Rathore to Attend Translational Cancer Research Workshop

T
he American Association for Cancer Research selects 50 participants each year to attend the Translational Cancer Research for Basic Scientists Workshop. This year’s workshop takes place over 6 days in Boston, and Dr. Kusum Rathore will be in attendance. Participants will attend lectures and small group sessions, as well as go to off-site, interactive observational visits in laboratories and clinics. The workshop addresses leading multidisciplinary teams, working collaboratively and effectively with industry partners, recognizing the unique needs and environment of the clinic and clinical laboratories, dealing with the regulatory and compliance issues in translational science, and understanding the perspective of the patient in order to place research questions into a broader context.

Rathore, a postdoctoral research associate in Dr. Maria Cekanova’s translational research laboratory (Department of Small Animal Clinical Sciences), is currently studying companion animals as models for human cancer. She has isolated and characterized various new canine and feline cell lines to better understand the nature of various cancers, and to evaluate the roles and mechanism of action of several novel drugs in various animal and human cancer cell lines. She is also working on studying novel fluorescent compounds for imaging of transitional cell carcinoma and oral squamous cell carcinoma in cats and dogs.

The translational cancer research workshop is hosted in close collaboration with the Dana-Farber Cancer Institute/Harvard Cancer Center, consisting of Beth Israel Deaconess Medical Center, Brigham and Women’s Hospital, Children’s Hospital Boston, Harvard Medical School, Harvard School of Public Health, and Massachusetts General Hospital.

UTCVM 2015 Sponsored Research ($277,690)

<table>
<thead>
<tr>
<th>Principal Investigator</th>
<th>Sponsor</th>
<th>2015 Funds</th>
<th>Project Title</th>
<th>Start Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bemis, David</td>
<td>Point of Care Diagnostics</td>
<td>$12,000</td>
<td>Phase I project</td>
<td>3/23/2015</td>
</tr>
<tr>
<td>Coan, Patricia</td>
<td>Chattanooga State Technical Community College</td>
<td>$2,760</td>
<td>Rodent wet lab rotations</td>
<td>3/15/2015</td>
</tr>
<tr>
<td>Fisher, Teresa</td>
<td>Radio Systems Corporation</td>
<td>$20,000</td>
<td>Mobile spay/neuter unit</td>
<td>1/1/2015</td>
</tr>
<tr>
<td>Gerhold, Richard</td>
<td>Egyptian Cultural &amp; Educational Bureau</td>
<td>$94,496</td>
<td>CEM Graduate student support</td>
<td>5/28/2015</td>
</tr>
<tr>
<td>Kania, Stephen</td>
<td>Egyptian Cultural &amp; Educational Bureau</td>
<td>$94,496</td>
<td>CEM Graduate student support</td>
<td>5/28/2015</td>
</tr>
<tr>
<td>Kania, Stephen</td>
<td>Merial Limited</td>
<td>$5,000</td>
<td>2015 Merial Veterinary Scholars Research Program</td>
<td>3/26/2015</td>
</tr>
<tr>
<td>Kennedy, Melissa</td>
<td>Morris Animal Foundation</td>
<td>$5,000</td>
<td>Surveillance of communal dogs in Botswana for viral and bacterial pathogens</td>
<td>4/16/2015</td>
</tr>
<tr>
<td>Souza, Marcy</td>
<td>University of Minnesota</td>
<td>$7,288</td>
<td>Evaluation of an implant vehicle for slow-release, long-term delivery of antifungal drugs in birds</td>
<td>5/4/2015</td>
</tr>
<tr>
<td>Tolbert, Mary</td>
<td>Winn Feline Foundation</td>
<td>$16,000</td>
<td>Identification and investigation of feline <em>Trichomonas foetus</em> surface antigens as a target for diagnosis and treatment</td>
<td>5/1/2015</td>
</tr>
<tr>
<td>Wilkes, Rebecca</td>
<td>Winn Feline Foundation</td>
<td>$16,500</td>
<td>Immune modulation using small interfering RNA for treatment of feline infectious peritonitis</td>
<td>4/14/2015</td>
</tr>
</tbody>
</table>

CEM Launches Forensic Odontology MS Concentration

C
omparative and Experimental Medicine (CEM), a joint program between the College of Veterinary Medicine and the Graduate School of Medicine, is launching the first post-graduate degree program in forensic odontology in the United States. The master’s program addresses the need for additional professionals — including crime scene investigators, anthropologists, dentists, medicolegal death investigators, and detectives — trained to investigate crime scenes, provide positive identifications, and to process dental remains as evidence. This need is currently unmet in the forensic community.

Forensic odontology is the method of identifying victims through the unique characteristics of their dental and craniofacial anatomy. Dental identification is particularly valuable since teeth, unlike DNA evidence, are virtually indestructible. These methods aid in solving criminal cases involving bite marks, as well as mass disaster identifications such as those after Hurricane Katrina and the World Trade Center attack.

“The World Trade Center attack is a good example of the need for this program to help identify victims of a disaster,” said Dr. Donald Tabor, CEM faculty member. “This kind of program helps us meet the need for forensic dental experts who can identify victims, and it will help us train those who will be doing these kinds of work in the future.”

Training for this intense, three-semester, 33 credit-hour master of science degree involves scene search, recovery, identification, and processing of fresh, mutilated, and decomposed remains exposed to many post mortem environments, from surface scattered bones and clandestine burials to aquatic and thermal settings. Courses are offered fall 2015.

Other partners in the concentration include the Knox County Regional Forensic Center, the University of Tennessee Medical Center and Department of General Dentistry, and the Law Enforcement Innovation Center in Oak Ridge. To learn more about the program, visit: http://tiny.utk.edu/forensicOdontology.

CEMPH Research Symposium Awards

Graduate Student Category
1st Place – Chelsi Cassilly, Microbiology (Mentor: Dr. Todd Reynolds)
2nd Place – Caroline Grunenwald, Microbiology (Mentors: Dr. Rick Gerhold & Dr. Chunlei Su)
3rd Place – Brittny Wilkerson, Kinesiology, Recreation, & Sports Studies, (Mentor: Dr. David Bassett)

Inter/Resident Award of Excellence – Dr. Jennifer Michaels, Small Animal Clinical Sciences (Mentors: Dr. William Thomas and Dr. Amy Hodshon)

Research Associate Award of Excellence – Michael Conway, Small Animal Clinical Sciences (Mentor: Dr. Maria Cekanova)

Gamma Sigma Delta Award for Excellence in Agricultural & Related Sciences – Dr. Kathryn Purple, Comparative and Experimental Medicine (Mentor: Dr. Rick Gerhold)

Phi Zeta Award for Excellence in Animal Health Research – Dr. Bryan McCleary, Small Animal Clinical Sciences (Mentor: Dr. Mike Jones)
Rathore to Attend Translational Cancer Research Workshop

The American Association for Cancer Research selects 50 participants each year to attend the Translational Cancer Research for Basic Scientists Workshop. This year’s workshop takes place over 6 days in Boston, and Dr. Kusum Rathore will be in attendance. Participants will attend lectures and small group sessions, as well as go to off-site, interactive observational visits in laboratories and clinics. The workshop addresses leading multidisciplinary teams, working collaboratively and effectively with industry partners, recognizing the uniqueness and environment of the clinic and clinical laboratories, dealing with the regulatory and compliance issues in translational science, and understanding the perspective of the patient in order to place research questions into a broader context.

Rathore, a postdoctoral research associate in Dr. Maria Cekanova’s translational research laboratory (Department of Small Animal Clinical Sciences), is currently studying companion animals as models for human cancer. She has isolated and characterized various new canine and feline cell lines to better understand the nature of various cancers, and to evaluate the roles and mechanism of action of several novel drugs in various animal and human cancer cell lines. She is also working on studying novel fluorescent compounds for imaging of transitional cell carcinoma and oral squamous cell carcinoma in cats and dogs.

The translational cancer research workshop is hosted in close collaboration with the Dana-Farber Cancer Institute/Harvard School of Public Health, and Massachusetts General Hospital. Rathore will be in attendance. Participants will attend lectures and small group sessions, as well as go to off-site, interactive observational visits in laboratories and clinics.

CEM Launches Forensic Odontology MS Concentration

Comparative and Experimental Medicine (CEM), a joint program between the College of Veterinary Medicine and the Graduate School of Medicine, is launching the first post-graduate degree program in forensic odontology in the United States. The master’s program addresses the need for additional professionals — including crime scene investigators, anthropologists, dentists, medicolegal death investigators, and detectives — trained to investigate crime scenes, provide positive identifications, and to process dental remains as evidence. This need is currently unmet in the forensic community.

Forensic odontology is the method of identifying victims through the unique characteristics of their dental and craniofacial anatomy. Dental identification is particularly valuable since teeth, unlike DNA evidence, are virtually indestructible. These methods aid in solving criminal cases involving bite marks, as well as mass disaster identifications such as those after Hurricane Katrina and the World Trade Center attack.

“we are fortunate to have two of the nation’s most credentialed specialists in forensic dental identification,” said Dr. Murray Marks, CEM faculty member. “Dr. Mike Tabor and Richard Weems helped identify North and South Tower victims at Ground Zero from the 9-11 attack, and having these experts on board as university faculty is a natural fit for this mission. These faculty bring an expertise and hands-on experience of unmatched value to the master’s student, and, until now, an academic-based program like this one being offered by UT has not been available in the United States.”

Training for this intense, three-semester, 33 credit-hour master of science degree involves scene search, recovery, identification, and processing of fresh, mutilated, and decomposed remains exposed to many post mortem environments, from surface scattered bones and clandestine burials to aquatic and thermal settings. Courses are offered fall 2015. Other partners in the concentration include the Knox County Regional Forensic Center, the University of Tennessee Medical Center and Department of General Dentistry, and the Law Enforcement Innovation Center in Oak Ridge.

To learn more about the program, visit: [http://utvs.utk.edu/forensicOdontology](http://utvs.utk.edu/forensicOdontology).