Discovery Winter 2012

Misty Bailey

University of Tennessee - Knoxville

Follow this and additional works at: https://trace.tennessee.edu/utk_discovery

Part of the Animal Sciences Commons

Recommended Citation


This Newsletter is brought to you for free and open access by the Veterinary Medicine – Other Materials (Newsletters, Reports, Etc.) at TRACE: Tennessee Research and Creative Exchange. It has been accepted for inclusion in Discovery Research Newsletter by an authorized administrator of TRACE: Tennessee Research and Creative Exchange. For more information, please contact trace@utk.edu.
Recent Presentations


Chen S, Sandersen M, Lanzas C. Modeling temporal patterns of Escherichia coli O157ecal shedding in cattle. Poster presented at: Epidemics3, 3rd International Conference on Infectious Disease Dynamics; December 2011; Boston, MA.

Craig LE, Reed A. Cartilage lesions of the canine humeral head. Presented at: 62nd Annual Meeting of the American College of Veterinary Pathologists; December 2011; Nashville, TN.

Dhar M, Stem cells, cloning and rats. Poster and oral presentation at: American College of Veterinary Pathologists Annual Conference; December 2011; Boston, MA.

Dharm M. Stem cells, cloning and regenerative medicine. Invited presentation at: Preprofessional Science Forum, South College; December 2011; Knoxville, TN.


Jankovsky J, Newkirk K, Ilha M, Newman SJ. COX-2 and c-kit expression in canine glioma. Poster presented at: American College of Veterinary Pathologists Meeting; December 2011; Nashville, TN.

Lanzas C. Clostridium difficile transmission dynamics and control at the hospital. Invited presentation at: International Workshop on Antibiotics-Resistant Infections: Mathematical Modeling, Transmission Dynamics and Control; December 2011; Miami, FL.


Lanzas C. Dubberke ER, Gröhn YT. Modeling the effects of screening and applying contact precautions for asymptomatic Clostridium difficile carriers in healthcare settings. Poster presented at: Epidemics3, 3rd International Conference on Infectious Disease Dynamics; December 2011; Boston, MA.


Miller DL. Amphibian diseases and pathology. Presented at: Exotics Symposium; January 2012; Knoxville, TN.

Miller DL, Gerhold R. Wildlife neoplasia. Workshop presented at: Exotics Symposium; January 2012; Knoxville, TN.

Newkirk K, McLean N. Brucella-associated phacoanatomic uveitis and endophthalmitis in a dog. Ocular Pathology Mystery Slides. Presented at: American College of Veterinary Pathologists Annual Conference; December 2011; Nashville, TN.

Rouse BT. On the good and bad side of host galectin in viral infections. Invited seminar at: Scripps Research Institute; February 2012; La Jolla, CA; at Emory University; January 2012; Atlanta, GA; at University of California Irvine; February 2012; Irvine, CA.

Tobias KM, van Amstel S. Modified perineal urethrostomy in the goat: a case series. Presented at: American College of Veterinary Surgeons Annual Symposium; November 2011; Chicago, IL.

Volkova V, Lanzas C, Lu Z, Gröhn YT. Effect of bacterial antimicrobial treatment on dissemination of plasmid-mediated antimicrobial resistance in enteric commensal bacteria of the host. Poster presented at: Epidemics3, 3rd International Conference on Infectious Disease Dynamics; December 2011; Boston, MA.

Wall J, Martin EB, Richey TA, Stuckey A, Osborne D, Kennel SJ. Stable and rapid binding of 124I-labeled peptide p5 to visceral amyloid in vivo as evidenced by dynamic PET imaging, Poster and oral presentation at: 2011 World Molecular Imaging Congress; September 2011; San Diego, CA.

In this Issue

p1 – re-publishing published images, TERA/PAMS accuracy; Roberson honor; p2 – Brian award, publications; p3 – Statistics resources, Crews & Jankovsky accolades, Martin honor, grant submission policies, externally-funded awards; p4 – presentations

Re-publishing a Published Image (Even if You Created It)

Q: “I can reuse that graph I created for my article in JAVMA, right?” A: Yes and no. Most journals ask that authors sign a copyright transfer agreement before an article is published. Once that is filed, the author no longer has the right to re-publish a graph or other image that has been published. Instead, permission must be given by the publisher.

Q: “I have to get permission to use my own creation? What a hassle!” A: Most publishers make the process simple, easy, and fast. Below is some information about the most common practices.

When an article is online, a “request permissions” link is usually found associated with each article. Some publishers generate their own permissions requests, but most large publishers use Rightlink, a service from the Copyright Clearance Center that often provides immediate written permission after a request is made by answering a series of short questions. To use Rightlink, users must create a free account. If a fee is charged (rarely) for reuse, a price estimate is provided.

Many publishers are also signatories to the International Association of Scientific, Technical & Medical Publishers’ Permissions Guidelines (http://www.stm-assoc.org/permissions/guidelines/#). Those that opt out of receiving express permissions requests (including Elsevier, Wiley, and Nature) give automatic permission for reuse of a small amount of material: up to three figures or 400 words from a specific article. But remember, if you’re unsure, request permission.

These same steps can be taken to request permission to re-use an image created by someone else. Remember to give proper credit in all instances of reuse, and that’s all there is to it!

Check Your Funding Record in TERA/PAMS

In 2011, the new TERA/PAMS proposal system went live. Not only must investigators use this electronic system in place of the paper routing form, but they should also be pro-active in checking their funding records to ensure accuracy between the previous database and the new one.

The system itself may be accessed at https://utia.tera.tennessee.edu/ramses/, and a link is also included on the UTCVM Research Web site.

To check your awards, after signing into the TERA/PAMS main page, select “My Awards” in the “Award Dashboard” box. To check submitted proposals, select “My Proposals” in the “Proposal Dashboard” box.

Verify both active and inactive awards, paying particular attention to begin and end dates and amounts.

If something is missing or erroneous, contact Tammy Berry.
Brian Research Honored by Pfizer Animal Health

Dr. David Brian, professor in Biomedical and Diagnostic Sciences, was one of the recipients of the 2011 Pfizer Animal Health Award for Research Excellence. The award recognizes researchers whose innovative studies have advanced the scientific understanding of animal health.

Brian’s research focuses on coronavirus, which can cause diseases of the respiratory tract of mammals and birds, including farm animals and pets. But the virus’s most obvious clinical manifestation is its association with common cold and SARS in humans.

When cells are infected with coronavirus, the virus hijacks the cells’ ability to build their own proteins in favor of virus proteins. For years, scientists assumed that this hijacking process involved a “cap” site. This cap is a special tag at the end of an mRNA molecule where the virus enters. However, the coronavirus also seems to have a cap-independent mechanism, otherwise known as an internal entry site.

Brian has been working to characterize this entry site and determine if the virus could “steal” the “intracellular” receptors between cap-dependent and cap-independent entry. More knowledge of this riboswitch will help scientists to design strategies to exploit the regulation of the riboswitch in coronavirus-infected cells, and thus develop ways to treat diseases caused by the virus in animals and humans alike.

Recent Publications


Veiga-Farga T, Suryawanshi A, Rousseau BT. Viral antflu immunoinflammatory lesions by modulating aryl hydrocarbon receptors and TLIR. Mol Pathog 2011;100:2427.


Yarbrough J, Harvey R, Cox S, Sehrawat S, Dr. Jonathan Wall from the UT Graduate School of Medicine, was also an author on the poster, entitled “Stable and rapid binding of 124-labeled peptide p5 to viscous amyloid in vivo as evidenced by dynamic PET imaging.” Full details are available in the “Presentations” section of this newsletter.

E S C E M Student Martin Recognized for Imaging Research

Emily Martin, PhD student in Comparative and Experimental Medicine, was a finalist in the poster session E wall-through at the 2011 World Molecular Imaging Congress in San Diego, CA. As a finalist, she gave a brief presentation about the research to judges and well-known experts in the field.

Martin’s mentor, Dr. Jonathan Wall from the UT Graduate School of Medicine, was also an author on the poster, entitled “Stable and rapid binding of 124-labeled peptide p5 to viscous amyloid in vivo as evidenced by dynamic PET imaging.” Full details are available in the ‘Presentations’ section of this newsletter.

Submitting a Grant? Negotiating a Contract?

As always, all grants and contracts MUST go through the Office of Research (Tammy Berry) for approval. UT and UTCVM policy prohibits submitting from submitting such proposals/agreements on their own. These documents actually represent agreements between the university and the external entity, which cannot be made by individual faculty or staff members.

Grant applications MUST be received by the Office of Research for review at least 5 days before the due date, according to previously-published requirements posted at http://www.vet.utk.edu/grants.

UTCVM Investigators Bring in $730,699 for Recent Sponsored Projects

<table>
<thead>
<tr>
<th>Title</th>
<th>PI Team</th>
<th>Agency</th>
<th>Start</th>
<th>Type</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment of female canine urinary incontinence</td>
<td>Bartges</td>
<td>UCB</td>
<td>2/15</td>
<td>2/3</td>
<td>10,481</td>
</tr>
<tr>
<td>Detection of EGFR and HER2 expression in equine squamous cell carcinomas</td>
<td>Newkirk</td>
<td>Morris Animal Foundation</td>
<td>1/1/12</td>
<td>1/1</td>
<td>3,056</td>
</tr>
<tr>
<td>Mechanisms in herpetic keratitis</td>
<td>Rouse</td>
<td>NIH</td>
<td>1/1/12</td>
<td>1/2</td>
<td>301,871</td>
</tr>
<tr>
<td>T-Regulatory cells in HSV immunity and immunopathology</td>
<td>Rouse</td>
<td>NIH</td>
<td>2/1/12</td>
<td>1/4</td>
<td>355,690</td>
</tr>
<tr>
<td>Evaluation of a terfinbine-impregnated, suctaneous implant for the treatment of Geonnycinx destruxin-infected rats</td>
<td>Ouza</td>
<td>Barbour (Bertens) Foundation</td>
<td>1/11</td>
<td>1/2</td>
<td>25,000</td>
</tr>
<tr>
<td>Terrestrial mammal health</td>
<td>Souza</td>
<td>TWA</td>
<td>1/11/12</td>
<td>1/5</td>
<td>11,001</td>
</tr>
<tr>
<td>Effectiveness of small interfering RNA (siRNA) to inhibit feline coronavirus replication</td>
<td>Wilkes</td>
<td>Winn Feline Foundation</td>
<td>1/1/12</td>
<td>1/2</td>
<td>23,600</td>
</tr>
</tbody>
</table>

Discovery: Research at the University of Tennessee College of Veterinary Medicine (2012) 7.1
Brian Research Honored by Pfizer Animal Health

Dr. David Brian, professor in Biomedical and Diagnostic Sciences, was one of the recipients of the 2011 Pfizer Animal Health Award for Research Excellence. The award recognizes researchers whose innovative studies have advanced the scientific understanding of veterinary medicine. Brian’s research focuses on coronavirus, which can cause diseases of the respiratory tract of mammals and birds, including farm animals and pets. The virus most obviously causes disease in fungi, but its ability to infect tissues in between cap-dependent and cap-independent entry. More information on this riboswitch type is expected to be published in the next issue of the journal.

Recent Publications


Recent Presentations


Chen S, Sanderson M, Lanzas C. Modeling temporal patterns of Escherichia coli O157 fecal shedding in cattle. Poster presented at: Epidemics3, 3rd International Conference on Infectious Disease Dynamics; December 2011; Boston, MA.

Craig LE, Reed A. Cartilage lesions of the canine humeral head. Presented at: 62nd Annual Meeting of the American College of Veterinary Pathologists; December 2011; Knoxville, TN.

Dhar M. Stem cells, cloning and regenerative medicine. Invited presentation at: Preprofessional Science Forum, South College; December 2011; Knoxville, TN.


Lammers B, Jennings TL, Robl N, Bugman AM, jeune J, Sanderson M. Modeling feral cat population dynamics in Knox County, TN. Presented at: Conference of Infectious Disease Annual Meeting; December 2011; Chicago, IL.

Miller DL, Gerhold R. Wildlife neurology. Workshop presented at: Exotics Symposium; January 2012; Knoxville, TN.

Newkirk K, McLean N. Brucella-associated phacoanesthetic uveitis and endophthalmitis in a dog. Ocular Pathology Mystery Slides. Presented at: American College of Veterinary Pathologists Annual Conference; December 2011; Nashville, TN.

Rouse BT. On the good and bad side of host galectin in viral infections. Invited seminar at: Scripps Research Institute; February 2012; La Jolla, CA; at Emory University; January 2012; Atlanta, GA; and at University of California Irvine; February 2012; Irvine, CA.

Tobias KM, van Amstel S. Modified perineal urethrostomy in the goat: a case series. Presented at: American College of Veterinary Surgeons Annual Symposium; November 2011; Nashville, TN.

Volkova V, Lanzas C, Lu Z, Gröhn YT. Effect of bacterial antimicrobial treatment on dissemination of plasmid-mediated antimicrobial resistance in enteric commensal bacteria of the host. Poster presented at: Epidemics3, 3rd International Conference on Infectious Disease Dynamics; December 2011; Boston, MA.

Wall J, Martín EB, Richey TA, Stuckey A, Osborne D, Kennel SJ. Stable and rapid binding of 1244-labeled peptide 53 to visceral amyloid in vivo as evidenced by dynamic PET imaging. Poster and oral presentation at: 2011 World Molecular Imaging Congress; September 2011; San Diego, CA.

Check Your Funding Record in TERA/PAMS

In 2011, the new TERA/PAMS proposal system went live. Not only must investigators use this electronic system in place of the paper routing form, but they should also be pro-active in checking their funding records to ensure accuracy between the previous database and the new one.

The system itself may be accessed at https://utia.tera.tennessee.edu/terapams/, and a link is also included on the UTCVM Research Work site.

To check your awards, after signing into the TERA/PAMS main page, select “My Awards” in the "Award Dashboard" box. To check submitted proposals, select “My Proposals” in the “Proposal Dashboard” box.

Verify both active and inactive awards, paying particular attention to begin and end dates and amounts. If something is missing or erroneous, contact Tammy Berry.