

Project Title	Overview	Research category (Choose the most appropriate)
Understanding Ethnic Markets Opportunities for Veal, Goat, Lamb and Rabbit	The objective of this project is to acquire information that will enhance the knowledge of ethnic consumer's preferred product attributes, to gain a greater understanding as to how ethno-cultural consumers wish to access these products and to recommend a marketing strategy to the industry.	Industry Business Development
Develop genetic selection program for dairy ewes in Quebec.	Implement a genetic selection program tailored to the dairy ewe sector. This goal can be achieved by integrating precise measures of the real components of dairy ewes (fat, protein, and quantity of milk produced per ewe). By evaluating these parameters accurately, it will be possible to establish the actual lactation curve of ewes, as well as to identify ways to improve economic impact characteristics and create dairy selection indices for reproductive subjects in this sector.	Production Efficiency

Premium BC Lamb	To develop a lamb grading system that will include a quality assurance program, traceability and branding for Premium BC Lamb.	Industry Business Development
Viability & Sustainability project	Another industry collaborative initiative undertaking a series of projects (Marketing, Predation Modules; SheepBytes Business Case; PFM Video series) that will transfer information on research and technology focused on recharging the industry. This project builds on previous projects "Building Better Lambs"/"Building Better Businesses" / "Precision Flock Management".	Industry Business Development
Creation of the first DNA bank for dairy sheep and collection of additional data needed for the development of GenOvis - dairy sheep	Deal with unexpected problems by adjusting programming with regard to the Valacta data capture system and the transfer of data between this system and the GenOvis and Bergere systems, and create the first DNA bank for dairy sheep.	Genetics

Alternative feeds	<p>This applied research project is working to provide a better understanding of the production efficiency of using various alternative feeds for lambs; economic efficiency of using various alternative feeds for lambs, and the effect of using various alternative feeds for lambs on meat quality.</p> <p>Completed phase I; starting phase II which is producer's stress testing the model shortly</p>	Production Efficiency
Preliminary investigation into ewe feed efficiency	<p>To give shepherds information on feed use and efficiency of ewe of varying mature body size. Shepherds need to know what impact breeding for small, medium or large fram ewes has on overall farm feed use and efficiency.</p>	Production Efficiency

<p>Maedi-Visna in Sheep and Potential Interaction with <i>Mycobacterium avium</i> spp. <i>Paratuberculosis</i></p>	<p>This project will investigate the prevalence of MVV (Maedi Visna Virus) and MAP (the causative agent of Johne's disease) co-infection in Ontario sheep flocks, and will investigate how MVV and MAP infection and co-infection alters the host immune response. A clear understanding of the host immune response to these pathogens and how these two pathogens interact is necessary for development of vaccines and treatment therapies, improved diagnostic testing, and genetic selection for enhanced disease resistance. Consequently, this study as an applied research project will contribute to the development of new strategies to combat economic losses associated with MVV and MAP infections. Knowledge gained from this study will also highlight the importance of on-farm applications of innovative health management strategies that exist to reduce the incidence of disease.</p>	<p>Animal Health</p>
<p>Creation of tools for veterinary practitioners, grouping relevant up-to-date information on extra-label drug use (ELDU), which is a routine practice in the treatment or prevention of sheep diseases.</p>	<p>Draw up a list of the drugs that are not registered but are routinely used in sheep production, conduct a literature review on these drugs, check the list that is drawn up and the information obtained with the organization CgFARAD, and use the document to take steps to initiate the process leading toward the registration of the most widely used drugs.</p>	<p>Animal Health</p>

Development of Master Shepherd Program	To develop a Master Shepherd Education Program for commercially-minded lamb producers wishing to expand their production and business management skill base. The project scope will include the development of the educational material and the initial delivery (pilot).	Industry Business Development
Seasonally anestrous ewes bred to a novel estrus synchronization protocol for timed AI	To examine a novel synchronization breeding protocol for sheep. Test the efficacy of the synchronization protocol for timed AI.	Production Efficiency

<p>Economic simulation of strategies for out-of-season breeding in sheep</p>	<p>Show the economic importance of the effectiveness of out-of-season breeding for sheep farm profitability and compare the financial performance of the three out-of-season breeding techniques available to Quebec sheep producers, taking into account the different production structures that exist in the province.</p>	<p>Production Efficiency</p>
<p>Project investigating causes of abortions, stillbirths and deaths in newborn in sheep and goats</p>	<p>The Food Safety and Animal Health Division of Alberta Agriculture and Rural Development with participation of Alberta veterinarians is continuing the project launched in 2013 to identify causes of abortions and stillbirths in does and ewes and mortality in lambs and kids less than 10 days old.</p>	<p>Animal Health</p>
<p>Development of a new semen extender specific to sheep</p>	<p>To modernize the semen storage protocols for AI based on the specific techniques for sheep successfully used elsewhere, including New Zealand.</p>	<p>Production Efficiency</p>

<p>Harmonization of the marketing of the three categories of lambs and establishment of a reference tool for calculating an objective selling price for heavy lambs</p>	<p>Unlike the case for heavy lambs, marketing of milk-fed and light lamb is not regulated and is characterized by widely varying volumes and prices. Consequently, the FPAMQ has initiated this project in order to:</p> <ul style="list-style-type: none"> - Prepare a portrait and an assessment of the market and of marketing for each lamb category. - Propose an objective price setting methodology for lamb in Quebec, based on relevant reference markets. 	<p>Industry Business Development</p>
<p>Evaluating the health of Saskatchewan sheep</p>	<p>The purpose of this study is to</p> <ol style="list-style-type: none"> 1. Evaluate the current animal and flock-level seroprevalence of MV, JD and BVD in the Saskatchewan sheep population, and 2. Identify flock-level predictors of these diseases, e.g. management practices, which will help inform industry and to use as input into future disease control initiatives pertaining to the Saskatchewan flock. 	<p>Animal Health</p>
<p>Predicting Feeder Lamb Performance - validation of SheepBytes feeding recommendation</p>	<p>SheepBytes is a web-based ration formulating software program developed for Canadian sheep producers. It uses the 2007 NRC as well as dynamic variables included environment and animal body condition. The accuracy of the predicted versus actual dry matter intake and average daily gain will be evaluated at two locations over two years. GrowSafe systems and RFID tags are used to monitor individual feed intake. Lamb performance, carcass quality and ration cost will be evaluated.</p>	<p>Production Efficiency</p>

Benchmarking Canadian Lamb Carcass and Meat Quality through the use of innovative platform technologies	Evaluation of current carcass assessment (GR, conformation) to establish benchmarks for lamb quality; evaluate potential of new technologies in fine tuning carcass evaluation (DEXA, NIRS), new information for producers and processors for use in improving carcass consistency and quality.	Meat Quality
Analysis of work efficiency on sheep farms in Quebec	Analyze the efficiency of work on sheep farms, build a reference base for various farm profiles, and prepare an annual portrait of the time devoted to various interventions on sheep farms in Quebec.	Production Efficiency

<p>Upgrading carcass quality indicators and genetic improvement tools to enhance the quality of marketed products and increase work efficiency</p>	<p>Upgrade carcass quality indicators and genetic improvement tools to enhance the quality of marketed products and increase the efficiency of producers.</p>	<p>Production Efficiency</p>
<p>Effect of targeted selective deworming at lambing on <i>Haemonchus</i> burdens on Ontario sheep farms with anthelmintic resistance</p>	<p>To determine the efficacy of closantel against ivermectin- and fenbendazole-resistant <i>Haemonchus</i> in sheep. Also, to determine if selective treatment of ewes at lambing with closantel has the same impact on farm parasite burdens as whole flock treatment with closantel at that time.</p>	<p>Animal Health</p>

<p>Prevalence and strain identification of <i>Coxiella burnetii</i> on dairy goat farms and in associated wildlife</p>	<p>Recent research found a high prevalence of infection with <i>Coxiella burnetii</i> in both sheep and goat farms and in the people who care for them. U of Guelph wished to determine if wildlife found on-farm may harbour infection and act as a potential reservoir.</p>	<p>Animal Health</p>
<p>Selection of barley silage varieties based on in vitro neutral detergent fiber (NDF) digestibility of on farm silage samples</p>	<p>Differences exist between barley varieties such as fibre digestibility, which can effect feed intake and performance of animals. Barley silage samples were collected from producers across AB and SK over 2012-13, and from those samples three varieties were selected as high, intermediate, and low digestible varieties to be grown and fed as silage using lambs as ruminant models. The objective was to determine the effect that feeding an ensiled barley variety with increased in vitro NDF digestibility will have on digestibility, rumen environment, lamb performance, intake, and carcass characteristics of lambs. Barley silage was fed to lambs in both a digestibility trial and growth trial in a mixed diet containing a pelleted concentrate supplement.</p>	<p>Production Efficiency</p>

Price Predictability	<p>This project is designed to build a price predictability tool for the Ontario sheep industry – from producers to retailers. This resource will provide much needed decision-making information in light of significant increases in price volatility within Ontario’s sheep sector and will act as a market risk mitigation tool.</p> <p>Completed phase I; starting phase II which is producer's stress testing the model shortly</p>	Industry Business Development
Experimental validation of a foreign transcervical artificial insemination technique in ewes and analysis of its efficiency in Quebec sheep flocks	Compare fertility results of ewes laparoscopically inseminated with the results of those inseminated using the RamGo technique during a trial conducted at the CEPOQ experimental farm and analyze the potential of the RamGo technique and its application in Quebec.	Production Efficiency

<p>Increasing perinatal survival in PEI sheep flocks</p>	<p>The ultimate goal of this research is to enhance the profitability and diversity of sheep production systems in PEI, so as to take advantage of seasonal markets and the high demand for local product.</p>	<p>Animal Health</p>
<p>Reducing the impact of ergot alkaloids on performance of growing lambs</p>	<p>Moisture levels in the past two growing seasons have produced not only bumper grain crops but bumper levels of ergot. Ergot is a fungus affecting seed heads of cereals and grasses. There are stocks of ergot-contaminated feed grains in western Canada. Ergot levels have contributed to sheep and cattle production losses in Saskatchewan and Alberta. The study will determine impacts of pelleting on alkaloid toxicity and evaluate two levels of an alkaloid binder in a series of growth and digestibility studies using lambs.</p>	<p>Production Efficiency</p>
<p>Characterization of lamb meat in Quebec</p>	<p>Characterization of the quality of the lamb meat marketed in Quebec, taking into account its provenance (Quebec, Western Canada, Australia, New Zealand) and the time of year, in order to determine how lamb produced in Quebec compares with the competition.</p>	<p>Industry Business Development</p>

Development of Sheep Welfare Videos	This project will produce a series of innovative consumer-facing videos on animal welfare. These 5-minute videos will be designed to complement videos that are being produced by other organizations that cover animal care and handling. They will provide consumers with information on how sheep are cared for and will be aligned with the national Codes of Practice for sheep.	Industry Business Development
Nutritional Value and Integration of Hybrid Willow and Poplar as Fodder for Sheep	Alternative and inexpensive feed options are vital to increasing profitability of lambing operations in Ontario. Integrating purpose grown perennial fodder crops has the ability to achieve this objective. Fodder trees provide additional benefits of climate resilience and sustainability by diversifying feed systems	Production Efficiency
Causes of mortality in Alberta fed lambs	There is little information available for veterinarians or Canadian sheep producers on causes of mortality in feeder lambs. Whether on farms or in feedlots lamb deaths are costly. For producers there has been an investment in the ewe flock, in lambing and feeding the lambs. Feedlots have investments in purchasing, trucking, managing and feeding the lambs. Without good information on the causes of lamb deaths it is very hard for veterinarians to help their clients reduce disease losses. The purpose of this study is to determine the specific causes and occurrence of mortality in Alberta feedlot lambs. Risk factors that will be evaluated include source of lambs, DOF (days on feed) when died, previous treatment, etc.	Production Efficiency

<p>Estimation of growth curves, adipose and muscle deposition in two terminal breeds to optimize genetic evaluation to improve carcass quality</p>	<p>Determine the growth curves, adipose and muscle deposition in the two most influential terminal breeds in the Quebec sheep genetic scheme (Suffolk-SU and Hampshire-HA) to identify the optimal time to take ultrasound measurements of these breeds in order to select subjects with the best potential for producing heavy lambs for market.</p>	<p>Genetics</p>
<p>Estimation of growth curves in maternal breeds (RI, RV, DP, PO) to identify the ideal time for genetic evaluation for carcass quality.</p>	<p>Determine the post-weaning growth curves of Rideau Arcott, Romanov, Dorset and Polypay breed subjects, of an average age of 50 days up to the average age of 140 days to identify the ideal time these breeds should be weighed and have ultrasound measurements taken and to enable an optimal genetic evaluation, improving the selection of subjects with greater maternal potential and a better potential for the transmission of slaughter carcass quality for the production of heavy lambs for market.</p>	<p>Genetics</p>
<p>Barberole worm: larval ecology and implications of a newly available anthelmintic</p>	<p>To investigate the rise in faecal egg counts in lambs on pasture in relation to local weather data, and to compare the effectiveness of closantel with currently available anthelmintics</p>	<p>Animal Health</p>

Growth Strategy	Provide the Ontario sheep industry with sector measurements, metrics and robust data needed to be able to benchmark competitiveness across the value chain.	Production Efficiency
Distance support for on-farm investigation of adult small ruminants	Few adult sheep and goats are submitted to a diagnostic laboratory to determine cause of illness or death. This project seeks to improve on-farm postmortems as performed by a veterinarian. Funds will be available to perform a minimum of 100 postmortems, including the fee of having the vet perform the pm, and diagnostic samples. Part of the project will be training of veterinarians and developing on-line assistance for submission of samples and relevant history	Animal Health
Bluetongue detection in Culicoides populations	In 2013, it was found that <i>Culicoides sonorensis</i> , the primary North American vector for Bluetongue virus, is now present within Ontario. Additionally, BTV was isolated in a beef cattle herd in September 2015, indicating that the virus may be present and undergoing transmission via <i>C. sonorensis</i> specimens. This project involves surveying regions of Ontario to locate <i>C. sonorensis</i> specimens and test them for presence of Bluetongue virus as a preliminary threat assessment.	Animal Health

<p>Captive Bolt Euthanasia Training Courses for Sheep and Goat Producers</p>	<p>Sheep and goat producers are provided with hands-on training on how to effectively euthanize sheep and goats on farm using a penetrating captive bolt pistol. Training includes: providing producers with information on how to make the decision to euthanize; acceptable methods of euthanasia; secondary steps when using a captive bolt; how to safely use a captive bolt and how to properly maintain a captive bolt; the opportunity to practice on sheep/goat heads. Producers will develop a flock/herd specific euthanasia action plan upon course completion and will leave the session with their own captive bolt pistol.</p>	<p>Production Efficiency</p>
<p>Piloting Sheep Flock Health Clubs</p>	<p>This project is piloting the concept for Sheep Flock Health Clubs. Based on similar clubs in the United Kingdom, the pilot will aim to prove the benefits of SFHC in strengthening the sheep producer-veterinarian relationship and its impact on farm productivity and profitability.</p>	<p>Production Efficiency</p>

<p>Sheep parasite and anthelmintic resistance survey in Alberta (Phase 1 and 2)</p>	<p>Phase 1-In the summer of 2014, Drs. Michel Levy and John Gilleard undertook a survey of twenty farms to assess the level and types of parasites present. They also conducted more detailed investigation of anthelmintic resistance on four farms.</p> <p>Phase 2-ALMA has approved funding for a more comprehensive research project. It will run over three years and will look at sheep parasites in all four western provinces. Researchers are also looking for more flocks in Alberta as well as flocks in British Columbia, Saskatchewan and Manitoba. The project will continue to look at parasite burden and at the efficacy of treatment at the flock level. Molecular techniques for identification of parasites will be developed. Detection of parasite resistance to dewormers and its evolution will be monitored over several years.</p>	<p>Animal Health</p>
<p>Improvement of the organoleptic quality and homogeneity of lamb meat in Quebec by monitoring the incidence of high-pH meat related to pre-slaughter stress in lambs</p>	<p>Understand and reduce pre-slaughter stress in lambs in order to improve animal wellbeing and the organoleptic quality, homogeneity and preservation of the meat produced. pH and colour measurements will be taken on lamb chops in two of the largest lamb abattoirs/packing plants in Quebec, on a regular basis and year-round. Relevant information on the animal, the farm of origin, transportation, arrival at the slaughterhouse, waiting and slaughter will be collected.</p> <p>Statistical analyses will make it possible to determine the incidence of high pH and the importance of the problem from a quality standpoint. In addition, the analyses will make it possible to identify potentially stressful factors that have the greatest impact on the incidence of high-pH meat.</p>	<p>Meat Quality</p>

<p>Optimization of practices surrounding feed management of prolific ewes in late pregnancy and management of lambs at birth, in order to reduce neonatal mortality among lambs</p>	<p>Compare 3 feed rations of prolific ewes whose control is based on the CNRC, so as to confirm changes in consumption, health and blood profiles of the females, colostrum quality, immunoglobuline levels and lamb growth</p>	<p>Production Efficiency</p>
<p>Efficacy of different estrogens on the synchronization of ovarian follicular waves, estrus, and ovulation in anestrus ewes</p>	<p>To compare the effects of treatment with CIDR-Estrus®-eCG to CIDR-estradiol-eCG for stimulating predictable ovarian follicle development, estrus, and ovulation and associated circulating reproductive hormones of seasonally anestrous ewes.</p>	<p>Production Efficiency</p>

Development of a Multivalent Recombinant Orf Virus Vaccine to Protect Against Maedi Visna Virus Infection	<p>Live virus vaccines are excellent inducers of long-term immunity by eliciting protective humoral and cell-mediated immune responses against foreign antigens. To this end, recombinant poxviruses are one of the most versatile expression systems for foreign antigens and have been extensively developed as vaccine vectors for veterinary diseases (1, 2). Recently, the type species ORFV (ORFV) of the genus Parapoxvirus in the family Poxviridae has been investigated as a novel vaccine vector(3). Attributes that favor the use of ORFV as a vaccine vector include: limited host range (sheep and goats), restricted tropism to the skin, lack of systemic infection, short-term vector-specific protective immunity, and unique immune-modulating properties which strongly stimulate the innate immune response at the site of infection, induce a potent Th1 immune response and rapidly generate foreign antigen-specific immune responses (4, 5). This short-term vector-specific immunity has an additional advantage in that it allows for repeated immunizations with the same or different ORFV recombinants. Finally, due to the large genome size of ORFV, it is possible to insert</p>	Animal Health
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Fibre requirements for market lambs	Feed costs are a significant driver of profitability on a sheep farm. With variable availability of forages and increasing number of high value by-products, the economic pressure is forcing sheep producers to move towards feeding high concentrate diets for all sheep and especially market lambs. However, fibre is required in ruminant rations to ensure rumen function for longevity in breeding stock and to maximize productivity in feedlot lambs. The purpose of this trial is to determine how much fibre (quantified by various methods) is required to optimize growth (rate and cost of production) and maintain rumen function (based on measuring pH) at levels appropriate to growing lambs. These data will help producers lower feed costs by incorporating feed supplements and alternative feeds while improving production levels (growth rate, feed efficiency and feed costs per unit of gain).	Production Efficiency
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Development of a vaccine to protect against Toxoplasma gondii infection in sheep	<p>Toxoplasmosis is a disease caused by the parasite, Toxoplasma gondii (T. gondii) and is one of the most common parasitic diseases of warm-blooded animals.</p> <p>In humans, T. gondii infection can cause severe disease in immunocompromised individuals and pregnant women and latent Toxoplasma infections have been associated with behavioural changes and schizophrenia. Most humans are infected by eating raw or undercooked meat but they can also be infected by ingesting soil contaminated by cat feces. While most warm-blooded animals carry this parasite, only cats shed the oocysts in their feces and thus they are the only definitive hosts for T. gondii. T. gondii is the most common cause of infectious abortion in sheep and goats in Ontario. Studies have indicated that there is widespread environmental contamination with T. gondii oocysts and producers in Canada have no means of controlling infection. Therefore, the objectives of this proposal are to (1) construct a recombinant parapoxvirus multivalent vaccine expressing three different T. gondii protective antigens (SAG1-ROP2-GRA2) and (2) to evaluate the immunogenicity and protective efficacy of the rORFV/SAG1-ROP2-GRA2 vaccine in a mouse</p>	Animal Health
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<p>Investigation of immune response of sheep to gastrointestinal nematode infection under Ontario grazing conditions for the purposes of selection of genetically resistant animals.</p>	<p>Researchers have been trying to select sheep that more rapidly develop immunity to gastrointestinal nematode infections. The immune response to GIN, and in particular haemonchus is complex with both humoral and cell-mediated immunity playing a role. To date, almost all research has been done with lambs undergoing long-term (6 month) grazing challenges. To date, no work has been done in sheep grazing under Canadian conditions, i.e. short hot grazing seasons with a rapid build-up of larval pasture challenges. This project will examine how sheep respond immunologically to haemonchus challenges and will determine if a sub-population of sheep are better able to immunologically respond to this challenge as measure by salivary IgA (CarLA salivary test) and important measures of CMI.</p>	<p>Animal Health</p>
<p>Determine species of coccidia in lambs</p>	<p>At this time, it is not practical to determine the species of Eimeria oocysts present in a fecal sample without considerable effort and training. This project will develop a test using PCR technology to differentiate between pathogenic species (E. ovinoidalis and E. crandallis) and species with low pathogenicity. This will help veterinarians and producers to assess the importance of an elevated oocyst count in lambs</p>	<p>Animal Health</p>

<p>Investigation of immune response of sheep to gastrointestinal nematode infection under Ontario grazing conditions for the purposes of selection of genetically resistant animals</p>	<p><i>Haemonchus contortus</i> is a major cause of morbidity and mortality in Ontario grazing sheep flocks, and is commonly resistant to available anthelmintics. Non-chemical control methods include selecting breeding stock that more rapidly develop immunity to <i>H. contortus</i>. This project will determine if sheep, which are raised under Ontario grazing conditions and parasite challenges, differentially develop immunity to gastrointestinal nematodes, including <i>H. contortus</i>. The immune response will be determined by following lambs through two grazing seasons on an Ontario sheep farm with known <i>Haemonchus</i> problems. Immunity will be measured directly using the CarLA® Saliva Test (AgResearch Ltd.), which measures L3-specific IgA, and indirectly with change in fecal egg count (FEC). Clinical and haematological measures, and FEC, will be used to determine level of infection. Additionally, tracer lambs from the University of Guelph Ponsonby flock that were selected based on their overall stress and immune response, will be grazed with the above commercial flock and <i>H. contortus</i>-specific IgA and FEC will be measured over time to better understand how sheep</p>	<p>Animal Health</p>
<p>Integrated management of resistance and gastrointestinal parasitism in grazing sheep.</p>	<p>To promote sustainable practices for controlling gastrointestinal nematodes in grazing sheep, the project aims to develop, for broad-scale use, genetic tests for detecting gastrointestinal nematode resistance to the following anthelmintics: fenbendazole and ivermectin. In addition, the project will assess the extent of resistance to pest control products that exists in sheep flocks in Quebec. Integrated management strategies for parasitism will be developed depending on the results obtained.</p>	<p>Animal Health</p>

<p>Saskatchewan Sheep Abortion Surveillance Program- In 2016 combined with Sheep Biosecurity program</p>	<p>Abortion in the lamb industry has been a problem for many years and some producers have come to accept abortions as normal. This program will help the Saskatchewan sheep industry determine the prevalence and type of abortion occurring on farms and to assess the severity of the problem.</p>	<p>Animal Health</p>
<p>Agricultural Producer Mental Health, Mental Health Literacy, and Emergency Response</p>	<p>The devastating impacts of agricultural emergencies on animals and economy are well-known; seemingly less well-recognized are the impacts on producers' mental wellness, although these can be equally destructive. While the mental health impacts of day-to-day farming stresses and those brought on by emergencies have been studied elsewhere, very little Canadian knowledge exists. This project will address that gap. Working with Ontario agricultural workers (i.e. agricultural producers, support staff, veterinarians, government personnel) and using rigorous qualitative methodologies, this project will characterize their lived experiences of everyday occupational stresses and agricultural emergencies, document help-seeking behaviours, motivations and barriers, and explore perceived ideals for mental health programming.</p>	<p>Production Efficiency</p>
<p>Opportunities to Diversify Ontario's Wool Production and Marketing</p>	<p>This research will examine the potential of wool production as a factor for regional development connecting rural areas to large urban centers in Ontario, identifying and developing marketing opportunities to tap into consumer preferences for natural fibres and fibre arts</p>	<p>Industry Business Development</p>

<p>Leveraging - OMICS and systems biology to understanding the genes and metabolic pathways associated with genetic resistance of sheep to gastrointestinal nematode parasite infections</p>	<p>Sharing animal-sourced data from the "Investigation of immune response of sheep to gastrointestinal nematode infection under Ontario grazing conditions for purposes of selection of genetically resistance animals". This project will develop tools for producers to better select genetically resistant sheep.</p>	<p>Production Efficiency</p>
<p>Estimation of voluntary dry matter consumption (VDMC) in prolific ewes</p>	<p>The purpose of the project is to determine VDMC values of prolific ewes in the specific context of the QC-specific sheep production system. Once the new VDMC values are known, they can be integrated into the Oviration software and applied by agricultural advisors (applied research) to improve the quality of feed programs formulated for the feeding of ewes and thus make it possible to achieve the objectives sought in the formation of animal feed rations. Our study is divided into three parts: 1) Study by meta-analysis of factors influencing VDMC among ewes; 2) Carrying out field studies to measure VDMC in prolific ewes; 3) Consolidation of meta-analysis results and field study measurements to set out VDMC prediction equations.</p>	<p>Production Efficiency</p>

Development of a Sheep Respiratory Vaccine	The purpose of this study is to develop an efficacious vaccine to prevent respiratory disease in sheep. There are no licensed vaccines available in North America for sheep to prevent acute septicemia which account for approximately 50% of the deaths in feedlot lambs. Animals are typically found dead in their pen before treatment with antimicrobials can be initiated. Therefore, an efficacious vaccine is needed to reduce disease losses.	Animal Health
B.C.'s Wildlife Health Program	The goal of the B.C. Wildlife Health Program is to better understand factors that affect the health of B.C.'s wild animals. To do this, they monitor diseases and parasites and how they affect animal populations over time and with environmental changes. They prioritize several diseases that can affect wildlife, domestic animals, humans and the economy. http://www2.gov.bc.ca/gov/content/environment/plant-s-animals-ecosystems/wildlife/wildlife-health/wildlife-health-program	Animal Health
Evaluation of Sheep's Wool as a Growing Medium		Industry Business Development
Breeding for Parasitic Worm Resistance in Sheep	This project is for an on-farm sheep breeding program focused on parasitic worm resistance. To select for increased worm resistance involves measuring the fecal worm egg counts of individual sheep and taking that into consideration along with the other production traits when making breeding animal selection decisions.	Animal Health
EWEGO	In collaboration with Wooldrift Farms, the applicant will test market strained sheep yogurt and strained sheep yogurt whey. The liquid sheep whey contains most of the water-soluble minerals (e.g. calcium) and vitamins.	Industry Business Development

Premium Lamb Value Chain Collaboration	This project will build a true value system with information flow to all of the partners' producers, processor and retailer. The information flow will be based on a complete traceability system which will support the authenticity of the product.	Industry Business Development
Production of diagnostic trees to help sheep producers and veterinarians identify diseases commonly encountered in Quebec sheep herds	Develop a practical tool to allow veterinarians and producers to observe, diagnose and promptly treat sick sheep. More specifically, the following activities will be carried out: determining the primary sheep diseases (those most commonly found) for which a diagnostic tree would be relevant, develop diagnostic trees for the identified sheep diseases in ewes, lambs and rams based on the symptoms observed, and lastly create and distribute a work tool available to producers and veterinarians.	Animal Health
On-Farm investigation of Adult Small Ruminant Mortalities	Adult sheep and goat mortalities are rarely sent to a laboratory for a complete postmortem and veterinarians infrequently perform postmortems on-farm. However, there is value in knowing why an animal died (chronic wasting diseases, metabolic/nutritional diseases, neurological disorders, parasite problems), so that changes can be implemented to help prevent on-going disease. This project seeks to improve the practice of on-farm postmortems, and improve information flow among producers, veterinarians, and pathologists.	Animal Health

<p>Metabolomics analysis of sheep RFI (residual feed intake) and carcass quality: a follow up study</p>	<p>The goal of this project is:</p> <ol style="list-style-type: none"> 1. To characterize genetic/metabolomic profiles associated with high/low RFI and carcass merit specific for sheep 2. To identify genetic/metabolomic fingerprints of high feed efficiency and carcass quality specific for sheep 3. To perform complete genotyping of local sheep breeds 4. To identify biomarkers of RFI and carcass quality in sheep to be implemented in centralized lab or future studies for development of a pen-side kit. 	<p>Production Efficiency</p>
<p>Improved accuracy in diagnosing pregnancy and predicting litter size in early gestation ewes; Metabolomics analyses for pen-side kit development</p>	<p>Early gestation detection of pregnancy and litter size impacts flock profitability through quicker culling decisions of infertile females and improved nutritional management resulting in better lamb survivability. Using metabolomics technology to uncover blood biomarkers associated with pregnancy status and litter size is the focus of this research to develop a low cost, accurate pen-side kit for ewe flock and feedlot owners to get immediate results.</p>	<p>Production Efficiency</p>
<p>Sheep Industry Life Cycle Analysis</p>	<p>To conduct an environmental assessment of sheep production in Ontario that can be used to establish a baseline against which the sector can benchmark it's environmental performance over time.</p>	<p>Environment</p>
<p>LambGrow Grading Pilot Project</p>	<p>This pilot project is designed to examine opportunities to increase the value and consistency of Ontario lamb by establishing a means for objectively measuring lamb carcass performance from retail grade and yield perspectives.</p>	<p>Meat Quality</p>

<p>Diminution des risques financiers pour les entreprises ovines canadiennes grâce à l'utilisation du logiciel Simulovins</p>	<p>Simulovins est un logiciel de simulation du fonctionnement d'un troupeau ovin qui a été développé à l'Université Laval dans le cadre de projets de recherche sur l'étude des systèmes de production en élevage ovin. Le logiciel permet de démontrer les impacts de variations des paramètres de performances zootechniques ou de différents systèmes de production sur les résultats techniques et économiques d'un troupeau. Ce logiciel pourrait jouer un rôle de premier plan dans le développement et la pérennité des entreprises ovines canadiennes s'il était utilisé pour aider et guider les producteurs agricoles dans les choix stratégiques de développement qu'ils doivent prendre année après année pour leurs fermes (ex. choix des races, des systèmes de production, des types de carcasses à produire, des objectifs de performances techniques, etc.). Cependant, le logiciel Simulovins, qui a été développé dans un contexte de recherche, ne peut être implanté ni utilisé dans sa version actuelle dans des entreprises ovines; il doit être modifié et adapté pour une utilisation plus conviviale, dans un contexte et un environnement commercial d'entreprise et de service-conseil.</p>	<p>Production Efficiency</p>
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Key Outcomes	Lead	Link for Report	Projected End date
<p>Enhance the knowledge of ethnic consumer's preferred product attributes, to gain a greater understanding as to how ethno-cultural consumers wish to access these products and to recommend a marketing strategy to industry. Data collection will include internet research and interviews with all participants in the supply chain, from the producer through to the ethnic consumers. Emphasis will be on the needs and preferences of ethnic consumers. Results from statistical and economic analysis of these data will then be used to create marketing strategies specific to each meat group. Given that 49% of all those living in Toronto are immigrants, the project will be conducted there.</p>	OSMA	http://www.ontarioheep.org/uploads/userfiles/files/GF2%200088_New%20Canadians%20Prefer%20Taste_OS_N_March%202015.pdf	Jan-15
<p>Project underway. Online program and final results expected in January 2016.</p>	CEPOQ/Valacta/CGIL/Centre expertise fromagère du Québec/FPAMQ	http://cepoq.com/admin/user/uploads/files/rapport_final_des_projets_13-c-155_et_13-c-219.pdf	Feb-15

	BC Association of Abattoirs	https://bcabattoirs.org/files/BCMQIS-Lamb-Carcass-Scoring-Criteria.pdf	Feb-15
Project goal was to extend research and pilot project information focused on improving flock profitability; new resource modules were developed (Marketing, Predation; flock management video series are posted sheepcentralalberta on YouTube; articles, fact sheets, industry sessions were completed.	ALP/AARD/ALMA		Mar-15
In this project, the first sheep and dairy cow DNA library in North America was created and implemented. In March 2016, almost 1,000 DNA samples were taken and are now stored in the CEPOQ laboratories. In future, these DNA samples will be used to carry out genomics projects involving subjects' genetic performance.	CEPOQ / FPMAQ / CGIL / Valacta		Mar-16

<p>Corn cob meal is an economical replacement for whole corn as it resulted in feed costs being just under 80% of using whole corn instead.</p>	<p>OSMA and University of Guelph (Ridgetown College)</p>	<p>http://www.ontariosheep.org/uploads/userfiles/files/2015%2007%2020%20Luimes%20articles.rev.pdf</p>	<p>Jul-15</p>
<p>Give shepherds information on feed use and efficiency of ewes of varying mature body size. This will assist in developing on-farm applications of innovative feed use and efficiency data.</p>	<p>OSMA / University of Guelph</p>	<p>http://www.ontariosheep.org/uploads/userfiles/files/2015%2007%2020%20Luimes%20articles.rev.pdf</p>	<p>Aug-15</p>

<p>Increased knowledge sharing among sheep producers regarding Maedi-Visna and Johne's diseases and management strategies that can be implemented to reduce disease incidence. Manuscript in Preparation. Stonos N et al. Prevalence of small ruminant lentivirus and Mycobacterium avium subsp paratuberculosis co-infection in Ontario dairy sheep and dairy goats. Paper accepted for publication, September 2016</p>	<p>OSMA / University of Guelph</p>	<p>http://www.ontariosheep.org/uploads/userfiles/files/MV%20Board%20Report%20November%202013.pdf</p>	<p>Sep-15</p>
<p>Underway—Results expected in September 2016</p>	<p>CEPOQ/FMV</p>	<p>http://cepoq.com/admin/user/uploads/files/rapport_final_medicament_web.pdf</p>	<p>Sep-15</p>

The project scope will include the development of the educational material and the initial delivery (pilot). A core group of producers will be selected to go through the entire program but individual modules may be open to others. The format of the program will be module-based learning components including assignments as well as self-assessment components.

OSMA

<http://www.ontariosheep.org/uploads/userfiles/files/GF2%200011%20Ontario%20Master%20Shepherd%20Course%20Update%20OSN%20Article.pdf>

Oct-15

The addition of the oestradiol treatment during a CIDR-eCG heat synchronization protocol does not clearly increase pregnancy and lambing rates.

OSMA/NSAC/
Dalhousie
University/Pfizer

<http://www.ontariosheep.org/uploads/userfiles/files/R12-3%20Preg%20and%20Lambing%20Rates%20OSN%20Mar%202014.pdf>

Dec-15

<p>This project will enable producers and advisors to make more informed choices about the most suitable out-of-season breeding strategy in various situations through enhanced knowledge of the economic impacts.</p>	<p>Université Laval</p>		<p>Dec-15</p>
<p>This project will provide additional information to lamb producers and veterinarians on the causes of death in newborn lambs and kids. Analysis of results underway.</p>	<p>Alberta Agriculture & Forestry / ALMA</p>		<p>Dec-15</p>
<p>The research team showed: -That cholesterol must be coupled with methyl β-cyclodextrin to allow it to be incorporated into the sperm membranes. -That an extender with a cholesterol-supplemented egg yolk base is less effective than a milk extender, as it has cholesterol, which competes with the CLC (cholesterol-loaded cyclodextrin). -That the cholesterol-supplemented skim milk-based extender increases the proportion of motile spermatozoa with intact acrosomes after thawing, as compared to the commercial egg yolk-based extender ($P < 0.05$). However, the CLC-supplemented skim milk-based extender is not sufficient to improve sperm membrane integrity post-thaw. In addition, the skim milk-based extender is much less effective than commercial extenders as regards preserving fresh semen. -The laparoscopic in vivo fertility test showed no improvement in the pregnancy rate when frozen sperm was used in CLC-supplemented skim milk as opposed to the egg-yolk extender ($P > 0.05$).</p>	<p>Laval University/ AAFC/CEPOQ</p>		<p>2015</p>

Harmonization of markets by reducing market distortions for the three categories of lamb.	FPAMQ, Comité brebis laitière		2015
Started in 2013, testing is completed. Should have report in early 2015.	SSDB/University of Saskatchewan		2015
<p>The SheepBytes ration balancing program over-estimates the DMI of intact ram lambs on high concentrate barley based finishing rations during summer feeding periods by up to 25%. However, the predicted ADG (0.42 kg/d) from SheepBytes is reported in an acceptable range compared to actual values (0.40 kg/d) gathered from feeding lambs over an eight week period. Lamb performance and carcass quality were similar when animals were fed a whole barley (BAR) or barley and wheat based pelleted (PEL) ration. However, profitability was very poor with net losses realized at each location in each year for both rations. Recommendations will be made to the SheepBytes Developing Committee to review their formulae for both DMI predictions of finishing lambs and for the lower temperature level to be moved from 25°C to 23°C to categorize the occurrence of heat stress.</p>	Alberta Agriculture & Forestry / ALMA		Jan-16

<p>Project underway to evaluate and benchmark carcass variability in commercial lamb production; to identify objective-measurable parameters in lamb carcasses using tow technology platforms that can relate to carcass yield and meat quality; to evaluate and develop reliable equations for DEXA and NIR technologies. To eventually identify key production factors responsible for variability in lamb carcass quality.</p>	<p>AAFC – Lacombe Meat Research Centre / AARD / ALMA</p>		<p>Mar-16</p>
<p>This project made it possible to create a first reference base concerning the average work time spent carrying out various interventions by producers raising housed sheep. Although there were multiple causes of variations in work efficiency and the facilities were very different from one operation to another, an overall picture emerged, revealing some especially interesting points. A few highlights: Operations that have been active for 6 to 12 years, commercial operations on GenOvis, and those that devote the most time to continuous training show the best technical performance. Mechanized operations spend 2.5 times less time feeding their flocks (number of hours/sheep/year). Operations using pasture perform similarly to the others in terms of kg of lamb/sheep/year. Operations with a biosecurity management facility (infirmarium and/or quarantine) have a lower mortality rate than the others, and the infirmarium areas seem to be bigger. Large operations spend less time monitoring lambing and caring for the newborns, but they also have the highest mortality rate. The use of electronic equipment (electronic scale, RFID chip reader) and adequate work facilities equipped with restraint chutes considerably reduce overall work time. Operations that take ultrasounds have a lambing rate of 1.21 compared to 1.06 for those that do not, and they also produce almost 30 kg more of lamb/sheep/year. On average, the 37</p>	<p>CEPOQ / FPMAQ / SEMRPQ / Valacta / Producers</p>	<p>http://cepq.com/admin/uploads/files/portraits_global_descs_entreprises_final.pdf</p>	<p>Mar-16</p>

Almost four years of development were required to produce the electronic version of GenOvis. Initially, this tool was supposed to enable breeders of purebreds to incorporate and manage their breeding group, then enter lambing data. Now this tool has been adapted to also serve commercial producers who only want to enter lambing data without having to create breeding groups.

CEPOQ/CGIL/FPA
MQ

Mar-16

(a) Elanco Animal Health has received approval for use of closantel in sheep in Canada against Haemonchus infections, with a strong recommendation that it should be used in a targeted selective manner to reduce the risk of drug resistance developing, (b) the efficacy of closantel has been published in: Westers, T., Jones-Bitton, A., Menzies, P., Van Leeuwen, J., Poljak, Z., Peregrine, A.S. (2016) Efficacy of closantel against ivermectin- and fenbendazole-resistant Haemonchus sp. in sheep in Ontario, Canada. Veterinary Parasitology 228, 30-41.
 (c) Clinical criteria to use in selective treatment programs can be found in: Westers, T., Jones-Bitton, A., Menzies, P., VanLeeuwen, J., Poljak, Z., Peregrine, A.S. (2016) Identification of effective treatment criteria for use in targeted selective treatment programs to control haemonchosis in periparturient ewes in Ontario, Canada. Preventive Veterinary Medicine 134, 49-57.
 (d) Evaluation of targeted selective treatment of periparturient ewes for controlling Haemonchus sp. can be found in: Westers, T., Jones-Bitton, A., Menzies, P., VanLeeuwen, J., Poljak, Z., Peregrine, A.S. (2017) Comparison of targeted selective and

University of
Guelph/OSMA/Elanco
Animal
Health/OMAFRA/NS
ERC-CRD

<http://www.ontariosheep.org/uploads/userfiles/files/Sheep%20News%20Article%20March%202014.pdf>

Apr-16

Sampling was conducted on 16 dairy goat farms and 14 nearby natural areas. A subset of the dairy goat herd (30 individuals that had most recently kidded) were systematically randomly sampled. The other resident farm animals were also sampled, alongside the wildlife live-trapped on the farm and nearby natural areas. Samples (milk, genital and fecal) were collected and stored in -20oC at the University of Guelph and transported to Laurentian University for DNA extractions at the end of the 2014 field season. The DNA from all samples were extracted in Fall 2015 and sent to Northern Arizona University for further laboratory testing. In January 2015 the Master student, Ariel Porty, spent 2 weeks at Northern Arizona University to receive training on the laboratory techniques used to detect and genotype *C. burnetii* in the samples. The end of January 2015, all samples were successfully tested for the presence of *C. burnetii*. Multiple sample types were collected per individual sampled, including 2 genital, 2 fecal, and milk samples. Individuals were deemed to be positive for *C. burnetii* infection if one or more samples tested positive for *C. burnetii*. In total

University of Guelph
/ Laurentian
University

Apr-16

It was determined that NDF digestibility of barley silage is difficult to maintain from one year to the next particularly with differences in growing conditions. There are nutritional differences between silage varieties such as fiber content, which makes the continuation of research in this area desirable for selection of barley varieties with improved nutritional value and digestibility. Lamb digestibility and performance did not differ based on the silage variety they were fed as the amount of silage was not large enough to elicit results. Feeding silage to lambs is dependant on good ensiling practices as poor silage quality will reduce lamb intakes.

AAFC / University of
Saskatchewan

Apr-16

<p>Build a price predictability tools. This resource will provide much needed decision-making information in light of significant increases in price volatility within Ontario's sheep sector and will act as a market risk mitigation tool. This web-based tool will provide producers, processors and retailers with a forecast of lamb prices and will enable them to make better business and marketing decisions. This tool can be used to contract and thus help take the risk out of a volatile market. Tool will be stress tested by sheep producers and processors. This will be a proof of concept project for web-based tool and key components of the project will be determining how to effectively get the tool out to the industry, how often the information needs to be updated and who will be responsible for updating it.</p>	OSMA	http://www.ontariosheep.org/uploads/userfiles/files/Articles/Price%20predictability%20tool%20available%20for%20sheep%20prices.pdf	May-16
<p>The research team's mandate was to determine, based on the results, whether or not the RamGo technique shows promise for the Quebec sheep industry. In order for the technique to be considered worthwhile, the results would have had to be similar to those obtained using laparoscopy, i.e., achieve a pregnancy rate of at least 50%. Unfortunately, the fertility results obtained in this trial with the RamGo insemination technique were 5% (4 pregnant ewes out of 76 inseminated), which is far below the results obtained with laparoscopy (67%, or 20 pregnant ewes out of 30 inseminated). Given these results, at this time the project team does not recommend this insemination technique as an alternative to laparoscopy, and it will not be possible to diffuse the technique for adoption in the sheep production industry.</p>	CEPOQ, ULAVAL, TecnoGen	http://cepoq.com/admin/user/uploads/files/rapport_final_ramgo.pdf	May-16

<p>To identify patterns of perinatal lamb loss in PEI flocks. To benchmark lamb morbidity and mortality rates against industry standards, and to identify flock-level factors related to high loss / high survival. From these data they will infer critical management points in the production cycle where interventions are likely to reduce lamb losses. These data will provide a basis for extension and on-farm trials of novel interventions and technologies over the next several years, with the objective of increasing lamb survival and lambs marketed per ewe per year in Island flocks.</p>	<p>Atlantic Veterinary College</p>		<p>Jun-16</p>
<p>The study will determine impacts of pelleting on alkaloid toxicity and evaluate two levels of an alkaloid binder in a series of growth and digestibility studies using lambs.</p>	<p>Alberta Agriculture & Forestry / ALMA</p>		<p>Dec-16</p>
<p>The quality of lamb meat marketed in Quebec will be compared scientifically, based on provenance, using these criteria:</p> <ul style="list-style-type: none"> - Quality; - Proportion of meat, fat and bone in racks and legs of lamb; - Proportion of meat deemed acceptable/unacceptable from the standpoint of tenderness; - Variation in tenderness for a given product; - Organoleptic quality (juiciness, tenderness, flavour). 	<p>FPAMQ, CEPOQ. Université Laval, Centre de recherche et de développement sur les aliment (AAC) et le Centre de développement bioalimentaire du Québec</p>	<p>http://cepq.com/admin/uploads/files/projet_caracterisation_vian_de_rapport_final2017_web.pdf</p>	<p>Dec-16</p>

Videos	OSMA	https://www.youtube.com/user/OntarioSheep/videos	Dec-16
1. Determine growth and yield of hybrid poplar/willow and native tree regrowth with and without livestock integration 2. Determine preferences of sheep fodder varieties/tree species 3. determine body condition score and weight changes when sheep are provided a high fodder diet. 4. Investigate practical applications of fodder crops as alternative feed (windrows, alleys). 5. Determine economic attractiveness of perennial fodder as alternative feed of sheep through cost benefit analysis	Sault Ste. Marie Innovation Centre		Mar-17
The purpose of this study is to determine the specific causes and occurrence of mortality in Alberta feedlot lambs. Risk factors that will be evaluated include source of lambs, DOF (days on feed) when died, previous treatment, etc.	Alberta Beef Health Solutions/ Alberta Agriculture & Forestry (Drs. Madhu Ravi, Jagdish Patel)/ALMA		Mar-17

<p>Ultrasound measurements currently being done at producers'</p>	<p>CEPOQ, CDPQ, CGIL, FPAMQ, SEMRPQ, SCEM</p>	<p>http://cepq.com/admin/user/uploads/files/rapport_mesures_repetees_13c367_et_368_final.pdf</p>	<p>Mar-17</p>
<p>Recruitment of producers underway.</p>	<p>CEPOQ, CDPQ, CGIL, FPAMQ, SEMRPQ, SCEM</p>	<p>http://cepq.com/admin/user/uploads/files/rapport_mesures_repetees_13c367_et_368_final.pdf</p>	<p>Mar-17</p>
<p>Compare the pattern of larval availability over several years with spring weather data</p>	<p>PSBANS</p>		<p>Mar-17</p>

<p>Development of an industry scorecards that contains a minimum of 1 metric for each sector of the value chain (producer, processor, retail) that supports the goals laid out in the OSMA strategic plan.</p>	<p>OSMA</p>	<p>http://www.ontariosheep.org/uploads/userfiles/files/Articles/Article%20EweGROW%20September%202017.pdf</p>	<p>Mar-17</p>
<p>Web page has been developed. Submissions will begin in October, 2016</p>	<p>University of Guelph</p>		<p>Apr-17</p>
<p>The goal of this project is to assess the presence of BTV within Ontario in efforts to pre-emptively limit the spread of the virus amongst and between livestock herds, minimizing the economical impact of the disease.</p>	<p>Brock university</p>		<p>Aug-17</p>

120 trained sheep/goat producers

OSMA

Not available yet

Oct-17

Development and dissemination of communication and promotional material including training materials for veterinarians.

OSMA

<http://www.ontariosheep.org/uploads/userfiles/files/Piloting%20Sheep%20Flock%20Health%20Clubs%20June%20Ontario%20Sheep%20News.pdf>

Oct-17

The results of this work, which were published in the January issue of the Alberta N'ewesletter, suggested that many Alberta sheep flocks have high parasite burdens and that ivermectin and fenbendazole/albendazole resistant parasites may be common in the province. The project will look at parasite burden and at the efficacy of treatment at the flock level. Molecular techniques for identification of parasites will be developed. Detection of parasite resistance to dewormers and its evolution will be monitored over several years.

University of Calgary

Dec-17

Determine the incidence of high-pH lamb meat in Quebec; Identify critical points during the pre-slaughter period and stress factors responsible for abnormal pH results; Put in place applicable recommendations for sheep handling and pre-slaughter interventions in order to minimize stress in lambs, reduce the incidence of abnormal pH results thus improve the quality of lamb meat produced in Quebec.

CEPOQ / FPAMQ
/Viandes Forget /
Monpak International
/ producers

http://cepoq.com/admin/user/uploads/files/stress_rapport_final_mars_2018.pdf

Dec-17

<p>Put in place recommendations making it possible to improve feed management for ewes in late pregnancy to: a) reduce the risk of metabolic disease in prolific ewes; b) study the curves of the various parameters stemming from metabolic profiles, primarily in late pregnancy, among prolific ewes based on the feed rations offered; c) establish the best time to perform metabolic profiles in order to better detect these diseases in late pregnancy, particularly gestational toxemia; d) foster the production of high-quality colostrum in terms of immunoglobulins; e) induce better immune defenses in lambs; f) consequently, reduce neonatal mortality among lambs.</p>	<p>CEPOQ /FMV - U. Montréal / U. Laval / Grober Nutrition</p>	<p>http://cepoq.com/admin/user/uploads/filles/rapport_final_toxemie_mars_2018.pdf</p>	<p>Dec-17</p>
<p>Examine two estrus synchronization protocols on the synchronization of ovarian follicular waves, heat, and ovulation in seasonally anestrous ewes. Ovarian function will be determined from analysis of progesterone and estradiol concentrations in the blood, and ultrasonography of ovarian structures.</p>	<p>Dalhousie University</p>		<p>Mar-18</p>

The aim of this proposal is to develop a vaccine platform based on the Parapoxvirus, ORFV, to protect against small ruminant lentivirus infections as well as ORFV induced disease, thereby significantly benefitting the livestock sector in Ontario.

University of Guelph

Apr-18

Determine how varying dietary forage to concentrate ratios affect rumen function as measured by pH and lamb growth performance (feed intake, growth rate, feed efficiency and feed cost per unit gain). It is expected that this will give us more accurate information on what level of fibre is required to maintain growth rates in lambs...this will help us be better equipped to use by-products and grains more cost effectively. How big the benefit will depend on one's current feeding system and lamb growth rate. Investigate which dietary measurements (crude protein, starch, fibre [percentages NDF, ADF, eNDF], etc.) or particle size (Penn State Shaker system) best predicts rumen pH in lambs when fed varying dietary forage to concentrate ratios.

OSMA/Manitoba
Sheep
Association/CSBA

Not
available
yet

Apr-18

UoG anticipates that this research could improve sheep health through the development of an effective vaccine against both T. gondii and Orf (also referred to as contagious ecthyma or scabby mouth), two very important diseases of small ruminants

University of Guelph

Not available yet

Apr-18

<p>1. Describe the immune response of replacement ewes to gastrointestinal nematode parasite infection particularly to <i>Haemonchus contortus</i>, over their first and second grazing seasons in Ontario. 2. Identify phenotypic variation in the immune response of these same animals to gastrointestinal nematode parasite infection, particularly to <i>H. contortus</i>. 3. Identify the relationship between stress and general immune responses of sheep and the immune response to gastrointestinal parasitism particularly to <i>H. contortus</i>.</p> <p>One-hundred and thirty ewe lambs are completing the first season of grazing along with 30 tracer lambs from the University of Guelph. Sampling continues. The tracer lambs will be slaughtered in November to determine parasite species and numbers.</p>	University of Guelph / OSMA	Not available yet	Aug-18
Develop a diagnostic test to determine species of <i>Eimeria</i> infecting Ontario lambs	University of Guelph	Not available yet	Aug-18

	University of Guelph	Not available yet	Aug-18
In progress, project just beginning - Slated to end in 2018.	CEPOQ/Université Mc Gil/FMV/MAPAQ		2018

	SSDB/University of Saskatchewan		2018
(1) create, deliver and evaluate a mental health literacy training program to train people to recognize and respond to mental distress, and reduce stigma around mental health issues, in Ontario's agricultural sector, and (2) create a mental health emergency response model to inform the province and enable swift and appropriate actions to support producer mental health in the wake of future crises.	University of Guelph		Aug-19
The specific objectives of the research are: <ul style="list-style-type: none"> • A needs assessment of the Ontario wool industry to develop communication streams within the supply chain and connect urban end users with rural wool producers; • Determining the challenges and opportunities for connecting farmers with consumers in urban areas; • Stimulate the diversification of sheep product income and preserve the cultural landscape and the vitality of Ontario's rural areas. 	University of Toronto		Sep-19

Examine the transcriptome using high-throughput technologies by collecting amples from high and middle stress responding tracer sheep; combine the resulting experimental -OMICS data; comibine this new information with data from other ongoing projects to develop a more robust approach for using genomic selection; identify barriers to participation in genetic selection programs

University of Guelph

Oct-19

Université Laval

Dec-19

This project, a collaboration between VIDO/PDS and Alberta Beef Health Solutions, will work to develop an efficacious vaccine for both Canadian ewe flocks and feedlot producers.

Alberta Beef Health Solutions/ VIDO/ PDS / University of Saskatchewan

	NSAC/Dalhousie University		
	Phil Smith / Collaboration		
	E. Z. Enterprises / Collaboration		

<p>Producers will form an organization whereby production protocol information will be developed and shared with its members. This producer group will hire a field person that will coordinate year round production to meet the needs of a retailer.</p>	<p>Newmarket Meat Packers Limited / Collaboration</p>		
	<p>CEPOQ / FPAMQ / veterinarians</p>		
<p>The objectives of the study are: 1. To determine why adult sheep and goats are dying on-farm; 2. To determine if technology (smart phones, tablets, digital cameras) can be used to increase the accuracy and usefulness of on-farm postmortems; and, 3. To determine if better disease diagnoses can increase discussions between producers and their vets, so that they can create sound flock/herd health and biosecurity plans that will increase on-farm productivity.</p>	<p>OMAFRA / University of Guelph</p>		

<p>Developing tools to reduce the costs of production by identifying more efficient animals i.e. those that eat less, but still produce the same quantity/quality of meat. These tools will help improve the selection of animals with better feed efficiency and at the same time as improving feed ration delivery and maintaining a quality product.</p>	<p>University of Alberta/ Olds College/ Lakeland College/ Alberta Agriculture and Forestry</p>	<p>Dec-17</p>
	<p>ALP / Alberta Agriculture and Forestry</p>	<p>Dec-17</p>
<p>Identifying priority areas for footprint reduction and mitigation in the context of an anticipated increase in production. The project will analyse 4 environmental indicators: energy use, greenhouse gas emissions, water consumption and land use.</p>	<p>OSMA / Groupe AGECO</p>	<p>Aug-17</p>
<p>Report to industry aggregate information (as the first benchmark) collected to the industry about how many lambs processed in Ontario are actually meeting the grading requirements of the processors.</p>	<p>OSMA / Value Chain Management International</p>	<p>Oct-17</p>

Le but du projet est de produire une nouvelle version de Simulovins qui soit adaptée à une utilisation pour et par les entreprises, qui permettra de répondre aux besoins techniques et économiques des futurs clients utilisateurs (conseillers agricoles et producteurs d'avant-garde).

Université Laval

Mar-18