

## **VET MED KUDOS FOR 03-28-17**

CVM Professor Dr. Lyon Lee and his WesternU collaborators, Drs. John Tyler, Maisie Dawes and Janet Han, recently received a \$170,000 grant for a research project entitled "Clinical investigation of hypertensive and hypotensive cardiovasoactives in an animal model utilizing a novel fiber optic biosensor incorporating measurements of oxygen, hydrogen, glucose, lactate, temperature, and microcirculation". The grant was from the Korean Institute of Science and Technology (KIST). Dr. Lee's research group from the Applied Physiology and Comparative Pharmacology Laboratory and their Korean collaborators led by Dr. Taebo Shim, director of the Chemical Kinomics Research Center, KIST will carry out the study together during 2017.

CVM Professor Beth Boynton presented "Veterinary Medicine as a Career" at Poplar Elementary School in Fontana for their Career Day on Tuesday, March 14. She had eight classes of 4<sup>th</sup>, 5<sup>th</sup>, and 6<sup>th</sup> grade students that primarily come from families without a lot of education, yet open to the possibilities that are before them. Several were interested in become veterinarians and all were encouraged to come to the CVM Open House on Saturday, April 1.

CVM Professor Jose M. Peralta was invited by the American Veterinary Medical Association (AVMA) in 2010 to participate as a member of the Model Animal Welfare Curriculum Planning Group. This group of national and international experts in animal welfare education was put in charge of the development of a program to facilitate the integration of the discipline in veterinary education. The set of guidelines that resulted should influence how accredited veterinary colleges incorporate animal welfare in the education and competencies of future veterinarians. Several years working on this project resulted in a landmark publication that just came out in the March 15 issue of JAVMA: "A model curriculum for the study of animal welfare in colleges and schools of veterinary medicine"  
<http://avmajournals.avma.org/doi/abs/10.2460/javma.250.6.632>

CVM Associate Professor Brian Oakley co-authored a research paper recently accepted to the journal PLoS ONE. The study titled "Environmental reservoirs of pathogenic Mycobacteria across the Ethiopian biogeographical landscape" was conducted with collaborators from UC San Diego and Warwick University in the UK. The authors used high-throughput sequencing to identify environmental factors associated with the geographic distribution of environmental mycobacteria species that are known to interfere with BCG vaccination efficacy and tuberculin test interpretation. Taxonomic groups implicated in lower BCG vaccine efficiency were core members of both soil

and water *Mycobacterium* communities. A reservoir of *M. bovis* was identified in water, with up to  $7.3 \times 10^3$  genome equivalents per ml. Elevation, temperature, habitat and vegetation type were important predictors of both soil and water *Mycobacterium* communities. These results represent the first step in understanding the potential risk of exposure to environmental mycobacteria that may undermine efforts to reduce disease incidence and illustrate the value of high-throughput sequencing approaches to link environmental animal, and human health.

CVM Associate Professor Dr. Faramarzi presented a talk at the 62<sup>nd</sup> annual convention of the American Association of Equine Practitioners (AAEP) in Orlando, Fl. last December entitled: "Functional properties of the equine digital cushion in Quarter horses". The study, for the first time, reported the details of the microanatomy of the digital cushion in horses feet (comparable to calcaneal/heel fat pad in human), reporting significant differences among different regions of the digital cushion. The coauthors included: Dr. Wael Khamas (CVM professor of Anatomy and Histology) and Linnea Lantz (Dr. Faramarzi's former graduate student and current DO candidate). The presentation was well received; Dr. Faramarzi was interviewed by Horse magazine later on and it was published/featured on their website as well. A manuscript is under review for publication.

[http://www.thehorse.com/articles/38906/whats-inside-the-equine-digital-cushion?utm\\_source=Newsletter&utm\\_medium=lameness&utm\\_campaign=03-15-2017](http://www.thehorse.com/articles/38906/whats-inside-the-equine-digital-cushion?utm_source=Newsletter&utm_medium=lameness&utm_campaign=03-15-2017)