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Discovery Spring 2010

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Editor

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THE UNIVERSITY of TENNESSEE
INSTITUTE of AGRICULTURE
COLLEGE of VETERINARY MEDICINE

Knowledge DISCOVERY Compassion

Comparative & Experimental Medicine and Public Health Research Symposium – Call for Abstracts

June 2010						
Sun	Mon	Tues	Wed	Thur	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

June 14 & 15

Who?

Graduate students, postdocs, residents, interns, & research assistant professors with research interests in the broad area of animal or human health

What?

Participants must give an oral presentation no more than 10 minutes in length.

Why?

Presentation experience, collaboration opportunities, and the chance for a travel award

Submission Deadlines:

Title: 5 pm, Mar. 26
Abstract*: 5 pm, Apr. 12

*Abstracts are limited to 250 words. Abstract submission instructions will be given once the title is submitted.

To Submit:

http://tinyurl.com/researchsymp2010

The symposium is located at the University of Tennessee Agricultural Campus and is sponsored by the College of Veterinary Medicine, Center for Public Health, AgResearch, UTK Office of Research, and Graduate School of Medicine

For more information: *http://www.vet.utk.edu/research/symposium*

Familiar 'Chap' Fills Research & Graduate Dean Position

The new year brought new leadership to the Office of Research and Graduate Programs–well, sort of. More accurately, the new year brought new leadership once removed when **Dr. Leon Potgieter** replaced Dr. Robert Moore, who took a position as executive director of the UT Space Institute. Potgieter began as interim in January, after a nearly 9-year hiatus, wherein he served as associate dean of Hospital Operations, Comparative Medicine Department head, and interim UTCVM dean.

Now, Potgieter is re-familiarizing himself with the research and graduate programs, and he welcomes any suggestions from faculty, staff, and students on ways to improve the programs. His office remains in the Comparative Medicine Department, and Kim Rutherford and Misty Bailey also continue to work with the Comparative and Experimental Medicine graduate program alongside Potgieter.

Moore (L) and **Potgieter** backstage, 2009 CVM graduation ceremony

Allender & Black Earn Phi Zeta Manuscript Accolades

Dr. **Matt Allender**, former zoological medicine resident, and Dr. **Chad Black**, Comparative and Experimental Medicine PhD candidate, were awarded for their entries in this year's Phi Zeta manuscript competition.

Phi Zeta is the national veterinary honor society and sponsors a competition each year to recognize outstanding publications in both basic and clinical sciences. Each veterinary school chooses a single manuscript from each category and forwards the winning submissions to the national competition.

Allender's entry, "The effects of short- and long-term hypoxia on hemolymph gas values in the American horseshoe crab (*Limulus polyphemus*) using a point-of-care analyzer" won for the clinical sciences division, and Black's paper entitled "Identification of a predominant multilocus sequence type, pulsed-field gel electrophoresis cluster, and novel staphylococcal chromosomal cassette in clinical isolates of *MecA*-containing, methicillin-resistant *Staphylococcus pseudintermedius"* won in the basic sciences category. The articles have been or will be published in the *Journal of Zoo and Wildlife Medicine* and *Veterinary Microbiology*, respectively.

Hecht Diagnosis–ACVR's CT/MRI Jan. Case of the Month

The CT/MRI Society recently featured Dr. **Silke Hecht**'s "Cerebellar cortical abiotrophy in a Staffordshire terrier" as its Case of the Month on the American College of Veterinary Radiology Web site. The case, which outlines history, imaging, findings, and diagnosis, and shows all 51 captured images, can be viewed at *http://www.acvr.org/members/case_presentations/ctmri_case_of_the_month/index.html*.

Recent Publications

Abd-Eldaim MM, Beall MJ, **Kennedy MA**. Detection of feline panleukopenia virus using a commercial ELISA for canine parvovirus. *Vet Ther* 2010;10(4): E1–E6.

Anderson MP, **Hecht S, Holford AL, Hicks DA**. What is your diagnosis? – Congenital portosystemic shunt in a dog. *J Am Vet Med Assoc* 2010;236:401–402.

Baron ML, Hecht S, Matthews AR, Stokes JE. Ultrasonographic observation of secretin-induced pancreatic duct dilation in healthy cats. *Vet Radiol Ultrasound* 2010;51:86–89.

Bartges J, Kirk C. Dietary therapy of diseases of the lower urinary tract. In: August JR, ed. *Consultations in Feline Internal Medicine*. St. Louis: Saunders;2010. pp. 88–97.

Baumwart CA, Prado TM, Anderson MP, Coffman EA, Simpson KM, Campbell GA. Successful treatment of a Vietnamese potbellied pig with an ovarian leiomyoma. *J Am Vet Med Assoc* 2010;236:558–561.

Choi CK, Sukhthankar M, **Kim C**, **Lee SH**, English A, Kihm KD, **Baek SJ**. Cell adhesion property affected by cyclooxygenase and lipoxygenase: Opto-electric approach. *Biochem Biophys Res Commun* 2010;391:1385–1389.

Cox S, Allender MC, **Yarbrough J**. Determination of metronidazole in adult artemia using high performance liquid chromatography. *J Liquid Chromatogr Relat Technol* 2010;33:89–96.

Drum M. Physical rehabilitation of the canine neurologic patient. *Vet Clin North Am Small Anim Pract* 2010;40:181–193.

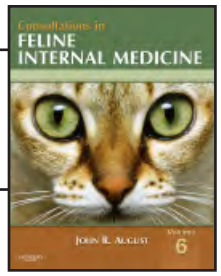
Griffin B, DiGangi BA, **Bohling MW.** A review of neutering cats. In: August JR, ed. *Consultations in Feline Internal Medicine*. St. Louis: Saunders;2010. pp. 776–792.

Hao F, Tan M, Wu DD, Xu X, Cui MZ. LPA induces IL-6 secretion from aortic smooth muscle cells via an LPA1-regulated, PKC-dependent, and p38α-mediated pathway. *Am J Physiol Heart Circ Physiol* 2010;298:H974–983.

Hecht S, Adams WH. MRI of brain disease in veterinary patients part 1: Basic principles and congenital brain disorders. *Vet Clin North Am Small Anim Pract* 2010;40:21–38.

Hecht S, Adams WH. MRI of brain disease in veterinary patients part 2: Acquired brain disorders. *Vet Clin North Am Small Anim Pract* 2010;40:39–63.

Johnson BM, **Fry MM, Flatland B**, **Kirk C**. Comparison of a human portable blood glucose monitor, veterinary portable blood glucose monitor, and automated chemistry analyzer for measurement of blood glucose concentrations in dogs. *J Am Vet Med Assoc* 2009;235:1309–1313.



Lane IF, section ed. Urinary system. In: August JR, ed. *Consultations in Feline Internal Medicine*. St. Louis: Saunders;2010.

Lane IF. Professional competencies in health sciences education: From multiple intelligences to the clinic floor. *Adv Health Sci Educ Theory Pract* 2010;15:129–46.

LeBlanc A. Positron emission tomography (PET). In: Henry CJ, Higginbotham ML, eds. *Cancer Management in Small Animal Practice*. Philadelphia: WB Saunders;2009.

Lyons JA, Newman SJ, Greenacre CB, Dunlap J. A gastric neuroendocrine carcinoma expressing somatostatin in a bearded dragon (*Pogona vitticeps*) *J Vet Diagn Invest* 2010;22:316–320.

Newkirk K, **Haines D,** Calvarese S, Esson D, Chandler H. Differences in the distribution and amount of pigment within the ciliary body of blue and brown canine eyes. *Vet Ophthalmol* 2010;13:76–80.

Souza MJ, Martin-Jimenez T, Jones MP, Cox SK. Pharmacokinetics of oral and intravenous tramadol in bald eagles. *J Avian Med Surg* 2009;23:247–252.

Sukhthankar S, Choi CK, English A, Kim J-S, **Baek SJ**. A potential proliferative gene, NUDT6, is down-regulated by green tea catechins at the posttranscriptional level. *J Nutr Biochem* 2010;21:98–106.

Thomas W, ed. *Vet Clin North Am Small Anim Pract: Diseases of the Brain* 2010;40.

Thomas W. Evaluation of veterinary patients with brain disease. *Vet Clin North Am Small Anim Pract* 2010;40:1–19.

Thomas W: Hydrocephalus in dogs and cats. *Vet Clin North Am Small Anim Pract* 2010;40:143–159.

Thomas W: Idiopathic epilepsy in dogs and cats. *Vet Clin North Am Small Anim Pract* 2010;40:161–179.

Tobias KM. Managing methicillin-resistant wound infections. *DVM Newsmagazine*. January 1, 2010:30–31.

Tobias KM. Portosystemic vascular anomalies. In: Bojrab MJ, Monnet E, eds. *Disease Mechanisms in Small Animal Surgery*. 3rd ed. Jackson, WY:Teton New Media;2010. pp. 175–182.

Tóth F, Frank N, Martin-Jiménez T,

Cont. on p. 3

Research Resource Spotlight

Web Site Allows Veterinarians to Search for Conferences

Can't always find the perfect conference at which to present findings? Want to publish your own event more widely? *VetAgenda.com* provides a free, searchable calendar of veterinary events worldwide.

The Germany-based company VetContact offers the service in six different languages and allows users to search by subject, keyword, date, country, and/or language. At a glance, results of the search show location, date, description, and contact information for each conference.

Meeting organizers may search for potential clashes in dates and offer a direct registration link from the VetAgenda listing.

VetContact is able to provide the free service through sponsorship from several major veterinary companies. ☙

DVM Student Mitchell Wins Research Scholarship

The Comparative Gastroenterology Society awarded 2nd-year student **Amanda Mitchell** the CGS Veterinary Student Summer Research Scholar Award.

The program provides a 12-week, hands-on research experience with a selected mentor–in Mitchell's case, Dr. **Jacqui Whittemore**. Their project will be "Comparison of operator judgment and impedance measurements for Veress needle placement."

The emphasis of the program is to expose students to gastrointestinal research and to give them an opportunity to gather hands-on experience. Only one winner was selected from the applicants. ☙

UTCVM Investigators Bring in Over $275,000 for Sponsored Projects Since Dec.

Title	PI	Agency	Start date	Type	$ Amount
A protocol evaluating a methodology to reduce leakage of amniotic fluid after premature rupture of the fetal membrane	HS Adair	Glenveigh Research	1/1/10	Yr 1/1	56,547
Spinosad dog study	MW Bohling	Eli Lilly	2/12/10	1/1	96,578
P-type ATPases, insulin signaling, protein trafficking	MS Dhar	American Diabetes Association	1/1/10	1/1	45,000
Treatment of alopecia X in Pomeranians with progesterone	LA Frank	Pomeranian Charitable Trust	3/1/10	1/1	2,916
COTC007a: Preclinical comparison of 3 indenoisoquinoline candidates in tumor-bearing dogs: A pilot study of Topotecan in dogs with lymphoma	JC Phillips	NIH	1/1/10	1/1	44,445
New staging techniques & evaluation of therapies for oral squamous cell	M Cekanova	Winn Feline Foundation	2/18/10	1/1	15,000
Polyprenyl immunostimulant for the treatment of the dry form of FIP	A Legendre	Winn Feline Foundation	2/18/10	1/1	14,825

Publications cont. from p. 2

Elliott SB, Geor RJ, Boston RC. Measurement of C-peptide concentrations and responses to somatostatin, glucose infusion, and insulin resistance in horses. *Equine Vet J* 2010;42:149–155.

Tóth F, Frank N, Geor RJ, Boston RC. Effects of pretreatment with dexamethasone or levothyroxine sodium on endotoxin-induced alterations in glucose and insulin dynamics in horses. *Am J Vet Res* 2010;71:60–68.

Yarbrough J, Greenacre C, Souza M, Cox S. LC Determination of tramadol, M1, M2, M4, and M5 in plasma. *Chromatographia* 2010;71:523–527.

Zemel MB, Sun X, Sobhani T, **Wilson B**. Effects of dairy compared with soy on oxidative and inflammatory stress in overweight and obese subjects. *Am J Clin Nutr* 2010;91:16–22. ☙

Equine Abstract Earns Travel Award for Tadros

Dr. **Lisa Tadros** (seen below), PhD student in the Comparative and Experimental Medicine program, received a travel award to present her abstract at the American Association of Equine Practitioners Foundation Equine Laminitis Workshop, part of the Fifth International Equine Conference on Laminitis and Diseases of the Foot held in West Palm Beach, Florida, in November.

She was in the company of the world's leading experts on that debilitating equine disease. ☙

Recent Presentations

Baek SJ. Molecular targets of NSAIDs in a COX-independent manner. Oral presentation at: 12th International Winter Eicosanoid Conference; March 7–10, 2010; Baltimore, Maryland.

Hecht S. Basic abdominal ultrasound; Basic abdominal ultrasound for technicians; Advanced abdominal ultrasound. Instruction presented at: 82nd Annual Western Veterinary Conference; January 15–16, 2010; Las Vegas, Nevada.

Kennedy M. The view on vaccines. Invited presentation at: North American Veterinary Conference; January 2010; Orlando, Florida.

Lane I, Sims M, Howell N, Bailey M, Brace J. Improving curriculum delivery by improving faculty teaching: A program for faculty development and dialogue. Poster presentation at: American Association of Veterinary Medical Colleges Annual Meeting; March 2010; Alexandria, Virginia.

Lane IF, Bogue G. Perspectives of veterinary faculty regarding their responsibility and preparation to teach nontechnical competencies. Poster presentation at: American Association of Veterinary Medical Colleges Annual Meeting; March 2010; Alexandria, Virginia.

Lane IF. Assessment of non-technical competencies. Oral presentation at: American Association of Veterinary Medical Colleges Annual Meeting; March 2010; Alexandria, Virginia.

Prado T. Female reproductive surgeries (bovine/equine) short course and wet lab. Invited presentation at: Asociación Panameña de Medicos Veterinarios; December 28–30, 2009; Anton, Panama.

Weisent J. Comparison of three time series models for predicting campylobacteriosis risk in Georgia, Minnesota and Oregon. Presentation at: 14th International Congress on Infectious Diseases; March 2010; Miami, Florida.

Kudos to Breickner for ACVP Honor

Dr. **Leisl Breickner**, resident in the Pathobiology Department, was honored at the December American College of Veterinary Pathologists annual conference in Monterey, CA, with a Charles Louis Davis Foundation Student Scholarship Award. Each year, veterinary schools with pathology residency programs have the option of nominating one resident from both the anatomic and clinical pathology residency programs combined. At UTCVM, both the anatomic and clinical pathology faculty vote on the nomination.

Phi Zeta 2010 Inductees

The University of Tennessee chapter of the veterinary medicine honor society Phi Zeta recently inducted 24 new members:

UTCVM Class of 2010	*Class of 2011*	*Residents*
Rosalie Mae Atkins	Amber Alesse	Chad Andrews, DVM
Jennifer Bernard	Margaret Anderson	Cheris Clement, DVM
Nimet Browne	Andrea Carlomagno	April Durant, DVM
Martha Cline	Christina Chan	Ricardo Videla, MV
R. Reid Harvey	Heather Garland	***Faculty***
Virginia Kiefer	Lindsay Harper	Agricola Odoi, BVM, MSc, PhD
Jessica Kruckeberg	Ashley Miller	***Honorary***
Elizabeth Lewis	Emily Murr	Maria Cekanova, PhD
Kathryn Wibking	Greta Schmoyer	

VOS Travel Award to Tóth

Mark S. Bloomberg Resident Research Awards are given each year to residents submitting excellent abstracts to the Veterinary Orthopedic Society Conference. One of this year's recipients is Dr. **Ferenc Tóth**, resident in the Large Animal Clinical Sciences Department.

His presentation on "Compressive damage to the deep branch of the lateral plantar nerve associated with lameness caused by proximal suspensory desmitis in horses" was one of only seven selected for the honor.

The conference was held in Breckenridge, Colorado, in February.

Cekanova Invited to Attend Cancer Research Imaging Camp

Research Assistant Professor Dr. **Maria Cekanova,** from the Small Animal Clinical Sciences Department, has been invited by the National Cancer Institute, in partnership with the American Association for Cancer Research, to attend the Cancer Research Imaging Camp held at Washington University in St. Louis this June.

This special intensive course focuses on in vivo and live cell imaging techniques and is for early career scientists in fields related to basic cancer biology. When selecting applicants, preference was shown to those integrating imaging modalities into their research. Leaders in the field of imaging will present lectures and conduct hands-on laboratories for selected participants, who will present a 5-minute synopsis of their current research at the camp.

Cekanova's research involves evaluation of newly synthesized, radio- and fluorescently-labeled, non-steroidal anti-inflammatory drugs as imaging tracers in dogs and cats with naturally occurring tumors overexpressing COX-2 in vivo, and evaluation of these tracers in primarily canine, feline, and human cancer cells in vitro. This research is based on Cekanova's new collaboration with Dr. Larry Marnett (Vanderbilt University) and with Drs. Jonathan Wall and George Kabalka (UT Medical Center, Knoxville).

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