



2014-15

Year **in** Review

Ideas. Information. Investment.



The more you know, the better you eat.™



ALMA
Alberta Livestock
and Meat Agency Ltd.

Dear Stakeholders,

As new challenges confront our livestock and meat industry, we are again pleased to report that the Alberta Livestock and Meat Agency Ltd. (ALMA) has achieved significant accomplishments that are helping the industry adapt to an ever-changing consumer environment. ALMA is devoting resources and energy across the value added meat chain to help ensure that our industry becomes an even bigger contributor to the province's economy.

Dollars in Action – This fiscal, ALMA looked to an even more targeted approach to research with specific calls for product differentiation, production excellence, and sustainability with approved projects of nearly \$1.5 million, \$1.6 million, and \$3.8 million, respectively. ALMA has also entered into a \$950,000 strategic arrangement with the Alberta Beef Producers on a joint call focused on forage research. Projects stemming from these calls will strengthen our industry's competitiveness. These projects will provide novel technologies, enhanced quality, safety, and value-based attributes and supply chain coordination on sustainable practices.

Economic benefit from innovation can only be realized through effective implementation – commercialization. ALMA supported 59 projects with commitments of over \$9 million for automation and efficiency improvements. Initiatives include the implementation of upgrade beef fabrication and refrigeration equipment; sausage line capacity; increase efficiency of milk manufacturing; and value-added processing expansions. In fiscal 2014-15, industry reported increased volume of product of 33.5 million kg stemming from partnerships with ALMA.

Productivity was enhanced through such partnerships as the Labour Summit with the Agriculture Industry Labour Council Alberta; recruitment campaign with the Alberta Cattle Feeders' Association (ACFA); and research into enriched beef fat with beneficial fatty acids, assessment of beef toughness, radio-frequency identification (RFID) and DNA collection, and electronic livestock trading solutions.

Through the year, projects and resources were aligned with priorities, representing 217 projects, \$28.5 million commitments, at an estimated total project value of \$146.36 million. Cross chain collaboration strengthened the information, business and research linkages needed to help move our industry forward. These accomplishments are highlighted in the Year in Review and would not have been possible without the coordination and cooperation of our industry partners, research collaborators, and co-funding partners. We gratefully thank you for your encouragement and look forward to another successful year in 2015.

We would also like to recognize the Ministry of Agriculture and Forestry, the Board of Directors, dedicated staff and ALMA's advisory members for their tireless efforts in realizing ALMA's vision.



A handwritten signature in black ink, appearing to read 'D. Chalack', written in a cursive style.

Dr. David Chalack
ALMA Board Chair



A handwritten signature in black ink, appearing to read 'G. Cove', written in a cursive style.

Gordon Cove
ALMA President and CEO

Overview

The Alberta Livestock and Meat Agency (ALMA) is a catalyst:

- providing ideas, information and investment opportunities for Alberta's livestock and meat industry.
- advancing the Alberta Livestock and Meat Strategy to help the industry reach its full potential.
- stimulating dialogue among industry leaders across the whole meat and livestock value chain.

Accountable to the Minister of Agriculture and Forestry and governed by a strong competency – based board to ensure accountability and effectiveness.

Assessing industry needs and facilitating innovation strategies that compliment industry stakeholder business strategies; strengthen the livestock and meat industry base through new knowledge and technologies; improve business practices; and generate growth.

Delivering programs and services through the Strategic Initiatives and Research and Development programs; and Industry Investments including industry market and development and commercialization programs (Growing Forward 2 Agri-Processing Product and Market Development Program and Growing Forward 2 Agri-Processing Automation and Efficiency Program).

Priorities:

- Increased customer access and market development
- Enabled product differentiation
- Enhanced productivity through the supply chain
- Sustainable development underpinning a social license to operate



Highlights:

Goal One: Increased Customer Access and Market Development



Supporting growth opportunities in target markets of China, Japan, the European Union, and South Korea and facilitates export ready agri-food businesses through trade missions and business-to-business meetings such as Genome Alberta's Agri-food trade mission to China; Alberta Animal Genetics Consulting Group Ltd.'s efforts regarding the marketing of swine genetics as frozen boar semen and live pigs primarily to India and China; and the Alberta Elk Commission's Korean trade and relationship enhancement project.

Customer focused leadership and education development with such initiatives as Edmonton Northlands' International Agriculture Program and Canadian Cattlemen's Association's (CCA) "Competitiveness Benchmarking for the Canadian Beef Industry" project.

Creating strong relationships with decision-makers and policy influencers through the Beef Value Chain, Pork Value Chain and Sheep Value Chain Roundtables.

Membership in the GIRA Club for comprehensive global market insights and reports.

Committing \$279,219 toward nine customer focused initiatives....

9 company missions....

6 ALMA supported market development activities

Goal Two: Enabled Product Differentiation

Enabling technologies for validation of product quality and assurance with the targeted call in Product Differentiation resulted in six projects approved for a total of \$1,458,454 in ALMA funding.

\$2.495 million committed for 14 research and development projects including:

- Dr. Mike Dugan's, Agriculture and Agri-Food Canada, and Dr. Leluo Guan's, University of Alberta, work on beef fat enriched with beneficial fatty acids for the consumer.
- Dr. Heather Bruce's, University of Alberta, work on assessment of beef toughness using polarized near-infra-red (NIR) spectroscopy.
- Mr. Glen Kathler's, SAIT Polytechnic, work with an "all-in-one" radio-frequency identification (RFID), and DNA collection management tags.
- Mr. David Moss's, AgriClear, development of an electronic livestock trading solution with physical clearing.
- Dr. Lynn McMullen's, University of Alberta, development of alternative strategies for horse meat harvest to ensure product quality and safety for export markets.



Developing of new products through 17 initiatives awarded just over \$ 343,000 generating 19 new products for 20 new markets ranging from beef and chicken pies, sausage rolls, pepperoni sticks and pizza pepperoni, new reformatted value added meats, lamb case ready, lamb burger and marinated products, new portion cuts and Halal expansion into local, BC, Manitoba and into Eastern Canada, as well as such markets as Dubai, USA, Bahrain.

Transfer of new market knowledge and supporting cross-sector learning opportunities with the Canada Beef Inc, ALMA, and Alberta companies partnership at SIAL Paris; Camrose Regional Exhibition and Agricultural Society on the Canadian Bull Congress School Education Program; Livestock Innovation Showcase by Edmonton Northlands with foot traffic attendance of 91,156, including 43 participating inbound buyers who also visited the showcase.

Committing \$4 million toward 46 differentiating initiatives...

30 new products...

360 newly educated professionals...

74 industry partners in research...

3 new companies...3 new patents

Goal Three: Enhanced Productivity

Assisting in the profitability of on-farm technologies and supply chain collaboration for improved knowledge transfer with the Alberta Cattle Feeders' Association's (ACFA)'s recruitment campaign and the University of Alberta's 2014 Western Nutrition Conference.

Improvements through manufacturing efficiencies and labour gains with over \$9 million committed to 59 projects. Results today include an increased volume of over 33.5 million kg of meat and dairy product. To name but a few: Saputo Dairy Products Canada; Mountain Top Foods Ltd.; Cargill Case-Ready; Harmony Beef Company Ltd.; Champion Petfoods (GP) Ltd.; Sunworks; JBS Canada; Olymel; Heritage Frozen Foods Ltd.; and the list goes on.



Advancing the transformational innovation with a targeted call in production excellence, with eight projects approved for a total of \$1,588,220. Over \$3.95 million was committed to 20 research projects such as discovery of Single Nucleotide Polymorphisms (SNPs) to enhance genomic prediction accuracy for feed efficiency and carcass merit; inhibitors against *Clostridium perfringens* mucolytic enzymes to mitigate colonization and necrotic enteritis; functional glycans and their ability to prevent enteric pathogens from adhering to the intestine in swine; a vaccine capable of strong induction of neutralizing antibodies against porcine circovirus 2 (PCV2); use of bovine colostrum-derived immune and stem cells to boost immunity and health of beef and dairy cattle; and mitigation strategies to reduce losses due to Bovine Respiratory Disease (BRD).

Enhancing supply chain collaboration with projects like the Food Processors Logistics Research Council to establish a strategic procurement buying group.

Committing \$14.093 million towards 87 projects....

33.5 million kg of meat and dairy product....

estimated additional industry revenue of \$83.8 million

Goal Four: Sustainable Development

37 research projects addressing gaps in information and balancing of societal-environmental economic priorities like Drs. Tim McAllister and Sylvia Checkley's work on the effects of antibiotic use on integrative conjugative elements (ICEs)-associated antimicrobial resistance (AMR); Dr. Daniel Farr's, Alberta Biodiversity Monitoring Institute, work on biodiversity assessment; Dr. Marian Weber's, Alberta Innovates Tech Futures, developments on the provision of Ecosystem Services (ES) on agricultural lands; Dr. Trevor Alexander's, Agriculture and Agri-Food Canada, work on the impact of pathogen prevalence and antimicrobial resistance on bovine respiratory disease (BRD) in feedlot cattle; Dr. Cameron Carlyle's, University of Alberta, work on grazing impacts on greenhouse gas (GHG) fluxes in Alberta's rangelands; Ms. Emily Murray's, Cargill, lead on the McDonald's Sustainable Beef Strategy Canadian Pilot Project to source sustainable beef by 2016.



Stimulating and supporting dialogue around sustainable forage projects with a \$950,000 support towards the Alberta Beef Producers' targeted call for proposals focused on forage research for improved yield and nutritional quality, grazing management, improved drought resistance and carbon sequestration. Support to assist in the establishment of Canadian Roundtable for Sustainable Beef and support for an Organic Waste Inventory for Alberta led by Jeff Bell of Agriculture and Rural Development, co-funded with Alberta Innovates – Energy and Environment.

Supporting the development of awareness, understanding and industry action relative to sustainability, with efforts like the work led by Michael Latimer, Canadian Beef Breeds Council, to preserving the legacy genetic samples of the Canadian beef breeds; the Alberta Beef Community Engagement Campaign with Alberta Beef Producers to increase its scope to reach new Canadians and also to target niche consumer markets that prefer premium beef products; the work led by Nicholas Allan, The Institute for Applied Poultry Technologies, to evaluate and develop a self-sufficient system for end of lay and emergency poultry depopulation to create value from poultry by-products and the Business Risk Management Education program led by Stuart Cullum, Lethbridge College, in collaboration with ACFA to develop non-credit programming offered.

Committing over \$10 million toward 74 initiatives...

17 approved projects with total ALMA funding of \$3.8 million through the targeted call for sustainability

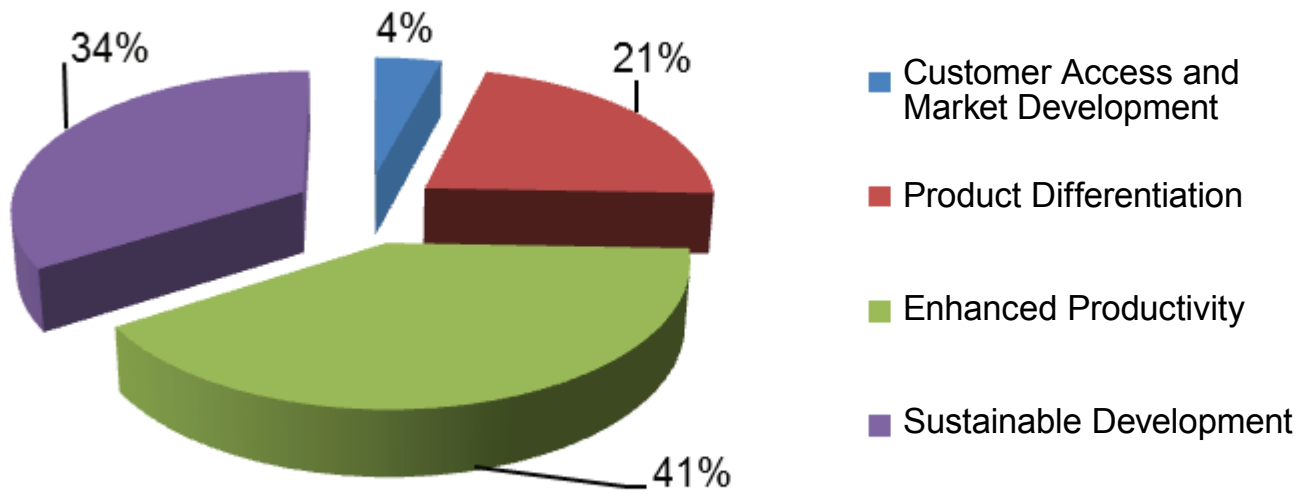
ALMA Commitment by Goal (\$)

Goal	ALMA Commitment
Customer Access and Market Development	\$276,129
Product Differentiation	\$4,051,771
Enhanced Productivity	\$14,093,698
Sustainable Development	\$10,081,803
Total	\$28,503,390

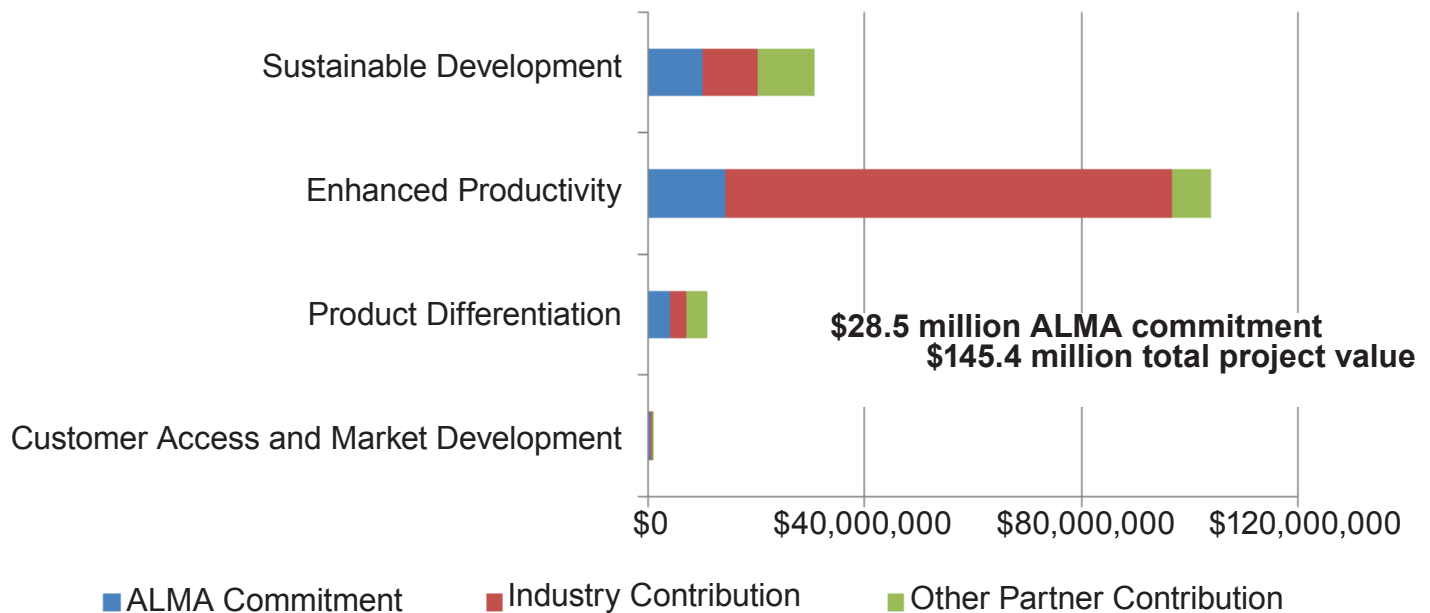
ALMA Commitment by Program (\$)

Program	No. of Projects	ALMA Commitment
Research and Development	65	\$12,158,467
Strategic Initiatives	9	\$2,384,493
Diversified Livestock Funds of Alberta/ Alberta Livestock Industry Development Funds	7	\$1,611,945
Industry and Market Development	60	\$2,937,530
Agri-Processing Automation and Efficiency	59	\$9,067,644
Agri-Processing Product and Market Development	17	\$343,311
Total		\$28,503,390

217 Projects



\$ Commitment by Goal



Board of Directors



Back row (L-R): Jeff Kroll, Robert Francis, Jurgen Preugschas, Leighton Kolk, Ron Jackson, Ted Bilyea, John FT Scott, John Weekes, Brad Klak (Ex-Officio)
Front Row (L-R): David Andrews, Gordon Cove (President & CEO), Jason Krips (Deputy Minister, Agriculture and Forestry; Ex-Officio), Dr. David Chalack (Chair), Anne Wasko, Kim McConnell

ALMA-Supported Projects 2014-15

Research and Development

Title	Objective	Applicant	Organization	Commitment
Effects of Nitric Oxide intervention in a lethal synergistic viral-bacterial Bovine Respiratory Disease complex (BRDC) model	Providing detailed insight into how Nitric Oxide (NO) disrupts the lethal viral-bacterial synergism that causes insidious respiratory disease called BRDC in cattle. NO, when administered to cattle arriving at the feedlot, reduces the incidence of BRDC and, as a new class of antimicrobial, is a naturally occurring molecule produced by mammals to protect themselves against bacteria, viruses, fungi and parasites.	Dr. Christopher Miller	University of British Columbia	\$191,600
Performance validation of RFI selected cattle under extensive cow/calf production systems	Extending genetic selection research to investigate the relationship between feed efficiency and cow/calf production under extensive open-range production systems. Existing programs measure efficiency (and its relationship with greenhouse gas production), largely in drylots, and thus the development of new tools for identifying cattle on range will lead to a more profitable cow herd.	Dr. Edward Bork	University of Alberta	\$245,000
Investigating factors associated with the pathogenesis of toe tip necrosis in Alberta feedlot cattle	Toe Tip Necrosis Syndrome is a condition of recently arrived feedlot cattle wherein bacteria infect the bone and soft tissues of the hoof, leading to lameness. Advanced cases are extremely difficult to treat, therefore prevention is critical to controlling this disease. ALMA-funded research into the role of micronutrients such as copper and zinc play in the development of this disease. Funding was also used to assess the biomechanical properties (hardness and elasticity) of the hoof.	Dr. Murray Jelinski	University of Saskatchewan	\$51,100
Predicting feeder lamb performance – a validation of SheepBytes® feeding recommendation	SheepBytes is a web based ration-formulating computer program based on the 2007 NRC nutrient recommendations which include dynamic variables like environment and animal body condition. The accuracy of the predicted versus the actual dry matter intake and average daily gain will be evaluated at two locations over two years using GrowSafe systems individual feed intake technology to determine feeder lamb performance, carcass quality and costs of production on barley based rations.	Dr. Susan Markus	Agriculture and Rural Development	\$63,280
Welfare assessment of alternates to electric prods	Determining the most humane handling aids for cattle on farm and at the packing plant. Even though the use of electric prods for handling beef cattle is very common, little scientific information exists on the effects of electrical stimuli on the behaviour and stress-related responses of cattle.	Dr. Karen Schwartzkopf-Genswein	Agriculture & Agri-Food Canada	\$188,956
Automated, rapid detection and identification or rule-out of high priority influenza viruses	Delivering user-friendly and cost-effective diagnostic tests that can streamline detection and characterization of influenza viruses in the laboratory. These tools can enhance disease surveillance and rapid detection of high priority influenza subtypes and improve our ability to respond to influenza threats.	Dr. Oliver Lung	University of Lethbridge	\$196,000
Enzymatic modification of egg lecithin and canola lecithin for Functional Food Development	Developing processes for the enzymatic modification of egg and crude canola lecithin to impart desirable physical properties plus dietary choline and omega-3 fatty acids. Lecithin is a widely used food emulsifier but most commercial food lecithin is sourced from soybeans. Exploring ways to create commercial opportunities for lecithin derived from Alberta grown eggs and canola.	Dr. Jonathan Curtis	University of Alberta	\$56,500

Title	Objective	Applicant	Organization	Commitment
Identifying functional SNPs to enhance genomic prediction accuracy for feed efficiency and carcass merit traits in beef cattle	Employing an integrated approach to develop genomic tools that can accurately predict efficient cattle with desirable carcass traits at birth based on their DNA markers. The genomic prediction tools will be made available to the industry to produce beef more efficiently.	Dr. Changxi Li	Agriculture and Agri-Food Canada	\$416,000
Effect of commercial housing type on laying hen welfare and bone characteristics in Alberta	Providing information on the welfare and bone density of hens in various housing systems used in Alberta. The Egg Farmers of Alberta have committed to not allowing the installation of new conventional cages after December 31, 2014. However, producers need reliable and unbiased evaluations of potential advantages/disadvantages of alternative housing systems available.	Dr. Clover Bench	University of Alberta	\$103,000
Application of laboratory assays for product efficacy studies focusing on treatment and control of Digital Dermatitis in cattle to improve animal welfare	Developing laboratory assays to evaluate new products for prevention of Digital Dermatitis before testing in the field. With new treatment options, cows are more likely to be cured, thereby breaking the chain of new infections in dairy herds. Lameness is a common disorder in cows, often caused by infectious agents causing Digital Dermatitis, which is painful and difficult to treat.	Dr. Karin Orsel	University of Calgary	\$92,082
Whole Genome Mapping (WGM) as a high resolution genotyping tool for traceback investigation of foodborne disease outbreaks	Developing a new technology to detect and quickly trace the contaminants of <i>Listeria</i> and <i>E. coli</i> to source to mitigate the effect on public health. Recent incidents cost the meat processing industry millions of dollars including the loss of 23 lives with the <i>Listeria</i> outbreak.	Dr. Kingsley Amoako	Canadian Food Inspection Agency	\$105,000
Development of single shot vaccines for swine	Developing a novel vaccine platform against Porcine Reproductive and Respiratory Syndrome Virus (PRRSV), the economically most important disease of pigs.	Dr. Volker Gerdts	University of Saskatchewan	\$160,000
The use of infrared thermography at a processing abattoir to identify meat quality aberrations in live animals	Demonstrating the cost-effective use of live animal infrared scans at an abattoir for the purpose of identifying animals likely to produce meat quality aberrations. Demonstrating the nutritional therapy treatment of these identified animals which will reduce the incidence of dark cutting beef and the subsequent beef quality discounts endured by producers.	Dr. Al Schaefer	University of Alberta	\$129,720
Improving foot pad quality in commercial broilers: Benchmarking and practical strategies	Benchmarking litter management philosophies in Alberta broiler barns, the evaluation of methods available for assessing foot pad quality at different levels of the production chain, and investigating new developments in bedding blends and poultry flooring for the purpose of improving overall broiler well-being and foot pad health.	Dr. Clover Bench	University of Alberta	\$126,542
Control of poultry contamination by aerotolerant <i>Campylobacter</i>	Investigating the effect of aertotolerant <i>Campylobacter jejuni</i> on poultry contamination and develop measures to control <i>C. jejuni</i> contamination by interfering with the aerotolerance of <i>C. jejuni</i> . <i>C. jejuni</i> is a major bacterial cause of gastrointestinal diseases in humans, most frequently transmitted via contaminated poultry.	Dr. Byeonghwa Jeon	University of Alberta	\$118,500
A novel therapy for controlling Shiga toxin-producing <i>E. coli</i> in livestock and human medicine	Evaluating non-pathogenic <i>E. coli</i> for their ability to out-compete Shiga-toxin producing <i>E. coli</i> (STEC) causing human disease. Once highly competitive, non-pathogenic <i>E. coli</i> (White Knights) are characterized, mechanisms they use to eliminate STEC will be investigated for future applications in human medicine and livestock production.	Dr. Kim Stanford	Agriculture & Rural Development	\$207,000

Title	Objective	Applicant	Organization	Commitment
Generation of novel vaccines for the livestock sector via reverse immunology technology	Identifying peptides representing neutralizing epitopes of Porcine Circovirus 2 (PCV2) . The peptides will serve as lead candidates for highly efficacious vaccines. Several veterinary vaccines induce only partial protective immunity resulting in mitigation of disease but not elimination of viral infection and transmission. A vaccine capable of strong induction of neutralizing antibodies against PCV2 will lead to prevention of viral infection, disease and shedding.	Dr. Markus Czub	University of Calgary	\$266,000
A potential effective and targeted methane mitigation technology for beef and dairy industry – a proof of principal study	Inventing a novel method to mitigate methane production from ruminants by targeting rumen methanogens specifically <i>in vitro</i> . The long-term goal is to convert this new technology to regular feeding process, to help farmers improve animal production through sustainable management.	Dr. Leluo Guan	University of Alberta	\$80,900
Introduction of bloat-free legumes into existing pastures for high performance cattle grazing in western Canada	Developing a pasture management strategy for rapid improvement of high performance grazing in different eco-climatic zones of Alberta. Improving profitability of cattle production in the area while generating information on economics and soil property dynamics of such a production system for determination of its sustainability.	Dr. Surya Acharya	Agriculture & Agri-Food Canada	\$150,000
Effect of rumen-protected B vitamins on dairy calf growth and health	Examining the effects of supplementation of rumen-protected and unprotected B vitamins on pre- and post-weaning growth and disease incidence and severity in dairy calves.	Dr. Lorraine Doepel	University of Calgary	\$243,454
Relationship between beef quality grade and collagen biochemistry	Examining if the connective tissue of highly marbled beef has fewer heat stable crosslinks than connective tissue from lean beef. Supporting Canadian beef branding based upon muscle composition.	Dr. Heather Bruce	University of Alberta	\$58,000
Surveillance and characterization of Influenza A viruses from western Canadian swine	Determining which strain types of flu viruses are circulating in pigs within the provinces of western Canada and working with producers and veterinarians to provide insights into the evolution of the virus within the herd and developing more effective control strategies.	Dr. Susan Detmer	University of Saskatchewan	\$54,476
Informed design and validation of inhibitors against <i>Clostridium perfringens</i> mucolytic enzymes to migrate colonization and necrotic enteritis	Mitigating infection and developing unique compounds that will prevent <i>C. perfringens</i> from colonizing the intestine of chickens, thereby disrupting the onset of disease and transmission to humans.	Dr. D. Wade Abbott	Agriculture & Agri-Food Canada	\$308,154
Investigations on survival of <i>Staphylococcus aureus</i> and <i>Clostridium perfringens</i> during bacon processing	Providing scientific validation of cooling processes so that processors can meet CFIA and USA requirements for cooked meats. Cooling processes for cooked meat products require validation to ensure product safety. With new guidelines for cooling from the Canadian Food Inspection Agency, processors need scientific data to ensure that their cooling regimes control the growth of <i>Staphylococcus aureus</i> and <i>Clostridium perfringens</i> .	Dr. Lynn McMullen	University of Alberta	\$98,500
<i>M. bovis</i> genetic variances among geographical regions	Comparing 700-800 sequenced genomes to see if there is a genetic variance in <i>M. bovis</i> between geographical regions. If genetic variances are identified then the study will look to see whether these changes are conserved among geographically distinct isolates and then determine if these genetic changes are sufficient to alter the structure of the proteins. If so it will look to design new ELISA antigens with increased sensitivity for the diagnosis of <i>M. bovis</i> infection.	Andrea Brocklebank	Canadian Cattlemen's Association	\$30,000

Title	Objective	Applicant	Organization	Commitment
Strategic vaccination of young calves to reduce respiratory disease in weaned beef calves	Developing effective vaccination strategies that begin early during the life of a calf and provide protective immunity against BRD during the weaning period. The key to this new vaccination strategy is to change the route of vaccine delivery from an injection under the skin (SC) to an intranasal (IN) injection.	Dr. Philip Griebel	University of Saskatchewan	\$65,000
Pilot study to test the efficacy of a vaccine for laminitis in feedlot cattle	Streptococcal exotoxin vaccination offers protection from induced laminitis in 80% of horses. Given the similarity of the disease in cattle, it is reasonable to expect that the same vaccination protocol might produce similar protection in feedlot cattle	Dr. David Wilson	University of Saskatchewan	\$212,720
Development of host defense peptides as a novel antimicrobial and anti-inflammatory therapeutic to mitigate intestinal diseases in livestock	Developing natural peptides secreted by animals (i.e. host defense peptides) as a novel therapeutic for important intestinal diseases in livestock. An overarching goal is to advance these peptides as a cost-effective, safe, and non-antibiotic innovation for Alberta producers (i.e. to reduce direct and indirect losses from intestinal disease in livestock).	Dr. Eduardo Cobo	University of Calgary	\$150,000
Evaluation of functional glycans and glycopeptides in swine	Building on previous success in identifying feed ingredients and functional glycans with activity against enteric pathogens. The swine industry will benefit from this project by access to an improved toolset for control of enteric disease and provides an alternative to antibiotic use in swine production.	Dr. Michael Gänzle	University of Alberta	\$280,000
Development of a novel delivery platform for immune modulators based on biodegradable nanoparticles	Developing a treatment with immune modulators, CpG ODN and/or poly(I:C) incorporated in cellulose nanoparticles to achieve this and reduce losses due to Bovine respiratory disease (BRD) at feedlot entry and/or a BRD outbreak at later times. Induction of early, innate immune responses would bridge the susceptible period between vaccination and development of specific immunity and provide protection from infection.	Dr. Sylvia van den Hurk	University of Saskatchewan	\$140,000
Development and optimization of a novel Bovine Viral Diarrhea Virus vaccine by transdermal needle-free delivery and antigen sparing	Bovine Viral Diarrhea Virus (BVDV) is a pathogen of major importance in beef and dairy herds worldwide. We developed a novel experimental BVDV vaccine, which elicits complete protection from BVDV-2 infection. We intend to further develop this vaccine candidate to make it commercially viable by using needle-free delivery, reducing the antigen dose and showing long-term duration of immunity.	Dr. Sylvia van den Hurk	University of Saskatchewan	\$150,000
Effect of colostrum feeding on gut microbial colonization, development and health of dairy calves	Determining how colostrum feeding strategies impact gut microbial colonization and gastrointestinal health and development. Microbial communities and gastrointestinal development will be examined using techniques in microscopy, physiology and DNA sequencing to characterize the impact of colostrum feeding schemes.	Dr. Michael Steele	University of Alberta	\$246,000
Genetic basis of susceptibility and resistance of pig lymphocytes to Porcine Circovirus type 2 infection	Identifying target cells for PCV2 infection, analyzing PCV2-induced cellular defects, and identifying pig genes that interfere with PCV2 replication. Developing new screening tools for selecting pigs more resistant to and excluding those highly susceptible for infections with PCV2.	Dr. Markus Czub	University of Calgary	\$165,000

Title	Objective	Applicant	Organization	Commitment
Development and evaluation of "all-in-one" RFID, DNA collection, and management tags to improve efficiencies and traceability in livestock production	Developing and evaluating new tag technologies for optimizing herd management decisions while improving on industry traceability standards by combining Ultra-High Frequency (UHF) technology and DNA trait analysis for on-farm production improvements. UHF has the potential to increase efficiencies in cattle management, movement and tracking. Tissue tags are the first step in DNA trait analysis for herd improvement, diagnostics and DNA traceability.	Mr. Glen Kathler	SAIT Polytechnic	\$244,500
Mitigation of <i>Campylobacter jejuni</i> in chickens: a biorationale-based approach to advance the sustainability of the Alberta poultry sector	Delivering essential information to develop a novel innovation (i.e. designer nanobodies and delivery systems) to achieve a safe, effective, and economically viable on farm strategy to mitigate <i>Campylobacter jejuni</i> , and thereby preserve Alberta's reputation as a producer of safe and environmentally sustainable foods. <i>C. jejuni</i> is the most prevalent cause of bacterial foodborne illness in Alberta.	Dr. Douglas Inglis	Agriculture & Agri-Food Canada	\$150,000
Reactive nitrogen and greenhouse gases at cattle feedlots	Measuring greenhouse gases and the fate of ammonia at cattle feedlots, seeking opportunities to reduce both production costs and environmental effects.	Dr. Sean McGinn	Agriculture & Agri-Food Canada	\$132,000
Use of probiotics to improve production efficiency and health of cattle	Developing probiotics to reduce the use of antibiotics and testing their potential to improve feed efficiency, modulate the immune system and improve the health of cattle. The addition of in-feed antibiotics as growth-promoting feed additives in beef cattle diets has been shown to improve feed efficiency but concerns over the use of antibiotics in livestock production continue to grow.	Dr. WenZhu Yang	Agriculture & Agri-Food Canada	\$190,000
Are grazing impacts on greenhouse gas fluxes in Alberta's rangelands mediated by the soil microbial community?	Quantifying the greenhouse gases (GHG) flux in rangelands and examining how cattle grazing alters the microbial community and associated GHG emissions. Rangelands provide ecosystem goods and services that benefit all Albertans, including carbon storage. Soil micro-organisms, which vastly out-weigh cattle in these systems, regulate carbon storage and GHG.	Dr. Cameron Carlyle	University of Alberta	\$316,844
Precision feeding layers for improved uniformity, production, and sustainability	Tailoring the type of and the amount of feed provided to individual free-run birds based on their individual body weights, measured at the time feed is provided; giving entirely new performance and behaviour insights. Precision feeding, or feeding the right feed to the right bird at the right time, can improve layer uniformity, egg production efficiency, and shell quality. This project is the first ever to pay attention to the nutritional needs of individual birds.	Dr. Martin Zuidhof	University of Alberta	\$190,000
Integrating surveillance & research to address emerging threats from antimicrobial resistance to the sustainability of livestock production and human health	Integrating antimicrobial use and resistance data from several existing surveillance programs and research projects involving humans, animals and the environment.	Dr. Sylvia Checkley	University of Calgary	\$125,000
Developing equipment for quick and efficient temporary fencing for crop residue grazing of ruminant livestock	Developing innovative equipment to efficiently erect temporary fencing that is suitable for a variety of terrains and weather conditions. Temporary fencing will help livestock producers take advantage of alternative grazing options which have been shown to reduce winter feeding costs and provide for a more sustainable method of grazing management.	Dr. Joy Agnew	Prairie Agricultural Machinery Institute	\$32,580

Title	Objective	Applicant	Organization	Commitment
Evaluation of purple prairie clover as a novel forage for the sustainable growth of cattle industry	Determining the yield, nutrient composition and basic agronomic characteristics of purple prairie clover as a novel and high nutritive forage by conducting field growing experiments and laboratory analysis.	Dr. Yuxi Wang	Agriculture & Agri-Food Canada	\$120,000
Advancing animal welfare management and communication in Canada	In collaboration with Alberta Farm and Animal Care (AFAC), developing alternative strategies for managing and communicating beef industry Farm Animal Welfare values and practices that are in line with the needs and demands of Canadian consumer and industry stakeholders.	Dr. Sven Anders	University of Alberta	\$148,000
Development of decision making tools for sustainable beef production in Canada	Developing a data-based decision making system (targeted heifer replacement/cow breeding and feeder cattle sorting tools) as a joint effort between AAFC, UofA, Livestock Gentec, Agriculture and Forestry and CCHMS. Users will be able to compare different scenarios for their herd thanks to research generated prediction values for animal performance, carcass merit traits, GHG emissions and profitability. This system will help to solidify Canada's leadership in sustainable beef production.	Drs. Manuel Juarez / Sven Anders	Agriculture & Agri-Food Canada / University of Alberta	\$149,987
Development of information and science to support the provision of Ecosystem Services (ES) on agricultural lands	Prototyping an integrated decision support system for enabling the development of innovative ES programs and markets in agriculture.	Dr. Marian Weber	Alberta Innovates Technology Futures	\$349,500
Bovine colostrum-derived immune and stem cells to boost immunity and general health of beef and dairy cattle	Developing a new method to enhance protection against disease and health of animals without using antibiotics, thereby enhancing economic viability of farms and sustainability of animal agriculture.	Dr. Hilal Gul-Uludag	MySteM Biotechnologies	\$120,000
Improving feed efficiency and reducing methane emissions from dairy cows using milk Mid-infrared spectroscopy to support "green Alberta milk"	Bringing together an international consortium to develop tools to improve feed efficiency and reduce methane emissions in dairy cattle based on simple analysis of routine milk samples.	Dr. Zhiquan Wang	University of Alberta	\$318,626
Biodiversity assessment of Alberta's beef industry: Filling gaps and identifying opportunities	Developing a rigorous and practical methodology for assessing the positive and negative impacts of the beef production life cycle. Using existing and new biodiversity data to contribute scientifically credible information to life cycle analysis practitioners and others seeking reliable information on the relationship between biodiversity and beef production.	Dr. Daniel Farr	Alberta Biodiversity Monitoring Institute	\$427,000
McDonald's sustainable beef strategy Canadian pilot project	Identifying specific indicators for recognizing sustainable beef production practices and include a mechanism to verify and trace sustainable beef operations throughout the supply chain. The Pilot aims to recognize current sustainable practices and provide a foundation for continuous improvement, as well as inform the Canadian Roundtable for Sustainable Beef's sustainable beef journey.	Ms. Emily Murray	Cargill Limited	\$310,542
The impact of pathogen prevalence and antimicrobial resistance on Bovine Respiratory Disease in feedlot cattle	Characterizing Bovine Respiratory Disease (BRD) pathogens in morbid and healthy feedlot cattle and evaluating microbial risk factors for the development and outcome of BRD. BRD is a significant animal health issue facing the beef industry and accounts for economic losses greater than all other diseases of cattle. Despite the importance of BRD, there is limited information on the prevalence of BRD pathogens in Albertan feedlots and the outcome of cattle treated for BRD.	Dr. Trevor Alexander	Agriculture & Agri-Food Canada	\$317,890

Title	Objective	Applicant	Organization	Commitment
Validating the stage of maturity at harvest for barley and oat for swath grazing	The objective of this proposal is to conduct a field trial to determine the effect of differing maturity at harvest for swath-grazing of barley, oat and triticale on animal intake and performance. The proposed approach will be to seed paddocks of all three cereals and to swath them at the recommended stage (soft dough for barley and triticale; and late milk for oat) as well as at hard dough stage (~ 20 d later); swathed cereals will be grazed by beef cows over winter to determine animal performance and system economics. The expected outcome is development of new recommendations for the stage of maturity at harvest for oat, barley and triticale that maximizes the yield of digestible nutrients without negatively affecting cow performance or profitability.	Dr. Bart Lardner	Prairie Agricultural Machinery Institute	\$54,995
An economic assessment of greenhouse gases and production efficiency for Alberta dairy farms	Evaluating the relationship between green-house gas (GHG) emissions and productive efficiency for Alberta dairy farms. Factors affecting trade-offs between economic viability and GHG emissions are assessed using historical production data for a sample of Alberta dairy farms.	Dr. Scott Jeffrey	University of Alberta	\$100,400
Assessment of beef toughness using polarized Near-Infra-Red (NIR) spectroscopy	Examining the use of polarized NIR light to predict cooked beef toughness from the raw product. Methods commonly used to measure meat toughness are time consuming and destructive; consequently, meat toughness is rarely assessed in industry because sacrificing of valuable product is seen as untenable. Invention of a non-invasive method of assessing meat toughness will allow for classification of carcasses or cuts into quality categories and facilitate product differentiation.	Dr. Heather Bruce	University of Alberta	\$260,000
Mucosal delivery of oligodeoxynucleotides containing CpG motifs (CpG-ODN) to broiler chickens as an alternative to antibiotics	Studying the utility of oligodeoxynucleotides containing CpG motifs (CpG-ODN) in neonatal chickens at poultry hatcheries. The use of antibiotics to control early broiler chick mortality was discontinued from May, 2014 in all Canadian broiler hatcheries. Alternatives to antibiotics are priority in the broiler chicken industry. There is a significant protective effect of immunostimulatory CpG-ODN against lethal bacterial infections in chickens.	Dr. Susantha Gomis	University of Saskatchewan	\$230,000
Development of a novel bioreactor technology for the production of drop-in platform chemicals from agricultural by-product	Demonstrating a novel technology to transform low-value materials from dairy processing facilities, into high-value prebiotic non-digestible food ingredients. The successful implementation of this technology will provide producers in Alberta and in Canada with a flexible tool to target the rapidly growing international market of functional health foods while reducing their operating costs.	Dr. Carlo Montemagno	University of Alberta	\$100,000
Using predicted and residual rumen volatile fatty acid production to predict feed efficiency, carcass yield, and carcass composition in beef cattle	Applying a mathematical model to identify rumen markers that are able to enhance nutrition models used for formulating diets and predicting animal performance by incorporating variables that account for genetic merit, thereby enhancing the ability of producers to sustainably manage feeding programs and improve production efficiency.	Dr. Leluo Guan	University of Alberta	\$249,416

Title	Objective	Applicant	Organization	Commitment
The versatile amino-sugar: glucosamine as a possible new curing and preservative agent in meat products	Developing an innovative glucosamine-based ingredient that can help increase the quality of processed meat products. Some non-meat ingredients (i.e. nitrites) used in the preparation of processed meat products have been associated with negative health image. In light of this, the meat industry is constantly looking for new "natural" ingredients to replace nitrites. Glucosamine, a natural molecule found in animal tissues, appears to be a valuable candidate in this regard.	Dr. Mirko Betti	University of Alberta	\$127,500
Development of a western Canadian forage NIRS database for use by industry and research communities	Developing Near-Infra-Red Spectroscopy (NIRS) capability for the rapid and accurate prediction of moisture, protein, fibers (ADF, NDF, lignin), fiber digestibility starch, fat, and macro minerals in intact undried forage and total mixed rations. These NIRS calibrations will be distributed throughout the Alberta Feed NIRS Network.	Dr. Mary Lou Swift	Hi-Pro Feeds	\$202,950
Development of whey protein and fiber combinations that sustain weight loss and improve diabetic control	Determining whether whey protein, and its components, synergize with fiber to produce greater reduction in food intake and body weight with improvements in glucose control than either intervention alone. The project may lead to the development of novel nutraceutical or functional food products for weight loss and diabetic control.	Dr. Prasanth Chelikani	University of Calgary	\$157,575
Identification and functional characterization of advanced glycation end products and meat protein-derived peptides as novel bitter taste blockers	Demonstrating additional beneficial properties of ovotransferrin peptides against metabolic syndrome to further increase its application and marketability. Metabolic syndrome afflicts ~20% Canadian adults. As hypertension is a classical feature of metabolic syndrome, an antihypertensive agent with additional benefits on metabolic syndrome is highly desirable.	Dr. Prashen Chelikani	University of Manitoba	\$164,000
Production and testing of PUFA-BHP in beef II: optimizing diets, NIRS predictions, rumen bacterial profiles, and human health implications	The second phase of a collaboration designed to enable development of beef and beef products enriched with healthy polyunsaturated fatty acid biohydrogenation products (PUFA-BHP). This involves a multidisciplinary approach covering beef cattle nutrition, genomic testing, rumen microbiology, the use of NIRS to rapidly measure PUFA-BHP's, and studies to examine health effects of PUFA-BHP's and their modes of action.	Dr. Mike Dugan	Agriculture & Agri-Food Canada	\$409,614
Systematic study on the relationship among rumen microbial lipid metabolism, meat beneficial fatty acids, and meat quality in beef cattle	Identifying the rumen microbial fatty acid (FA) metabolism and host tissue FA synthesis pathways, to determine their impact on meat FA profiles and quality. The long-term goal is to differentiate meat products through marker assisted breeding in combination with desired nutritional regimes to improve beef FA composition, ultimately leading to higher profitability.	Dr. Leluo Guan	University of Alberta	\$359,340
Alternative strategies for horse meat harvest to ensure product quality and safety for export markets	Providing data on alternative chilling strategies and the impact that they have on the microbiological quality and eating quality of horse meat. Ensuring market access for Alberta horse meat and providing the basis for policy changes for cooling of horse meat.	Dr. Lynn McMullen	University of Alberta	\$239,925
Optimum dose rate of a methane inhibitor for beef cattle	Exploring the dose response of cattle to a new feed additive designed to reduce methane emissions from feedlot cattle. Using this new additive to lower methane production could lower the carbon footprint of beef production in a cost effective manner if animal performance is also increased.	Dr. Karen Beauchemin	Agriculture & Agri-Food Canada	\$190,000

Title	Objective	Applicant	Organization	Commitment
Development of a topical anesthetic/analgesic for the control of pain and inflammation in piglets undergoing castration and tail docking	Conducting research required for registration of a product that can be used topically for short term and long term pain in castration and tail docking of piglets in Canada. The product was developed by Alberta Veterinary Laboratories. Industry is looking for an analgesic/anesthetic to address pain associated with these procedures where currently no registered product exists.	Dr. Merle Olson	Bow Valley Research	\$248,000
Refining recommendations for grazing whole plant corn in Saskatchewan	Focusing on grazing whole plant corn with an emphasis on evaluating methods to mitigate digestive upset, minimize feed wastage, and maximize profit for livestock producers. Generating new information for beef cattle producers with respect to recommended grazing techniques to reduce rumen acidosis and maximize forage utilization when grazing whole plant corn during winter months.	Dr. Bart Lardner	University of Saskatchewan	\$106,020
The effects of antibiotic use on ICE-associated antimicrobial resistance (AMR) transfer in livestock production	Investigating integrative conjugative elements (ICEs) in the development of antimicrobial resistance (AMR) and evaluate the effect of antibiotic use on ICE-mediated AMR transfer in the Alberta beef and poultry industries, particularly related to antimicrobials with relevance to human and animal health.	Drs. Tim McAllister / Sylvia Checkley	Agriculture and Agri-Food Canada / University of Calgary	\$595,500
Ovum pick-up and <i>in vitro</i> production of embryos for dissemination of cattle genetics	Piloting an efficient procedure for <i>in vitro</i> production of embryos from live cattle and establishing this technology in Alberta for improving genetic selection and productivity of cattle. Reproductive technologies are critical for increasing the number of progeny from genetically superior cattle. In that regard, repeated collection of eggs from elite cattle by an ultrasound-guided approach and its use for laboratory (<i>in vitro</i>) production of embryos is highly innovative.	Dr. Jacob Thundathil	University of Calgary	\$180,960
Investigating and mitigating the emergence of <i>Haemonchus contortus</i> as a major pathogen of western Canadian sheep	Investigating parasite prevalence, developing new faster methods to detect drug resistant parasites and enabling producers to make informed decisions regarding if drug treatments are required and which drug to use as part of their parasite control programs.	Dr. John Gilleard	University of Calgary	\$421,000
Development of a feeding program for young pigs using solely human-non-edible feedstuffs to control gut health and growth	Developing new highly digestible feed ingredients and feeds is required to overcome the loss of plasma protein as a feed ingredient for young pigs. Feed intake following weaning is the most critical factor for a successful swine feed program and plasma protein provided a required boost. However, plasma protein has also been associated with a new infectious disease in Canada; hence, replacement ingredients and complete feeds are required.	Dr. Ruurd Zijlstra	University of Alberta	\$200,000
Using a swine (Landrace) model of early insulin resistance to investigate the therapeutic potential of vaccenic acid in intestinal inflammatory bowel disease	Using a pre-clinical swine model to study the benefits of vaccenic acid (VA) in early and established conditions of inflammatory bowel disease (IBD). A newly discovered natural trans fat called VA found in beef and dairy is known to reduce inflammation in the intestine and may be beneficial for IBD.	Dr. Spencer Proctor	University of Alberta	\$206,100
The Bos Farm automated goat rotary project	Building the most automated and user friendly goat rotary in the world thereby revolutionizing the goat milking industry in Alberta by allowing farms to manage more animals per person and achieve higher returns.	Cherylynn Bos	Bos Farms	\$176,164

Strategic Initiatives

Title	Objective	Applicant	Organization	Commitment
An organic waste inventory for Alberta	Addressing major deficiencies Alberta's organic waste: i. Waste composition; ii. Seasonal variation; iii. Geographic distribution by creating an Alberta organic waste inventory.	Jeff Bell	Agriculture and Rural Development	\$75,000
Modernization of livestock carcass grade standards	Facilitating in the development of a proposal for modernization of the regulations, standards and architecture of a standards authority.	Cindy Delaloye	Canadian Beef Grading Agency	\$23,800
<i>E. coli</i> O157 research and education strategy: Phase II	Developing an executive summary brochure as a resource for packers, food service and retail trade partners in Canada. In collaboration with Health Canada the findings will be incorporated into consumer resources to be developed and distributed by Canada Beef Inc.	Mark Klassen	Canadian Cattlemen's Association	\$109,000
Electronic livestock trading solution with physical clearing	AgriClear (ACR) is an electronic trading platform combined with physical clearing. ACR's vision is to aid both buyers and sellers with a transformational and mutually beneficial means of transacting business which will reduce transaction costs; develop a transparent and highly dynamic market-based pricing mechanism for livestock; establish failsafe transactional security and build trust between industry sectors.	David Moss	AgriClear Inc.	\$450,600
Canada West: Developing a delivery model for veterinary laboratory testing and disease surveillance in western Canada	Providing detailed strategic and financial analysis and a decision document for the partners as knowledge regarding the required outcomes, the current state of the services, and collaborative opportunities to stakeholders in animal health services in western Canada.	Dr. Marilyn Jonas	Prairie Diagnostic Services Inc.	\$240,000
Pathways to the Chinese food retailer and consumer: Enabling Canadian exports to China: Opportunities & challenges	CABI reported on China's market for high-quality food and beverage ingredients and products from Alberta and Canada. A mission focused on connecting with senior-levels of leading Chinese retailers, identified key barriers and opportunities and CABI summarized and published its learnings and their policy implications for the benefit of agri-food stakeholders overall.	David McInnis	Canadian Agri-Food Policy Institute (CAPI)	\$15,000
Canadian Roundtable for Sustainable Beef (CRSB) Development Project	The CRSB is a multi-stakeholder organization that works to advance continuous improvement in sustainability of the Canadian beef industry. The CRSB will ensure that the beef industry moves ahead in a coordinated, acceptable and relevant direction.	Fawn Jackson	Canadian Cattlemen's Association	\$439,450
National Retail Meat Case Benchmark Study	The National Meat Case Study will achieve logistical efficiencies and enhanced opportunities for knowledge acquisition by being conducted in parallel with the retail portion of the National Beef Quality Audit (NBQA).	Mark Klassen	Canadian Cattlemen's Association	\$81,643
Targeted Forage Research Call	The targeted call for proposals focuses on forage research priority areas benefiting Alberta's cattle producers.	Karin Schmid	Alberta Beef Producers	\$950,000

Commercialization: Agri-Processing Automation and Efficiency

Title	Description	Organization	Commitment
WMS Project	Implementing a warehouse management system to improve the physical warehouse infrastructure, tracking systems, and wireless communication between product stations.	High Noon Investment Corporation	\$120,816
New Production Installation - Phase 1	Installation of a new boiler, mixer, grinder to increase steam capacity for perogy products that require bacon, eggs, and dairy.	Heritage Frozen Foods Ltd.	\$156,081
Productivity and Plant Efficiency Improvement Project	Improving production efficiency, consistency and output with the purchasing of new equipment (dicers and thermoforming packaging machine) to fill an immediate opportunity with Loblaws and Federated COOP.	Mountain Top Foods Ltd.	\$67,590
ICP Building Expansion	Facility expansion and increased production capacity.	Intercity Packers Ltd.	\$142,900
Infrastructure Project	Upgrading infrastructure at the Northern Alberta Processing Co. plant with new blood and feather air condenser; a rail winch; and new lighting fixtures.	West Coast Reduction Ltd.	\$91,100
Value Added Pastry Line	Enhancing preparation, production and process for pastry line.	Nossack Gourmet Foods Ltd.	\$39,297
Automated Equipment and Scale Equipment	Improving poultry processing efficiency, labelling and traceability.	Hutterian Brethren Church of Ridge Valley	\$7,800
Meat Processing Expansion	Increasing production with an additional smokehouse.	Medicine Hat Meat Traders Ltd.	\$8,971
High Compression Conversion Project	Upgrading shaft presses into high compression presses.	West Coast Reduction Ltd.	\$20,000
Meat Processing	Enhanced value-added capacity with vacuum pack equipment, new scales and bar-code printing and tracking software.	Lone Pine Farming Inc.	\$7,220
Overall Plant Revenue Enhancement Cost Reduction and Efficiency Improvements	Efficiency improvements with the purchase of boilers, dearator and softeners, and v-mag machines for improved quality and safe operations in the plant.	JBS Food Canada Inc.	\$422,338
Increase Production and Efficiency	Purchasing packaging equipment to improve efficiency and productivity and increase capacity.	Old Country Sausage Shop	\$29,260
Improving Traceability and Increasing Capacity for Free Range Pork Products	Automating inventory tracking to meet increased demand of free range pork products. Equipment additions include scales, a rail system within the coolers, and a vacuum filler.	Spragg's Meat Shop Ltd.	\$30,284
Automatic Splitting Saws	Purchasing and installing two automatic splitting saws into a modified line for increased efficiency.	Olymel S.E.C.	\$272,603

Title	Description	Organization	Commitment
Automated Organic Poultry Processing Facility	Installing automated poultry processing equipment for the new, state of the art organic poultry processing facility to increase capacity by 200,000 birds/year.	Sunworks Farm (2013) Ltd.	\$432,209
Nanton Production - Equipment Selection, Product Testing and Planning	Developing a functional plan for the expansion of the facility and developing a process that increases overall capacity and productivity.	Mountain Top Foods Ltd.	\$1,794,250
Packaging Machine Upgrade - Equipment and Process	Improving the efficiency of a multi-species, federally inspected slaughter and boning facility with the installation of a new vacuum packaging machine in the boning and pack-off operation.	Bouvry Exports Calgary Ltd.	\$74,666
Fabrication and Refrigeration Upgrade	Upgrading the fabrication and refrigeration equipment.	Harmony Beef Company Ltd.	\$1,000,000
Red Deer Facility Dairy Products Processing	A significant overhaul of the Red Deer facility to enable processing of milk solids non-fat into higher valued products.	Saputo Dairy Products G.P.	\$2,000,000
Southern Alberta Processing Co. Hide Chain	Installing a hide chain to improve the efficiency of the hide processing operation.	West Coast Reduction Ltd.	\$24,500
Enhanced Capacity for Portion Control Packaging	Expanding operations with a double chamber vacuum machine that will be utilized for packaging portion cut steaks for newly developed wholesale markets.	Foothills Custom Meat Processors Ltd.	\$4,810
Automation of Beef Patty Line	Automating the beef patty line with the addition of in-line grinders, conveyors and a high throughput automatic forming machine to compete into the wholesale and foodservice markets.	Family Meats 2011 Ltd.	\$9,555
Kitchen 1 Capital Upgrade Project	Implementing a new system to eliminate the drawbacks of outdated designs while dramatically improving convenience, safety and cleanliness. Additionally installing a dry ingredient mixer and micro system to improve process automation, process improvement and technology upgrades.	Champion Petfoods (GP) Ltd.	\$579,271
Smokehouse Replacement, Addition and Reconfiguration	Improving efficiency with a new smokehouse.	Nossack Fine Meats Ltd.	\$100,320
Food Safety and Machinery Update for Di Latte Cheese	Purchasing production equipment that will allow increased capacity and meet customer demand.	White Gold Cheese Factory Ltd.	\$17,920
Sausage Cutter Replacement	Increasing capacity with a new sausage cutter to maximize production and increase capacity.	Nossack Fine Meats Ltd.	\$41,960
Improving Supply Chain Productivity and Enhanced Meat Processing Capacity	Increasing capacity with semi-automated, high output equipment, refrigeration upgrades, and facility design.	Hutterian Brethren Church of Pine Haven	\$55,600
Hog Slaughter Amex	Augmenting beef slaughter capacity with hog slaughtering operations.	Country Quality Meat Cutting Ltd.	\$10,002

Title	Description	Organization	Commitment
New Egg Grading Machine	New egg grading machine with future traceability capacity.	GV Colony Farming Co. Ltd.	\$16,210
Automation of Bison Processing to Increase Productivity	Installing a meat slicer and vacuum packaging machine to improve the processing capacity and efficiency.	Olson's High Country Bison Company	\$6,489
2014 Plant Upgrades for Cost and Energy Efficiencies and Food Safety	Upgrading for cost and processing efficiencies, food safety and ergonomics.	SunGold Specialty Meats Ltd.	\$22,430
Addition of Fry Line	Installing a complete fry line including batter breading and automatic kebab forming/stick inserting machine.	Siwin Foods Ltd.	\$138,083
Pilot Plant	Designing, building and equipping a product development pilot plant.	Siwin Foods Ltd.	\$45,365
Value-Added Processing Capacity Expansion	Acquiring value-added processing equipment for an enhanced sausage processing line to facilitate the transition to marketing products into wholesale and food service markets.	Copperfield Farms Ltd.	\$16,032
EPIC Liquid Egg Expansion	Installing raw product and blended product storage systems for a liquid egg processing facility to improve compliance with product temperature requirements.	Egg Processing Inovation Cooperation	\$65,252
Packing Equipment Upgrades	Upgrading packaging to improve pack size options and labeling enhancements for multiproduct daily runs. Purchasing of a metal detection device also increases product safety and security.	Mountain Dog Enterprises Inc.	\$43,628
Camrose Colony Slaughter Facility	Purchasing cooling equipment to make the red meat facility more efficient and add value within the local market and farm store.	Hutterian Brethren Church of Camrose	\$4,899
Expansion Automation and Efficiency Project 2014	Upgrading automated systems to increase productivity and reduce cost, as well as improve traceability.	McLane's Meats Ltd.	\$6,885
Japan Sausage Processing	Enhanced fresh sausage processing to meet the demand of a new customer in Japan.	Trochu Meat Processors Ltd.	\$13,060
Upgrade to Cow's Milk Cheese Production	Upgrading of a sheep cheese making facility to include cow milk cheese production.	The Cheesiry F. Incorporated	\$934
BHJ Canada Meat Products Inc.	Investigating expansion opportunities at the Foothills site with order of magnitude cost estimates for construction.	BHJ Canada Meat Products Inc.	\$8,950
Calgary Distribution Improvement Project	Setting up a refrigerated distribution hub to enable better quality practices, expansion and control of the All Asia Fresh Foods product line.	All Asia Fresh Foods Inc.	\$8,000
Vacuum Filling Machine	Purchasing a continuous vacuum filling machine suitable for filling, portion and linking sausage.	Bashaw Meats and Sausage Ltd.	\$8,524

Title	Description	Organization	Commitment
Ben's Meats and Deli - Smoker	Replacing a smoker for greater efficiency, safety and productivity.	847552 Alberta Ltd. o/a Ben's Meats and Deli	\$9,800
Protein and Fat Recovery Project	Recovering proteins and fats from the process condensate, through the use of Dissolved Air Flotation ("DAF") systems.	West Coast Reduction Ltd.	\$225,128
Camrose Colony Slaughter Facility	Purchasing food processing equipment and training employees to enhance efficiency and value-added capacity at a red meat facility with production into local markets and farm store.	Hutterian Brethren Church of Camrose	\$15,050
Filling Portioner for Meat Based Cannelloni	Purchasing a patty former machine to replace the manual scooping of portions for meat based cannelloni.	Troika Foods	\$3,400
Batch Pasteurizer Walk-in Cooler and Ricotta Machine	Purchasing a batch pasteurizer, walk-in cooler, and Ricotta making machine to meet a growing demand.	White Gold Cheese Factory	\$21,178
Equipment Purchase	Installing a new Poly-Clip machine and food slicer to ensure Rollover dog food rolls are sealed correctly, as well as reduce waste, improve product quality and increase productivity.	Rollover Premium Pet Food	\$49,472
Wonton Automation	Reducing labour cost and increasing wonton output.	All Asia Fresh Foods Inc.	\$3,500
Shrink Wrapper Training	Purchasing a shrink tunnel system training.	Bles-Wold Yogurt Inc.	\$3,009
Box Erector	Purchasing fully automated carton erectors for improved labour efficiency and safety.	Maple Leaf Foods Inc.	\$76,587
2014 Valbella Upgrade and Addition	Implementing a new combined cold smoke/liquid smoke smokehouse and steam boiler for increased capacity.	Pioneer Meats Ltd	\$37,620
Calgary Phase IV	Increasing plant capacity with new equipment and process automation which will permit moving current production from other provinces to Calgary.	Cargill Limited	\$545,041
ICP Building Expansion	Expansion of capacity.	Intercity Packers	\$391,014
2015 Project	Purchasing a new filler packaging machine to make a new product called Burrata.	Alberta Cheese Company Ltd.	\$98,375
Automatic Grader and Packer	Installing an automatic egg grader and packer for improved efficiency.	Bristone Farming Co. Ltd.	\$24,800
Shrink Wrapper	Purchasing a shrink tunnel system to replace a corrugated boxes system for improved efficiency and environmental stewardship.	Bles-Wold Yogurt Inc.	\$11,525

Commercialization - Agri-Processing Product and Market Development

Title	Description	Organization	Commitment
New Product Development and Continuation of Recipe Formulation	Reformulating 20 existing products and developing 6 new meat products to improve costs, incorporate anti-microbial and anti-allergens ingredients and reduce sodium content to meet CFIA requirements.	Capital Packers Inc.	\$59,246
Halal Pepperoni Sticks	Providing the market with new pepperoni offerings.	El Nour Deli Inc.	\$17,708
Website and Label Design	Establishing a website to market products and supporting retail efforts with Co-op in Red Deer and Calgary.	Lone Pine Farming Inc.	\$2,000
WRA International Market Development	Generating interest for a premium beef brand, Western Royal Angus (WRA), in domestic markets and through distribution partnerships with international companies.	Western Feedlots Ltd.	\$38,700
Elk Antlers and Pet Chews	Developing, producing and selling elk antler, pet chews for dogs, to be sold in a retail store chain.	Riverbend Elk Farm Ltd.	\$5,544
Sales Development	Launching three new products and developing a website, sales and conference materials to penetrate food service channel and select food manufacturers.	Egg Processing Innovations Cooperative	\$27,273
Myers Eastern Packaging Development	Developing a new name brand "Meyer's" for Eastern Canada Retail Frozen Department.	710769 Alberta Limited o/a Royal Food Products	\$38,420
Torta Project	Introducing a cream cheese base torta, farm fresh cream cheese blended and layered with herbs, fruits and nuts. A food entertainment item for parties and at home celebrations.	Bles-Wold Yogurt Inc.	\$24,800
Market Development	Travel to SIAL in Paris to understand market potential, make customer contacts, and view product innovations for product development both in Canada and abroad.	Top Grass Cattle Co. Ltd.	\$2,200
Launching a New Marketing Campaign	Developing and launching a new website in order to target new customers with rebranded Meadow Creek.	Meadow Creek Sausage and Meat Ltd.	\$2,275
Latin Foods Business Plan. A strategy for increasing production capacity	Developing a new plan to increase capacity and solving production bottle necks.	Latin Foods Inc.	\$1,500
Stuffed Antler Chews	Developing a line of stuffed antler chews for sale through pet stores throughout Canada.	Rollover Premium Pet Foods	\$32,592
Value- Added Meat Processing Facility Development and Feasibility Assessment	Assessing costs and implementation requirements to retrofit a building for value-added processing and increase capacity.	TK Ranch at Inverlake Ltd.	\$27,500
Product Development of Value-Added Meats	Developing a business performance strategy/plan for expanding value-added processing capacity while developing 10 new products complete with nutritional analysis and marketing labels.	Bauer Meats Ltd.	\$4,340
Marketing in Japan and Korea	Gaining export access to the Japanese and South Korean markets through visits with buyers, building relations, and providing product samples.	Siwin Foods	\$43,742
Federated Co-op Private Label Wagyu Burger	Developing and launching a retail packaged private label burger for all Federated Co-op stores including Calgary Co-op and other stores.	Brant Lake Cattle Co. Ltd.	\$13,051

Industry and Market Development

Title	Description	Organization	Commitment
Use of Biological Simulator Technology	Creating a biological simulation system for personnel training, competency certification and verification of effectiveness of stunning procedures utilized during the slaughter of livestock.	Veterinary Simulator Industry Ltd.	\$125,000
Market Access to South India and China for Swine Genetics Sales	Attendance and participation in agricultural/livestock shows in India and China to meet government officials, industry companies, and independent producers relative to frozen semen and live pigs products.	Alberta Animal Genetics Consulting Group Ltd.	\$83,000
Agri-food Procurement Review - Phase 1	Implementing human resource consultation, market studies, waste management, group buying, and the consolidation of freights. This follows upon a procurement study the FPLRC undertook in 2013.	Food Processors Logistics Research Council (FPLRC)	\$25,200
International Agriculture Program	Connecting Alberta industry stakeholders with highly qualified buyers to source Alberta cattle, genetics, and other agricultural goods and services. The Northlands International Program consists of a highly integrated set of programs designed to seek out and attract qualified buyers and facilitate business between domestic and international stakeholders.	Edmonton Northlands	\$41,225
Framework for a Competitive and Sustainable PRC	The Poultry Research Centre (PRC) Advisory Board has determined that it is important to set a strategic direction in order to position itself as a leader in the poultry industry. Developing a strategic framework through which the PRC can maintain financial sustainability and capitalize on future research, technology transfer and learning opportunities.	University of Alberta	\$20,400
Carcass 101	An annual two day forum held in June with a theme of how to improve consistency and quality in a carcass to ultimately add value to that product. The event is hosted in conjunction with Certified Angus Beef.	Canadian Aberdeen Angus Association	\$43,655
Evaluation and development of an end lay and emergency poultry depopulation to create value from poultry by-products	Evaluating the use of the Low Atmospheric Pressure System (LAPS) as part of a self-sufficient long term business to provide routine and emergency depopulation for the Alberta poultry industry. The collaborators recognize that in order for this service to be viable and self-sufficient, a valuable use for the end product (spent hen/fowl) needs to be established.	The Institute for Applied Poultry Technologies	\$222,700
Customer Beef School and Camp	Bringing a 1 week training session to Alberta key account managers from distribution and sales to sell the story of our ranchers, feedlots, packing plant and beef production. Heritage Angus Beef provides what health-conscious consumers are demanding in beef: a safe, wholesome food that can be savoured and trusted.	Prairie Heritage Producers Inc.	\$50,225

Title	Description	Organization	Commitment
Development and demonstration of genetic selection for female traits in Canadian cattle	The development and demonstration of new selection tools that will enhance the longevity and sustainability of the Canadian cow herd. Optimal value is only realized with maximum producer up take, and an extensive producer engagement campaign will be undertaken by all partners.	Canadian Aberdeen Angus Association	\$100,500
Adaptation of herd management software and creation of a new mobile app for Canadian cow-calf producers with integration into Canadian breed association performance data.	Pursuing a modernized, Canadian, industry-specific herd management software- incorporating mobile functionality- that will facilitate broader adoption of data collection and analysis and enhance information exchange along the supply chain.	Canadian Hereford Association	\$45,825
Strategic Planning, Communication, Collaboration & Leadership	Creating a strategic plan to reflect current industry situations and provide benefit to members within the resources available. Contracting a facilitator to provide a one day joint workshop for board directors of the Canadian Sheep Federation and Alberta Lamb Producers and senior staff of the member organisations.	Alberta Lamb Producers	\$9,900
2014 Asian Trade and Relationship Enhancement Project	The Alberta Elk Commission (AEC) has taken a lead role working through the Canadian Cervid Alliance (CCA) in a coordinated effort with the Canadian Trade Secretariat to develop a clear plan of action to move towards achieving market access into China. AEC and CCA are both invested in a common goal of improved market access for our products.	Alberta Elk Commission	\$19,934
#FarmVoices Gallery Project	Creating a portable gallery for the purpose of educating the public about family farming, by sharing powerful #FarmVoices stories and information that illustrate its importance to the food system. The #FarmVoices stories will be organized into various themes and professionally designed to fit within 8 portable pop-up banners.	International Farm On Foundation	\$23,500
Agri-Food Trade Mission	Supporting Genome Alberta to participate in a federal agri-food trade mission to China to increase awareness and open up markets for Alberta and Canadian seed stock genetics and quality meat products .	Genome Alberta	\$5,000
Canadian Bull Congress School Education Program	This is a unique marketing opportunity for purebred cattle producers - with several components - Marketing- (private treaty sales), Purebred Cattle Show, 4-H Judging Clinic, Taste of Beef Banquet and Steak Challenge, Ag. Based Trade Show and School Education Program. In 2014 the Canadian Bull Congress revamped it's school program to include more informative and hands-on based station.	Camrose Regional Exhibition and Agricultural Society	\$52,500
SIAL Paris	A partnership between Canada Beef Inc., ALMA, and Alberta companies to jointly promote Alberta meat proteins at SIAL Paris.	Canadian Beef Cattle Research Market Development and Promotional Agency	\$62,500
Competitiveness Benchmarking for Canadian Beef	Developing a five year National Strategy showing how various organizations can work together to best position the industry to compete for a larger share of the world market and to become the high quality beef product of choice in the world. The strategy is being developed by the National Beef Strategy Planning Group (NBSPG) which includes all the provincial associations, the Canadian Cattlemen's Association, National Cattle Feeders' Association, Canadian Beef Breeds Council, Canada Beef Inc. and the Beef Cattle Research Council.	Canadian Cattlemen's Association	\$44,586

Title	Description	Organization	Commitment
Livestock Innovation Showcase	The showcase will consist of a combination of static and interactive displays. Booth space will be allocated to participating groups, which could include live animals. Product marketing was permitted in the showcase area, which is an important program component for showcasing value-added products and generating show sales for specific participants.	Edmonton Northlands	\$37,125
Pilot Training for 3rd Party Facility	Training through classroom teaching and hands-on application by participants. At the same time, under the training opportunity supported by the National Meat Training Centre at Olds College in corroboration with Cargill's resources as a meat packing plant, the partnership will be able to design a program that will fulfill the needs and meet the gaps of labour force shortage in the meat packing industry.	Cargill Limited	\$52,282
Porkapalooza	The Porkapalooza BBQ Festival focuses on creating a unique pork experience for Albertans; increasing consumer awareness of Alberta pork products; providing a platform for local food vendors to showcase their talent and Alberta meat products; integrating other Alberta proteins into the festival; and creating an event where the consumer can interact with the producer.	Alberta Pork	\$92,500
Recruitment Campaign	Developing a Recruitment Campaign, tailored toward the specific needs of ACFA, and the beef industry. The success of the initiative hinges on showing people what the industry looks like instead of telling them with the use of social media channels.	Alberta Cattle Feeders' Association	\$115,800
Preserving Genetic Material for the Canadian Beef Breeds	Evaluating and prioritizing current stored tissue, blood, hair, and extracted DNA cattle samples currently being stored in labs across Canada, for the beef breed associations. Transitioning viable and priority samples to Delta Genomics' biobank in Edmonton, AB, or the lab of choice for the beef breed associations. Developing a long-term biobanking and sample pulling strategy for the breed associations. Developing an Information Management System for easy and cost effective access to individual samples, ID's, and animal trait data.	The Canadian Beef Breeds Council	\$525,000
FAA Convention and Youth Day	An annual convention to update members on industry issues and developments and to take advantage of learning opportunities that benefit themselves and their families. The youth delegates are free to attend the whole convention as an opportunity to network with experienced members who have been feeding livestock for many years.	Feeder Associations of Alberta	\$25,604
Board Governance Workshop	A 2 day workshop on the essentials of board governance to the FAA Board and Directors from our 48 local Feeder Associations.	Feeder Associations of Alberta	\$14,350
Business Risk Management Education	Creating an agriculture business management program within the post-secondary system. Business risk management will be one of the first initiatives to be developed and launched in close collaboration with industry. Lethbridge College and the Alberta Cattle Feeders' Association have partnered on the Business Risk Management Project and would like to be considered co-applicants.	Lethbridge College	\$215,570
Stakeholder Project	Stakeholder engagement is a critical means for EFA to maintain and enhance its social license to operate. It begins with the understanding that stakeholder issues are not external issues that the organization must react to, but instead they are forces that can influence the organization's future. If properly addressed through formal stakeholder engagement, these issues can provide valuable insights into future strategic risks, which can be transformed early on into strategic opportunities.	Egg Farmers of Alberta	\$55,950

Title	Description	Organization	Commitment
2015 Korean Trade and Relationship enhancement Project	Advancing market access objectives specific to South Korea, following the advice of trade specialists in the Canadian Trade Secretariat and our own contacts both domestically and internationally, as well as at the invitation of Honourable Ed Fast, Minister of International Trade.	Alberta Elk Commission	\$8,812
International Agriculture Committee Projects	Bringing Alberta producers together, along with industry leaders & government dignitaries in a non-formal setting to foster relationships that will benefit Alberta & Canadian agriculture businesses and livestock producers.	Calgary Exhibition and Stampede Ltd.	\$20,000
2014 UCVM Beef Cattle Conference	An annual University of Calgary Veterinary Medicine (UCVM) Beef Cattle Conference to address pertinent animal health and well-being issues for the beef industry that have direct effects on productivity and financial returns to the producer, bridging the gap between research and the community.	University of Calgary	\$14,180
Chinese Master Chef Gold Medal Dinner	A culinary celebration of the 6th annual Chinese Restaurants Awards. This is an international collaboration of Chinese Master Chefs that are working together to create an exclusive "once in a lifetime" Chinese dining experience for 300 guests. The award-winning Chefs are from Hong Kong, Guangzhou and Shanghai. The international Chinese Master Chefs will be joined by four award-winning Canadian Chinese Master Chefs to orchestrate an unforgettable dinner.	Think X Blink Communications	\$11,500
Peace County Sheep Conference 2014	Providing information and guidance to sheep and goat producers, a conference with 5 speakers discussing topics related to sheep and goat production.	Peace River Lamb Association	\$3,100
Big on Beef	A forum connecting consumers, industry stakeholders and the retail sector to build a better understanding of Alberta's cattle and beef production practices and standards.	Alberta Cattle Feeders' Association	\$20,000
2014 Annual CSAS Meeting	Graduate students from the University of Alberta, and researchers from Alberta will present and discuss their research at this meeting, gain new knowledge generated around the world, and network to strengthen current collaboration and establish new collaborations with colleagues from Canada, the US and from around the world.	Canadian Society of Animal Science	\$2,500
CANFAX Cattle Market Forum 2014	Providing cow-calf operators, feedlot managers, cattle producers and industry stakeholders with up-to-date information on the global economy and how this affects the beef industry, currency trends and how they affect the beef industry.	Canadian Cattlemen's Association	\$10,000
ABIC 2014 Conference and Speaker Support	"Global Leadership in a Changing World" with speakers on the global impact of recent technologies, vaccines, and research that is going on in the livestock industry.	Ag-West Bio Inc.	\$10,000

Title	Description	Organization	Commitment
2014 Western Nutrition Conference	The conference normally starts with a pre-conference symposium entirely sponsored and organized by industry, a plenary session that focuses on current issues (nutrition & health in livestock), a breakout session for either ruminant or monogastric nutrition with more detailed nutrition information, and finally a plenary session with topics on consumers and market perspectives on nutritional management.	University of Alberta	\$23,000
Pasture Walk with Jim Gerrish and Low Stress Cattle Handling with Curt Pate	A one day pasture walk with emphasis on grazing management and livestock handling in a field learning setting. There will be a focus on beef production, profitability and animal welfare.	Gateway Research Organization	\$3,494
Labour Summit: 2014 National Labour Action Plan	The Agriculture Industry Labour Council of Alberta (AILCA) held a labour summit and focused on the new released 2014 National Labour Action Plan to assist agriculture employers in their labour issues.	Alberta Milk	\$7,500
Canadian Bison Association Convention	An Annual Convention and Show and Sale - "Building Blocks for Success". For the bison industry to grow producers must understand the world around them, be able to develop business plans to achieve their goals, understand the importance of leadership and succession in agriculture, understand the nutritional attributes of bison meat, learn from producers who are leaders in the industry and listen to marketers in order to understand current market realities.	Canadian Bison Association Corp.	\$10,000
Advancing Women Conference	Bringing together over 500 participants and about 12 speakers to discuss, share and collaborate on women's opportunities and focus on 4 main pillars of leadership.	Iris Meck Communications Inc.	\$12,000
2014 Alberta Goat Breeders Association AGM	An annual conference to participate in discussions that will shape the future of the goat breeding organization and industry. Traceability, biosecurity, marketing skills and animal health, were on the agenda.	Alberta Goat Breeders Association	\$10,000
Pure Prairie Eating Plan	The event will feature Canadian cuisine crafted from exclusively local ingredients. The event will include a presentation of the Pure Prairie Eating Plan by one of the authors while enjoying a multi-course meal of locally sourced ingredients.	Dietitians of Alberta	\$1,000
2014 Ag for Life Harvest Gala	Celebrating the harvest and showcasing foods grown and raised in Alberta, providing networking opportunities for agricultural producer groups, corporate Alberta, government and primary producers and informing guests of the programs in which Ag for Life invests.	Agriculture for Life Inc.	\$10,000
Alberta Chicken Producers Platinum Brooding Workshop	Delivery of a Platinum Brooding® Workshop to Alberta Chicken Producers on sound brooding practices for implementation within Alberta broiler producer's facilities to limit the challenges associated with changing genetics, nutrition and health management as well as to enhance antimicrobial stewardship throughout the poultry supply chain in Alberta.	Alberta Chicken Producers	\$6,740

Title	Description	Organization	Commitment
2014 Western Canadian Grazing Conference	"Going Beyond Sustainability" to address future challenges and understand the opportunities facing ruminant livestock producers and stewards of the land. The focus is on creating soil, increasing carbon capture, improving soil-water-air quality and addressing the profitability and quality of life needed for young people to choose to be part of our future beef industry.	Agricultural Research and Extension Council of Alberta	\$10,000
Tiffin Conference	This conference is aimed at progressive primary producers, agri-business, agricultural entrepreneurs, and post-secondary agriculture students. It is organized by a volunteer committee of people from a wide cross-section of the agricultural industry in Southern Alberta.	Lethbridge College	\$3,800
Banff Pork Seminar	Addressing the major issues facing the pork industry such as increasing exports, increasing domestic processing, increasing domestic consumption, reducing feed costs, improving production efficiency, reducing disease risks, improving animal nutrition, retrofitting existing farm facilities to meet new animal welfare guidelines, improving industry communication and management, supporting research and technology transfer, and training of highly qualified personnel.	University of Alberta	\$30,000
Advances in Protein Nutrition Across Lifespan	A one-day conference on "Advances in Protein Nutrition Across the Lifespan." While our knowledge of dietary protein continues to grow, so too does confusion surrounding the latest scientific discoveries. This meeting is geared towards all health professionals including physicians, dietitians and researchers.	Canadian Nutrition Society	\$3,000
24th Annual Conference	"SHOW ME THE MONEY" focused on how new technologies and discoveries within in the field of veterinary medicine can help producers maximize returns on their beef and dairy operations.	Western Canadian Association of Bovine Practitioners	\$10,000
Alberta Beef Industry Conference	PlaniT Beef- Make it Canadian - fulfilling a strategy to grow the business around a unique and differentiated Canadian beef offering. Bringing our differentiated Canadian product to the world. Session topics focus on ways individuals can plan for the future, give insight into consumer demands, upcoming global trends, and how your industry leaders are working for them to move Canada's superior beef products overseas.	Alberta Cattle Feeders' Association	\$19,150
Annual 4-H Alberta Provincial Leaders" Conference	An annual institution in the fabric of the 4-H organization. Approximately 300 4-H leaders and staff from across Alberta, along with guests from across Canada and Montana, gather for three days of intense learning, invaluable networking and a whole lot of fun. This event has occurred for 71 years!	4-H Foundation of Alberta	\$20,000
1st International Bison Health Symposium	A symposium following a traditional format for veterinary continuing education conferences. That is, a welcoming reception allowing participants to engage each other, followed by a program of invited speakers presenting information in their particular area of expertise	Universty of Saskatchewan	\$2,500
2015 Nutrition File Seminar	A series of professional nutrition education events hosted annually by Alberta Milk. The seminar is dedicated to health professionals and educators. Dietitians, public health nurses, pharmacists and some physicians attend as well as home economists, teachers, wellness coordinators and fitness instructors.	Alberta Milk	\$10,000

Title	Description	Organization	Commitment
2015 Livestock Care Conference	An annual Livestock Care Conference in partnership with Alberta Veterinary Medicine Association (ABVMA). This conference provides an opportunity for researchers, industry, students, government and the public to address challenges and trends in animal care.	Alberta Farm Animal Care	\$12,500
Bison Producers of Alberta (BPA) Sustainable Revenue Development Plan	Exploring options for funding opportunities and generation of sustainable income for the BPA. This will be facilitated through the hire of a business advisor/consultant to help establish viable options for a diverse base for program funding and support that will ensure long-term success for the BPA.	Bison Producers of Alberta	\$12,629
ANUGA 2015	The bison industry's presence at ANUGA is very important recognizing the future potential in Europe. A trade booth represented by the Canadian Bison Association and Canadian Rangeland Bison and Elk will share with the Canadian elk industry as represented by AWAPCO.	Canadian Bison Association	\$5,558
Development of a Bovine Leukemia Virus Control Program	Developing a producer-driven and evaluated program that has a low entry level aim to improve production, longevity and welfare of cows. Enzootic Bovine Leukosis (EBL) caused by bovine leukemia virus (BLV) has long been considered as a production limiting disease, and its impact on production has recently become more clear. This is associated with decreased milk production, an increased risk of being culled and the potential development of leukosis.	University of Calgary	\$93,486
Alberta Beef Community Engagement Campaign	Growing an in-store retail / food service presence through developing more labeling and collateral programs, as well as an integrated marketing and communications plan that delivers key messages of taste and superior production methods, and pursuit of increased product sales and long-term investment in the brand.	Alberta Beef Producers	\$376,250
The Genomics of Profitability	2014 conference, with focus on how to transfer new research insights including those from genomic research into tangible results for the Albertan and Canadian livestock industries. This year's topics include sessions on feed efficiency and forage as well as emerging evidence on the cost / benefit of genomics and (GE-EPDs) as applied to commercial (as opposed to purebred) cattle.	University of Alberta	\$15,000





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