OMAFRA – U of G Partnership KTT Funding Program - Approved Projects 2015/'16

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Successful Projects 2015/'16

Ralph Martin - Inclusive inquiries of production and consumption conundrums for emerging policies to improve food systems in Ontario

Executive Summary:

Conundrums related to potential agriculture and food policies often entail entrenched positions which restrict our ability to solve pressing food system problems related to economic viability, the environment and population health. Our key objective is to identify new solutions to pressing food system problems.

The project will include two workshops in August and October 2017, addressing the question: "What are the policy options for the agri-food sector to meet public social license expectations and to produce adequate, healthy food to address food security needs, while adapting to climate change?".

About 24 people representing different parts of the agri-food sector will attend each workshop. The workshop format will be a Circle protocol in plenary and small groups, to discuss the overall question and to probe values and insights of participants. After the first two workshops, they will attend industry meetings and reconvene in March 2018 to assess understanding and communication possibilities in their sectors.

We expect new ongoing working relationships leading to creative, profitable and sustainable policies and practices. Participants and their contacts will have options to contribute to our developing webpage on the basis of respect for different approaches and interests and an eye for creative resolutions, not yet recognized.

Derek Haley - Veterinarians creating change using a Focus Farms approach to the delivery of animal care dairy assessments programs

Executive Summary:

This study examines veterinarians using a Focus Farms (FF) approach to engage dairy farmers and motivate on-farm changes to improve dairy cattle welfare. We are interested in the role of veterinarians in this process, as facilitators of peer-to-peer learning among their clients.

NEED: The mandatory quality assurance program proAction includes an animal care assessment (i.e., welfare audit). Veterinarians will be coaching their clients to ensure they exceed the standards set and, undoubtedly, to motivate them to strive for continuous improvement in animal care. This has always been the role of veterinarians, however, now in a new context (under a mandatory program) there is a greater need to ensure successful transfer of knowledge on how to improve animal care.

METHODS: This study will use a series of FF meetings organized by veterinarians, to facilitate peer-to-peer learning among their dairy clients. A pre- and post-survey methodology will be used to evaluate the efficacy/impact of FF.

EXPECTED OUTCOMES: Our study will determine whether FF meetings improve the knowledge, attitudes and behaviour of farmers on animal welfare, whether FF meetings change how veterinarians approach consulting with their clients, and whether improvements in animal welfare result.

Claudia Wagner-Riddle - Establishing an interpretive centre and outreach initiatives to disseminate research on soil health and ecosystem services

Executive Summary:

Producers are increasingly interested in better management practices that will improve soil health and reduce the environmental impact of practices. The proposed KTT activities will capitalize on a long-term soil lysimeter infrastructure to be installed at the Elora research station, unique in North America, with a focus on the environmental impact of diverse vs. non-diverse cropping systems.

Knowledge translation and transfer tools will include:

- 1. Establishment of an interpretive centre to disseminate research results;
- 2. Hosting farmer-focus groups; and
- 3. Media and web-based initiatives

We aim to increase the awareness of research conducted on soil ecosystem services, and to increase the public knowledge about how diverse cropping influences soil health, water and air quality, and crop productivity. The lysimeter infrastructure will have real-time monitoring of soil processes and data which will be converted into user-friendly charts and displayed via TV screens at the Interpretive Centre. The Ontario Soil and Crop Improvement Association will be active on Twitter and Instagram to deliver information directly to followers (i.e., farmers, general public, and other environmental researchers).

Terri O'Sullivan - Advancing swine research KTT: A pilot study to develop, implement, and evaluate an Ontario Swine Research KTT Network

Executive Summary:

A KTT project to develop, implement, and evaluate an "Ontario Swine Research KTT Network" (OSRN) is proposed.

OBJECTIVES: To enhance and improve the timeliness and accuracy of KTT related to UofG swine research results (and activities) to end-users. To be accomplished through the utilization of multiple communication modalities (website, podcasts/webinars, conferences) and networking opportunities between researchers and key end-users including industry representatives such as swine producers, Ontario Pork, veterinarians, and other researchers. Such communications and networking will enable researchers and industry end-users to establish connections with each other and encourage the promotion of multidisciplinary research collaborations to address and identify provincial and national swine industry issues.

Activities include:

 Annual UofG Swine Conference to translate and transfer swine research results/activities to industry through (oral & poster) presentations made by UofG swine researchers, graduate students, and keynote-speakers;

- 2. Seminars/webinars presenting current swine research findings aimed towards the end-user;
- 3. Development and maintenance of an OSRN website for the further exchange of research findings, podcasts, events, and research news;
- 4. Evaluation of the KTT effectiveness using survey instruments and focus group sessions to seek opinions of network users; and
- 5. Establish a sustainable OSRN and associated website for ongoing KTT

Angela Canovas - Accelerating the translation and transformation of research knowledge in genetics to enhance innovation in Canada's beef and sheep industries

Executive Summary:

Beef and sheep producers often make breeding decisions without current knowledge of the science, existing systems and tools that they can use on farm to benefit from this research. Taken in isolation, a research finding can be confusing and lack any meaningful connection to the real world of production in which producers make decisions. Thus, producers require more concise, layman's terms presentation of the benefits of implementing change in their businesses, as well as a more clearly defined stepwise approach they can take to implement that change.

In order to translate and transfer the research knowledge associated to genetics, this project involves three components:

- 1. A series of videos demonstrating real life benefit of using the results of research;
- 2. Two field days at the Elora Beef Research Centre; and
- An internship opportunity for senior students in Animal Science program at the University of Guelph.

This project will provide a whole new level of unity of message across relevant organizations as well (University of Guelph, OMAFRA, producer and service organizations) which is key to affecting change necessary to enhance and accelerate innovation in Canada's beef and sheep industries.

Wayne Caldwell - Growing resilient communities through collaborative knowledge transfer and translation

Executive Summary:

This KTT project will disseminate information gathered from the Measuring Farmland Loss (MFL-030044) research project. The main goal of this project was to document the loss of farmland, create a methodology and develop a toolkit that regions/counties can use to accurately measure the amount of farmland converted to non-farm land uses. Fieldwork and draft reports have been completed for regions/counties within the Greenbelt Area. In total, reports for eight counties/regions have been completed.

This proposed project will host workshops with the farming community to disseminate results of the MFL study, including the amount of farmland lost, locational trends and impacts of official plan policies on agricultural viability. In sharing the amount of farmland lost, in particular, these workshops will permit the sharing of information related to coping strategies farmers have undertaken to mitigate against the impacts of farmland loss and the encroachment of urban land uses. We will also hold

workshops with the planning community, policies makers and other stakeholders to disseminate the knowledge generated through the farmer workshops. This project will result in a mutual sharing of knowledge related to farmland loss, agricultural resiliency and rural/land use policy development.

Zvonimir Poljak - An evidence based medicine pilot project focusing on the swine veterinary community and Influenza A viruses of swine

Executive Summary:

The project applies tools of evidence based medicine (EBM) to the body of research on Influenza A Virus of swine (IAV-S). With unprecedented support of the American Association of Swine Veterinarians (AASV), its 1300 members (across 40 countries) will be surveyed for first time collection of baseline preferences for sourcing and accessing research information and for keeping technically up to date. Results will guide future knowledge translation strategies.

Next, a scoping review will be completed to sort and categorize all available research on IAV-S and to identify candidate interventions for systematic review. One or more systematic reviews (and meta-analyses if possible) will be completed on interventions (i.e. vaccination, diagnostics) to quantify intervention efficacies, and to identify research inefficiencies with respect to gaps in the body of evidence, unnecessary variation in study design, and poor reporting. Industry stakeholders will be provided with appropriate and accessible interpretations of the body of IAV-S research evidence through peer reviewed publications, conference presentations, generation of one-page plain language summaries and one or more work-shops with key groups of swine veterinarians and selected stakeholders. There is a dearth of synthesis work on swine health research. This work has not previously been done.