In this issue

P1-UTCVM Stem cell group, CEMPH Research Symposium awards; 2-CEM students new & graduated; Workshop travel fellowship, publications; 3-Selected works externally funded awards; 4-Presentations; 5-Technology maturation fund, JoVE, Brian & Rouse prestigious publications

Comparative & Experimental Medical Research Symposium

Travel Award Winners

On June 14 and 15, 81 new scientists from 20 different departments came together to present research talks. Of those 81 were 55 researchers from the Institute of Agriculture, and UTIA took seven of the eight awards given.

• Phi Zeta Excellence in Animal Health Research Award: Laura Eberlein (College of Veterinary Medicine)
• Gamma Sigma Delta Excellence in Agricultural & Related Sciences Award: Katie Horn (College of Agricultural, Consumer and Environmental Sciences; Research Assistant Professor Category, Award of Excellence: Seong-Ho Lee (Pathobiology)
• Research Associate Category, Award of Excellence: Wendy Stober (Graduate Student Category)
• Research Assistant Professor Category, Award of Excellence: Karen Wells (Graduate School of Veterinary Medicine)
• Graduate Student Category

• 1st Place: Kusum Rathore (Genome Science & Technology/Comparative Medicine)
• 2nd Place: Nishan Kalapahana (Obesity Research Center/Animal Science)
• 3rd Place: Ashley Pedigo (Comparative & Experimental Medicine)

Top-bottom: Dr. Paul Erwin introduces Monday’s lunch speaker; Dr. Jihua Kallamparampil; Laura Eberlein presents her research; Attendees visit exhibit tables; Last-minute presentation preparations.

Research at the University of Tennessee College of Veterinary Medicine
Recent Publications


Close D, Patterson S, Ripp S, Dr. Stephen Kania. Working on a PhD with Dr. Robert Reed.


Dennis Handagama SMLC, Arijatrans HBS, FCEA, Katta A, Krizelle J. Mendis-Handagama SMLC, Arijatrans HBS, FCEA, Katta A, Krizelle J. 


Eswaram J, Kennedy MA. Viral infections. In: Peterson ME, Kutzler MB, eds. Infections. In: Peterson ME, Kutzler MB, eds. in the Comparative and Experimental Medicine program in 2010. Entering in spring was Leon Richardson, who is working on an MS with Dr. Seung Joon Baek. New summer students were Mohammed Al-Wadei, working with Dr. Hildegard Schuller on a PhD, and Dr. Josh Rowe, working on a PhD with Dr. Robert Reed.

For all, the following students joined the program: Dr. Melissa Kennedy (PhD, 2010). Maryanne Murphy (PhD, 2010). Claudia Kirk, Joseph Bartges, and Angela Lusby (PhD, 2010). Graduating this year were Dr. Chad Black (PhD, 2010). Nichelle Whitlock (PhD, 2010). Working on a PhD with Dr. Robert Reed.


Widner A, Patton S, Dr. Chad Black (PhD, 2010). What is your diagnosis? Nasal surgery and long-term hypoxia on hemolymph gas values in the American horsehair crab (Limulus polyphemus) working on a PhD with Dr. Robert Reed.


### Research Resource Spotlight

**SelectedWorks by Jana Redmond**

An initiative of Trace, UT’s digital repository, and a trademark of The Berkeley Electronic Press, SelectedWorks offers customizable author pages. An open-access showcase of faculty research, SelectedWorks (SW) allows easy upload of documents, including but not limited to previously published articles. SelectedWorks increases exposure to research with indexing by bepress over 160,000 papers strong.

The SW author page functions like a faculty Web page by providing access to your CV and publication list. With SW, updating the page is in your hands. UTCVM faculty member Dr. Marcy Souza likes the author control SW offers in comparison to standard faculty pages. Dr. Souza remarks, “My SelectedWorks page is set up as a link from my homepage. If anyone wants to look at an updated list of publications, they can follow the link to my SelectedWorks page.” SelectedWorks tracks the number of downloads each item receives and reports this number via e-mail.

Dr. Shelley Newman sees SW as an effective means to inform students and colleagues, both in-house and beyond UTCVM, of her work and research interests. Dr. Newman offers, “In a visit you may only have 20 minutes with a potential residency candidate, but you can refer them to the SW page where they can see your area of research interest.” SelectedWorks also provides Dr. Newman and her colleagues with access to research being done within their department and, more broadly, at UTCVM. The download reports enable Dr. Newman to better understand how integrated her work is in the bigger scheme of things. To view current UT author pages, visit [http://trace.tennessee.edu/sw_gallery.html](http://trace.tennessee.edu/sw_gallery.html).

If you would like help setting up an SW author page, please contact Ann Viera at 974-9015 or annviera@utk.edu. You may also visit [http://bit.ly/TraceContributor](http://bit.ly/TraceContributor) or attend one of the training sessions offered throughout the semester at Hodges Library. For questions or more information on sessions, please contact the Trace+SW liaison at trace@utk.edu.

Dr. Brian Whitlock’s SW page.

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**UTCVM Investigators Bring in Nearly $586,000 for Recent Sponsored Projects**

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<tr>
<th>Title</th>
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<td>Genomic evaluation of stone disease</td>
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<td>C Egger</td>
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<td>Pilot evaluation of induced superficial radiation injury in porcine skin</td>
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<td>Efficacy of different anti-coccidia drugs on growth inhibition of developmental <em>Eimeria macusaniensis</em> in cell cultures</td>
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<td>Comparative Gastroenterology Society</td>
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Recent Presentations


Böttcher P, [. . . ], Hecht S, et al. Low-field magnetic resonance imaging of meniscal tears in dogs: Multioserver diagnostic performance. Presentation at: American College of Veterinary Radiology (ACVR) Annual Meeting; August 2010; Asheville, NC.


Buchanan B, Frank N, Elliott SB. Effects of season on adrenocorticotropin hormone concentrations in a group of horses located in the state of Texas. Poster presented at: ACVIM Annual Forum; June 2010; Anaheim, CA.

Cekanova M. Imaging of naturally occurring tumors in dogs and cats using newly synthesized NSAIDs. Oral presentation at: National Cancer Institute/ American Association for Cancer Research Imaging Camp; June 2010; St. Louis, MO.


Chameroy KA, Frank N, Elliott SB. Effects of levethyroxine sodium on body condition, blood measures of metabolic status, and glucose dynamics in horses with equine metabolic syndrome. Poster presented at: ACVIM Annual Forum; June 2010; Anaheim, CA.

Chameroy KA, Frank N, Elliott SB. Effects of metformin hydrochloride on glucose dynamics during transition to grass paddocks in insulin-resistant horses. Presented at: ACVIM Annual Forum; June 2010; Anaheim, CA.


Cox S, Martin-Jimenez T, Doherty T. Pharmacokinetics of intravenous and intramuscular tramadol in llamas. Presented at: ACVIM Annual Forum; June 2010; Anaheim, CA.


Frank N. Management of the insulin resistant horse; Which endocrine disorder are we dealing with? Pituitary pars intermedia dysfunction versus equine metabolic syndrome: Diagnostics; Which endocrine disorder are we dealing with? Pituitary pars intermedia dysfunction versus equine metabolic syndrome: Treatment options; Equine endocrinology special interest group: Insulin resistance. Oral presentations at: ACVIM Annual Forum; June 2010; Anaheim, CA.

Hecht S, Adams WH, Cunningham MA, Lane IF. Initial experience with the classroom performance system (CPSTM) in radiology education. Presentation at: EVDI Meeting; July 2010; Giessen, Germany.

Hecht S, Adams WH, Narak J, Thomas WB. Susceptibility artifacts due to metallic foreign bodies in small animal MRI. Presentation at: ACVR Annual Meeting; August 2010; Asheville, NC.

Hecht S, Durant AM, Bohling MW, Adams WH, Conklin GA. Use of contrast-enhanced MR angiography (CE-MRA) for the diagnosis of a vascular ring anomaly in a dog. Presentation at: EVDI Meeting; July 2010; Giessen, Germany.


Lane IF. Curriculum change; Incorporation of non-technical competencies into courses and curricula. Invited presentation at: North Carolina State University College of Veterinary Medicine, Course Directors Workshop; June 2010; Raleigh, NC.

Lane IF. How people learn; The teaching philosophy; Competencies, goals, and objectives; Course design; Lecture preparation; Clinical teaching. Invited presentations at: Tuskegee University School of Veterinary Medicine, Teaching and Curriculum Faculty Development Workshop; May 2010; Tuskegee, AL.

Lane IF. Refractory lower urinary tract diseases; Case examples in feline urology; Urinary incontinence in dogs; Reviewing the basics; Managing refractory incontinence in dogs. Invited presentations at: American Veterinary Medical Association Annual Convention; August 2010; Atlanta, GA.

Lee SH, Krisanapun C, Baek SJ. NSAID-activated gene-1 as a molecular target for capsacin-induced apoptosis through a novel molecular mechanism involving GSK3β, C/EBPβ, and ATP3. Presented at: EB Meeting; April 2010; Anaheim, CA.

Cont. on p. 6
CVM Graduate Program Welcomes New Students, Says Goodbyes to Graduates

Nine new graduate students welcomed the Comparative and Experimental Medicine program in 2010. Entering in spring was Leon Richardson, who is working on an MS with Dr. Seung Joon Baek. New summer students were Mohammed Al-Wadei, working with Dr. Hildegard Schuller on a PhD, and Dr. Josh Rowe, working on a PhD with Dr. Robert Redetz.

For fall, the following students joined the program: Dr. Eman Anis (PhD, Dr. Melissa Kennedy), Dr. Llies Brekken (PhD, Dr. Madhu Dhar), Joel Brody (PhD, Dr. Schuller) Emily Martin (MS, Dr. Jonathan Wall), Kyung-Won Min (PhD, Dr. Baek), and Dr. Maryanne Murphy (PhD, Drs. Claudia Kirk, Joseph Bartges, and Dr. Jonathan Wall).

Graduating this year were Dr. Chad Black (PhD, “Methcillin resistance in Staphylococcus pseudintermedius”), Dr. Stephen Kania (PhD, “Malignant catarrhal fever viruses in ruminants”), Dr. Robert Donell.

Whitchell Labs Experimental Biology Travel Fellowship

PhD candidate Nichelle Whitchell presented an abstract at the Experimental Biology Meeting in Anaheim, CA through an American Physiological Society/NIDDK Minority Travel Fellowship.

The fellowship was made possible by a grant from the National Institutes of Health to Dr. Stephen Kania. Whitchell submitted an abstract, a letter of intent, CV, and recommendation letter. Whitchell’s mentor is Dr. Seung Joon Baek. For full details about the presentation, see Recent Publications.

Recent Publications


Cekanova M, Lee SH, Patterson S, Ripp S, Close D, Patterson S, Baek SJ (PhD, “Methcillin resistance in Staphylococcus pseudintermedius”), Dr. Stephen Kania, and Dr. Robin Cissell (PhD, “Malignant catarrhal fever viruses in ruminants”), Dr. Robert Donell.

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Recent Publications


Mendis-Handagama SMLC, Airiaytis HBS, Fectaeu KA, Grizzle RT, Elsevier Saine E. Discovery: Research at the University of Tennessee College of Veterinary Medicine (2010) 5.2.

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2011 Technology Maturation Fund Application Deadline Announced

The UT Research Foundation announced its fourth annual maturation funding program to help UT researchers further develop technologies that have the potential to grow into intellectual property. Up to $1.5 million ($1.0 million) will be awarded to the highest ranked proposals.

The proposed project must be related to an existing or new UT invention/creation and will be judged on demonstration of a path for commercial development, market potential, and stage of development.

The deadline for proposal submission is November 12, and awards will be announced December 17 in time for a project start date of January 17, 2011.

For more information, visit http://atrf.tennessee.edu or contact Joy Fisher at fisher@utk.edu.

Two UTCVM Faculty with Prestigious Publications

Two papers by Pathobiology Department faculty members were recently published in high impact factor journals. Nature Reviews Immunology (impact factor [IF] 32.2) and Proceedings of the National Academy of Science, USA (IF 9.43).

Drs. Barry Rousse and David Brian, respectively published “Immunology and immunopathology to viruses: What decides the outcome?” and “Subgenomic messenger RNA amplification in coronaviruses.” Full microplots of all papers may be found in the Recent Publications section.
Legrande A. Polyphenyl stimulaton. Oral presentation at: American College of Veterinary Internal Medicine Association; June 3–6, 2010; Anaheim, CA.


Mendez-Handagama C. Unveiling the mysteries of Leydig stem cell differentiation in the postnatal mammalian testis. Invited talk at: Second World Congress for Antibiotics; March 10–16, Beijing, China.


Newman S. Amyloid-producing odontogenic tumor in dog. Presented at: Midwest Pathology Meeting; August 12–13, 2010; Kalispell, MT.

Odoo A, Busingye D. Application of network analysis in the investigation of disparities in geographic access to emergency stroke and heart attack care. Oral presentation at: 4th International Symposium on Geospatial Health; August 20–21, 2010; Melbourne, Australia.

Pedigo A, Odoo A. Disparities in geographic access to emergency stroke and myocardial infarction care. Poster presented at: Care and Outcomes Research in Cardiovascular Disease and Stroke 2010 Scientific Sessions; May 2010; Washington, DC.

Pedigo A, Seeger W, Odoo A. Application of fuzzy clustering and discriminant analysis to identify neighborhood population characteristics and health needs. Poster presented at: 10th Annual Forum; June 3–6, 2010; Anaheim, CA.

Prado M. Oral pharmacokinetics of ivermectin in healthy llamas (Lama glama). Invited presentation at: American College of Veterinary Internal Medicine Annual Forum; June 3–6, 2010; Anaheim, CA.

Prado M. Problems affecting small ruminants; Diagnosis and management of colic in the horse; Failure of passive transfer in different species. Invited presentations at: Scientific Congress, School of Veterinary Medicine, University of Panama; July 2010; Panama City, Panama.


Roberson J. Small ruminants for technicians; Odd reproductive problems in severely parasitized small ruminant. Three intriguing cases and small ruminant tips; Clinical mastitis: The first 8 days. Presented at: 43rd Annual Convention of the American Association of Bovine Practitioners; August 2010; Albuquerque, NM.

Schumacher J. Rheitis arthritis and analgesia; Ultrasound and CT imaging of the pancreas; Imaging of osteosarcoma. Oral presentation at: 5th Congress of the World Small Animal Veterinary Association; June 2–5, 2010; Switzerland.


Souza MJ, Guzman D, Paul-Murphy J, Cox S. Framadom in Hispanic amazon parrots. Oral presentation at: Annual Conference of Association of Avian Veterinarians; August 2010; San Diego, CA.

Tadros L, Frank N. Assessment of two experimental models for prolonged (48 hours) endotoxemia in horses. Poster presented at: American College of Veterinary Internal Medicine Annual Forum; June 2010; Anaheim, CA.

Tobias K. Portosystemic shunts: questions and answer; Methicillin-resistant Staph infections; Hernia; Oral surgery; Esophagostomy tubes. Oral presentation at: American Veterinary Medical Association Annual Meeting; August 2010; Washington, DC.

Toth F, Schumacher J, Schramme M, Hecth F. Evaluation of four techniques for injecting the thoracoabdominal bursa of horses. Oral presentation at: European Veterinary Diagnostic Imaging Meeting; July 2010; Giesen, Germany.


Whitlock NC, Bahin B, Baek SJ. Resveratrol-induced ATF3 expression is mediated by EGR-1/FLK4 interaction. Presented at: Experimental Biology Meeting; April 2010; Anaheim, CA.


A part of the stem cell initiative here at UTCVM, four researchers obtained partial funding to attend the 1st North American Veterinary Regenerative Medicine Conference (NAVRM) held in Santa Ynez Valley, CA, March 5–6. Drs. Madhu Dhar, Dennis Geiser, and Steve Adair and Ms. Nancy Neilson attended the conference, which was jointly organized by the University of California-Davis School of Veterinary Medicine, Alamo Pintado Equine Medical Center, and Rood and Riddle Equine Hospital.

The meeting proved to be a remarkably successful gathering, bringing together more than 250 renowned scientists from the United States and Canada, all experts in regenerative medicine and cell therapy. Several open-forum roundtable discussions were held between researchers and practicing clinicians, covering a range of topics including clinical trial development, basic research and stem cell biology, regulatory affairs, and in-practice solutions.

The conference was moderated by Dr. Gregory Ferraro of the UC-Davis Center for Equine Veterinary Regenerative Medicine, and included presentations of the research work of Dr. Arnold Caplan of Case Western University, Dr. Dori Borjesson of the UC-Davis School of Veterinary Medicine, Dr. Thomas Koch of the University of Guelph, and Dr. Alan Nixon from Cornell University.

Comparative & Experimental Medical Research Symposium

Travel Award Winners

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- Gamma Sigma Delta Excellence in Agricultural & Related Sciences Award: Katie House (College of Agriculture)
- Research Assistant Professor Category, Award of Excellence: Seong-Ho Lee (Pathobiology)
- Research Associate Category, Award of Excellence: Oudessa Lerro (Animal Science)
- Intern/Resident Category, Award of Excellence: Karen Wells (Graduate School of Medicine, Radiology)
- Graduate Student Category
  - 1st Place: Kusum Rathore (Genome Science & Technology/Comparative Medicine)
  - 2nd Place: Nishan Kalupahana (Obesity Research Center/Animal Science)
  - 3rd Place: Ashley Pedigo (Comparative & Experimental Medicine)

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