



MASTERS OF PREVENTIVE VETERINARY MEDICINE (MPVM) PROGRAM

The MPVM program has recently updated its curriculum, added new faculty and is under a slightly different administrative structure associated with the campus Office of Graduate Studies. The School of Veterinary Medicine continues to oversee and manage the MPVM program. We currently have 20 students matriculating through the program.

UPDATED CURRICULUM

The MPVM faculty have modernized the core/elective <u>curriculum</u>. The MPVM program offers core courses in epidemiology, study design, research methods, leadership, ecosystem health, infectious disease epidemiology, and biostatistics. Elective options allow students to explore zoonotic disease, food safety, diagnostic test evaluation, spatial analysis, mathematical modeling, disease ecology, One Health, and many more courses throughout UC Davis. Graduates of the MPVM program become:

Livestock Herd Health Veterinarians Wildlife Veterinarians Shelter Veterinarians Veterinary Epidemiology Consultants Faculty at veterinary/medical schools worldwide Epidemiologists with NGOs (ILRI, EMBRAPA, etc.) Laboratory Animal Veterinarians

Regulatory/public health veterinarians -- state, national (USDA, FSIS, CDC), international (FAO, UN, EU) levels

The MPVM degree curriculum and thesis project also prepare graduates to pursue further graduate work in epidemiology, ecology, international agriculture development, integrative pathobiology, or other programs.

OUTSTANDING STUDENTS/GRADUATES



Dr. Dharmaveer Shetty came to UC Davis in 2011 after working with the Envirovet program at the Mysore Zoo and field studies at the Bandipur Tiger Reserve. Dr. Sheety received his BVS in 2005 from Karnataka Veterinary, Animal and Fisheries Sciences University, Bidar. He is pursuing both the MPVM and PhD degrees. As part of his MPVM project, Dr. Shetty spent the first three months of 2014 at the Wayanad Wildlife Sanctuary in southern India, looking for evidence of parvovirus and FPLV in tigers and leopards. The International Union for Conservation of Nature lists these big cats as endangered and near threatened.

So far, Dr. Shetty has positively identified FPLV in one leopard and a suspected case from a tiger. The genetic fingerprint of the FPLV in the leopard was also a match to FPLV in a domestic cat sample 300 miles away.

Dr. Megan Moriarty (DVM '12, MPVM '13) completed veterinary school at UC Davis and immediately enrolled in the MPVM program to gain the tools for developing a quantitative approach to disease investigation in free-ranging wildlife populations. She performed a randomized field trial of the Santa Catalina Island fox through the Wildlife Health Center. Dr. Moriarty investigated the effect of ear mite removal on ear canal lesions and immune response to better understand an ear canal cancer that affects the foxes. "The program was a great experience for me to understand how diseases can be discovered and managed in wildlife populations," she said.



DIVERSE FACULTY

The MPVM students have the advantage of being supported by a large, diverse group of vibrant <u>faculty</u> including recent hires in epidemiology, wildlife, food animals, and poultry health. We're also fortunate to have a wealth of adjunct contributors from state and federal management agencies and organizations. New faculty include:



Dr. Beatriz Martínez-López, (DVM, MPVM, PhD) is an Assistant Professor in Infectious Disease Epidemiology. She worked on international projects focused on the epidemiological evaluation, communication and technology transfer of several infectious diseases, including those at the wildlife-livestock interface, first at the VISAVET-UCM center (2009-2011) and later at the National Wildlife Research Institute of Spain (IREC-CSIC-UCLM) (2012-2013). Her research is focused on novel epidemiological methods for more cost-effective diseases prevention, surveillance and control.

Dr. Woutrina Miller is an Associate Professor of Infectious Disease Epidemiology. She obtained her BA in Biology from Pomona College, Claremont, California, (1996), DVM and MPVM from the UC Davis (2001) and PhD in Comparative Pathology from UC Davis (2004). Dr. Miller's current research investigates the epidemiology of zoonotic pathogens at human:animal:environment interfaces in Africa, Asia, and North America. Current funding sources include the National Institutes of Health, National Science Foundation, Bill & Melinda



Gates Foundation, California Sea Grant Program, and U.S. Agency for International Development. As Education Coordinator for the One Health Center of Expertise in the UC Global Health Institute, and as Capacity Tracking Coordinator for the USAID PREDICT Program, she works to promote collaborative One Health research and education locally and globally.

GRADUATE GROUP ADVANTAGE

The MPVM program is now operated by the School of Veterinary Medicine through the Graduate Group in Preventive Veterinary Medicine. All graduate groups on the Davis campus officially report through the UC Davis Office of Graduate Studies. This new structure allows the program to have added benefits associated with being part of the larger graduate group organization, electronic application processes, some support funding, and broader inclusion of affiliate faculty from across the university. The program's home base remains firmly in School of Veterinary Medicine as a professional degree program open to veterinarians, human medical doctors, nurses and other medical professionals. Through this broader format the faculty have further embraced the One Health approach to advance animal, human and environmental health.

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Application Deadline for Fall 2015 = January 15, 2015