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## Embracing Distance Learning and “One Medicine”

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by Joan Capuzzi Giresi, C’86 V’98

It all started with a small package that came in the mail. From there, followed a brilliant idea. And then the leading cyber-trove of running veterinary info, the Veterinary Information Network (VIN), was launched.

**Duncan C. Ferguson, V’79 GR’82**, who co-founded the online veterinary knowledge base, remembers the parcel he opened one day in 1989. It held a floppy disk, and he started answering the questions it contained on pet health from the users of Quantum Computer Services, an online bulletin board system, which was later renamed America Online. Before long, he was running America Online’s pet care forum.

He soon met Dr. Paul D. Pion online, then a veterinary cardiologist at the University of California, Davis, School of Veterinary Medicine. The two discussed online outreach to the veterinary community.

“If we could do it with music, sports, and entertainment,” reasoned Ferguson, professor of physiology and pharmacology and of small-animal medicine at the University of Georgia College of Veterinary Medicine, “then why couldn’t we be doing it with veterinary education?”

And so VIN was born. The independent network, which grew from just 200 members in 1992 to some 19,000 today, had a three-fold goal. First, it would provide what Ferguson calls “information insurance” to the private practitioner. For a monthly fee, veterinarians could access veterinary health news, take part in weekly rounds, and utilize an expansive database.

Second, it would build community. “We did it to bring veterinarians together and improve the profession,” says Pion, president of VIN.

VIN, he explains, has transformed structured learning into a daily event for doctors, as opposed to the monthly or annual event offered by the conference format.

“Duncan and I are firm believers that education has to become part of your life. It’s an every-moment event.” In contrast to a meeting, Pion says, VIN offers access to specialists available to answer questions, and chat rooms where information can be traded.

Adds Ferguson: “It’s an effective mode of tackling universal quandaries—the old ‘Yeah, that’s just like a case I saw the other day.’”

Third, the new service would provide another mode by which subscribers could earn continuing-education credits. While Pion focused

on building the business, Ferguson, who sold his share of the Davis, Calif.-based company to his partner six years ago to focus exclusively on his research and teaching obligations, spearheaded the education piece. But the veterinary state boards were a force to reckon with: many, Ferguson remembers, refused to offer credit for computer-based education, insisting on meeting attendance instead.

“We are a very conservative profession,” Ferguson reasons. “But the reality is that there is a legitimate learning process going on here, and there’s no difference between distance learning and on-site learning.”

Yet meetings are money-makers for the state boards. “We tried to tell them these were two different populations, and that people would still attend meetings.”

Despite the obstacles, Ferguson and Pion proceeded with the CE program, which brought specialists and consultants—whom they paid hourly—into the VIN loop.

A specialist himself, Ferguson, who is a diplomate of the American College of Veterinary Internal Medicine and the American College of Veterinary Clinical Pharmacology, is a strong proponent of up-to-the-minute, bench-to-bedside medicine.

Growing up in a Connecticut suburb, he had pets as a child. But his interest in veterinary medicine did not solidify until his junior year at Dartmouth College, where he majored in chemistry. Accepted into medical school and Penn Veterinary Medicine, he chose the latter for its invitation into the combined V.M.D.-Ph.D. program.

Ferguson’s career choices were further solidified by the arrival of an apparent newcomer disease to veterinary medicine—hyperthyroidism—which evidently began cropping up in cats toward the end of his time in veterinary school.

Ferguson completed his doctoral degree in pharmacology with a concentration in thyroid hormone metabolism. The Penn Medicine lab where he worked, while practicing part-time at a local emergency clinic, developed thyroid hormone assays for use in people, and studied the basic aspects of thyroid hormone metabolism.

“I really bought into the idea of ‘One Medicine,’” he says. “We see a lot of spontaneous dis-

ease in animals that reveals many things about the human condition.”

He points out several human diseases where progress can be made by studying corresponding or associated veterinary models. These include Alzheimer’s, Parkinson’s and Cushing’s diseases, the latter occurring some 20 times more frequently in dogs than in people.

After earning his doctorate, Ferguson crossed back over 38th Street for a residency in small-animal medicine. Today, he runs a lab at the University of Georgia, where he studies thyroid hormone metabolism and action, sequences the molecule thyrotropin (TSH), and develops TSH assays designed to screen for disease before the animals become clinical.

Ferguson, 50, also collaborates with his wife, **Margarethe E. Hoenig, GR’84**, who performs diabetes research across the hall from him at UGA. The pair, who have two grown daughters and live in Athens, Ga., met at Penn while Duncan was working in the lab and finishing his clinical rotations and Margarethe was doing a residency in small-animal medicine.

Although he spends half his time in the lab, with much of the rest devoted to professional and graduate teaching, he stays close to practice. “Clinical relevance is very important to me, which is why I have always kept my hand in thyroid diagnostics,” says Ferguson, who heads a recently funded initiative to develop a D.V.M.-Ph.D. program at UGA.

He adds that the clinical perspective is also a strong component of his student lectures. And so are a few tricks he learned while developing a practitioner-friendly format for VIN. “It changed the way I did things in the classroom. I became much more interactive,” says Ferguson, who also created an interactive online education program at UGA.

Of the interrelated twists and turns in his career, he observes, “In these last 20 years I’ve become an ‘uberspecialist’ in clinical pharmacology and endocrinology. But I was very drawn to the intellectual interchanges we initiated on VIN—there’s a truly fine line between what I do in the lab and the logic of making a medical diagnosis in the clinic.”

