MANITOBA GRAIN INNOVATION HUB
WHAT IS THE GRAIN INNOVATION HUB?

GRAIN =

[Images of different types of grains]
WHAT IS THE GRAIN INNOVATION HUB? OUTCOME

Manitoba as an exceptional environment for collaborative innovation.

Manitoba in an advanced state of business activity driven by innovation.
Government’s goal is for Manitoba to earn a reputation as an exceptional environment for collaborative innovation and vigorous innovation-driven business.
HOW DO WE GET TO BE A HUB?

A pathway toward the HUB must be mapped and navigated. The pathway is being initiated by government. The journey will be supported by government.

You, the stakeholders, must drive.
Approximately 75 stakeholder organizations in four categories.

- Funders, investors, economic interests: 15
- Technical service, research, technology transfer: 32
- Producers/value chain: 19
- Buyers, handlers, shippers, processors: 19

STAKEHOLDERS IN THE HUB
Approximately 25 national level stakeholders across categories.

- Funders, investors, economic interests: 3
- Producers/value chain: 5
- Buyers, handlers, shippers, processors: 7
- Technical service, research, technology transfer: 10
WHAT IS AN INNOVATION HUB?

A meeting of science, technology, business and creativity

Networks of science connected to networks of business in a creative environment
HUBS CAN BE VIRTUAL
HUBS CAN BE PHYSICAL
HUBS ARE EVEN IMAGINARY
We want a HUB model that’s developed in Manitoba for Manitoba
THIS HUB IS ABOUT

Increasing connections between stakeholders

• Where the business of grain production, processing, handling and marketing meets the potential of science.

Creating an environment for:

• business growth and start-up
• recruitment and retention of talent
• scientific and business achievement
• Manitoba’s contribution to Canada
GOVERNMENT HAS A MISSION FOR THE MANITOBA GRAIN INNOVATION COMMITTEE

1. Spark a more strategic and coordinated form of innovation in grains for the good of Manitoba’s economy.

2. Distinguish Manitoba’s role in national and global grain innovation.
MANITOBA GRAIN INNOVATION COMMITTEE

SCOPE:
- Science and Business
  - Links between science and business

FOCUS:
- Grain Production and Utilization
  - Links between production and utilization
SCOPE: SCIENCE

Discovery
Understanding the nature of things that affect crops and products at their fundamental levels

Development
Verifying that a new technology or practice has a commercial advantage
WHAT WOULD THE COMMITTEE DO?

SCOPE: BUSINESS

**Commercialization**
Investment and business/legal/technical activities to bring a product or practice to market.

**Marketing**
Post commercialization technical market support.
Innovations within the Science and Business scope that reduce production risk and increase Manitoba’s ability to supply markets.

Building on existing strengths focus on how Manitoba could capture opportunities to:

• Improve crops and farming systems to increase resiliency to extreme weather especially excess water
• Manage risks from crop disease, weeds and insect pests
• Develop and adopt equipment and information technologies used in the production, storage and transportation of grains
FOCUS: UTILIZATION

Innovations within the Science and Business scope that expand demand for Manitoba grain

Building on existing strengths focus on:

• Food quality attributes, including how food can prevent or treat chronic diseases
• Making Manitoba grain competitive in animal feed and industrial feedstock markets
• Technology, including the equipment and information technologies used in the processing of our grains
SCOPE and FOCUS

BENEFIT THE GRAIN VALUE CHAIN

Dr. Baldur Stefansson

Seed Co.

Dr. Peter McVetty

Farm

Feed Mill

Elevator

Transportation

Processing

Biorefinery

MANITOBA GRAIN INNOVATION HUB

Manitoba
We’re not starting from scratch – innovation is a driver of the grain value chain right now and we are a HUB.
We’re not working in isolation.
We’ve invested in grain innovation.
INVESTMENT IN RESEARCH AND DEVELOPMENT

- Cereal Crops: 18%
- Livestock: 14%
- Nutraceuticals: 19%
- Oilseed Crops: 12%
- Pulse Crops: 5%
- Hemp: 7%
- Forage Crops: 5%
- Horticulture & New Crops: 5%
- Food Processing & Development: 8%
- Manure Management: 2%
- Other: 2%
- Soil Sustainability: 3%

Source: Agri-Food Research and Development Funding Initiative 1997-2014
RECENT INDUSTRY-GOVERNMENT PARTNERSHIPS UNDER Growing Forward 2

Manitoba Corn Development Project
Wheat Gluten and Sprouting Tolerance Research
Manitoba Functional Food and Feed Opportunities Program
Research Into Grains’ Effect on Chronic Disease
SCIENCE-BUSINESS SCOPE

**Research**
Upstream discovery, proving a concept in the lab, foundational technologies
*Ex: N-fixation, stress tolerance*

**Development**
Creating a product, testing in the real world, refining the product
*Ex: plant breeding, food/feed products*
**SCIENCE-BUSINESS SCOPE**

**Commercialization**

Linking new products and discoveries with customers and end users

*Ex: Scale up, genes into plants; regulatory testing*

**Adoption**

Helping producers/processors adopt a new technology or practice

*Ex: Precision farming, improved cultivars*
Outreach, promotion, advocacy

Communicating to the public and influential audiences; “waving the flag” for Manitoba on innovation. *Ex: media campaign, web, social media, trade shows*

Infrastructure

Both physical and intellectual infrastructure
*Ex: labs, incubators, researchers and supply chain experts*
Strategy Development/Review

In what areas should Manitoba have a strategy? How are we doing?

Ex: genomics, feed grain, promotion and advocacy
SCIENCE-BUSINESS SCOPE

Alliance Building

Strategic alliances on a jurisdictional, institutional or thematic basis.

Ex: pest risk in the mid-continent corridor, foods for health with the health care sector

Market Development

Support (technical, marketing) for Manitoba businesses and their products in the marketplace. Ex: trade missions, promotional material, quality certification, trouble shooting
MANITOBA GRAIN INNOVATION HUB IS FUNDED BY

Growing Forward 2
A federal-provincial-territorial initiative