The Species-Spanning Nature of Illness

Zoobiquity, one of the first conferences of its kind, brought together 200 physicians and veterinarians to promote understanding of the global, species-spanning nature of illness and forge ways that both fields can work together to further medicine, science and research.

The continuing education event on January 29 was organized by the David Geffen School of Medicine at UCLA, the UC Davis School of Veterinary Medicine, the Los Angeles Zoo and Botanical Gardens, and the One Health Center of the UC Global Health Institute. Veterinarians, physicians, veterinary students and medical students attended.

Unique Format

"It was a unique format," said Bennie Osburn, dean of the School of Veterinary Medicine, who gave welcome remarks. "First a veterinarian described an animal case of a particular disease, then a physician presented a human case dealing with the same disorder, and they discussed them, comparing approaches and noting similarities. The presentations were followed by a discussion with the audience. The way in which the program was presented and the audience reaction really brought home how comparative medicine and translational research are such powerful tools."

More than a dozen veterinary faculty participated with physicians. Case studies illustrated similarities between species:

- Obsessive-compulsive disorder in a bull terrier and a video store employee
- Lead poisoning in a California condor and toddlers
- Brain tumor in a Rhodesian ridgeback dog and a retired school guidance counselor
- Lyme disease in a Thoroughbred horse and a mother of three
- Salmonella in a farm dog and a reptile collector

Osburn noted that presentations by veterinary faculty Patricia Conrad and Jonna Mazet on their One Health projects particularly impressed clinicians because of the programs' multispecies approach and international scope.

The program later moved to the Los Angeles Zoo, where all observed grand rounds of animal cases.

Continued on next page

"Several of us may be developing new collaborations with our MD counterparts with whom we compared cases at the conference."

– SVM faculty member

Student Jenna Winer, DVM classmates and medical students observed a case of skin cancer in a rhinoceros during rounds at the Los Angeles Zoo, which co-hosted the event.
Experts in both animal and human medicine reviewed skin cancer in a rhinoceros horn and diabetes in New World and Old World monkeys. UCLA cardiologist and conference organizer Barbara Natterson Horowitz, who consults frequently with zoo veterinarians about their patients, described a heart condition in a lioness.

Conference proceedings will be submitted for publication in both human and veterinary journals.

The Future of Medicine

A. Eugene Washington, MD, UCLA vice chancellor for health sciences and dean of the Geffen School of Medicine, commented, “The Zoobiquity conference… brought together established field leaders, younger physicians and veterinarians-in-training who will develop the future of medicine with new hypotheses and approaches.”

Student Research Initiative

As one outcome of the conference, UC Davis and UCLA launched the Zoobiquity Research Initiative. Veterinarian Cheryl Scott, director of the Calvin Schwabe One Health Project, will coordinate veterinary students from UC Davis and medical students from UCLA. Several research projects pertaining to the health of humans and animals have been proposed, including a comparative examination of causes, outcomes and prevention of obesity in people and pets, particularly as weight gain relates to diabetes. Other studies will deal with geriatrics and environmental toxic exposures. Faculty mentors from each school will guide the students and evaluate their work.

“This symposium reminded me that there is so much that the human and veterinary medical professions have to offer each other. The world’s [multi-faceted] health issues have already transcended the borders of one profession... and require an interdisciplinary approach.”

— DVM student, zoo medicine track

Veterinarian Patricia Conrad, left, physician Barbara Natterson Horowitz and veterinarian Cheryl Scott organized the conference and arranged rounds with colleagues at the Los Angeles Zoo.