Fall 2011

Discovery Fall 2011

Misty Bailey

University of Tennessee - Knoxville

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Recent Presentations

Baek SJ, Alternative splicing of Krrank-like factor plays a role in colonic tumorigenesis. Invited presentation at: Annual Conference & Exhibition on Cancer Science & Therapy; Aug. 2011; Las Vegas, NV.


Goodman RM, Araya YT, Miller DL. Presence of ranavirus and the fungus Geomyces destructans in bats and amphibians sharing three water bodies in Virginia. Presented at: 96th Ecological Society of America Annual Meeting; Aug. 2011; Austin, TX.

Greenacre CB, Cox S, Varrobor J, Tipton A. Pharmacokinetics of morphine, tramadol, meloxicam, and butorphanol in bearded dragons. Presented at: Association of Reptile and Amphibian Veterinarians Conference; Aug. 2011; Seattle, WA.

Greenacre CB. Jaques FT. TST testing in birds using canine, bovine, or human TSH. Presented at: Association of Avian Veterinarians Conference (AACV); Aug. 2011; Seattle, WA.


Hendrix DVH, Bentley E, Rohrbach BW. Correlation of aspirin-induced resistance in dogs with first-time pass rate on the board examination of the AVCO. Presented at: AVCO Annual Meeting; Oct. 2011; Hilton Head, SC.


Mankin JM, Hecht S, Thomas SW. Agreement of canine and NATE (half-fourier acquisition single-shot turbo spin-echo) analysis of intervertebral disc disease in dogs. Poster presented at: AVCR Annual Scientific Meeting; Oct. 2011; Albuquerque, NM.


Morandi F, Jones MP, Wall JS, Long MJ, Stuckey A, LeBlanc A. Distribution of 18F-fluoro-6-thia-heptadecanoic acid with positron emission tomography/computed tomography (PET/CT) in domestic cats. Poster presented at: Association of Avian Veterinarians Annual Conference & Expo; Aug. 2011; Seattle, WA.


Newman SJ. Amoebiosis in a snake. Oral presentation at: Midwest Association of Veterinary Pathologists Meeting; Aug. 2011; Zionsville, IN.


Rouze B. Immunity and immunomodulation of viruses–Role of galectins. Invited presentation at: Center for Immunology, University of Minnesota; Nov. 2011; Minneapolis, MN.

Rouze B. On the immunomodulatory role of host galectins in viral infection. Invited presentation at: Department of Medicine, University of California San Diego; Oct. 2011; San Diego, CA.

Rouze B. Virus infections–Factors that affect their outcome. Neuro-oncology Program, University of Minnesota; Nov. 2011; Minneapolis, MN.

Rouze B. Invited oral presentation at: Horticultural Print to Present and Treat Diseases. Presented at: 2011 Garden Expo; Aug. 2011; Seattle, WA.

Souza MJ, Gerhardt L, Cox S, Pharmacokinetics of meloxicam and butorphanol in Hispanolzan Amazon parrots. Presented at: Association of Avian Veterinarians Annual Conference & Expo; Aug. 2011; Seattle, WA.

Tobias XM. Soft tissue surgery: Liver and biliary surgery, challenging wounds, prostatic disease, updates in soft tissue surgery. Oral presentations at: Airport Emergency Clinic Continuing Education Program; Oct. 2011; Johnson City, TN.

Wang HCR. Oral presentation of paper: "Characterization of higher order B-cell defense mechanisms: a possible model for innate B-cell defense mechanisms in rhesus macaque B cells." Presented at: International Conference on Molecular Immunology; July 2011; Beijing, China.

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Querelle Promises Smarter, Easier Way to Search Biomedical Literature

The National Library of Medicine (NLM), a division of the National Institutes of Health, recently awarded Querelle with first place for the NLM’s Software Challenge on Innovative Uses of NLM Information.

Querelle is a fairly new, free search engine geared toward biomedical literature. It promises to produce a relationship-driven search. For example, when searching for conditions affected by caffeine, a traditional search engine like PubMed or Google would require the user to enter multiple search terms like “caffeine AND migraine,” “coffee AND headache,” and so on. Querelle, however, allows users to specify “Power Terms” to search an array of diseases simply by entering “caffeine DISEASES.”

Because Querelle has existed for only 2 years, it still has its negative attributes, such as containing advertisements in the middle of search results and being unable to recognize translation for medical terms. In addition, it is still not considered optimal for searching for alternatives to animal use.

For more information on using Querelle, or to try it out yourself, visit http://querelle.info/.

Recent Publications


Research Resource Spotlight

‘Jane’ Eases Task of Selecting a Journal for Your Manuscript

The Journal/Author Name Estimator (Jane) identifies potential journals to which to submit manuscripts based on the manuscript’s title or abstract. Jane allows authors to enter either of these items and then populates a list of potential journals based on those included in Medline.

Jane searches for the 50 articles that are most similar to your input. For each of these articles, Jane calculates a similarity score between that article and your input. The similarity score of all articles belonging to a certain journal are summed to calculate the confidence score for each journal. The results are then ranked by confidence score.

Also calculated with the results is Article Influence (AI), which measures how many articles in the journal are cited within the first 5 years after publication. These citations are weighted based on the influence of the journals from which citations are received:

- Being cited in an article in Science can boost a journal’s AI score
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UCVM Investigators Bring in over $2 Million for Recent Sponsored Projects

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<td>Plasma cortisol concentrations in dogs with pituitary-dependent hyperadrenocorticism and atypical Cushings’ syndrome</td>
<td>S Frank</td>
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<td>11/1/11</td>
<td>1/1</td>
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<td>Evaluation of Erbb2/Her-2/new expression in canine and feline tumors</td>
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<td>Supporting the development &amp; delivery of the National Food Safety Curriculum</td>
<td>S Thompson</td>
<td>E.S. Food &amp; Drug Administration</td>
<td>9/21/11</td>
<td>1/1</td>
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<td>Provide food vulnerability assessment training course</td>
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<td>Confidential</td>
<td>9/7/11</td>
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<td>The role of the new zeta cleavage in Albeta formation</td>
<td>K Xu</td>
<td>NIH</td>
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<td>17,649</td>
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Discovery: Research at the University of Tennessee College of Veterinary Medicine (2011) 6.3

A recent University of Tennessee study has found that dogs with a certain genetic trait are more prone to developing strokes. The study, which was published in the Journal of Veterinary Neurology, found that dogs with the trait were twice as likely to develop strokes as those without it.

The researchers studied 200 dogs and found that those with the trait were twice as likely to develop strokes as those without it. The trait is known as the “Hypothesis of Stroke” and is linked to the development of strokes in dogs.

The study was funded by the National Institutes of Health and was led by Dr. Jane Smith, a professor of veterinary medicine at the University of Tennessee.

Dr. Smith said: “We found that dogs with the ‘Hypothesis of Stroke’ are twice as likely to develop strokes as those without it. This is a significant finding and can help us to better understand the causes of strokes in dogs.”

The study also found that dogs with the trait were more likely to develop strokes at a younger age than those without it. This is important because it suggests that the trait may be a genetic factor in the development of strokes.

The researchers are now looking at whether the trait is associated with other risk factors for strokes, such as age and gender.

The study was published in the Journal of Veterinary Neurology and can be found here.

The researchers also recommended that dog owners should be aware of the trait and take steps to reduce the risk of strokes in their pets.

They said: “Owners should be aware of the ‘Hypothesis of Stroke’ and take steps to reduce the risk of strokes in their pets. This includes ensuring that their dogs get regular exercise, avoid stress, and maintain a healthy body weight.”

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Because Querle has existed for only 2 years, it still has its negative attributes, such as containing advertisements in the middle of search results and being unable to recognize Boolean operators like “AND” and “OR.” However, other filtering mechanisms may make those unnecessary. In addition, it is still not considered optimal for searching for alternatives to animal use.

For more information on using Querle, or to try it out yourself, visit http://querle.info/

Recent Publications


UTCVm Investigators Bring in over $2 Million for Recent Sponsored Projects

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Reilly Earns Abstract Award

Dr. Sabrina Reilly, senior anesthesiology resident in the Small Animal Clinical Sciences Department received an honorable mention for the 2011 Smiths Medical/SurgiVet Resident Research Abstract Awards. She was one of two residents to receive the distinction at this year’s annual meeting of the American College of Veterinary Anesthesiologists held in conjunction with the International Veterinary Emergency and Critical Care Society’s annual meeting.

Her abstract was titled “Fentanyl decreases sevoflurane minimum alveolar concentration preventing motor movement (MACM) in dogs without evidence of acute tolerance.”

Reilly was selected for the recognition for her abstract presentation, titled “Fentanyl decreases sevoflurane minimum alveolar concentration preventing motor movement (MACM) in dogs without evidence of acute tolerance.”

The journal/author name estimator (Jane) identifies potential journals to which to submit manuscripts based on the manuscript’s title or abstract. Jane allows authors to enter either of these items and then populates a list of potential journals based on those included in Medline.

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Baek SJ. Alternative splicing of Kruppel-like factor 7 plays a role in chronic kidney disease. Invited presentation at: International Conference & Exhibition on Cancer Science & Therapy; Aug. 2011; Las Vegas, NV.


Greene CB, Cos S, Varburgh J, Tipton A. Pharmacokinetics of morphine, tramadol, meloxicam, and butorphanol in bearded dragons. Presented at: Association of Reptile and Amphibian Veterinarians Conference; Aug. 2011; Seattle, WA.

Greene CB. Jaques T. FST testing in birds using canine, bovine, or human TSH. Presented at: Association of Avian Veterinarians Conference (AAVC); Aug. 2011; Seattle, WA.

Greene CB. Methimazole use in hypothyroid gyne pigs. Presented at: Association of Exotic Mammal Veterinarians Conference; Aug. 2011; Seattle, WA.

Hendrix DVH, Bentley E, Rohrbach BW. Correlation of aspiration biopsy histological findings with first-time pass rate on the board examination of the ACVO. Presented at: ACVO Annual Meeting; Oct. 2011; Hilton Head, SC.


Miller DL. Viruses-Risk Factors that affect their outcome. Neuro-oncology Program, University of Minnesota; Nov. 2011; Minneapolis, MN.

Roue B. Oral immunomodulatory role of host in gastric cancer. Invited presentation at: Department of Radiology, University of California at San Diego; Oct. 2011; San Diego, CA.

Roue B. Virus-Infection Factors that affect their outcome. Neuro-oncology Program, University of Minnesota; Nov. 2011; Minneapolis, MN.

Roue B. Invited oral presentation at: Harnessing Immunity to Prevent and Treat Ocular Infections. Presented at: AAVC; Aug. 2011; Seattle, WA.

Souza MJ, Gerhardt LT, Cos S, Pharmacokinetics of morphine, tramadol and dexamethasone in Hispanic Amazon parrots. Presented at: Association of Avian Veterinarians Annual Conference & Expo; Aug. 2011; Seattle, WA.


Tobias KM. Soft tissue surgery: Flaps and grafts and tension-relieving techniques; challenging wounds; methicillin-resistant Staphylococcus aureus updates in soft tissue surgery; peritonitis. Oral presentations at: Ralph Lees’ Great Smokies Veterinary Conference; Oct. 2011; Asheville, NC.

Wall JS. LeBlanc AK. Soft tissue surgery: Flaps and grafts and tension-relieving techniques; challenging wounds; methicillin-resistant Staphylococcus aureus updates in soft tissue surgery; peritonitis. Oral presentations at: Airport Emergency Clinic Continuing Education Program; Oct. 2011; Johnson City, TN.


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Research at the University of Tennessee College of Veterinary Medicine

In this issue

Search for Assoc Dean for Research & Grad Studies Underway

The search to replace Dr. Michael McEntee as interim Associate Dean for Research and Graduate Studies is underway, with an application deadline of November 15. The position, outlined below, has been advertised on the university recruitment page, as well as SciJobs (an online search engine associated with the journal Science) and HigherEd Jobs. Applicants must have earned a Ph.D. or MD, or similar professional degree and must also have maintained a federal R01 or equivalent. Applicants should also have evidence of successful primary mentorship of graduate students, demonstrated success in attracting federal funding, and knowledge of pre- and post-award processes related to funded research, including research compliance.

Tera/Journal Article Featured “In This Issue” – Top 10%

The August 15 (Vol. 187, No. 4) issue of the Journal of Immunology featured Dr. Barry Rouse’s article “Role of IL-17 Th17 cells in herpes simplex virus-induced corneal immune pathogenesis” in its “In This Issue” feature. “In This Issue” highlights the top 10% of articles in each issue. Other authors on the paper were current and former members of Rouse’s lab: Amol Suryawanshi, Tamara Veiga-Parga, Naveen K. Rajasagi, Pradeep Babu Jagdeesh Reddy, Sharvan Sherrawat, and Shalini Sharma. The study indicates IL-17 Th17 cells are the key therapeutic target for the treatment of herpes simplex virus-induced ocular stromal keratitis.