

chapter twenty-eight

veterinary pharmacist



Veterinary Pharmacist Checkpoint

Are you eager for an unconventional career experience?

Do you feel comfortable around animals?

Are you well-versed and excited about expanding your knowledge in pharmacology for different animal species?

If so, read on

A TRUE TALE

Each year, pet owners spend more than \$3 billion to maintain the health of their animals. The veterinary pharmacist is indispensable as a provider of animal health care. The pharmacists' knowledge of drugs, their stability, and their mechanisms of action and administration, may mean the difference in the outcome for a sick or injured animal.



Don Michalski, RPh, MS, ardently believes that a special relationship exists between human beings and members of the animal kingdom. Michalski is the Director of Pharmacy at the University of Wisconsin Veterinary School. He is responsible for developing the drug distribution system, including purchasing and contract management. I'm the "keeper of the keys," the 55-year-old Michalski states.

Michalski grew up surrounded by animals, on a dairy farm near a small, rural town in northern Wisconsin. For a while he considered careers in meteorology or agricultural research. Along the way, however, goaded by his father's exhortations to find a career where he could be his own boss, Michalski discovered pharmacy.

He received a Bachelor's degree in pharmacy from the University of Wisconsin in 1968, and practiced in a private hospital in Milwaukee for four years. He then returned to the University of Wisconsin for a residency and Master's degree in hospital pharmacy. Later he moved to the 350-bed Swedish American Animal Hospital in Illinois as an associate director.

Profiling the job

Michalski arrived at the University of Wisconsin in March 1983, the year the Center began seeing patients. He estimates that nearly 1,000 animals were seen that first year. Now, there are 50 clinical faculty members and 25

residents. Last year the center cared for 16,000 animals. In addition to Michalski, there is one other full-time pharmacist, one part-time pharmacist, three technicians and two office staff that work in the purchasing office.

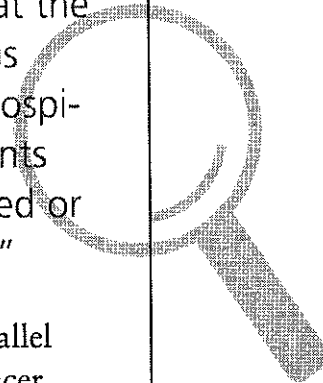
“What’s different about veterinary pharmacy is that rather than dealing with the patient, you most often deal with the owner,” says Michalski. “In that sense, it’s very much like a pediatric population where your client is mom or dad.”

The therapy is also different since many of the diseases are different. A lot of diseases do, however, parallel human illnesses. Michalski and his staff regularly see animals for cancer, ophthalmological problems, kidney transplants, cardiac conditions, gastrointestinal problems, orthopedic difficulties, and behavioral problems. There are also theriogenology specialists to handle artificial insemination, and neonatologists to care for foals. Most of the patients are beloved “companion animals,” but the staff also sees dairy cattle, snakes, horses, llama, goats, pigs and other species. Few of the medications or medical services are covered by insurance. Bills can easily soar to \$10,000 or more.

A day in the life

Michalski’s day begins early. Usually, by 6:00am he is reviewing the previous night’s activities and attending to administrative duties. By midday, he and the staff are busy preparing antibiotics, cardiac and chemotherapy injections for horses and cattle, and flavored oral therapies for dogs, cats and exotic species. Birds, snakes, gerbils and rabbits require special palate formulations. Often they use butter or liver sausage as a base to entice the animals to take their medicine. He also reformulates tablets and capsules and prepares topical gels.

“The Veterinary School at the University of Wisconsin is every bit like a human hospital except that the patients are four-legged or winged or they have no legs at all.”



Did you know?
Dogs get cancer at roughly the same rate as humans, while cats get fewer cancers. Cancer accounts for almost half of the deaths of pets over 10 years of age.



Did you know?

The typical dog owner may expect to spend over \$275 a year in veterinary costs, though, according to Michalski the costs can sometimes run much higher.

On a typical day, the staff prepares about 200 prescriptions. Some days are non-stop; others are slower. Once Michalski and his staff readied more than 300 syringes in a day. The most common drugs his center dispenses are heartworm preventatives and anti-parasite drugs, antibiotics and hormone therapy. A growing therapeutic area in veterinary pharmacy, Michalski says is pain management. His arsenal also runs to the unusual: Michalski recently administered a \$50,000 dosage of surfactant for an immature calf's lungs. The calf was being used for a cloning project. The advances in biotechnology and xenobiology could produce an expanded role for the care of such super-animals that will be used as living product and organ factories.

The staff also prepares dosages for double-blind research studies, teaches veterinary and pharmacy students, and manages clerkships. Approximately two thirds of students take the veterinary pharmacy elective.

One aspect of the job that Michalski treasures most is the feeling of being highly valued. While accompanied by a technician on his way to check the six to 15 patients in the post-operative critical care unit, he is often barraged with questions from other healthcare workers or animal owners.

The casual consultations continue as Michalski makes his way to the large animal unit where he checks the medications of the five to 20 animals in residence there. The questions continue to flow in over the two windows at the Pharmacy. Perhaps five to 10 calls a day are received from veterinarians around the state and country. Often he has many requests for information and help from the 40 veterinary students on rotation and the 20 residents dispatched to the pharmacy to pick up drugs along with lessons about dosages and new therapies.

Other positive aspects of the job, he says, are the variety of conditions he encounters and the people with whom he works. Together, they more than makes up for a salary that is lower than most other areas of pharmacy — and the long hours. Michalski is called in on weekends a few times a month when residents need support.

Being a veterinary pharmacist has convinced him of the importance of the human-animal bond. “I know that some students decide to go into veterinary pharmacy for the love of a pet. I’ve seen many people stricken with grief over the loss of their animal. I’ve also seen brusque individuals become soft and sweet around their animals. My work has really taught me about the love between humans and their animals.”



PATIENT POINT OF VIEW

Duke was a large breed dog who’d been on chemotherapy for five years. He was like a child to the older couple who shared his life and who’d poured their savings into his care. Toward the end of Duke’s hospitalization, the man approached Michalski. “Our love for Duke might seem strange to you,” he said, “but we can’t understand how people can spend so much on a vacation and only have a suntan and some memories for it. We’ve had a real connection with Duke for many years and that’s why we appreciate how you patiently answered our questions and showed us how to care for him and helped us through this time. We feel you understand how emotionally wrenching this is for us.”



fast facts

What do you need?

- Creativity and resourcefulness for dealing with a variety of animal patients and their owners
- Ability to work closely with veterinarians
- Strong knowledge base in pharmacy and the willingness to compound prescriptions
- Ability to solve problems, prepare products, teach and consult with healthcare workers and pet owners

What's it take?

- A current, active license to practice pharmacy
- Bachelor of Science (BS) or Doctor of Pharmacy (PharmD) degree*
- Background in animal husbandry may be preferred
- Membership in the Society of Veterinary Hospital Pharmacists (SVHP) or American College of Veterinary Pharmacists (AVCP), and/or special training or certification by them may be preferred

Where will you practice?

- Specialized veterinary pharmacies
- Veterinary schools
- Animal clinics
- Animal hospitals
- Rescue centers
- Universities
- Compounding pharmacies
- Chain pharmacies

*Students graduating after Spring 2004 will be required to have a PharmD degree