

CALL FOR ABSTRACTS

2018 University of Guelph Swine Research Day

Creelman Hall, University of Guelph, Guelph, Ontario, Canada

Wednesday, May 16, 2018

Graduate Student Abstract Competition and General Abstract Submission

ABSTRACT SUBMISSION GUIDELINES AND SPECIFICATIONS

We welcome abstracts focused on **all issues** related to swine, including (but not limited to) food safety, animal welfare and behaviour, zoonoses, health management and disease, epidemiology, economics, immunology, microbiology, genetics, nutrition, reproduction, pharmacology, pathology, housing, manure management, etc.

The focus of this meeting is knowledge translation and transfer (KTT). The target audience consists of leaders and consultants in the pork industry as well as members of the University of Guelph.

Please word your abstracts accordingly so you can deliver your research and message to the target audience.

Student Abstract Competition:

In recognition of the Centralia Swine Research Update (CSRU) the **University of Guelph Swine Research Day** is once again pleased to host a graduate student oral and poster competition called: **The CSRU Graduate Student Competition**. We are now accepting abstracts from graduate students registered at the University of Guelph for consideration for the student oral or poster competition. Students may submit more than one abstract but must indicate which abstract is to be considered for the competition. Additional student abstracts will be included in the general abstract session.

A scientific committee will review the submitted student abstracts and judge them based on scientific merit, writing clarity, and on the likelihood that the work will make a significant contribution to pork production. Abstracts will be selected for either the student oral presentation competition or the student poster presentation competition. Awards will be given for the best student oral and the best student poster presentations. Enrolment (part-time or full-time) in a graduate program at the University of Guelph is required to be eligible for the student awards. Post-doctoral fellows are ineligible.

General Abstract Session:

We are accepting other UofG swine-focused research abstracts for inclusion in the general poster session.

Abstract Deadlines and Notification Schedule:

Deadline for all abstract submissions:

Wednesday April 4, 2018 by 11:59 pm EST (deadline is firm)

Authors of abstracts chosen for the student competitions will be notified mid-April 2018.

Submit abstract(s) to Karen Richardson with

**“UofG Swine Research Day Abstract Submission” in the subject line
and students please indicate your program, department, and advisor**

krichard@uoguelph.ca

ABSTRACT GENERAL SPECIFICATIONS (for student competition and general abstracts):

- **Abstracts must adhere to the following specifications or they may be rejected. Please carefully read these specifications and refer to the example abstract provided below**
- Abstracts must not exceed one page and must be submitted in word processing format (i.e. MS Word .doc)
- Title should clearly identify the contents of abstract, size 12 font Times New Roman, and bolded. No line space between title line and author line
- Authors should be indicated by First Name, Initial(s), Last Name, degree(s).
 - Please indicate the presenting author by underlining
 - Author names to be size 11 font Times New Roman
 - No line space between author names and author affiliations
- Author affiliations to be size 10 font Times New Roman
- One line space between last author affiliation line and body of abstract
- Body of abstract to be size 11 font minimum Times New Roman, single spaced, one column right and left justified, 1 inch margins at top and bottom, 0.75 inch margins left and right.
- Abstract must be divided into the following parts:
 - Introduction / Methods / Results / Conclusions / Industry Implications / Acknowledgments / References
 - One line space between each section
 - References may be truncated
- Images are NOT accepted
- Tables are permitted (within the one page limit) and minimum of size 11 font Times New Roman
- Each student may (and are encouraged to) submit multiple abstracts but must **indicate only one abstract for the competition**

ABSTRACT EXAMPLE AND FURTHER QUESTIONS:

Please refer to the abstract example provided below.

If you have any further questions regarding abstract submissions please email
Karen Richardson, Department of Population Medicine:

krichard@uoguelph.ca

with “UofG Swine Research Day Abstract Question” in the subject line.

Microbiological analysis of swine tonsils collected from carcasses at slaughter

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Introduction: The difficulty of sampling swine tonsils ante-mortem makes collection at the time of slaughter an obvious alternative for disease monitoring purposes. (1) The funnelling of large number of animals during the slaughter process also provides an opportunity to sample a wide range of animals and animal sources on one premise. The objectives of this 7-month study were to determine the prevalence of porcine pathogens of the tonsil of the soft palate at slaughter, to determine if sampling normal or abnormal hog carcasses provides different microbiological profiles, and to determine if the slaughter plant provides

Methods: Twenty (20) tonsil samples were collected every week for 20 consecutive weeks, June to December 2008, from swine carcasses at a federally inspected abattoir in southern Ontario, Canada. The sampling was performed by experienced abattoir staff during normal slaughter operations. Microbiological analyses of the tonsils were conducted by the Animal Health Laboratory (AHL) at the University of Guelph, Guelph, Ontario. Testing included The relationship between finding a pathogen from pigs on the hold rail (abnormal carcasses) vs. normal carcasses was examined by logistic regression. A generalized mixed model using farm as a random intercept was utilized to determine whether there was any clustering at the farm level.

Results: A total of 395 samples were collected of which 180 were tonsils from normal carcasses and 215 from carcasses that were on the hold rail. 264 different farms were represented and no clustering occurred at the farm level. Most commonly isolated bacterial pathogens included: *S. suis* (53.7%), *A. pyogenes* (29.9%), *P. multocida* (27.3%), and *S. porcinus* (19.5%). PRRS virus and PCV-2 were identified in 22.0% and 11.9% of the samples respectively. Tonsils had 2 times greater odds (OR=2.16, CI 1.44-3.24) if sampled from the holdrail vs. normal carcasses. Similarly, tonsils had an 8 (OR= 8.79, CI 4.24-18.23) and 7 (OR=7.51, CI 2.89-19.54) times greater odds of being positive for *S. porcinus* and *Staph hyicus* respectively, if collected from the hold rail vs. normal carcasses. However

Conclusions: The sampling frame and sampling method proved to be an efficacious way to collect swine tonsil tissue. Accurate tissue recovery occurred (99.7%), the sampling protocol was not technically challenging, and plant production was minimally affected during the sampling periods. Tissue collection during the slaughter process was a superior method of tonsil tissue collection compared to reports of ante mortem techniques where only 48.9% of samples were correctly obtained by tonsil biopsy methods (1). Interestingly.....

Industry Implications: Highlight the important information/message that your research brings to the swine industry.....

Acknowledgments: Funding provided by.....

References:

1. Bierk MD, et al. J Swine Health Prod. 2000(8):279-282.