



# Alberta Agricultural Research Institute

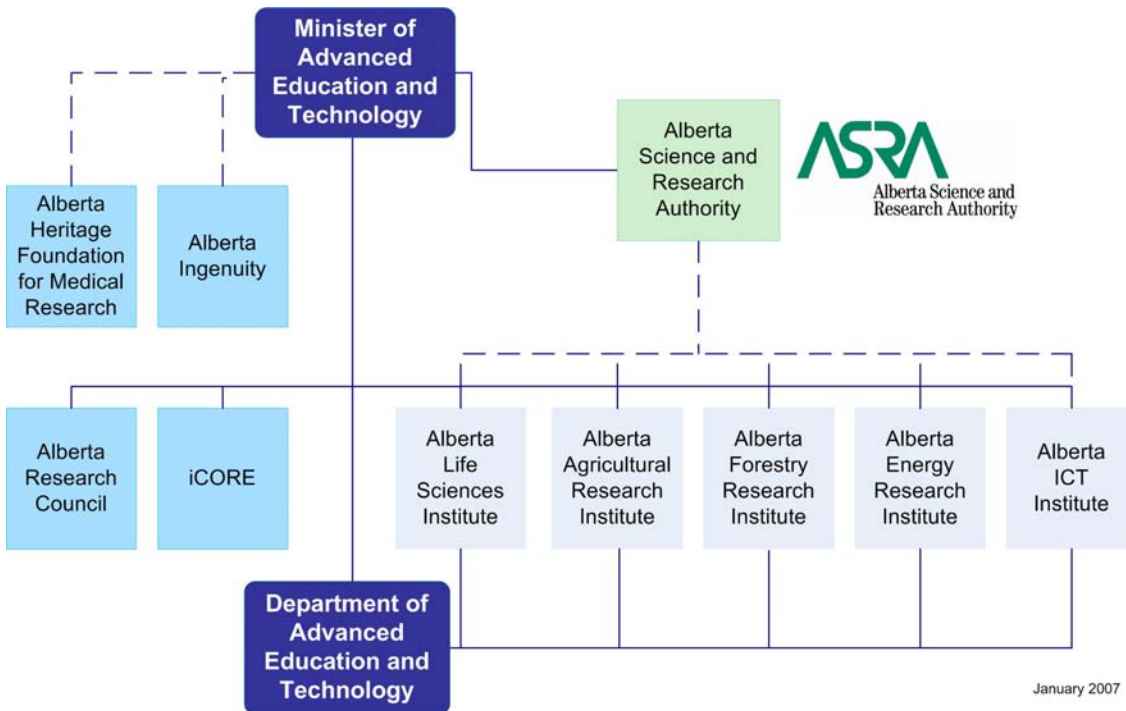
## Annual Report 2007-2008

### A Year in Review

#### Overview

The Alberta Agricultural Research Institute (AARI) is an unincorporated board consisting of representatives from industry, academia and government, established under the *Alberta Science and Research Authority Act*. AARI's mission is to support the growth of a dynamic, sustainable Alberta Life Sciences Sector by leading the agri-based industry's research, development and deployment strategies and outcomes. Our vision is to be the Alberta leader responsible for ensuring that agricultural research, development and deployment delivers innovative solutions to the marketplace.

AARI plays a key role in Alberta's agri-based industry through its work in the research and innovation system. AARI provides leadership, coordination and funding for the innovation that will ensure Alberta's agri-based industry continues to grow and capture key future opportunities.



## Message from the AARI Board

Alberta is well positioned for continued prosperity as it moves into its second century as a province. As an industry which has embraced and benefitted from innovation and is a cornerstone of Alberta's current economy, agriculture will be a platform for tomorrow's bioeconomy. The Alberta Agricultural Research Institute (AARI) has played a critical role as an innovation champion within the agriculture sector, and will continue to provide leadership in the strategic direction and catalytic funding of agricultural research in the province.


AARI recognizes that research and innovation will continue to be a key factor in keeping our agricultural industry competitive and strong. As a result we will continue to focus on three main areas of research and innovation:

- Sustainable Production
- BioProducts
- Health and Nutrition

Over the past year we have made significant investments in each of these three areas – investments that we are confident will support future successes for our province and our agricultural industry.

We would like to thank our Board of Directors for their strategic insight and direction. We especially want to recognize the fruitful contribution of Barry McFarland, MLA Little Bow, for co-chairing AARI. We welcome our new Directors to the AARI Board, Alastair Cribb, Eugene Dextrase and Rod Bradshaw.

The Board eagerly anticipates the opportunity to bring a spirit of dedication and creativity to the challenges and rewards of the next century of innovation in agriculture in Alberta.



Ty Lund, MLA  
Co-Chair



Art Froehlich  
Co-Chair

June 2008

## Key Activities

Activities undertaken by AARI over the 2007-2008 fiscal year support the directions established by the Alberta Science and Research Authority, and also support the Alberta Advanced Education and Technology Business Plan 2007-10, Goal 4: *Build Research and Innovation Capacity* and Goal 5: *Capturing Value through Innovation*.

- AARI has been engaged in measuring the health of the sector - by co-funding a review of the competitiveness of the grains sector and the Alberta Bovine Genomics Program, as well as reviewing the research investments in the agriculture sector through the “Millennium + 8” report. AARI participates in the Institute for Food and Agricultural Sciences, Alberta (IFASA) Operating Committee.
- Recent AARI investment in new technologies in the bioenergy realm has now lead to commercial agreements by industrial partners and TEC Edmonton. The next investments with the potential for commercialization are in biobutanol, biofibre (spray-up processing) and biodigestion of Specified Risk Material from the processing sector and significant investments in the Creating Agri-Value from Agriculture Biowaste Program at the Alberta Research Council (ARC).
- AARI has extended its influence in support of the bioeconomy by sponsoring the Bioenergy, Biofuels and Beyond Conference in Calgary (November, 2007) and assisted in planning the National Biofibre Foresighting exercise in Edmonton. AARI was well represented at BIO International Conference in Boston, MA (May, 2007) – resulting in corporate meetings. Dr. Stan Blade was invited to participate in EPOBIO in summer 2007, identifying plant-science research priorities for investments, as well as part of the review of Alberta’s bio-energy projects. AARI led, with several global agricultural companies interested in Alberta, “Team-Alberta” to the World Congress of Biotechnology and Industrial Bioprocessing in Chicago. This group (industry, government and academic) met with companies to explain Alberta’s strengths in the bioeconomy and resulted in several visits to Alberta by companies interested in collaboration and investment.
- In another priority area, Food for Health, AARI hosted its third session on Food for Health in April, 2007, and partnered with the Alberta Life Sciences Institute on developing the Food and Health Innovation Framework for the province. AARI supported the HQP (Highly Qualified People) session at the Advanced Foods and Materials Network (AFMNet) Annual Meeting, a National Centre of Excellence in food and materials – AARI will further look to AFMNet for potential collaborations.
- AARI continued to make funding available for the Value-Added Meats Program and projects that developed value-added products and research in strengthening Alberta’s food safety system; gaining profile with a full complement of highly qualified people, giving Alberta a unique blend of academic, research and industry collaborations to advance product development and expertise within the province.

- In the AARI priority of sustainable production, AARI continued to make significant contributions in support of the Bovine Genomics Programs, enhancing the portfolio with investments in support of a national healthy embryo development network and further in livestock genomics. AARI investments expanded to include livestock nutrigenomics and bio-marker development.
- AARI, in August, 2007, supported the 8<sup>th</sup> International Plant Cold-Hardiness Seminar, critical to evolving cropping systems in western Canada amidst climate change. AARI and Flax 2015 co-hosted a workshop in Edmonton regarding the use of Life-Cycle Analysis as a mechanism for furthering Alberta's position in the global marketplace. AARI also supported a new initiative from the Research Division of Agriculture and Agri-Food Canada using foresighting as a means of scoping the priorities of agriculture research and the national food system.
- Alberta was the host to several critical conferences, of which AARI had key roles. In September, the world gathered in Calgary at the Agriculture Biotechnology International Conference where AARI was the partnering sponsor. Over 600 scientific and business leaders attended, showcasing Alberta's strengths in this field, and identifying potential collaborations. AARI has explored an agreement with the India Agricultural Research Institute to exchange knowledge and technologies that could benefit each jurisdiction. AARI sponsored the 3<sup>rd</sup> China-Canada Agri-science Workshop in Edmonton and further met with Inner Mongolia officials to support ongoing initiatives with that jurisdiction. Additionally, support was granted to FarmTech, the largest crop technology meeting in Alberta with over 1200 crop industry leaders in attendance.
- AARI continued to invest in innovation, applying nanotechnology in agriculture research in the areas of plant transformation, livestock vaccine development and smart (slow-release) fertilizers.
- AARI continued to provide leadership and guidance to members of the Agriculture Funding Consortium.

## Financial Details

### AARI Investment Portfolio for 2006-2007 Fiscal Year:

During 2007/08, \$4.9 million was invested in AARI's three strategic theme areas: Industrial Biorefining, Sustainable Production and Food and Health.

