Fall 2012

**Discovery Fall 2012**

Misty Bailey

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McEntee Named Associate Dean for Research

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A new directorship position has also been created to coordinate and advance the Comparative Medicine and Experimental Medicine (CEM) graduate students’ program. Dr. Stephen Kania will work with the UT Graduate School, program staff, the Joint Graduate Committee, CEM faculty, and McEntee to increase the breadth and depth of graduate studies related to basic, translational, and clinical science research. Kania has a long history of close involvement with CEM.

Hill Selected for AVMA Future Leaders Program

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Participants were selected from approximately 60 AVMA member nominees who had graduated from veterinary schools within the last 15 years. Dr. Hill is a graduate of North Carolina State University College of Veterinary Medicine.
Recent Publications


Cekanova Proposal Earns Neutron Imaging Beam Time at ORNL Facility

Dr. Maria Cekanova’s project on “Neutron imaging of normal and tumor breast tissues” was selected by Oak Ridge National Laboratories (ORNL) to receive 3 days of beam time on the Neutron Imaging Prototype Station, which is a part of ORNL’s High Flux Isotope Reactor.

The imaging station allows neutron scattering research into the fundamental properties of condensed matter. The reactor itself is one of the most powerful steady-state neutron fluxes of any research reactor in the world and uses highly-enriched uranium-235 as fuel.  

Recent Presentations

Adams JK, Coan PN. Developing an institutional environmental enrichment program. Presented at: Enrichment Extravaganza, Emory University; April 2012; Atlanta, GA, and American College of Laboratory Animal Medicine Forum; May 2012; St. Pete Beach, FL.


Anderson D. Bovine anesthesia and surgery. Presented at: Central Veterinary Conference; Aug. 2012; Kansas City, KS.


Baek SJ. Animal models in cancer research; Inflammation and cancer; Physiotherapy in cancer prevention. Presented at: Center of Excellence in Drug Discovery and Development; Aug. 2012; Khonkaen and Bangkok, Thailand.


Bailey M, Benson K. Utilizing techniques applied by college writing center tutors in medical editor-author dialogue. Poster presented at: American Medical Writers Association 72nd Annual Conference; Oct. 2012; Atlantic City, NJ.


Craig L. Effective lecture delivery. Invited lecture at: University of Illinois College of Veterinary Medicine; Apr. 2012; Urbana, IL.

Cui M-Z. Lysophosphatidic acid signaling in vascular smooth muscle cells. Plenary talk at: 2nd World Congress on Clinical & Experimental Cardiology; Mar. 2012; Omaha, NE.

Dhar M. From diabetes to tendon damage repair: Importance of animal models in research. American Association of Laboratory Animal Science Training Session, University of Tennessee; June 2012; Knoxville, TN.


Emery LC, Cox SK, Souza MJ. Pharmacokinetics of nebulized terbinafine in Hispaniolan Amazon parrots. Presented at: Annual Conference of the Association of Avian Veterinarians; Aug. 2012; Louisville, KY.

Favi PM, Stephens C, Neilsen N, Hammonds R, Benson R, Dhar M. Proliferation, osteogenic and chondrogenic differentiation of equine-derived bone marrow mesenchymal stem cells on bacterial cellulose scaffolds Poster presented at: Annual Experimental Biology Meeting; Apr. 2012; San Diego, CA.

Fonseca Pinto ACB, Hecht S. Magnetic resonance imaging (MRI) of the brain in small animals – Evaluation of sequences and protocol recommendations. Presented at: IVRA/EAVDI/ECVDI Scientific Meeting; August 2012; Bursa, Turkey, and American College of Veterinary Radiologists Annual Scientific Meeting; Oct. 2012; Las Vegas, NV.

Frank L. Feline dermatology. Workshop presented at: European Society of Veterinary Dermatology; May 2012; Mallorca, Spain.

Gray MJ, Waltzek TB, Miller DL. Ranaviruses can be transmitted across ectothermal vertebrate classes. Presented at: Southeastern Partners in Amphibian and Reptile Conservation; Feb. 2012; Fall Creek Falls, TN.

Hecht S. Comparative imaging in veterinary oncology and the role of the veterinary technician in imaging of the oncologic patient. Keynote address at: Veterinary Technician Forum, Annual Conference of the Veterinary Cancer Society; Oct. 2012; Las Vegas, NV.

Hecht S, Huerta MM, Reed RB. Magnetic resonance imaging (MRI) spinal cord and canal measurements in normal dogs. Presented at: IVRA/EAVDI/ECVDI Scientific Meeting; August 2012; Bursa, Turkey, and American College of Veterinary Radiologists Annual Scientific Meeting; Oct. 2012; Las Vegas, NV.

Hecht S, Ramsay EC, Schumacher J, Thomas WB, Adams WH, Conklin GA. Magnetic resonance imaging (MRI) of the central nervous system in large felids. Presented at: IVRA/EAVDI/ECVDI Scientific Meeting; August 2012; Bursa, Turkey, and American College of Veterinary Radiologists Annual Scientific Meeting; Oct. 2012; Las Vegas, NV.


Kennedy M. Update on canine viruses; Update on feline viruses; FIP, the ultimate hypersensitivity; Immunology for dummies; Viral diagnostics: What you need to know. Invited presentations at: Atlantic Coast Veterinary Conference; Oct. 2012; Atlantic City, NJ.

Kennedy M. Update on feline viruses; Update on FIP. Invited presentations at: 24th Annual Fred Scott Feline Medicine Symposium, Cornell University; July 2012; Ithaca, NY.
Cui Selected as Editorial Board Member for J Biol Chem

D Wei-Zhen Cui, associate professor in the Department of Biomedical and Diagnostic Sciences, was recently selected to serve as a member of the editorial board for the journal of Biological Chemistry. Her appointment was approved by the journal’s editorial board in September 2012, and her 5-year, 3-month term will begin in July 2013.

Board members are appointed and approved by the journal’s associate editors, editor-in-chief, and deputy editor. Candidates undergo a rigorous selection process and typically are tenured faculty members or experienced scientists with distinguished research careers. Their job is to determine the suitability of manuscripts for publication in the journal. The J Biol Chem has an impact factor of 4.773.

Cui is also an editorial board member for other journals.

Recent Publications


Discover: Research at the University of Tennessee College of Veterinary Medicine (2012) 7.2

DVM Student McRee funded to Study Canine Pathogens in Zimbabwe

From the DVM class of 2013, Lee Emery won the student manuscript award for his presentation of “Pharmacokinetics of nebulized terbinafine in Hispaniolan Amazon parrots” at the Annual Conference of the Association of Avian Veterinarians in August. The research was the result of his project with Dr. Marcy Souza for the Center of Excellence in Livestock and Human Health Student Program in 2011.

De Jager, a graduate student in Materials Science & Engineering, earned a travel award from the American Association of Anatomists to attend the Experimental Biology Meeting in April as a result of her work with Dr. Madhu Dhar on the “Proliferation, osteogenic and chondrogenic differentiation of-derived bone marrow mesenchymal stem cells on bacterial cellulose scaffolds.

Full details about all two presentations may be found in the Publications section of this newsletter.

UCVM Investigators Bring in $2,885,365 for Recently Sponsored Projects

<table>
<thead>
<tr>
<th>Title</th>
<th>PI</th>
<th>Agency</th>
<th>Start</th>
<th>Type</th>
<th>Amount</th>
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<tr>
<td>Treatment of female canine uterine incompetence</td>
<td>Bartz</td>
<td>Uroplasty</td>
<td>6/28/12</td>
<td>Vr</td>
<td>3/3</td>
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<tr>
<td>Effectiveness of a novel disinfectant in aerosol form against hard surface bacteria and the type of information the user wishes to display.</td>
<td>0 Bemis</td>
<td>Microbial Disinfecting</td>
<td>6/17/12</td>
<td>1/1</td>
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<td>Novel mechanism mediating LPA-induced smooth muscle cell</td>
<td>O Bemis</td>
<td>Microbial Disinfecting</td>
<td>6/17/12</td>
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<td>Coronavirus RNA replication</td>
<td>0 Bemis</td>
<td>Microbial Disinfecting</td>
<td>6/17/12</td>
<td>1/1</td>
<td>6,471</td>
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<td>Body composition of adult, outdoor, intact cats compared to adult, indoor, neutered domestic cats with ideal body condition score</td>
<td>M Clinton</td>
<td>Hill's Pet Nutrition</td>
<td>10/12/12</td>
<td>1/1</td>
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<td>In vitro model of canine oral cancer damage to test the efficacy of mesenchymal stem cells</td>
<td>M Dhar</td>
<td>Morris Animal Foundation</td>
<td>6/17/12</td>
<td>1/1</td>
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<td>Development and implementation of veterinary diagnostic services</td>
<td>M Kennedy</td>
<td>Morris Animal Foundation</td>
<td>6/17/12</td>
<td>1/1</td>
<td>3,900</td>
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<td>Imaging properties and toxicity of selected near-IR dyes in dogs</td>
<td>A LeBlanc</td>
<td>DOE-UT Battelle-ORNL</td>
<td>9/26/12</td>
<td>1/1</td>
<td>79,701</td>
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<td>GABA-IR-mediated prevention of pancreatic cancer</td>
<td>0 Schiller</td>
<td>NIH</td>
<td>9/26/12</td>
<td>1/1</td>
<td>280,393</td>
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<tr>
<td>The GABA-IR receptor is a novel drug target for pancreatic cancer</td>
<td>M Schiller</td>
<td>NIH</td>
<td>9/26/12</td>
<td>1/1</td>
<td>4,264</td>
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<td>Supporting the development and delivery of the national food safety curriculum</td>
<td>S Thompson</td>
<td>FDA</td>
<td>6/28/12</td>
<td>1/2</td>
<td>1,299,952</td>
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<tr>
<td>A framework to determine the prevalence and economic impact of anaplasmosis in beef</td>
<td>X Wu</td>
<td>NIH</td>
<td>6/28/12</td>
<td>1/2</td>
<td>149,650</td>
</tr>
</tbody>
</table>

Alternative Periodic Table Fast Way to Determine Options to Graphically Display Data

A new twist on the familiar visually-appealing and perhaps new periodic table shows options representation. Put together by the group for conceptualization of data in a behind-Visual-Literacy.org, the “Periodic Table of Visualization Methods” is available free online.

The table is organized by the type of information the user wishes to display. Mousing over each “element” shows an example of what that method might look like and how it might be applied.

To access the table, go to http://www.visual-literacy.org/periodic_table/perodic_table.html
Cont. from p. 4

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The year-long program provides each participant (selected in part for their existing leadership skills and demonstrated potential to enhance their leadership skills and create usable tools for the wider veterinary profession. The AVMA describes the program as unique in that it takes a holistic approach to leadership. Its goal is to develop the strengths and talents of emerging leader veterinarians, promoting their leadership skills for the benefit of the veterinary workplace, organized veterinary medicine, and society as a whole.

Participating veterinarians will develop a personal plan for leadership development and growth. The program will reinforce and expand participants’ personal skills and attributes and will provide an authentic, realistic forum to practice and improve skill sets.

The program includes five face-to-face meetings and 18 months of online courses, which include a month-long project on a specific topic. The participants will gain understanding of the role of leading the veterinary profession through the lens of the association’s committees, councils and task forces. The program consists of a year-long leadership development and mentoring program.

For the first time, two cohorts will be selected this year and graduate in December 2013. The program is sponsored by Pfizer Animal Health.

Selected participants included 10 veterinarians from across the country, representing a cross-section of the profession. Participants are drawn from practice, academia, industry, government, military, and the military veterinary corps. The participating veterinarians were selected based on their leadership traits, achievements, and commitment to advancing the veterinary profession.

The 2012-13 cohort of Future Leaders includes:

- Ed McClelland, DVM, from the University of California, Davis (UC Davis)
- Jillian Decker, from the University of Kentucky (UK)
- Elisa De La Mata, DVM, from the University of Florida (UF)
- Michael DeRosa, DVM, from the University of Pennsylvania (UPenn)
- Kelly Eagan, DVM, from the University of Texas (UT)
- James Ely, DVM, from the University of Missouri (UMiss)
- Yifan Gao, from the University of Illinois (UIllinois)
- Charles Galloway, DVM, from the University of Minnesota (UMinnesota)
- Sarah Green, DVM, from the University of California, San Diego (UCSD)
- Mary Hrusak, DVM, from the University of California, Davis (UC Davis)

The AVMA Future Leaders Program will be supported with a grant from Pfizer Animal Health, a global animal health leader and a long-time AVMA supporter.

The AVMA Future Leaders Program is sponsored by Pfizer Animal Health.

In this issue
p1-Associate dean for research & graduate director; Veiga-Parga award, Hill honor; p2-Cui honor; publications; p3-publications; p4-Cekanova honor; presentations; p5-graphical displays, McEntee in Zimbabwe, Emery & Favi student awards, externally-funded awards; p6-presentations

Research at the University of Tennessee College of Veterinary Medicine