

**November 8<sup>th</sup>, 2005**

# **Bio-Innovation - Moving Forward in Canada NSERC's Role**

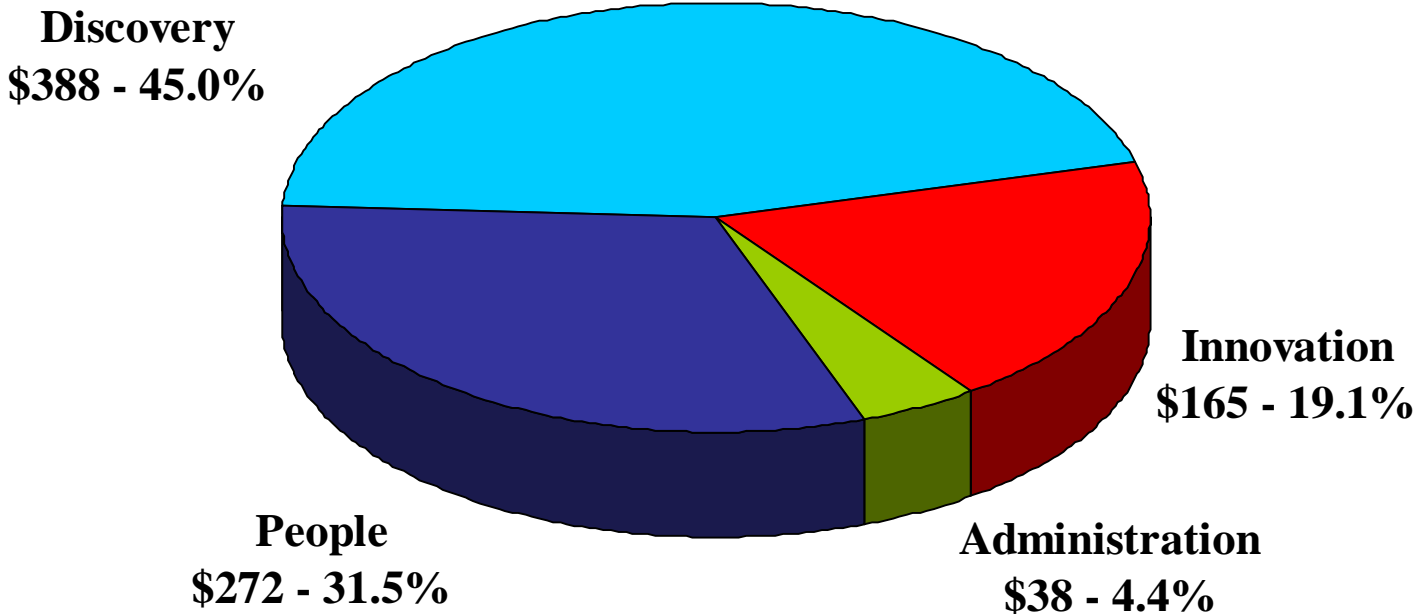
**by**

**Susanne Liou, Program Officer,  
Environment and Natural Resources  
Research Partnerships Programs**

# Natural Sciences & Engineering Research Council of Canada

- **Goal: maximize benefits of university research to Canada**
  - **Link universities with public & private sectors through collaborative research projects**
  - **Expose students to challenges & opportunities in industry & government**
  - **Facilitate innovation through flexible responsive programming**
  - **Stimulate investment in research**

# NSERC Budget 2005-06 (millions of dollars)



**Total: \$863M**

# Research Partnerships Programs (RPP)

- **Collaborative R&D Grants (CRD)**
- **Strategic Project Grants (SPG)**
- **Idea to Innovation (I2I)**
- **Research Partnership Agreements (RPA)**
- **Industrial Research Chairs (IRC)**

# NSERC Partnerships Programs – Brief Overview

- Innovation Projects

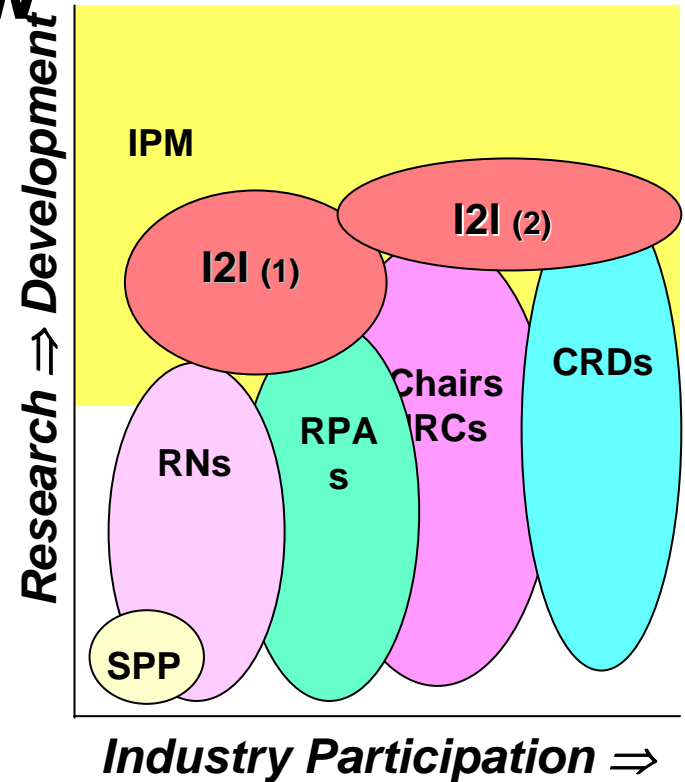
- ➤ Strategic Projects
- ➤ Research Networks
- ➤ Collaborative R&D Grants
- ➤ Research Partnership Agreements

- Building Critical Mass

- ➤ Chairs

- Technology Transfer

- ➤ Idea to Innovation
- ➤ Intellectual Property Management & Networked Training



# Strategic Project Grants (SPG)

- **Early stage university research with the potential to lead to breakthrough discoveries in future (5-10 yrs)**
- **Active involvement of non-academic participants - no cash required**
- **Target areas:**
  - of national importance
  - emerging areas of potential significance



# Strategic Target Areas

- **Target Areas - Old**
  - Biosciences
  - Environment & Sustainable Development
  - Value Added Products & Processes
  - Information & Communication Technologies
- **Target Areas – New**
  - Environment & Ecosystems
  - Competitive & Sustainable Manufacturing
  - Foods & Other Bio-Based Products
  - Clean & Renewable Energy Systems
  - Safety & Security
  - Advanced Communications & Information Management

## Greenhouse Gas Mitigation

- **Finite program funded by NRCan**
  - \$5M over 5 years
  - Money now spent
- **Specifically asked for technological solutions**
- **Future of program**



# Collaborative R&D Grants (CRD)

- **Main vehicle for Canadian firms to work with university researchers**
- **At any point in the R&D spectrum**
- **Support well-defined, focused projects with specific short- to medium-term objectives, or**
- **Discrete phases in longer-range research programs**
- **Require signed research agreement between university and industrial partner**

# Idea to Innovation (I2I)

- **to support research & development projects with identifiable technology transfer potential**
- **to reduce technical risk & demonstrate commercial potential of university discoveries**
- **University ILO works with researchers & partners**

# Research Partnership Agreements

**To build strong linkages between private sector, university researchers & federal institutes**

**Agreements with:**

- **Agriculture & Agri-Food Canada**
- **Canadian Forest Service**
- **Department of National Defence**
- **NRCan-Earth Sciences**

# Industrial Research Chairs

- **Prestigious appointment of a distinguished researcher**
- **Industry provides 50% of cost in cash**
- **Initial appointment: 5 years (renewable)**
- **A significant university research program is established or enhanced in area of interest to industry**



# NSERC “Bio” Awards

<b>Year</b>	<b>Number of Awards</b>	<b>Amount Awarded</b>	<b>Partner Cash Contributions</b>	<b>Partner In-Kind Contributions</b>
<b>2000</b>	<b>1</b>	<b>\$256,000</b>	<b>-</b>	<b>-</b>
<b>2001</b>	<b>2</b>	<b>\$1,088,353</b>	<b>\$48,000</b>	<b>\$1,820,801</b>
<b>2002</b>	<b>4</b>	<b>\$504,000</b>	<b>-</b>	<b>-</b>
<b>2003</b>	<b>4</b>	<b>\$978,421</b>	<b>-</b>	<b>\$1,485,400</b>
<b>2004</b>	<b>8</b>	<b>\$1,385,875</b>	<b>\$168,000</b>	<b>\$1,346,722</b>
<b>2005</b>	<b>5</b>	<b>\$889,955</b>	<b>\$195,000</b>	<b>\$45,000</b>

# Thank You

**Susanne Liou,**  
**Research Partnerships Programs**  
**Telephone: (613) 996-6331**  
**E-mail: [susanne.liou@nserc.ca](mailto:susanne.liou@nserc.ca)**