

***The Alberta
Agri-Health and Value-Added
Strategic Research Network***

Strategic Focus & Research Priorities

Facilitated by

*Stewart J. Campbell, PhD, MBA, PAg.
S. J. Campbell Investments Ltd.
Cochrane, Alberta, Canada T4C 1R5
sjc@bizinc.com*

December, 2002

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Mission of the Alberta AH&VA SRN

.... through science and innovation to enhance the:

- Growth and prosperity of Alberta's food and agricultural processing industries.*
- Availability of safe, high quality, differentiated, value-added products for human use and in livestock production.*
- Acceptance of new Alberta manufactured food, feed, health, wellness and performance products.*

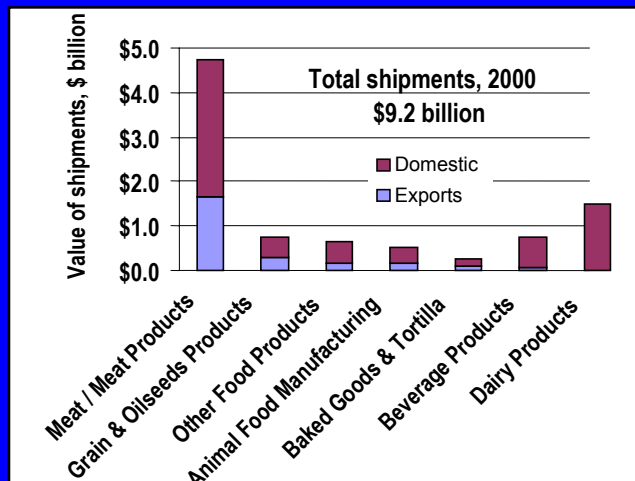
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Tasks for the Alberta AH&VA Strategic Research Network

- *Facilitate the identification of the strategic focus and priorities for research in Alberta.*
- *Identify the R&D capacity, infrastructure and human resource needs.*
- *Recommend approaches for investment and collaboration in strategic focus areas.*
- *Provide leadership to enable collaborative responses.*
- *Enable stakeholders to obtain the required investment from public and private sources.*

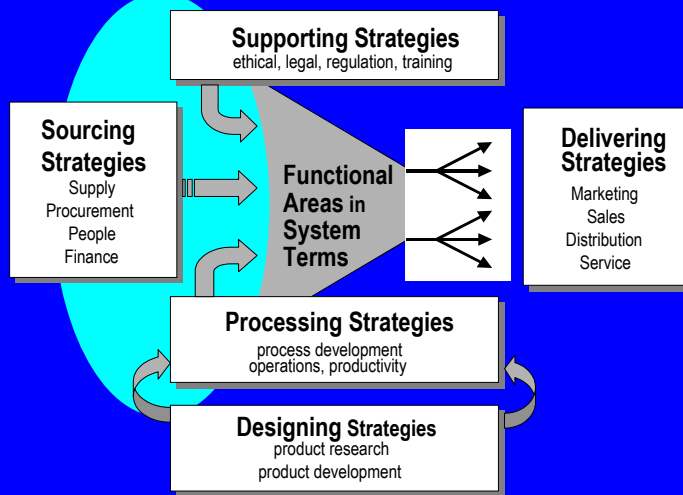
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Alberta Food and Agricultural Processing Activity



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Functional Areas with Research Potential



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Criteria to Identify Strategic Focus

- *R&D outcomes measurable and with a market focus.*
- *Milestone process implemented - start and exit date for R&D activities.*
- *Size of the target market a consideration for strategic focus.*
- *Portfolio balanced for payoff:*
 - Long term (8 – 15 year) initiatives – focus on future technology and promising platform technology.*
 - Medium term (4 – 7 year) initiatives – support for emerging areas with commercial potential.*
 - Short term (1- 3 year) initiatives – content specific focus and for today. Improvement to existing technology, products and markets.*

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Criteria to Identify Strategic Focus

- *Recognize differing timelines and requirements for knowledge creation, technology development, product development, venture development, and industry growth.*
- *Environment is receptive to scientifically based ideas.*
- *Expansion of money (public and private) available for R&D invested in Alberta.*
- *Technology transfer enhanced and part of the evaluation process.*
- *Opportunistic – mechanism to handle "flyers", early success with some quick hits.*
- *Performance measured at every level of the R&D, Technology Transfer and Commercialization Continuum.*

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Priority Areas

- 1. FOOD INGREDIENTS AND FERMENTATION PRODUCTS FROM CROPS**
 - Native & modified wheat, canola, mustard and pea protein isolates.
 - Wheat and barley native and modified starches
 - Food hydrocolloids - beta glucan, pentosan, gums
 - Fermentation products - gums, amino acids, acidulants, polyols
- 2. VALUE-ENHANCED MEATS AND MEAT PRODUCTS**
 - Global population growth, disposable income, product traits
 - Country of Origin labeling and product branding
 - Food safety, traceability, product integrity
- 3. HEALTH, WELLNESS AND PERFORMANCE PRODUCTS**
 - Bioactive ingredients - native, molecular farmed
 - Nutraceuticals, functional food, cosmeceuticals, biopharmaceuticals

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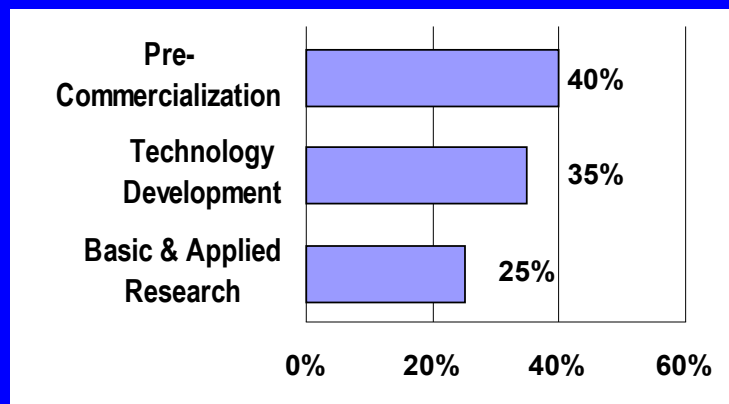
Value-Enhanced Meats and Meat Products

<u>Category</u>	<u>Program Teams</u>	<u>5 Year Investment</u>
1. Infrastructure		\$ 6 million
2. Value-Added Meats Product Development	4 FTE	\$ 10 million
3. Food Safety & Cold Chain Improvement	4 FTE	\$ 10 million
4. Strengthening Industrial R&D Capacity	4 placements	\$ 3 million
5. Manufacturing Research Support Team	4 FTE	\$ 4 million
6. Market Research, Due Diligence, Intel. Property	Contracted	\$ 1 million
TOTAL INVESTMENT		\$ 34 million

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Value-Enhanced Meats and Meat Products

Portfolio Balance across the R&D Continuum



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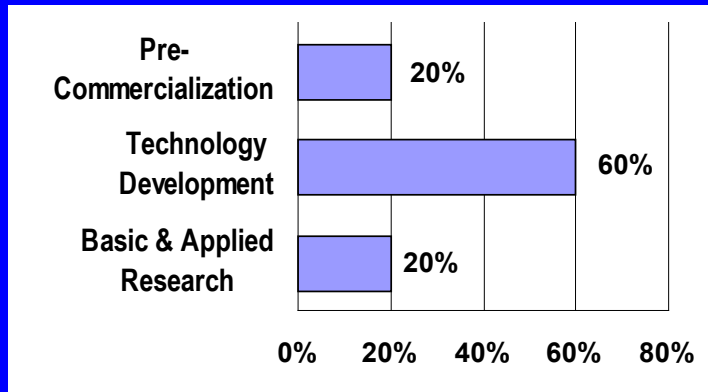
Food Ingredient and Fermentation Products

Category	Program Teams	5 year Investment
1. Infrastructure	Pre-pilot / Clinical	\$ 10 million
2. Cereals Science Team	4 FTE	\$ 10 million
3. Milling By-Products Science Team	4 FTE	\$ 10 million
4. Edible Composites Science Team	4 FTE	\$ 10 million
5. Fermentation Science Team	4 FTE	\$ 10 million
6. Market Research, Due Diligence, Intel. Property	Contracted	\$ 2 million
TOTAL INVESTMENT		\$ 52 million

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Food Ingredient and Fermentation Products

Portfolio Balance across the R&D Continuum



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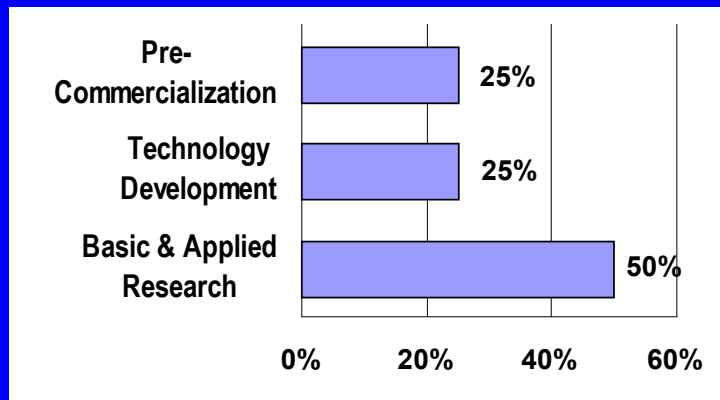
Health, Wellness and Performance Products

<u>Category</u>	<u>Program Teams</u>	<u>5 Year Investment</u>
1. Infrastructure	Pre-pilot / Clinical	\$ 10 million
2. Nutraceutical & Functional Foods	4 FTE	\$ 10 million
3. Molecular Farming Product & Application	4 FTE	\$ 10 million
4. Cancer & Diabetes Disease Prevention / Mgt	4 FTE	\$ 10 million
5. Market Research, Due Diligence, Intel. Property	Contracted	\$ 2 million
TOTAL INVESTMENT		\$ 42 million

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Health, Wellness and Performance Products

Portfolio Balance across the R&D Continuum



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**Thank you to more than 20 dedicated
Network Team Participants and
Contributors**

Facilitator

Stewart J. Campbell, PhD, MBA, PAg.

S. J. Campbell Investments Ltd.

43 West Terrace Drive

Cochrane, Alberta, Canada T4C 1R5

sjc@bizinc.com

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