

The Referring VETERINARIAN

VETERINARY MEDICAL TEACHING HOSPITAL ❖ COLLEGE OF VETERINARY MEDICINE ❖ CORNELL

FROM THE DIRECTOR



This issue of *The Referring Veterinarian* highlights the contributions of our veterinary technicians to the missions and goals of the Veterinary Medical Teaching Hospital. Currently the VMTH employs a total of 37 Technicians. These talented, competent, energetic individuals fulfill an essential role in the operation of our Hospital. The bottom line is that we simply could not get along without them. Their assistance is vital in the movement of cases from area to area throughout the Hospital. Their knowledge, training, and skills in the technical aspects of the practice of veterinary medicine are crucial to fulfilling our service responsibilities. In addition to their expertise and efficiency in performing technical procedures, they play a vital role in instructing our students and others in the technical aspects of our joint profession.

Since faculty and to some extent even house officers rotate in and out of hospital service responsibilities, in a real sense, our technicians represent to many of our clients that thread of constancy and continual care that is so important to our success. Further, our technicians in many cases are the most knowledgeable individuals on our staff with respect to the operation, maintenance, and repair of the state of the art sophisticated medical and surgical devices present in our VMTH. We hope you will enjoy reading this issue of *The Referring Veterinarian* and from it gain



Technician Jean Young determines the respiratory rate of an equine patient.

Photo by Rob Way/NYSAES/Cornell

SETTING AN EXAMPLE— VETERINARY TECHNICIANS AT THE VMTH

The Veterinary Medical Teaching Hospital at Cornell is an enormous but complex resource for veterinarians in the field, for referral care, knowledge and information, and for leadership in new equipment and methodologies. For the referring veterinarian, an invaluable key to working with this resource is to become familiar with the VMTH's technical staff.

Days, nights, and weekends, this team of 37 Licensed Veterinary Technicians (LVTs) moves in practiced patterns through the corridors of the Teaching Hospital, receiving and attending to patients, working with students and clinicians, coordinating and ensuring the smooth functioning of all

the interlocking departments. The technical staff is notable for their degree of specialization and expertise, their experience and dedication, and their pride in helping define the expanding role of the LVT.

While technicians at the VMTH share many roles in common with technicians in private practice, other roles are unique to the Teaching Hospital. To get a detailed picture of the workings of the technical staff in relation to referrals—staff organization, unique attributes, and especially the people who comprise it—we spoke with the Supervising Veterinary Technicians and other senior technicians in The Equine and Farm Animal Hospitals and The Com-



The Companion Animal Hospital Technical Staff (left to right): Debbie Bain, Cindy Bennett, Doreen Schwartz, Heidi Parmelee Newton, Sue Brown, Debbie Watrous, Sharon Koski, Anne McCormick, Kim Baldwin, Linda Hubbell, Chantel Rebmann, Nicole O'Connell. Not pictured: Halle Alvarez, Laura Barlow, Ducka Kelly, Andrea Lawrence, Susan Long, Carol Morrell, Thea Wallace.

Rob Way/NYSAES/Cornell

TECHNICIANS

continued from page 1

panion Animal Hospital, and ancillary services. Service areas involved included Large and Small Animal Medicine, Surgery, ICU/Critical Care, Ophthalmology, Anesthesia, and Radiology.

Specialization and Experience

Technicians at the VMTH are for the most part organized by service areas. As a group they possess an impressive amount of experience in their fields; the supervising and senior technicians we interviewed have an *average* of over 12 years' experience at the VMTH. And it is experience gained in a supercharged learning environment, combining a high caseload including many difficult or unusual cases, with the input of faculty experts and residents from many different fields.

"We learn every day," says Jean Young, technician for Large Animal Medicine. She has been at the VMTH for 10 years and also serves as a technician in the Large Animal Ophthalmology and ICU services. She has a strong interest in the neonatal ICU,

working with foals. "We see so many cases in our specialties every week, we really start to recognize clinical signs and patterns—for example, seasonal things involving foals, diarrheas, colics—and can anticipate what the patients will need. Being able to respond extremely quickly to stabilize an animal, especially a young one, can make all the difference."

"I've seen probably thousands of animals anesthetized," comments Sharon Koski, Supervising Technician, of her 9 years in Small Animal Anesthesia. "We have all the latest monitoring equipment, which is why a lot of difficult cases get referred here, and we stay up-to-date on training. But it's also something of an art to pick up on the subtleties of an animal in trouble—the ever-so-slight change in mucous membrane color, blood pressure, breathing—so that critical care can

jump in right away. I'm sure this increases overall patient safety."

"Emergency and critical care medicine is a rapidly growing specialty," says Andrea Lawrence, Supervising Technician of the ICU. "When I started as supervisor in 1988 we had 3 full-time and 5 to 10 part-time technicians in this department. Today we have 7 full-time techs and 15 to 20 part-time student techs, so I can have a licensed full-time tech on shifts 24 hours a day, 7 days a week. We're hoping to create an actual service and ro-

TECHNICIANS continued on page 3



Technician Kara Peery (left) demonstrates preparing an animal for casting for students Karen Laidley and Christina Reed.

Rob Way/NYSAES/Cornell

TECHNICIANS

continued from page 2

tation in this area.” She continues, “Referrals are an excellent way for students to learn CC techniques due to the variety of clinical problems at various stages they present in—it’s not always the acute traumatic injury.”

On the opposite side of the coin is the satisfying sense of planning and teamwork in the procedures that go ultra-smoothly: “We work as a team,” says supervising LVT Linda Hubbell of her staff of 4 in Small Animal Surgery. “We have a good core group together. We have a rapport, we’re very familiar with the procedures, we stay with the cases right to the end, and we can anticipate problems. Consequently, most of our cases can go as planned.”

Karen Netherton agrees. With 24 years as a technician and 18 at the Hospital, she’s the Supervising Technician in Large Animal Surgery, working with a staff of 2, 8 to 10 emergency crew students, and 5 full-time night/week-end techs who take care of the cases in the barns and help with emergencies. “When you spend so much time in one area, it makes the cases go smoother and faster, and hopefully minimizes post-op problems,” she says. “We really watch what’s going on so we can predict what [*the student or clinician*] will need ahead of time and have it ready. My favorite statement is ‘Get me what I want, not what I ask for!’”

Ann Sturmer is the Supervising Technician in Large Animal Anesthesia, a technician for 24 years with 13 at the VMTH. She points out an important detail: “Sometimes veterinarians in private practice don’t realize the extent to which technicians here get involved. In my area, for example, our responsibilities closely parallel those of a Nurse Anesthetist in human medicine; due to our training and experience, [*co-technician*] Joan Ballenstedt and I may do everything from inducing the case, running and monitoring it, to recovering the patient.”



The Equine and Farm Animal Hospitals' Technical Staff (left to right): Jean Young, Karen Netherton, Judy Sobszak, Ann Sturmer, Judy Urban, Joan Ballenstedt, Lori Lukas, Molly Copeland. Not pictured: Kathie DeWolf, Kara Peery, Karen Puffer.

Latest Equipment

From the latest machines, such as the CT Scanner which are not that common even at teaching hospitals, to technologies such as ultrasound which are now starting to move out into private practices, technicians at the VMTH are at the forefront of veterinary medical technology and supplies—procurement, use, and maintenance—and as such provide a valuable reference for the referring veterinarian.

“Toys? Oh, sure, toys are a big thing,” says Karen Netherton with a smile. “We have a lot of veterinarians come through, spot a piece of new equipment, want to know how it works, where they can get it, how much it is. Or former students call back about something they used here. We’re

glad to answer those questions.”

“We try to stay at the cutting edge of technical support on our equipment,” says Ann Sturmer. Ann has attended the 4-day course sponsored by North American Drager on the maintenance and function of their anesthesia machine, and she is the one in their department who handles most of the calls on machine maintenance.

“What happens,” she continues, “is

TECHNICIANS continued on page 4



Shari Renaud-Farrell (right) with an ultrasound in progress.



Technical Staff, Radiology and Ultrasound/Cardiology (left to right): Renea McNeill, Patty Homer, Barb Chapman, Shari Renaud-Farrell. Not pictured: Bob Wallace.

Rob Way/NYSAES/Cornell

TECHNICIANS

continued from page 3

that surgical procedures are advancing so fast—detailed, invasive procedures such as laparoscopy which require more sophisticated monitoring—that they are challenging anesthetic technique. Equipment changes quickly and you need to be very familiar with it, and this job usually falls into the realm of the tech. These machines have their own personalities, what they can do and what they can't. You have to know when to believe them and when not to." She echoes her Small Animal counterpart, Sharon Koski: "It's an art form actually, monitoring to assure proper levels of anesthesia."

In Small Animal Medicine, technicians Kim Baldwin and Deb Watrous are involved extensively in the use of endoscopy and related procedures such as bronchoscopy, colonoscopy, and rhinoscopy. "We get many referrals for this procedure," says Watrous. "It's less expensive than exploratory surgery. It's also quicker, less invasive and less stressful which is better, especially for critical animals."

Barb Chapman works in radiology. She is a former human x-ray technician

who now specializes on the CT scanner. She notes that, due to the sophistication of the machinery and the corresponding level of expertise among the technical groups, when veterinarians refer an animal to the VMTH for imaging, they are getting "the most up-to-date modalities offered in x-ray, ultrasound, nuclear medicine, and CT." Although the sophisticated images may cost somewhat more, they contain much more information and, in the long run, are often quicker. But Barb and the other techs in her department often take calls from referring veterinarians asking about their own office machines (x-rays, mostly) with questions regarding equipment, technical factors, and positioning.

Shari Renaud-Farrell, technician for ultrasound and cardiology, says more and more practices are purchasing their own ultrasound equipment, so she makes it a point

to teach students how to use it. Veterinarians sometimes come to the hospital for 2 or 3 days to work with her, to watch and learn these techniques.

Each of the technicians interviewed also work with suppliers to stock their respective departments and are willing to share their expertise on where to get supplies, how well they work, best prices, even tips for saving money.

Consistency and Standards

In the Teaching Hospital environment where students, residents, and even faculty rotate through, the day-in, day-out presence of the technical staff has obvious benefits in many areas. Two of special note to referring veterinarians are in the areas of client service and the maintenance of standards and protocols.

"We're part of the constant," says Debbie Bain in Ophthalmology, who started at the VMTH 18 years ago. "Our clients know this is a teaching hospital, but they still feel better seeing a familiar face; someone who remembers their personal preferences, knows their animals, and can help them navigate the structure of the hospital."

Judy Urban agrees. Judy has worn many hats since she arrived at the VMTH some 22 years ago. Now, as Receiving Technician for The Large

TECHNICIANS continued on page 5



Photo by Charlie Harrington, University Photo

Sharon Koski, student Maria Lagana, and Barb Chapman monitor their patient during a break in CT scanning.

TECHNICIANS

continued from page 4

Animal Surgery Service, one of her most challenging roles is that of “chief negotiator and diplomat,” working with owners to keep them informed of their animal’s progress, working within her service and between other departments to continually re-adapt to the priorities of cases as they come in. “There are always changes and delays in the normal routine,” she says. “But, as long as the owners are told the ‘what’ and the ‘why’ of the delay, they are generally happy. It all comes down to what the client sees. If the client has a good experience here, word will get back to the referring veterinarian and we’ll see more cases.”

“Sometimes we’re just easier to get on the phone than the clinicians,” says Jean Young, with a thought echoed by several of those interviewed. “If we can help, we’re happy to. If not, we pass the call along to the appropriate clinician.”

In reference to standards, Judy Urban notes: “We teach our students the ‘Cornell Way’ of performing technical procedures and protocols. Sometimes we may even have to gently remind residents how we do things here. It helps to have everyone start from the same standard.”

“Referring veterinarians are often surprised when they come to visit at how strict we are about our protocols, and how close they are to human medicine,” notes Karen Netherton. “We try to be really strict and teach students the top—the best way.”

“We try to maintain and teach the ideal,” agrees Linda Hubbell, regarding sterile technique. “We know our students won’t always be able to work under those conditions in the field, but we want them to know what they are.”

“This is a unique contribution of the technical staff,” concludes Ann Sturmer. “Through their individual



Rob Way/NYSAES/Cornell

Technician Anne McCormick (left) and student Matt Antkowiak place an IV catheter.

and combined experience, the technicians here maintain the constant environment necessary to keep the technical aspects of patient care at their highest level.”

Teaching and Learning

A primary role of veterinary technicians at the VMTH is to supervise students in their rotations and teach them “everything technical” in animal care. “We shadow them,” says Deb Watrous. “Our job is also to safeguard the animal’s comfort and safety at the same time.” All the technicians interviewed appreciated both the normal cases and the unusual referrals for their teaching value: “There’s a big difference in what students learn once they see a case,” comments Jean Young.

LVTs at Cornell teach in a number of other ways as well. Many of the technicians participate in laboratory courses in their specialties, e.g. the Third Year Surgical Laboratory. Shari Renaud-Farrell maintains tapes of especially clear cardiac ultrasounds for students and others to practice their interpretations. Andrea Lawrence has had 4 articles together with photos accepted this year in the magazine, *Veterinary Technician*.

Many technicians conduct continuing education seminars for other technicians within and outside the VMTH; Anesthesia Techs Sharon Koski, Ann Sturmer and Joan Ballenstedt have been asked to speak later this year at a New York State Association of Veterinary Technicians seminar in Rochester. Sturmer co-authored the chapter on “Emergency Equine Anesthesia in the Field” in VMTH faculty member Dr. Tom Divers’ book *Equine Emergency Manual for Veterinarians* (Saunders Co., Philadelphia, expected publication date Jan. 1998).

Continuing education plays an important role in the veterinary technicians’ year. Apart from the learning that takes place every day in the hospital environment, monies have been recently allocated for techs at the VMTH to attend conferences and seminars around the country. Those who go share what they have learned with the rest of the technical staff in monthly in-house seminars. Not surprisingly, given their levels of specialization, most of the technicians interviewed found programs directed at veterinarians to be

TECHNICIANS continued on page 6

TECHNICIANS

continued from page 5

most useful in advancing their skills.

Many of the supervising technicians we spoke with were actively involved with professional organizations representing their particular specialties. Many felt that advanced certification for veterinary technicians was a coming trend and a positive one, similar to human nursing, where individuals who choose to undertake higher levels of education and training acquire specialized skills and credentials and have the opportunity to utilize these skills commensurately.

Setting an Example

"Veterinary technicians are many times the unsung heroes of the teaching hospital," says Dr. Susan Fubini, VMTH faculty member in Large Animal Surgery. "They perform so many services that are essential to our day-to-day work. They are integral to our teaching and service mission. They deserve our respect, admiration, and thanks."

Just as the faculty and the new facilities at the VMTH represent state-of-the-art veterinary medicine, so, too, does its staff of Licensed Veterinary Technicians. These dedicated professionals are highly specialized and expe-

rienced in their particular veterinary technology fields. As trainers and supervisors of students in the technical aspects of veterinary medicine, they set high standards and teach the latest techniques. They provision and maintain the most sophisticated supplies and equipment. They form the backbone



Deb Watrous draws blood for assessment tests.

and the neural connections of the busy, complex system of the Teaching Hospital. And yet, the strongest impression one gets from watching them work is that they are calm, friendly individuals who care for their patients and value their

work and their co-workers.

"We are not unusual," observes Karen Netherton. "I'd like to think our staff sets an example for the ways many veterinarians make their practices better by using veterinary technicians to their fullest potential."

Editor's Note: One article cannot begin to encompass the enthusiasm, the interest, and the broad range of knowledge that the veterinary technicians we spoke with demonstrated in their work. Technical discussions and details especially had to be limited for space reasons. A list of LVTs by service area and phone number is included at right. You are encouraged to contact them if you would like further information.

VETERINARY TECHNICIANS AT THE VMTH

COMPANION ANIMAL HOSPITAL

Phone: (607) 253-3003

Anesthesia

Ducka Kelly	Anne McCormick
Sharon Koski	

Medicine

Kim Baldwin	Deb Watrous
-------------	-------------

ICU

Halle Alvarez	Cindy Bennett
Susan Brown	Andrea Lawrence
Carol Morrell	Doreen Schwartz
Thea Wallace	

Ophthalmology,

Debbie Bain

Surgery

Laura Barlow	Linda Hubbell
Nicole O'Connell	Chantel Rebmman

Community Practice Service (CPS)

Heidi Parmelee Newton
Susan Long

EQUINE AND FARM ANIMAL HOSPITALS Phone: 253-3100

Anesthesia

Joan Ballenstedt	Ann Sturmer
------------------	-------------

Medicine

Jean Young

ICU

Jean Young

(night technicians)

Molly Copeland	Kathie DeWolf
Lori Lukas	Karen Puffer

Surgery

Karen Netherton	Judy Sobszak
Judy Urban (Rec.)	Kara Peery

ANCILLARY SERVICES

Radiology

Barbara Chapman	Patricia Homer
Renea McNeill	Robert Wallace

Therigenology

Liane Dillon

Ultrasound/Cardiology

Shari Renaud-Farrell

To Our Readers: *The Referring Veterinarian* is published twice annually by the Office of the Director, Veterinary Medical Teaching Hospital, Cornell University, Ithaca, NY 14853.

A subscription is free to veterinarians who refer cases to the Hospital, as one means of keeping them informed of news of interest here.

Two issues ago we extended our circulation on an introductory basis to a larger readership of veterinarians, particularly to familiarize them with our new Companion Animal and Equine and Farm Animal Hospitals. If you are a member of this latter group and would like to continue to receive the newsletter, we will be happy to send it to you, but in the interests of efficiency, please contact us to confirm this. Write us at the address above, phone us at (607) 253-3030, or e-mail to MCF4@cornell.edu.

Thank you.

DIRECTOR'S REPORT

continued from page 1

an appreciation of the enormous role our technicians play in our activities.

We have now been completely moved into our new facilities for about a year. Most of the "bugs" have been worked out and clinical operations are going along quite smoothly. We are very proud of the new buildings and equipment which give us the opportunity to provide the best possible care to the patients referred to us by private practitioners. The case load during the past several months has been higher than usual. We are very grateful for this and hope that, with the availability of our expanded facilities and capabilities, this increase in case load, so important to the training of the future generations of veterinarians, will continue.

Congratulations go out to several of our faculty who have recently been promoted. **Dr. Peter Daels**, in our Theriogenology Services, has been promoted from Assistant to Associate Professor with indefinite tenure. **Dr. Sharon Center** in Small Animal Internal Medicine has been promoted from Associate Professor to Full Professor. **Drs. Rick Hackett** and **Tom Divers** in Large Animal Surgery and Medicine, respectively, have also been promoted from Associate to Full Professor. Their promotions signify due recognition of the contributions of these professors to all aspects of their academic responsibilities including dedication to clinical service.

We would like to welcome **Dr. Chris Schweizer** as a lecturer in Theriogenology. Chris joined us for a one year appointment as of March 1. She will be assisting in both the Large Animal and Small Animal Theriogenology Services for the next year to cover for sabbatical leaves of full-time faculty. **Dr. Peter Daels** began a one year sabbatical leave on March 1 and **Dr. Rob Gilbert** will begin a six month sabbatical leave on June 1. **Dr. Vicky Myers-Wallen**, Small Animal Theriogenology, is on sabbatical leave for this academic year and will return at the end of Au-

gust. We welcome **Dr. Schweizer** to our staff. She is a Board Certified Theriogenologist, has significant expertise in all areas of this specialty, and is ready and anxious to serve the needs of our referring practitioners during this coming year. Finally, we welcome **Dr. Ron Riis** back from sabbatical leave. Our Ophthalmology Service is now back to full strength.

Two issues ago we expanded circulation of *The Referring Veterinarian* on an introductory basis to include not only recently referring practitioners—our regular recipients—but veterinarians in general throughout the neighboring region. If you would like to continue to receive this free newsletter and have not referred a case here in the

past couple of years, it would be our pleasure to continue to send it to you, but would you please contact us to request it, so we know it's wanted. Please let us know, by any of the means below.

As always, we welcome your referrals and are anxious to hear of any comments you have with respect to the services we provide. I can be reached by telephone at (607) 253-3030 during work hours or at (607) 257-2522 on nights or weekends. Our fax number is (607) 253-3056 and we can be reached by e-mail at fak1@cornell.edu. We welcome your comments through any of these communication channels. Of course, snail mail as well will also reach us in due course.

—*Fran Kallfelz*

Cases Needed for Erythropoietin Therapy Trial for Dogs with Anemia Secondary to Chronic Renal Failure

Anemia is one of the more serious consequences of chronic renal failure and contributes substantially to the clinical signs of lethargy, weakness and inappetence. Lack of erythropoietin (EPO, the hormone that stimulates red blood cell production in the bone marrow) production by the diseased kidneys is considered the most important cause of anemia in chronic renal failure. To treat this problem in people, recombinant human EPO (rhEPO) (Epo-gen®/Amgen) is used by physicians to increase red blood cell numbers in the circulation. In dogs suffering from anemia secondary to chronic renal failure, rhEPO therapy is also initially effective in increasing red blood cell production. Unfortunately, with repeated treatments, dogs often make antibodies against this human-derived EPO that not only block its therapeutic benefit, but also have the potential to cross react with residual endogenous EPO leading to a life threatening erythroid hypoplasia.

Drs. James MacLeod (Baker Institute) and John Randolph (Companion Animal Hospital) may have a possible solution to this problem. These investigators are studying the effects of recombinant canine EPO (rcEPO), made using the ca-

nine EPO gene which was cloned in their laboratory. The response to rcEPO therapy in healthy dogs shows that rcEPO appears to be both safe (no development of erythroid hypoplasia or adverse side effects in any dog) and efficacious (stimulates red blood cell production in a manner comparable to rhEPO).

The Companion Animal Hospital at Cornell University is now offering rcEPO therapy for dogs with anemia (hematocrit < 30%) secondary to chronic renal failure that become enrolled in the trial study. In order to be eligible, dogs must have a history of polyuria/polydipsia/poor appetite with a duration of at least 2 weeks; clinicopathologic findings of isosthenuria and azotemia; findings of small- to normal-sized kidneys on radiographs or ultrasound exam; systolic blood pressure not greater than 200 mm Hg; and an age of not less than 6 months. The cost to the client is partially subsidized by a grant from the Morris Animal Foundation.

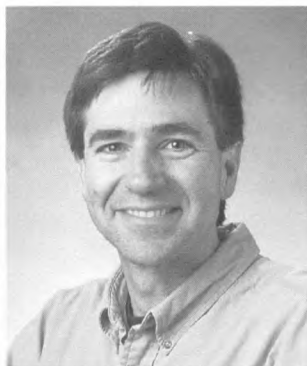
Veterinarians with questions about the trial should call Dr. John Randolph at the Companion Animal Hospital (607) 253-3060.

STAFF PROFILES

Dr. James A. Flanders earned his DVM from UC-Davis in 1980, then came to Cornell for a small animal internship and surgical residency. He was an instructor for 2 years, one as an orthopedic/neurosurgeon and one as a soft tissue surgeon, after which he entered a tenure track Assistant Professor position as a small animal soft tissue surgeon. He became a board certified surgeon in 1988, and, in 1991, was promoted to Associate Professor with tenure.

Dr. Flanders has had an interest in oncologic and endocrine surgery. Earlier in his career, he worked on hyperthyroidism and parathyroid physiology in cats. More recently, his interests have shifted to oncology. In 1993, he obtained a three-year training grant from the National Cancer Institute to study cancer cell biology.

Dr. Flanders has a half-time commitment to the General Surgery Service, and is especially interested in surgical oncology.



Dr. Dorothy M. Ainsworth is an Associate Professor of Medicine, having joined the section of large animal medicine (Department of Clinical Sciences) in January 1991.

She graduated from Washington State University in 1980, completed an internship in equine surgery and radiology at the San Luis Rey Equine Clinic (Bonsall, CA) and an equine medicine residency at Michigan State University (1983). Following board certification in internal medicine, she undertook graduate studies at the University of Wisconsin and completed her masters and doctoral work in respiratory physiology/pathophysiology in 1986 and 1990, respectively.

Dr. Ainsworth's specific clinical interests are in respiratory diseases of horses and perinatal diseases of foals



THE 89TH ANNUAL CONFERENCE FOR VETERINARIANS

The 89th Annual Conference for Veterinarians will be held March 21-23, 1997, at the College of Veterinary Medicine at Cornell University, Ithaca, New York. This year's conference provides excellent continuing education opportunities in companion animal, equine and farm animal medicine, and time for renewing old friendships. Tours of our new Veterinary Medical Center and the Companion Animal Hospital will be available.

Specific information and registration materials can be obtained by contacting Mrs. Linda Schumacher, Office of Continuing Education, at (607) 253-3200.



The Referring
VETERINARIAN
College of Veterinary Medicine
Cornell University
Ithaca, New York 14853