

Global Connections for Canadian Innovators Liaisons internationales pours les innovateurs canadiens

#### The growing inportance of Global Technology Partnerships...

4<sup>th</sup> Annual McGill Global Health Conference

> Henri Rothschild, April 26<sup>th</sup>, 2910

# Presentation overview...the backdrop of government supported health R&D

- the changing role of government in research;
  - Domestic science;
  - International cooperation.
- the global perspective;
- The launch of the International S&T partnerships program;
- Perspectives on future developments



## **The Changing Face of Innovation support**

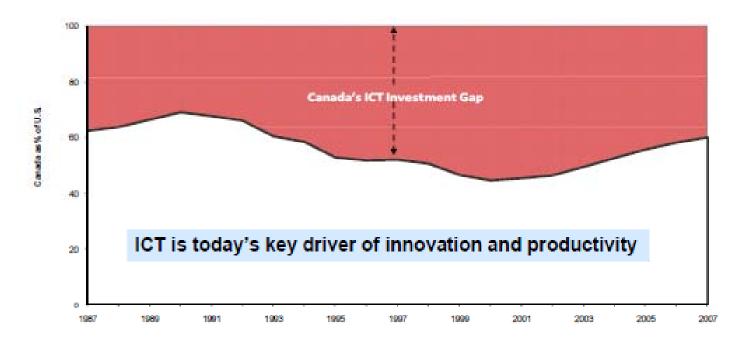
- 1970s: beginning of a fundamental rethink of public support for university research;
- 1980s: emergence of the granting councils;
- 1990s: emergence of S&T 'policy' (major investments by the public sector;
  - NCEs, CIHR, Research chairs, CFI, Genome Canada
  - Yet...continuation of divergent paths..university/industrial research

#### • 2000s: continued support for granting councils:

- 'Focus on technology commercialization and 'sector drive' in health/environment/energy;
- BL NCEs..CECR
- Plus emergence of provincial role



#### **INVESTMENT IN "EMBODIED' INNOVATION ALSO LAGGING**



BUSINESS ICT INVESTMENT PER WORKER - CANADA AS PER CENT OF U.S. 1987-2007

TOO MANY CANADIAN BUSINESSES ARE TECHNOLOGY FOLLOWERS, NOT LEADERS



# International research: innovation policy's unfinished business

- Growing sense that bi-lateral commercial relations required an R&D cooperation component: a new era of S&T agreement. From cultural to economic;
- Increasing trend to 'coordinate' and focus historic and existing research cooperation;
- Emergence of Foreign Affairs/International Trade as a "science based department".

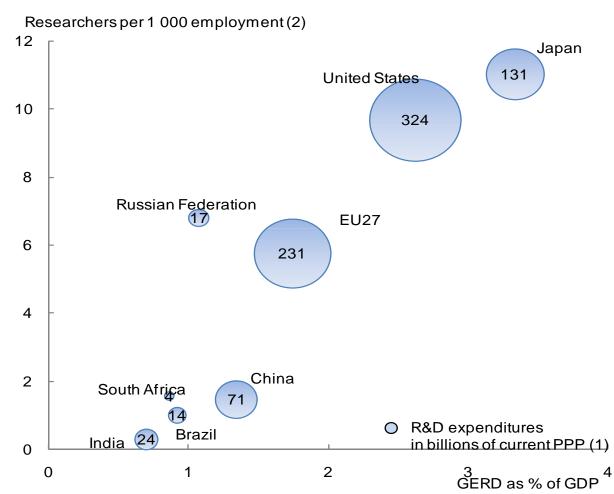


# The emergence of global connections

- A productivity strategy intersects with a global market enlargement strategy
- Three factors are driving the competition for global partnering;
  - 1- emergence of India, Brazil and China;
  - 2- continuing acceleration in the pace of and complexity behind innovation; and
  - 3- the corresponding need for increased technological scope and visibility
- The bonus is increased market access.

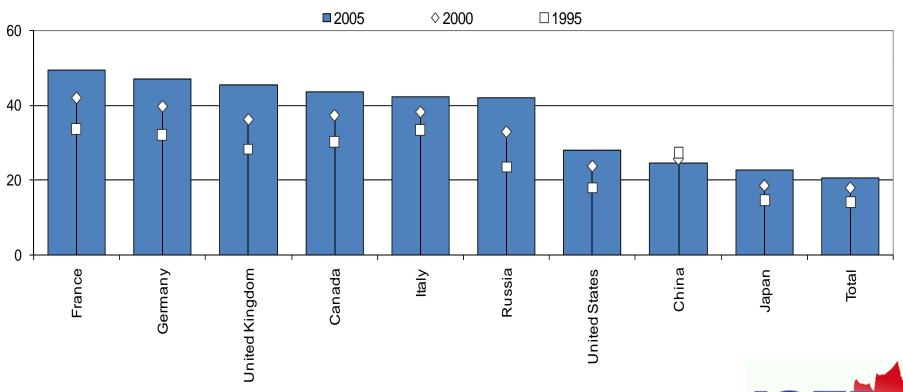


- China is now the third largest investor in R&D globally – with a target to reach an R&D intensity of 2.5% by 2020.
- China's growth of R&D spending has been on average 18% a year since 1995.
- China now counts close to 1000 foreign R&D labs, accounting for about 25% of business R&D.
- Some firms undertake R&D for the global market in China.





# Share of scientific articles that are internationally co-authored, 1995, 2000 and 2005 (in %)<sup>1</sup>



Source: OECD STI Scoreboard 2007, based on NISTEP. Note: (1) Only scientific articles in natural science.



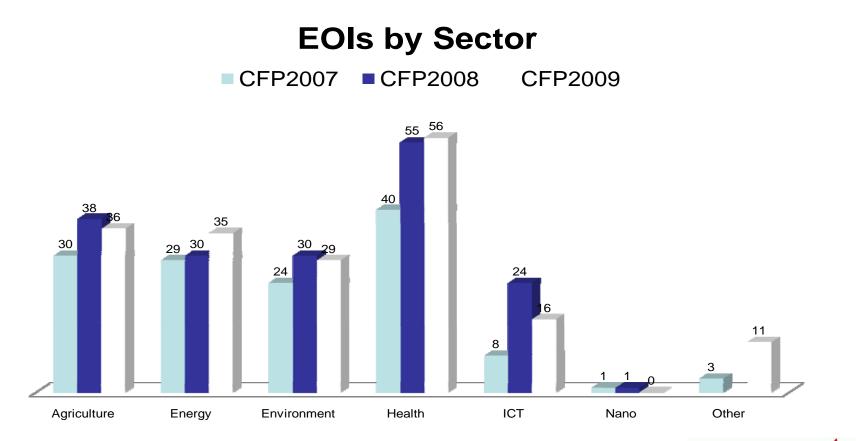
#### International S&T Partnerships Canada: a new 'instrument'

- Collaborative bi-lateral management
  - Synchronization/harmonization of research review and approval
- Important role for universities/hospitals:
  - Especially with China
- Emphasis on defining new forms of research cooperation;



**Global Partnerships: and the health sector** 

### Comparisons 2007 vs 2008 vs 2009





1

Totals: 135, 178, 183

# Value Proposition to research institutes, universities and companies

- Partnering, visibility;
- On the ground support;
- Funds for partnering;
- Guide to other sources of Canadian funding support; and
- Due diligence on joint collaboration prospects.



## Conclusions

- ISTPP programs will likely grow in the years ahead;
- Canada has much untapped potential to be a major player with the emerging economies;
- Designed with the technology/visibility needs of tech-based SMEs but also driven by 'sector priorities, including health as a domestic economic and global market issue;
- Continuing integration of multiple objectives of productivity, innovation, global partnerships and economic growth

