mosquito bites
- Wearing insect repellant (products containing DEET are the “god standard”)
- Avoiding high mosquito exposure time around dawn and dusk
- Vaccinating horses against WNV, but also EEE, WEE, and VEE

From Jim Schuermann, WNV epidemiologist, and Dr. James Wright, Health Service Region 4 and SN Zoonosis Control, Texas Department of State Health Services, Austin Texas, www.dhs.state.tx.us.

### WEST NILE VIRUS

#### Videotape Available

You can purchase the Texas AgriLife Extension Service video SP-142, “West Nile Virus: A Survival Guide” (September 2002, 8 minutes) from http://agrilifebookstore.org for $9.95. It discusses the origins of west Nile Virus, the way the virus is spread, the risk of infection, and what symptoms the disease causes in humans and horses. The first indicator that WNV may be in a community can be the deaths of birds such as blue jays and crows. Although no WNV vaccine was available for horses at the time of the creation of this video, WNV vaccination in horses continues to be a highly effective, routine preventative recommendation.

From Floron (Buddy) C. Faries, Jr., DVM, MS, Extension Program Leader for Veterinary Medicine, Texas AgriLife Extension Service, The Texas A&M System, College Station, Texas 77843.

### AQUATIC PRACTICE

#### Two New Publications on Pond/Lake Management To Improve Largemouth Bass Fishing

SP-327, “The Largemouth Bass—Better Fishing Through Private Water Management” (April 2008) by Michael P. Masser, is a collection of the PowerPoint presentations made at the Largemouth Bass Conference held March 27, 2008 in Athens, Texas. The information includes all aspects of water management to improve largemouth bass fishing. You can purchase it ($8 each, or $6 each for orders of 10 or more) at http://agrilifebookstore.org.

Also by Masser is SP-326, “The Largemouth Bass” CD (April 2008). It can be purchased at http://agrilifebookstore.org ($20 each or $10 for orders of 10 or more). This CD is authored by fisheries experts from Texas AgriLife Extension Service, the Natural Resource Conservation Service (USDA), the Texas Chapter of the American Fisheries Society, and the Southern Regional Aquaculture Center. This up-to-date reference covers all aspects of private pond-impoundment management. It includes sections on construction, stocking, pond and lake management, water quality, special problems, and more.

### CANINE PRACTICE

#### Serum Cortisol and Thyroxine Concentrations as Predictors of Mortality in Puppies Severely Affected with Parvovirus Diarrhea

Several studies on critically ill humans have shown a positive correlation between high serum cortisol concentration and death. Many other
human studies have failed to show this association.

A recently reported, prospective case-control study evaluated the role of adrenal and thyroid hormones as predictors of death in a population of critically ill puppies with parvovirus diarrhea by measuring the serial daily serum concentrations of cortisol and thyroxine. Fifty-seven severely ill puppies with parvovirus diarrhea admitted to one hospital (of which 11 died and 46 survived) and 17 clinically normal control puppies were included in the study. Basal serum cortisol and thyroxine concentrations were measured for each puppy with parvovirus diarrhea at admission (prior to treatment) and daily until death, euthanasia, or discharge.

**Results** — Median time between admission and death was 48 hours (e.g., on Day 3). Median serum cortisol concentration on Day 1 (admission) in all puppies with parvovirus diarrhea (248 nmol/L) was significantly higher than in control dogs (77 nmol/L). No significant difference was found in Day 1 median serum cortisol concentration of 11 puppies that died (302 nmol/L) and 46 puppies that survived (238 nmol/L). On Days 2 and 3, a significantly higher median cortisol concentration was, however, found in nonsurvivor group puppies (Day 2 - 266 nmol/L; Day 3 - 279 nmol/L), compared with survivor group puppies (Day 2 - 96 nmol/L; Day 3 - 62 nmol/L).

Median serum thyroxine concentrations on Day 1 in puppies with parvovirus diarrhea was significantly lower than in control puppies (8.12 nmol/L versus 35 nmol/L, respectively). Median serum thyroxine concentration of the nonsurvivor group puppies (4.4 nmol/L) was significantly lower than that of the survivor group puppies (9.2 nmol/L) at admission and became even lower on Days 2 and 3 (Day 2 survivor and nonsurvivor – 10.54 and 2.7 nmol/L, respectively; Day 3 survivor and nonsurvivor – 10.78 and 2.7 nmol/L, respectively). Note that the limit of thyroxine detection assay was 2.7 nmol/L, so the nonsurvivor puppies may have had even lower thyroxine levels than 2.7 nmol/L on Days 2 and 3.

**Conclusions and Clinical Application** — High serum cortisol and low serum thyroxine concentrations at 24 and 48 hours after admission were associated with death in puppies with parvovirus diarrhea.