



Welcoming Remarks

Dr. Peter Hunton, CPRC Chair



Dr. Peter Hunton, Chair of the Canadian Poultry Research Council (CPRC), welcomed participants and outlined the objectives of the Symposium. He described the Symposium as “the most important meeting that has ever been held concerning poultry research and education in Canada.”

ing that has ever been held concerning poultry research and education in Canada.”

The mandate of the CPRC, which was established in November 2001, is to provide a focal point for poultry research in Canada; to secure additional and/or matching funding for poultry research; to establish national research priorities; to assess research proposals and select researchers; and to disseminate research results. The Symposium was designed to bring together industry, academic and government researchers and stakeholders to review the current state of poultry research in Canada and to identify priorities for the future. Another key objective of the Symposium was to define the major roles and focus of the CPRC and to collectively shape a strategy for moving forward.

In his opening remarks, Dr. Hunton challenged the federal government to match the enthusiasm of the poultry industry stakeholders with appropriate funding. He also challenged the scientific and industrial communities to collaborate and work cooperatively to address the research development needs that will be articulated over the course of the Symposium.

CPRC and the poultry research community wish to thank **National Farm Products Council** for their funding support making the 1st CPRC Symposium on Research Priorities a reality and a great success.



Canada

Present Status of Poultry Research

Dr. Roger Buckland, Poultry Unit of Macdonald College, McGill University

Dr. Peter Hunton, CPRC Chair

Dr. Buckland presented a snapshot of Canada’s poultry research, including an overview of the number of researchers in academic and institutional settings who are focusing on poultry issues. Dr. Buckland compared the funding received for animal research from Agriculture and Agri-Food Canada (AAFC) from 1996 to 1999 for four commodities (dairy, beef, swine, poultry). His figures demonstrated that funding for poultry research had declined significantly, while funding for dairy and beef remained virtually unchanged and increased for swine.

He reviewed some of the constraints facing the poultry research community, such as:

- AAFC does not have a poultry research component in their research program.
- All poultry (animal health) research at the federal level is done by the Canadian Food Inspection Agency (CFIA) – however the narrow mandate of the CFIA limits work to reportable diseases and food safety issues.
- The Matching Investment Initiative (MII) of AAFC can essentially not be used to increase poultry research as the MII rules mandate that federal researchers must be involved.

Dr. Buckland noted that there are also a number of positive trends affecting poultry research, including:

- CFIA has modified its MII fund and is proposing to work more closely with universities.
- The industry is raising significant research funds that could be used by federal researchers under the MII program or under new university funding programs such as the Canada Foundation for Innovation and provincial programs such as the Challenge Fund (Ontario).
- There is an increased recognition of the benefits of partnering. For example, the Agricultural Policy Framework (APF), the Innovation Strategy and the Partnerships initiative (all federal government initiatives), strongly support and encourage a coordinated, partnership approach to research.

• Present Status of Poultry Research	1
• Future Directions	2
• Funding Research - A European View	3
• Setting Our Priorities	3-5
• Funding Strategies/Modus Operandi	5-8
• Collaboration/Opportunities	8
• Conclusions	10
• Attendees	11-12



Dr. Buckland noted that the creation of the CPRC is extremely timely. He emphasized the need to recover the research funding dollars that have eroded over the past years and expressed confidence that through concerted, industry-wide collaboration and cooperation, the opportunities of the future will be seized.

Dr. Peter Hunton, CPRC Chair

Prior to the Symposium, key leaders in poultry research and the poultry industry were surveyed for their views on poultry research needs and priorities and on the approach and organizational structure that should be adopted by the CPRC. Dr. Hunton presented the survey results to Symposium participants.

The key priority areas identified in the survey included:

- *Food Safety Issues:* antibiotic resistance, and alternatives in production systems; prevalence of human pathogens in poultry populations; biosecurity; bird health.
- *Production Issues:* feed conversion, medicated feed, use of GM crops in feed; water quality; building design and specifications; feed withdrawal.
- *Animal Welfare Issues:* housing; stocking density, catching and transportation.
- *Environmental Issues:* nutrient management; dead bird disposal.
- *Consumer Issues:* nutritional values and enhancement; value-added products (e.g., dark poultry meat, skin quality).
- *Economic Issues:* system performance and competitiveness; benchmarking; sustainability.

These areas provided a foundation for the group work at the Symposium on key issues facing the poultry industry in Canada and priorities for poultry research.

In terms of the preferred approach to CPRC operations and funding, survey respondents noted that the CPRC should not copy what is already successfully done by the Poultry Industry Council (PIC). Key roles of the CPRC should be to coordinate existing projects for maximum leverage and encourage more research in defined areas of priority. Dr. Hunton encouraged participants to consider lessons learned from other similar organizations, and reviewed the approach and organizational structures of the Australian Poultry Cooperative Research Centre and of Canada's Natural Sciences and Engineering Research Council of Canada (NSERC).



Future Direction – Three Elements of a Vision for Poultry Research

Panel members Dr. Max Hincke, Dr. Frank Robinson and Dr. Gordon Dorrell spoke to participants and answered questions in an open forum session.

Dr. Max Hincke reviewed his research on egg shell structure and how it can provide future improvements in eggshell quality. He told participants that the process was a prime example of the effectiveness of international collaboration in research. He described a number of lessons learned and the benefits of a distributed, multi-disciplinary approach. A key to success is the willingness to participate and break institutional barriers.

Dr. Frank Robinson of the Alberta Poultry Research Centre (PRC) provided an overview of his experiences in fund development and infrastructure renewal. He described the PRC's Poultry Technology Centre and its innovative approach to technology transfer and community outreach. A key to funding success has been close industry collaboration and on-going two-way communication throughout the process. Dr. Robinson also highlighted the importance of the submission process and "grantsmanship."

Dr. Gordon Dorrell of AAFC reviewed the realities and limitations of federal funding for poultry research. He told participants that it is important to understand that while AAFC is involved with researchers through federal programs and collaborative efforts, AAFC does not directly fund research. He highlighted that there may be better ways of working together, and noted that there are a number of changes underway at AAFC to move from a project-based to a program-based approach. He described the role of APF and the scope and limitations of the MII. He encouraged CPRC and its members to set national research priorities and to work together with AAFC to develop new ways to collaborate.

SETTING OUR PRIORITIES



Funding Research – A European View

Dr. Roel Mulder
Spelderholt®Poultry



Dr. Mulder opened his presentation with a quote by the former Minister of Agriculture of the Netherlands: “International collaboration comes naturally to most scientists. They recognise its value and in general they know their way in

the world, especially when it concerns their own field of research. Research funding, however, is still largely a national matter. This will change. Globalization will result in an international economy of knowledge in which research institutes will face international competition. Agricultural research institutes should anticipate these developments.”

Dr. Mulder provided a detailed overview of the funding stream in the Netherlands and a general look at the situation in Europe. He tracked funding from the 1970s to today to demonstrate a decrease in government research funds by 60%. At the same time, there has been an increase in industrial research which has resulted in less basic research and more industry-based, targeted research.

Dr. Mulder believes that further success in research will be achieved through better understanding of the players, including the E.U, national governments, industry, academe, private sector, banking institutions, and others, and mobilizing these partners to rally around common goals. A more integrated, flexible, and coordinated approach to research funding is needed.

In closing, Dr. Mulder emphasized that without new funding, traditional poultry research will disappear. It will be research on “popular” topics that receives funding.



SETTING OUR PRIORITIES

Participants worked in small groups on the following questions:

- Given the substantive priorities of the industry, what are the three to five overarching priorities for research for the poultry industry?
- Are there specific priorities that stand out for specific stakeholder groups?

Each table group presented their top three priorities for poultry research in plenary. The following provides an overview of the most frequently mentioned priorities. For this report, the issue areas and priorities have been grouped around three levels:

- Level 1 reflects priorities that require immediate and urgent attention. These tend to be issues that are of a cross-sectoral, pan-commodity nature.
- Level 2 reflects priorities that, while less urgent, are important nonetheless to achieving key improvements that are necessary to ensure the ongoing efficient and profitable management of the poultry industry.
- Level 3 priorities are areas not currently requiring direct research, as a substantial body of knowledge already exists on these subjects. They are, however, important issues to the industry.

Poultry Research Priorities

LEVEL 1 Priorities that require immediate and urgent attention.

FOOD SAFETY

- Antimicrobials:
 - prudent use;
 - resistance;
 - alternatives (probiotics, prebiotics);
 - setting minimum levels.
- HACCP:
 - gate to plate/whole system approach.
- On-farm bio-security.
- Chemical and microbial modes of action.
- Packaging and handling of products.
- Scientific support to identify measures of progress or concern.
- What are root causes of infection?
- Traceability of product.
- Rapid diagnostic response capability.
- Alternative methods to control pathogens.



POULTRY HEALTH

- Gut microbiology – due to demands related to changes in feed re waste and food safety.
- Surveillance to detect disease; monitor trends.
- Bio-security awareness.
- Necrotic enteritis.
- Coccidiosis.
- Host response to prevent infectious diseases.
- Nutritional theory.
- Infectious diseases including zoonotic diseases.
- Metabolic diseases related to legs.
- Pathogen detection, rapid testing surveillance.
- Development of disease resistant birds.

ENVIRONMENT

- Nutrient management (reduction of NPK).
- Regulatory process.
- Water use (producer/processor).
- Rendering plants.
- Re-evaluate production systems to reduce negative impacts on soil, water, air.
- Recycling waste – create new products rather than disposal.
- Alternatives to bird disposal and reduction of the impact of by-products to the environment.
- Housing environment.
- Bio-processing and nutrient management.

NICHE MARKET DEVELOPMENT

- Product development:
 - Functional foods – vitamin-rich eggs.
 - Non-food products.
 - Value-added uses of dark meat.
 - Make functional food link to dark meat.
- Public education to connect the nutrient value of poultry to diet.

Poultry Research Priorities

LEVEL 2 Priorities that are important, but less urgent.

RESEARCH SYSTEM PERFORMANCE

- Facilities, infrastructure.
- Human resources (researchers, veterinarians, etc.).
- Condition and specialization of the research network, extension (industry, government and consumers).
- Basic research (genomics, proteomics) – look at molecular level.
- Impact/cost benefit of research application to industry.
- Focus on programs not projects – longer term.
- Identify programs that have interlacing themes – those that cut across disciplines (biological, economic, social, etc.).
- Lobby for more research positions.

POULTRY PRODUCTION

- Enhance poultry performance to reduce the cost of production systems, such as improvement of digestion and feed consumption.
- Summaries of existing statistics collected at the processing level to be used to establish benchmarks on factors important to the industry – useful for epidemiological monitoring of the industry.
- Understanding what is going on in systems – not what the reaction/response is to specific conditions.
- Basic research to deal with new or different breeds.
- Feed efficiency.
- Productivity vs. animal welfare.
- Improve % of saleable chicks.
- Production efficiency – we are pushing birds very fast – raises questions of costs and sustainability.
- Sustainable poultry breeding and production systems.

SETTING OUR PRIORITIES



SOCIO-ECONOMIC

- Research to validate and demonstrate the socio-economic benefits of supply management.
- Educating consumers and society.
- Benchmark against other countries.
- Total value economic activity.

Poultry Research Priorities

LEVEL 3 Priorities with an existing body of knowledge, but which are important issues to the industry.

BIRD WELFARE

- Take initiative to set standards.
- Transportation, housing, density.

HUMAN HEALTH

- Health of the producer in an industrial environment.

FUNDING STRATEGIES & MODUS OPERANDI

Symposium participants, in their table groups, discussed the role, organizational approach, and strategies for moving forward that CPRC should adopt. The following presents a synthesis of the discussions.

FOCUS ON CPRC

The CPRC has the dual role to fund national poultry research priorities and to lobby/influence government research support to the poultry industry. Given this role, what strategies should the CPRC pursue with respect to government to maximize the leverage of its resources for research funding, e.g., MII with AAFC?

Four key roles were identified: advocate, broker/clearinghouse, funder, and information manager. There is also an overarching role, to be the centre of poultry research for Canada.

Advocate

A key role of the CPRC is to create awareness and understanding around the issues related to the poultry industry in general, and, more specifically, poultry research priorities and needs. This awareness building would be aimed at both political/ government leaders and the public. Participants suggested a strategy that links broad-based issues, such as food safety, with poultry research efforts in order to maximize funding.

Participants noted a need for the CPRC to be proactive in lobbying efforts with governments to gain more funding for poultry research. For example, CPRC should discuss research priorities with AAFC and CFIA to ensure that their research supports industry priorities and doesn't duplicate industry-funded research. Other strategies suggested included:

- CPRC should discuss with NSERC putting in place a national program that supports poultry research (1-2 years to accomplish).
- CPRC should communicate research results to governments as a means of influencing government policy direction.

Broker/Clearinghouse

There is a need to bring together the disparate poultry research efforts that are taking place to create synergy, efficiency and to avoid duplication. As a broker/clearinghouse, the role of CPRC would be to act as facilitator and enabler amongst industry, government and researchers and to coordinate Canadian poultry research priorities. This liaison role could include maintaining a list of research capabilities (personnel and facilities) across Canada, projects and all funding sources/amounts, including federal and provincial government funding bodies and programs, industry organizations, private sector and international sources. The broker/clearinghouse role was described as "providing technical assistance and administrative support to match the "buyer" with the "seller." It would provide a resource for researchers to know what is required by industry, and vice versa. Suggested strategies to engage this role included:

- CPRC to provide group coordination between a number of different NSERC researchers.
- Non-duplicated research that maximizes the research funds and outcome.
- Hold a priority setting meeting with researchers, industry and government once every two years.
- Bring potential human and physical resources together to determine if and how a poultry research priority can be addressed.



Funder

As a funder of poultry research, CPRC's responsibility would be to leverage funds from both industry and government. Suggested strategies included:

- Access money from industries and government.
- Take projects to researchers with industrial money in place.
- Bring the members of CPRC to the table along with other partners to provide the private sector sources for matching with public sector funds.

Information Manager

An important role for the CPRC is to act as information manager: collecting and disseminating information on a regular, on-going basis. An important part of the CPRC mandate would be to ensure technology transfer occurs between researcher and user. This communication function would serve to keep stakeholders and the research community informed of progress, resources, and research results. It would also serve to provide public education on specific topics, for example food safety. As part of its information management service, CPRC would provide professional assistance for grant preparation – writing the application, compiling the CVs, etc., and would provide information on why applications are declined.

CPRC: The Centre for Poultry Research

The overarching role of the CPRC is to be the centre of poultry research in Canada. The impetus for this to take place is the establishment of the CPRC as a research agency under Part 3 of *Farm Products Agency Act*.

As the centre for poultry research in Canada, CPRC would establish (in consultation with stakeholders) research priorities, catalogue what research has been done and what research is underway, identify gaps, and seek proposals.

Participants noted that CPRC might be modelled along the lines of the Canadian Institute for Health Research (CIHR), which serves as a centre for health research. It effectively brings together research interests across disciplines to enable and enhance collaboration and partnerships.

Other suggestions included:

- Look to federal and university partnerships as a model for research.
- Develop joint industry/government initiatives to set research priorities within APF.
- Explore other models for research funding.
- Explore opportunities for international partnerships.
- Offer national post-graduate scholarships – support research, bring new people into poultry research.
- Think broadly about the many partners who are available. Possible partners: NSERC and CIHR (research funding agencies), AAFC, Health Canada, CFIA, feed industry, animal health industry.
- Look at other livestock/processing industries and through a coordinated effort address key issues.
- When appropriate or economically viable use existing resources for other funding agencies to achieve CPRC's goals.
- Consider funding academic positions possibly through matching programs with NSERC; this would help build a critical mass of researchers and provide highly-qualified personnel for industry.
- Facilitate international collaboration – allow funding to support projects outside of Canada.
- Determine broad programs of national impact on the Canadian poultry industry so it crosses several departments and ministries and their mandates.
- Find allies in other areas and use them in lobbying (e.g., when talking about animal welfare, use the National Grocery Council, etc.).
- Talk to the federal government about in-kind contributions.





INSTITUTIONAL COORDINATION

What will differentiate the CPRC in terms of what it funds and how it allocates funding?

Many participants at the Symposium see the CPRC as a central entity that focuses on the “big picture” of poultry research. In this connection, it coordinates the funding of *program* research, rather than *project* research, and takes a multi-disciplinary/partnership approach. It seeks long-term research initiatives. This broad approach also applies in a national sense, with the CPRC considering national interests over those of a more provincial or regional focus.

It was suggested that “excellence and potential impact” guide funding criteria. Funded research will need to be about poultry, have national importance, be consistent with identified priorities, and be of benefit to the poultry industry as a whole (although it may carry specific emphasis to specific sectors). In addition, it must meet scientific rigour, not be repetitive, and balance applied and basic components of research.

Some participants described the CPRC as a “one stop shopping” institute for researchers and industry. It is the major source of funding for poultry related research. It was suggested that matching funds be a criterion – however, it was cautioned that requiring matching funds can delay research. A policy will need to be established to deal with research projects that can’t attract matching funds.

How can the CPRC coordinate on a national basis in order to maximize the effect of the total investment in poultry research?

Communication and coordination will be key components of an effective national approach to poultry research. The CPRC will need to communicate with provincial and national funding agencies, government decision makers, industry, and researchers on poultry research priorities, funding sources, and benefits of research. For example, the CPRC would undertake an inventory of all industry funding of poultry research, and use this to lever government research funding. Part of the communication process is identifying “who does what” and conveying this information to others. A key role of the CPRC will be to “sponsor communication between industry and researchers,” for example by hosting meetings and promoting exchange of information through protected e-technology discussion mechanisms.

The CPRC would establish and maintain a national database for projects, personnel and physical facilities. This could take the form of a national registry system. CPRC, acting as a central agency that programs “go through,” would facilitate and enable opportunities for collaboration and partnership, thereby helping to reduce or eliminate duplication of research efforts. This approach would lead to improved efficiencies, reduced start-up and slow down times through improved continuity of projects, and overall improved use of funds.

Researchers have a responsibility to provide information to CPRC. Participants suggested “every researcher involved in each CPRC funded/managed research program must provide, as a minimum, an annual report of activities, findings, progress and student involvement.” In addition, technology transfer must be included as part of the research proposal commitment.

How should the CPRC operate in a fashion that is compatible with other industry research funders?

A number of suggestions were put forward by participants, including:

- Help identify collaborating interests.
- Do not duplicate other industry projects.
- Communicate actions.
- Identify potential funding partners.
- Research projects must ask how the projects related to: production and efficiency; food safety/quality; animal well-being; and industry sustainability.
- Promote non-competitive research between jurisdictions.
- Ensure a nation-wide technology transfer component.
- Be part of the research community/team.
- Create linkages with other producer groups to fund research in common areas, such as food safety, agricultural environmental issues, etc.
- Identify synergies with more project-based (short-term) research.
- Know how other funders work – maintain close communications/relationships.
- Use a familiar format for application, e.g., progrid used for AARI in Alberta.



How could the CPRC complement the research funding activity going on across the country?

It will be important for CPRC to promote itself as the centre for poultry research and to build credibility within the research community to support lobbying efforts.

CPRC should draw on expertise and research findings of other commodities and promote opportunities for adapting existing research projects that are not poultry specific, so that they are applicable to the poultry industry.

CPRC should work with other research centres to help avoid duplication. Sharing of information in order to develop a complete inventory was suggested. Similarly, CPRC should ensure that existing data are collected and reviewed by conducting a full literature review prior to designing and launching research.

For researchers: In light of the discussion on priorities, are there projects/programs that you are willing to collaborate on with other researchers to avoid duplication and maximize outcomes? If so, please provide details.

Participants enthusiastically supported the notion of collaboration, and a number of researchers submitted their contact and research specialty information (see Appendix). It was noted that government and other funders may prefer to fund collaborative projects. Collaboration will facilitate a broad-based approach that considers all aspects of production and efficiency, food quality/safety, animal well-being, and industry sustainability.

However, some participants cautioned that collaboration must be an individual researcher's own decision. In addition, it was noted that some research problems are not conducive to collaboration, as they are "too complex to answer within multidisciplinary approaches" and "multidisciplinary projects are expensive."

COLLABORATION

Projects/programs researchers are willing to collaborate on with other researchers to avoid duplication and maximize outcomes.

Researcher: L.D. Campbell
Institution: Animal Science, University of Manitoba
Project/Program Area: Poultry Nutrition
Contact information: (204) 474-9168
E-mail: campbel3@m.s.umanitoba.ca

Researcher: Bogdan A. Slominski
Institution: Animal Science, University of Manitoba
Project/Program Area: Alternatives to antibiotics; feeding strategies to improve nutrient utilization (enzymes, feed composition)
Contact information: (204) 474-8291
E-mail: b_slominski@umanitoba.ca

Researcher: Ming-Kuei Huang
Institution: McGill University, Department of Animal Science
Project/Program Area: Probiotics in poultry
Contact information: (514) 398-7539
E-mail: mhuang8@po-box.mcgill.ca

Researcher: Martine Boulianne and Roger Buckland
Institution: Centre for Poultry Research, McGill University and University of Manitoba
Project/Program Area: Pre-harvest technologies and food safety and quality
Contact information: (514) 345-8521, ext. 8470, (514) 398-7658
E-mail: roger.buckland@mcgill.ca

Researcher: Max Hincke
Institution: University of Ottawa
Project/Program Area: Food safety and quality — eggs
Contact information: (613) 562-5800, ext. 8193
E-mail: mhincke@uottawa.ca

COLLABORATION



Researcher: Eng-Hong Lee
Institution: Vetech Laboratories, Guelph, Ontario
Project/Program Area: Alternatives to antimicrobials
Contact information: (519) 822-2994
E-mail: immucox@vetechinc.com

Researcher: George Brinkman
Institution: University of Guelph
Project/Program Area: Policy analyses and socio-economic issues
Contact information: (519) 824-4120
E-mail: brinkman@agec.uoguelph.ca

Researcher: Hoon Sunwoo
Institution: University of Alberta
Project/Program Area: Poultry product technology for health
Contact information: (780) 492-0378
E-mail: hsunwoo@ualberta.ca

Researcher: Jim Chambers
Institution: AAFC – Food Research Program
Project/Program Area: Microflora manipulation and safety
Contact information: (519) 829-2400, ext. 3103
E-mail: chambersj@agr.gc.ca

Researcher: Dr. Mansil W. Griffiths
Institution: Canadian Research Institute for Food Safety, University of Guelph
Project/Program Area: Microbiological safety of foods
Contact information: (519) 824-4120, ext. 2269
E-mail: mgriffit@uoguelph.ca

Researcher: Heidi Schraft
Institution: Lakehead University, Biology
Project/Program Area: Food Safety (microbiology) with focus on campylobacter
Contact information: (807) 343-8351
E-mail: heidi.schraft@lakeheadu.ca

Researcher: John Feddes
Institution: University of Alberta
Project/Program Area: Air quality (inside/outside of buildings)
Contact information: (780) 492-0105
E-mail: John.Feddes@ualberta.ca

Researcher: Carlton Gyles
Institution: University of Guelph, Ontario Veterinary College
Project/Program Area: Bacterial infections, especially e-coli; food safety
Contact information: (519) 824-4120, ext. 4715
E-mail: cgyles@ovc.uoguelph.ca

Researcher: Davor Ojkic
Institution: University of Guelph, Animal Health Lab
Project/Program Area: Avian virology, diagnostics
Contact information: (519) 824-4920, ext. 4529
E-mail: dojkic@lsd.uoguelph.ca

Researcher: Doug Korver
Institution: University of Alberta
Project/Program Area: Nutrition, immunology, calcium metabolism, bird health
Contact information: (780) 492-3990
E-mail: doug.korver@ualberta.ca

Researcher: Derek Anderson
Institution: Nova Scotia Agricultural College
Project/Program Area: Nutrition, feed stuff evaluation
Contact information: (902) 893-6651
E-mail: danderson@nsac.ns.ca

Researcher: Bruce Rathgeber
Institution: Nova Scotia Agricultural College
Project/Program Area: Poultry products
Contact information: (902) 893-6651
E-mail: brathgeber@nsac.ns.ca

Canadian Poultry Research Council SYMPOSIUM ON RESEARCH PRIORITIES



COLLABORATION

Researcher: Rob Renema
Institution: University of Alberta
Project/Program Area: Managing productivity within the context of welfare concerns; reproduction and metabolism in poultry
Contact information: (708) 492-9323/492-4265 fax
E-mail: Robert.renema@ualberta.ca

Researcher: Shai Burbut
Institution: University of Guelph, Food Science
Project/Program Area: Poultry further processing, food safety
Contact information: (519) 824-4120
E-mail: sbarbut@uoguelph.ca

Researcher: Ron Pettitt
Institution: Alberta Food Processing Development
Contact information: (780) 980-4862
E-mail: Ron.Pettitt@gov.ab.ca

Researcher: Lynn McMullen
Institution: University of Alberta
Project/Program Area: Meat microbiology; food safety; lactic acid bacteria; probiotics
Contact information: (780) 492-6015
E-mail: lynn.mcmullen@ualberta.ca

Researcher: Joshua Gong
Institution: Food Research Program, AAFC
Project/Program Area: Gut microbiology and probiotics/prebiotics
Contact information: (519) 829-2400, ext. 3107
E-mail: gongj@agr.gc.ca

Researcher: Eva Nagy
Institution: Pathobiology, University of Guelph
Project/Program Area: Health, infectious diseases, vaccines, diagnosis
Contact information: (519) 824-4120
E-mail: enagy@ovc.uoguelph.ca

Researcher: Amer Silim
Institution: Faculty of Veterinary Medicine at St-Hyacinthe
Project/Program Area: Poultry health, viral diseases, antibody monitoring of breeders, diagnosis use of egg antibodies for enteric diseases control in other species.
Contact information: (450) 773-8521
E-mail: amer.silim@umontreal.ca

Researcher: J.S. Sim
Institution: University of Alberta, Alternative Egg Farming
Project/Program Area: Antibody farming and IGT technology
Contact information: (780) 492-7687
E-mail: jssim@ualberta.ca

CLOSING REMARKS

In closing the Symposium, Dr. Hunton and Dr. Buckland noted that three key accomplishments had been achieved. First, what began as an idea in 1996 is now a reality: the CPRC is now poised to be *the* centre for poultry research in Canada. Second, research priorities have been collectively identified and defined. And third and perhaps most importantly, the Symposium has brought people together to set in motion a collaborative process and spirit that will lead to successful, national poultry research and improved knowledge and understanding of the poultry industry in Canada.



ATTENDEES



LIST OF ATTENDEES

Brenda	Allan	Veterinary Infectious Disease Organization	Derek	Ellis	Montague Doyle & Associates
Derek M.	Anderson	Nova Scotia Agricultural College	Gaylene	Fasenko	University of Alberta
Bob	Anderson	Canadian Poultry and Egg Processors Council	John	Feddes	University of Alberta
Ted	Baas	Chicken Farmers of Canada	Denis	Frenette	Canadian Egg Marketing Agency
Louis	Blais	Schering-Plough Animal Health	David	Fuller	Chicken Farmers of Canada
Sigrid	Boersma	Cuddy Farms Corp.	Jennifer	Gardner	Poultry Industry Council
Phil	Boyd	Canadian Turkey Marketing Agency	Malenka	Georgiou	Canadian Turkey Marketing Agency
Doris	Braslins	Natural Sciences and Engineering Research Council of Canada	Meb	Gilani	Canadian Egg Marketing Agency
George	Brinkman	University of Guelph	Joshua	Gong	Agriculture and Agri-Food Canada
Brian	Brooks	Canadian Food Inspection Agency	Bill	Graham	Weston Graham & Associates Ltd.
Roger	Buckland	McGill University	Mansel W.	Griffiths	University of Guelph
Mary	Buhr	University of Guelph	Carlton	Gyles	University of Guelph
Lloyd	Campbell	University of Manitoba	Errol	Halkai	Canadian Broiler Hatching Egg Marketing Agency
Teresa	Cereno	Merial Canada	Max	Hincke	University of Ottawa
James	Chambers	Agriculture and Agri-Food Canada	S.K.	Ho	Agriculture and Agri-Food Canada
Peter	Clarke	Canadian Egg Marketing Agency	Ming-Kuei	Huang	McGill University
Henry	Classen	University of Saskatchewan	Peter	Hunton	Canadian Poultry Research Council
Neil	Connell	Canadian Egg Marketing Agency	Owen	Jones	Canadian Bio-Systems Inc.
Bernadette	Cox	Canadian Egg Marketing Agency	Wendell	Joyce	Canadian Poultry and Egg Processors Council
Ed	DeJong	Canadian Broiler Hatching Egg Marketing Agency	Waldie	Klassen	Chicken Farmers of Canada
Tracie	Dixon	Poultry Industry Council	Doug	Korver	University of Alberta
Gordon	Doonan	Canadian Food Inspection Agency	Urs	Kuhnlein	McGill University
Gordon	Dorrell	Agriculture and Agri-Food Canada	Joi-Wei	Lee	McGill University
Jihad	Douglas	Hybrid Turkeys	Eng-Hong	Lee	Vetech Laboratories Inc.
Mont	Doyle	Montague Doyle & Associates	Steve	Leeson	University of Guelph
Mike	Dungate	Chicken Farmers of Canada	Dave	Loewen	Canadian Broiler Hatching Egg Marketing Agency
			Gyslain	Loyer	Canadian Broiler Hatching Egg Marketing Agency

Canadian Poultry Research Council SYMPOSIUM ON RESEARCH PRIORITIES



Doris	Ludlage	Canadian Broiler Hatching Egg Marketing Agency	Heidi	Schraft	Lakehead University
Anne	Malleau	Speksnijder Farms	Tom	Scott	Agriculture and Agri-Food Canada
Ed	McKinlay	Chicken Farmers of Ontario	Ted	Sefton	Alltech, Inc.
Keith	McMillan	Canadian Poultry and Egg Processors Council	Amer	Silim	University of Montreal
Lynn	McMullen	University of Alberta	Fred	Silversides	Agriculture & Agri-Food Canada
Reg	Milne	National Farm Products Council	Jeong	Sim	University of Alberta
Yoshi	Mine	University of Guelph	Bogdan	Slominski	University of Manitoba
Lorna	Morris		Greg	Smith	Canadian Turkey Marketing Agency
Roel	Mulder	Spelderholt® Poultry	Andrei	Sotyrine	Canadian Food Inspection Agency
Eva	Nagy	University of Guelph	Gord	Speksnijder	Speksnijder Farms
Mike	Nailor	Chicken Farmers of Ontario	Lloyd	Spencer	Canadian Food Inspection Agency
Dave	Nodwell	Poultry Industry Council	Diane	Spratt	Ontario Ministry of Agriculture and Food
Alex	Oderkirk	Agra Point International	John	Summers	University of Guelph
Davor	Okjic	University of Guelph	H.H.	Sunwoo	University of Alberta
Andrew	Olkowski	University of Saskatchewan	Gary	Thiessen	Canadian Food Inspection Agency
Rachel	Ouckama	Canadian Poultry and Egg Processors Council	Luc	Turcotte	Chicken Farmers of Canada
Craig	Pearson	University of Guelph	Bill	Uruski	Canadian Turkey Marketing Agency
Jim	Pettit	Jim Pettit Inc.	Deborah	Whale	Poultry Industry Council
Ron	Pettitte	Chicken Farmers of Canada	Marilyn	White	Canadian Poultry Magazine
Bruce	Rathgeber	Nova Scotia Agricultural College	Mike	Wolf	Canadian Broiler Hatching Egg Marketing Agency
Robert	Renema	University of Alberta	Xin	Zhao	McGill University
Frank	Robinson	University of Alberta	Martin	Zuidhof	Alberta Department of Agriculture, Food & Rural Development
Melanie	Rustad	University of Alberta	Shai	Barbut	University of Guelph

