**NEWS and MEDIA**

OVC projects awarded Zoetis Investment in Innovation funds

Dr. Nicole DeFraeye, with Zoetis, congratulates OVC researchers who submitted successful proposals.

A project with **Drs. Brandon Lillie**, Pathobiology, and Luis Arroyo, Clinical Studies, will focus on Equine Herpesvirus-1 (EHV-1). The goal is to better understand how this virus exists in the horse population, what factors contribute to the virus causing disease, and ultimately attempt to determine novel approaches to maximize the efficacy of current vaccines and minimize the impact of EHV on the health of horses. >> [Read Full Article]

MORE NEWS: | [OVC NEWS](#) | [OVC BULLETIN](#) | [U of G Campus News](#) |

**CONGRATULATIONS**

- **Dr. Patrick Boerlin** for his recent funding from JPIAMR; a multi-nation effort. He will lead a project for 2.1 million dollars for work on genomic approaches to cephalosporin resistance and his lab will receive around 20% of that amount.

- **Dr. Scott Weese** for his successful international collaborative award also from JPIAMR for 550k to study antimicrobial resistance in companion animals.

- **Dr. Brandon Lillie** for his successful ACVP/STP award of 125k for an anatomic pathology fellowship. This was a highly competitive process based in part on the quality of our training program and an excellent candidate, Dr. Karen Carlton OVC 2016, will begin in May.

- **Pauline Zhang** has won the "Outstanding Graduate Student Presentation" from the American College of Veterinary Microbiologists at the Conference of Research Workers in Animal Diseases (CRWAD) in Chicago in December 2016.

**Bacti-Art Voting Results (see Jan Pathobiologist).** Background: Vickie Shen, our summer student started with the turtle plate and then a contest followed between Vickie, Pauline Zhang, Ashley Cormier (flower), and Gabhan Chalmers (Olympic rings)

- 1st WOLF by Vickie Shen
- 2nd DOLPHIN by Pauline Zhang

[ABOVE PHOTO (LEFT TO RIGHT): Dr. Brandon Lillie, Dr. Nicole DeFraeye and Dr. Luis Arroyo.]

**CHAIR’S NOTES**

I will be away on administrative leave from Feb 1 to Mar 31.

Jan MacInnes will be Acting Chair for this period. Please give her the same support that you have given me. I will be out of contact sporadically during this period and may not respond immediately to email (it doesn’t work well underwater).

Cheers John
Expression of Kidney Injury Molecule-1 in Healthy and Diseased Feline Kidney Tissue
S. K. Bland, C. W. Schmiedt, M. E. Clark, J. DeLay, and D. Bienzle | Veterinary Pathology

Abstract
Sensitive markers to detect acute kidney injury (AKI) in cats are lacking. Kidney injury molecule-1 (KIM-1) is a promising marker of acute tubular injury in humans, and sequence and structure of feline KIM-1 have been determined. KIM-1 is shed into urine of cats with natural AKI. The objectives of this study were to characterize temporal and cellular expression of KIM-1 in kidneys from cats without and with experimental and natural AKI using histopathology and immunohistochemistry. Tissue sections from 8 cats without kidney disease, 3 to 4 cats with experimentally induced AKI on each day 1, 3, 6, and 12 after unilateral ischemia/reperfusion, and 9 cats with natural AKI were assessed. In sections from cats without kidney disease, patterns of periodic acid-Schiff and aquaporin-1 staining allowed identification of 3 distinct segments of the proximal tubule. KIM-1 staining was absent in segments 1 (S1) and S2, and faint in S3. Injury of S3 in cats with experimental and natural AKI was characterized by cell loss and necrosis, and remaining intact cells had cytoplasmic blebs and reduced brush borders. In experimental AKI, intensity of KIM-1 expression increased in proportion to the severity of injury and was consistently present in S3 but only transiently in other segments. Vimentin was absent in proximal tubules of healthy cats but expressed in injured S3. These findings indicate that S3 is the proximal tubular segment most susceptible to ischemic injury and that KIM-1 is a sensitive tissue indicator of AKI in cats.

>> Go to PubMed Publication

IMPORTANT DATES
Feb 27  Advisory Committee Form and Graduate Degree Form due for S17 registration.
Mar 10 Last day to drop one semester course
Jan 30 - Feb 17 Graduation applications— avoid late fees
If you are planning on finishing your program in W17 - Please apply to graduate in WebAdvisor. If for whatever reason and you don't finish you will be moved to the next convocation date. But if you are planning to finish by the end of April 2017, just make sure that you do apply to Graduate.

EVENTS
Feb 10  Pathobiology Graduate Student Social 6-10 pm Grad Lounge (5th floor of the UC). There will be free food provided and it’s just an event to meet fellow students, relax and de-stress. Funded by the Student Life Enhancement Fund
RESEARCH HIGHLIGHT

Development of a vaccine to protect against Toxoplasma gondii infection in sheep

We aim to develop recombinant ORFV and adenovirus vectors expressing protective antigens from *T. gondii* and to evaluate immunogenicity and protective efficacy of a prime-boost vaccination strategy in sheep. We anticipate that immunized sheep will develop a robust immune response against *T. gondii* leading to a reduction in tissue cysts and protection against congenital infection.

**Collaborators:**
Dr. Karen Shapiro, University of California Davis
Dr. Paula Menzies, Ontario Veterinary College
Dr. Byram Bridle, Pathobiology

**HEALTH & SAFETY**

Campus-wide Hazardous Waste Disposal Campaign
February 27 – March 10, 2017

- Do you have questions regarding chemical/hazardous waste disposal?
- Do you need assistance with disposal of your hazardous waste and old chemicals in your lab?
- Do you want to learn how to responsibly and safely manage chemicals and hazardous waste in your lab?

If you answered YES to any of the above questions, this information session is for you!

All participants will receive a "Goody Bag"

This session is intended to raise awareness on proper disposal of chemicals in a safe, efficient and environmentally friendly manner. This information session introduces participants to key elements of Hazardous Waste Management: regulatory requirements, hazardous waste determination, safe handling and storage, treatment of waste, after it leaves your lab and more..... Registration for a session can be done through the EHS registration system.

>> register for course

**READ YOUR UoG Email DAILY:** This is how the Department of Pathobiology and other Departments of the University of Guelph contacts you.

**MAILBOX:** Pick up your mail on a daily or weekly bases. If you are not here, please make arrangements to have your mail picked up for you.

**MOVING?** Let the Graduate Student Office know.

**PLEASE** refrain from wearing any and all fragrance to work, as there are people in our Department that are extremely sensitive.

Donna Kangas Ext. 54725
Graduate Program Assistant - GPA
Population Medicine Building, Bldg #174
Pathobiology ovcsas.gradpath@uoguelph.ca
dkangas@uoguelph.ca

Please make sure that you get all the signatures before submitting to the Graduate Program Assistant Donna Kangas will get the signature from the Graduate Coordinator. You can submit your forms in an envelope in Donna’s mailbox on the third floor in Pathobiology. They will be picked up once a day.

**REMINDERS**

If you are planning on taking a Leave of Absence, make sure that you let us know to stop your payments.

Protect your passwords: Be aware of attempts to get your personal information. No one from the University will ask you to provide your login and password in an email. Go to the IT Security website for information on the latest scams.
PATHOBIOL OGY SEMINARS

Seminars will take place at 11:30 am in PAHL room 1810

Feb 3  Jose Perez-Casal  
“Mycoplasma research at VIDO-InterVac”  
Host: J. Caswell

Feb 10 Alex Leveille  
“If at first you don’t succeed... Optimizing molecular analyses and genome sequencing with examples from the Apicomplexa”  
Host: J. Barta

Mar 3 Jon David de Jong  
“Development of baculovirus CRISPR vector for gene and cell therapy”  
Host: S. Wootton

Mar 10 Shawn Babiuk  
“The development of lumpy skin disease virus multivalent vaccine for sheep and goat pox, peste des petits ruminants and Rift Valley fever.”  
Host: S. Wootton

OTHER EVENTS

Feb 7  2017 Winegard Lecture  
>> details  
Dr. Homa Hoodfar, Concordia University  
“Captiveity in Infamous Tehran “Prison 5:30 to 7 p.m. in Rozanski Hall, Room 103

Feb 7  CCSAW Welfare Seminar  
>> details  
“Creating and Housing the Modern Hen” and “Bringing Science to the Layman”  
PAHL Rm 1800 12:30 pm

Feb 7  NAVC Conference  
>> details  
Lake Eola B, Hilton Orlando, Florida

Feb 11  OVC Family and Friends Day  
1:30-3:30 pm

Feb 12  Population Medicine Seminar  
>> details  
Food from Thought: Agricultural Systems for a Healthy Planet 3:30 pm LLC Rm 1714

Feb 14  Happy Valentine’s Day  
to everyone!

Feb 22  OVC Winter Convocation  
Call for Volunteers >> details  
1 pm War Memorial Hall

PHRN SEMINARS

Feb 10  Dr. Tyler Whale, President, Ontario Agri-Food Technologies  
Agri-Tech: Ontario’s opportunities beyond Food and Feed  
12:30pm PAHL Rm 1800

Mar 7  Dr. Mike Joyce, Poultry Veterinarian  
Vet Consulting Services, Ontario 12:30pm

DEPARTMENT REMINDERS

Meeting rooms in the Pathobiology building are well used. If you have reserved a room only to find out that you no longer need the space, please cancel your booking as someone else may be looking for a room to use at that time.

Contact Nathalie  
- newsletter submissions  
- OVC website updates  
- research posters  
- research websites  
- teaching rooms and resources