

## WSU professor to join National Academy of Inventors

This April, Dr. Katrina Mealey, a professor at Washington State University College of Veterinary Medicine, will be inducted as a fellow of the National Academy of Inventors, an organization comprising over 3,000 members and 757 fellows, including more than two dozen Nobel laureates.

Dr. Mealey discovered the *MDR1* gene mutation, a multi-drug-resistance gene in herding dogs that predisposes the animal to adverse reactions involving over a dozen drugs. She developed a test for the potentially fatal condition and established a program at WSU of individualized medical treatment for pets.

Her nine national and international patents, licensed on four continents by eight companies, have generated more than \$1 million in royalties and licensing fees for the university.

“Dr. Mealey’s research in veterinary pharmacogenetics has generated discoveries that truly are ‘bench to bedside’ and are used globally to prevent adverse drug reactions in dogs and cats,” said WSU veterinary college Dean Bryan Slinker. “Becoming a fellow in the NAI is quite uncommon for veterinarians, and we could not be more proud of this honor for Katrina and her team.”

The academy cited her for demonstrating “a highly prolific spirit of innovation in creating or facilitating outstanding inventions that have made a tangible impact on quality of life, economic development and the welfare of society.”

“While I am honored to be a fellow in the National Academy of Inventors, it is equally rewarding because this validates the impact of pharmacogenetics and precision medicine in the veterinary profession,” said Dr. Mealey, the

Richard L. Ott Endowed Chair in Small Animal Medicine and Research.

She launched the world’s first coordinated research effort in individualized veterinary medicine at the WSU veterinary college. The program in individualized medicine has a dedicated core faculty, technical staff, and collaborators that optimize drug therapy for individual patients. Faculty members share their expertise via education and outreach activities for veterinarians, breeders, and the pet-owning public worldwide.

Dr. Mealey is one of 175 scientists and researchers who will be inducted into the NAI during the organization’s annual conference April 6 in Boston. 🇺🇸



Dr. Katrina Mealey

Courtesy of Henry Moore Jr. (WSU)

## Horse advocates, veterinarians noted for outstanding work

The American Association of Equine Practitioners recognized the 2016 recipients of several awards Dec. 3-7 2016 at its 62nd Annual Convention in Orlando, Florida.

Renowned airway surgeon and pioneer in laryngeal procedures Dr. Norm Ducharme (Montreal '79) delivered the Frank J. Milne State-of-the-Art Lecture. His lecture, titled “Equine Upper Airways: Intersection of Evidence-Based Data, Emerging Discoveries, and the ‘Veterinary Art,’” focused on clinical applications of var-

ious upper-airway problems through examination of current research and emerging diagnostics and treatments. Included in his presentation were unpublished data on management of complications as well as advances in standing laryngoplasty.

Dr. Ducharme is the James Law Professor of Surgery at Cornell University College of Veterinary Medicine. He served as medical director of the equine and large animal hospitals at Cornell from 1990-2014, when the Cornell Ruffian

Equine Specialists Clinic opened near Belmont Park in Elmont, New York.

His clinical and research interests center on sports medicine with an emphasis on equine upper-respiratory airway physiology at exercise. This encompasses respiratory flow and pressure mechanics, neuromuscular assessment of the neural control of airway patency, characterization of health status of the respiratory tract, and their influence on modifying or developing new surgical diagnoses and treatments.