NEWS and MEDIA

Probiotics against pathogens in poultry
Over the last decade, Dr Shayan Sharif’s lab at the University of Guelph has been involved in developing probiotic formulations against Salmonella. > All About Feed

Immune response may combat parasites in sheep
OVC graduate student Emma Borkowski is working with OVC Prof. Andrew Peregrine, along with several other professors from the Ontario Veterinary College, the Ontario Agricultural College and the Department of Animal Biosciences, to investigate how sheep pastured under Ontario’s climate develop immunity to parasites. > OVC Bulletin

Exploring the Equine Microbiome
“Studying the equine intestinal microbiome is important because horses are hindgut fermenters,” says Scott Weese. “Changes in the microbiome can result in diseases such as colic, colitis, and laminitis, which are leading causes of morbidity and mortality in horses.” > The Horse

Prof Using Pets to Track Ticks
“Right now Lyme disease and ticks are mostly found along the north shore of Lake Ontario, but this area is expanding,” said U of G pathobiology professor Scott Weese, who developed the online tool. “If we can track where the ticks are, then we can get a better handle on where Lyme disease risk is because where the ticks move, the disease moves.” > OVC Bulletin

OVC professors honoured for research excellence
Dr. Shayan Sharif, in OVC’s Department of Pathobiology, has received a Research Leadership Chair. “The awards recognize both researchers who are embarking on stellar careers and those whose research successes already set them apart from their colleagues in their disciplines globally,” said Malcolm Campbell, vice-president (research) in University of Guelph news release. > OVC Bulletin

CONGRATULATIONS

Prof. Dorothee Bienzle was elected by the American College of Veterinary Pathologists to the office of President-Elect, 2018.

Prof. Byram Bridle was one of fifteen members of the Canadian Oncolytic Virus Consortium (COVCo), which had its funding renewed by the Terry Fox Research Institute for the next five years.

Jamie Rothenburger won Best Poster and Shannon French received Honorable Mention for her poster at the 2017 Wildlife Disease Association Annual International Conference in San Cristobal de las Casas, Chiapas, Mexico.

Congratulations to Mankerat Singh who won the award for the best undergraduate student presentation at the Summit for Cancer Immunotherapy that was held in Gatineau, Quebec, June 25-28. Mani was co- advised by Drs. Khalil Karimi and Byram Bridle. His poster was entitled “Differentiating dendritic cells in the presence of interleukin-4 to enhance their potential as vaccines”.

Congratulations to Ashley Ross, who received a prestigious Vanier Scholarship. She is beginning her PhD program in September and will be co-advised by Drs. Byram Bridle and Sarah Wootton.
**RECENT PUBLICATIONS**

**Acute Leukemia in Horses.** Cooper CJ, Keller SM, Arrayo LG, Hewson J, Kenney D, Bienzle D. | PubMed

**Amplified visual immunosensor integrated with nanzyme for ultrasensitive detection of avian influenza virus.** Ahmed, S.R., Corredor, J.C., Nagy, É, Neethirajan, S. | Nanotheranostics

**Bovine WC1+ and WC1neg γδ T Lymphocytes Influence Monocyte Differentiation and Monocyte-Derived Dendritic Cell Maturation during In Vitro Mycobacterium avium subspecies paratuberculosis Infection.** Baquero MM, Plattner BL. | PubMed

**Foreign gene expression and induction of antibody response by recombinant fowl adenovirus-9-based vectors with exogenous promoters.** Ackford, J.G., Corredor, J.C., Pei, Y., Krell, P.J., Bédécarrats, G., and Nagy, É. | PubMed

**Metabolic reprogramming in the tumour microenvironment: a hallmark shared by cancer cells and T lymphocytes.** Allison KE, Coomber BL, Bridle BW. | PubMed

**Outbreak of parasitic pneumonia in a herd of beef cattle** Jan Shapiro, Andrew Peregrine, Jeff Caswell | AHL Sep 2017 Newsletter

**Prevalence of lapine rotavirus, astrovirus, and hepatitis E virus in Canadian domestic rabbit populations.** Xie, X.T., Bil, J., Shantz, E., Hammermueller, J., Nagy, É., Turner, P.V. | Veterinary Microbiology

**Public Health Follow-up of Suspected Exposure to Echinococcus multilocularis in Southwestern Ontario.** Trotz-Williams LA, Mercer NJ, Walters JM, Wallace D, Gottstein B, Osterman-Lind E, Boggild AK, Peregrine AS. | PubMed

**Recent advances in biosensor development for foodborne virus detection.** Neethirajan, S., Ahmed, S.R., Chand, R., Buozis, J., Nagy, É. | Nanotheranostics


**Self-assembled star-shaped chiroplasmonic gold nanoparticles for ultrasensitive chiro-immunosensor of viruses.** Ahmed, S.R., Nagy, É, Neethirajan, S. | Royal Society of Chemistry

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**GRADUATE STUDENT DEFENSES (contd)**

**Sep 8**  
Wendy Xiao Ting Xie, MSc PhD Final Defense  
9 am PAHL Rm 1810 (presentation) Rm 4838 (examination)  
**Thesis Title:** “Characterization of the Fecal Virome and Fecal Virus Shedding Patterns of Commercial Mink (Neovison vison)”

**Sep 8**  
Diego Gomex Nieto, DVSc PhD Final Defense  
1:30 pm PAHL Rm 1812 (presentation)  
Rm 4838 (examination)  
**Thesis Title:** “Investigations in calf diarrhea: bovine coronaviruses, intestinal microbiota, and antimicrobial usage.”

**Sep 18**  
Pauline Zhang, MSc PhD Final Defense  
9 am PAHL Rm 1810 (presentation) Rm 3826 (examination)  
**Thesis Title:** “Resistance to extended-Spectrum Cephalosporin resistances in chickens, dogs and pigs in Canada”

Graduate seminars — see upcoming events

**IMPORTANT DATES**

**Sep 15**  
Tuition payments are due if paid yourself. Avoid late fees.

**Oct 10**  
Graduating Winter 2017 application due.
REGISTRATION (2 parts)
If you have not registered, please do so soon.

Part I: Register in UNI*7500—RESEARCH and WRITING plus and UNIV*7510- Active Full-time Student or UNIV*7520 Part-time Student. Also register for your courses

Part II: General Settlement” on WebAdvisor. This is if you are being paid by payroll. If you have any questions, please ask the Graduate Program Assistant.

GRADUATING INFORMATION
GRAD STUDENTS AND FACULTY - Final defense forms must be received by the Graduate Program Assistant / Graduate Coordinator at least 8 weeks prior to the date proposed for the defense.

Sep 6 Last day to submit approved thesis for Fall 2017 Convocation

Please make sure that you get all the signatures from your committee members before submitting your semester report 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. It is advised that you have a committee meeting every semester.

REMINDERS

READ YOUR UoG Email DAILY: This is how the Department of Pathobiology and other Departments of the University of Guelph contacts you. Contact CSS 58888 if you encounter email issues. If you are not receiving emails from your department, contact your GPA.

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.

SCAMS: Go to the IT Security website for information on the latest scams.

MAILBOX: Pick up your mail on a daily or weekly basis.

MOVING? Let Donna Kangas know.

Send all email request to Donna Kangas to pathgrad@uoguelph.ca

Donna Kangas Ext. 54725
Graduate Program Assistant - GPA
Population Medicine Building, Bldg #174
Pathobiology donna.kangas1@uoguelph.ca
dkangas@uoguelph.ca

RESEARCH HIGHLIGHT

High Immunity Research Technology
A Broad Based Approach to Disease Resistance in Commercial Swine Herds

ABOUT Pork is big business for Canadian producers, both domestically and internationally. In Canada, it is the second-most consumed meat. Globally, Canadian pork is exported to more than 100 countries and it is consumed throughout the world more than any other source of protein. Managing disease in pig populations is one of the most costly and difficult challenges for pork producers.

Short Project Description and Project Goals
Since the HIR technology can identify food-producing animals with increased capacity for immune response, and subsequently increased disease resistance, its implementation and integration into pig breeding programs is timely.

It is expected that commercial adoption of this technology in the swine industry will lead to improvements in health and productivity by enhancing general resistance to recurring and newly emerging infectious disease, as exemplified in commercial dairy production. This approach will also complement more agent-specific approaches such as vaccination, while reducing reliance on high risk health management strategies, including the use of antibiotics and breeding for pathogen-specific host resistance.

This study, headed by Postdoctoral fellow Dr. Julie Schmied seeks to test the HIR technology in approximately 3600 commercial pigs. IR-phenotyping results will be correlated with herd health and production traits. Additionally, DNA samples will be used to derive useful genomic information associated with immunity.

> View Research Poster

New IT Security Initiative
Blocking additional file types in email starting August 17

In a continued effort to increase security, decrease risk to the University, and follow security best practices, the Information Security team will be updating email attachment filtering beginning on August 17. Specifically, they will begin blocking a number of potentially dangerous file types inbound to all University mailboxes.

For future reference, the list of blocked file types is available on the CCS website.
PATHOBIOLOGY SEMINARS
Seminars will take place at **11:30 am**
in PAHL room **1810**

**Sep 15**  Megan Whaley (tentative)
Topic: TBC  
Host: B. Bridle

**Sep 22**  Abbie Viscardi  
Topic: TBC  
Host: J. MacInnes

**Sep 29**  Rob Mould (tentative)  
Topic: TBC  
Host: B. Bridle

**Oct 6**  Gabriella Mallia  
Topic: TBC  
Host: S. Weese

WELCOME PIZZA LUNCH
**SEP 28 12-1 pm Rm 1800**
Please bring your advisor/ supervisor with you to introduce you to the department. Be prepared to tell us about yourself and your graduate work or the project you will be working on. Everyone is welcome.

PATHOBIOLOGY EVENTS

**Sep 28**  Pizza Lunch 12-1 Rm 1800

U of G EVENTS
**Sep 6**  Community Breakfast 8:30 - 10 am  
Athletics Centre

Thank you Pathobiology! This summer’s three Ice Cream Sundae Day events raised almost $600 for the United Way. Thank you to John Lumsden for donating all of the ice cream, toppings and supplies needed to make this event possible.

This year’s fire drills will begin on Monday, **September 18, 2017** and will continue throughout the month and into the beginning of October (if needed)

NEWS from OVC Centres and More
- OVC Bulletin
- Campbell Centre for Animal Welfare
- Centre for Cardiovascular Investigations
- Centre for Public Health and Zoonoses
- Equine Guelph
- Institute for Comparative Cancer Investigations
- OAHN
- OVC Pet Trust
- Poultry Health Research Network
- B4uGetaPet
- Worms and Germs

GRANT OPPORTUNITIES
- **EXTERNAL**
  - Proposals Invited for 2017-2018 Quebec-Ontario Cooperation for Agri-Food Research Competition: Deadline for Letter of Intent: Sep 20 at 4 pm
  - Morris Animal Foundation Announces Call for Wildlife/Exotics Proposal: Deadline: Nov 15 at 11:50 pm
  - 2017 Zoetis Investment in Innovation fund: A total of $100,000 in funding is available to proposals received from the five Canadian veterinary colleges. Follow link to application form Deadline: Oct 20,
  - Grayson-Jockey Club Research Foundation is accepting proposals on the soundness and health of horses. Deadline: Oct 2 at 5. p.m.

DEPARTMENT REMINDERS and NOTICES

Please remember that all new employees and students are required to complete the **New Employee or Student Safety Orientation Checklist** which includes the three mandatory courses: WHMIS, Laboratory Safety and Worker Health and Safety Awareness Training. Please submit signed checklist to Marni - paper or electronic is acceptable.

You may have noticed that there were shelves installed outside the lab hallways on the third and fourth floors; these shelves are intended to hold your drinks while you go into the lab but are not meant to keep empty cups or garbage of any kind. Please help to keep these shelves clean and available for everyone to use.

Britta Knight and Boris Lee welcomed **Jakob Lee** on May 15th, weighing 7 lbs 1 oz.

Russell Fraser and Sonya Rae welcomed **Felix** on June 28 and he weighed 7 lbs 5 oz.

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

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