



# Strengthening Ontario's Innovation System: The Role of Ontario's Innovation Agenda

**Damian A. Dupuy, Ph.D.**

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*“Places around the world that invest in innovation, that cap and stoke the creativity of their people, that market their ideas most effectively will be home to the most rewarding jobs, to the strongest economies and the best quality of life.”*

*-Honourable Dalton McGuinty, Premier of Ontario, 2005*

*“... an openness on the part of people to new ways of thinking and doing that bring about improvements, whether to an individual business, an industry, government, the economy or society as a whole.”*

*-Ontario’s Innovation Agenda 2008*

# Ministry of Research and Innovation

Created in 2005 to:

- **Lead** the transformation of Ontario's economy to one focused on innovation
- **Focus** the government's commitment to innovation as the driver for economic growth across all sectors of the economy
- **Coordinate**, strategically, innovation programs that previously were scattered across 9 different ministries.

Mandate is to:

- **Develop** an integrated innovation strategy and guide its delivery
- **Invest** in both policies and programs to deliver on the innovation strategy
- **Foster** a culture of innovation and showcase Ontario's innovative culture nationally and internationally.

# Ontario's Shifting Economic Paradigm

**FROM**  **TO**

- Ontario's 5 Point Economic Plan

- Invest in skills and knowledge
- Invest in infrastructure
- Lower business costs
- Form key partnerships to strengthen economic growth
- Strengthen the environment for innovation

- Open Ontario Plan

- Focused on building the economy of the future where innovation is a *key lens* to view economic activity.
- Specific elements include:
  - Clean water technology
  - Financial services
  - Post-secondary education
  - Developing a significant new chromite deposit in NW Ontario

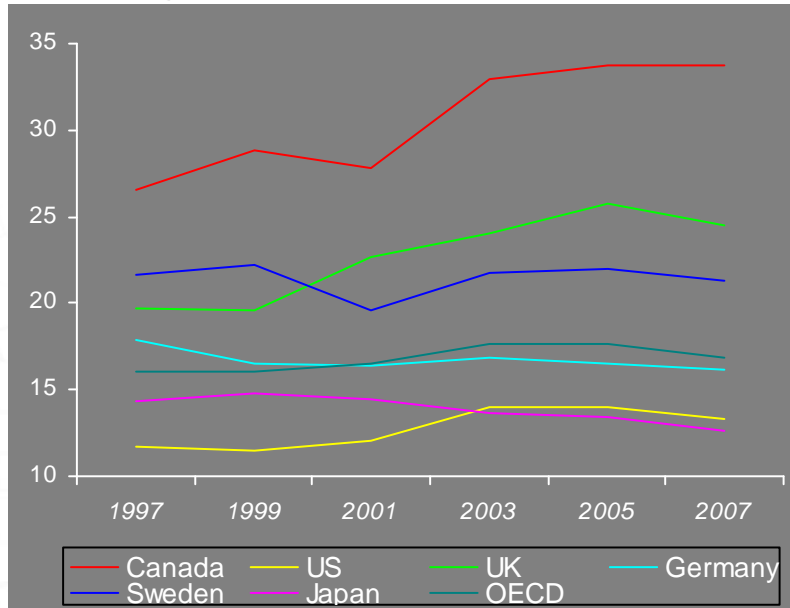
**Industrial Based Economy** 

**Knowledge-Based Economy**

# Strengthening Ontario's Innovation Economy

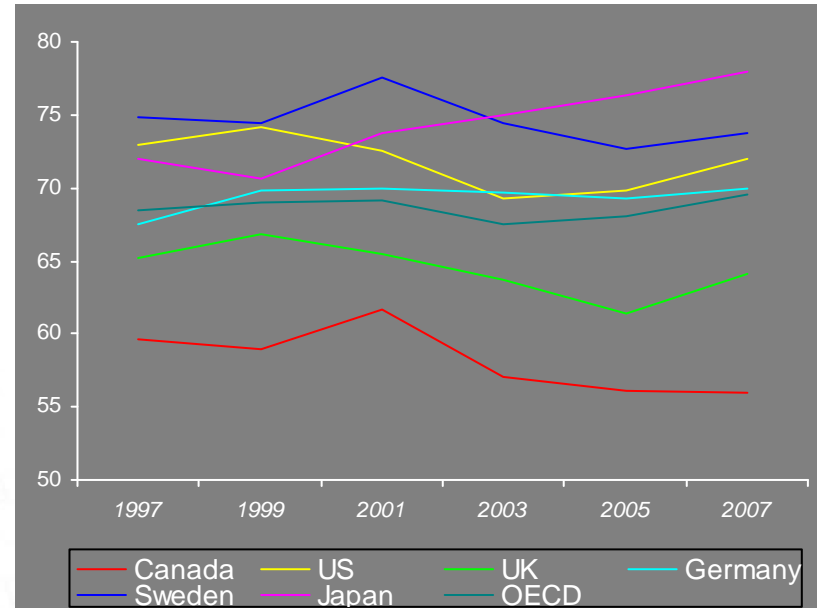
*Innovation performance is mixed*

**Figure 1: Higher Education Performed GERD (%)**



Source: OECD, 2009

**Figure 2: Business Performed GERD (%)**



Source: OECD, 2009

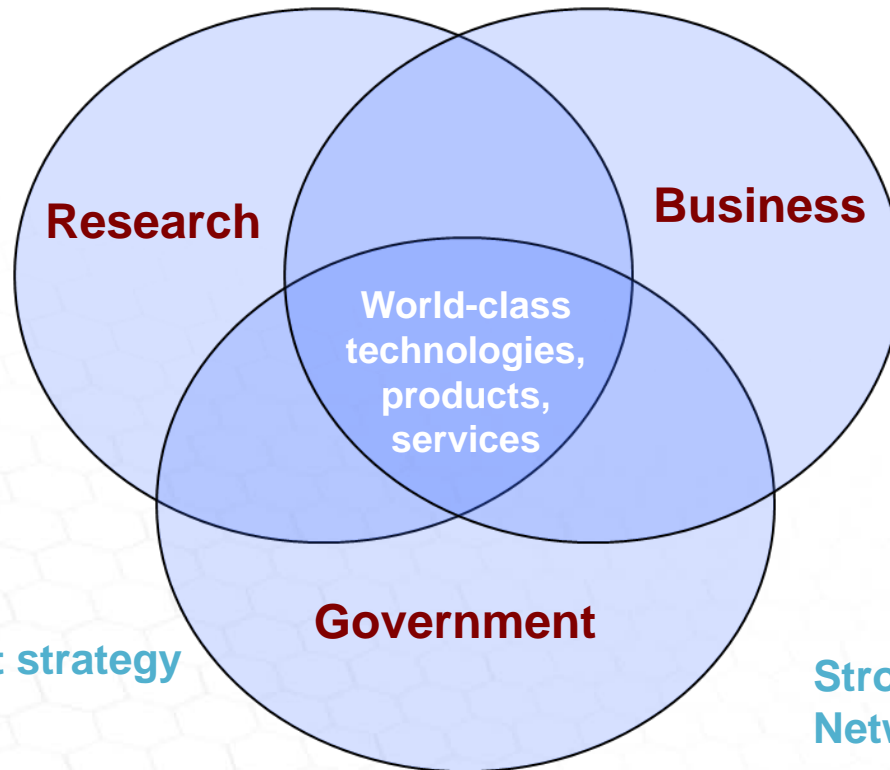
- Canada (and similarly Ontario) punches above its weight in the percentage of GERD performed by higher education (Figure 1).
- But punches well below its weight in the percentage of GERD performed by business (Figure 2).

# ONTARIO'S INNOVATION SYSTEM – KEY ELEMENTS

## Competitive Business Climate

Globally significant research

Access to Capital



Education system for knowledge-based economy

Highly productive industry

Focused government strategy

Strong Clusters and Networks

Promoting an Innovation Culture

# ONTARIO'S INNOVATION SYSTEM

## *Ontario's Innovation Agenda*

- Based on the advice of the Ontario Research and Innovation Council (ORIC), a multi-disciplinary advisory group to the Premier.
- Informed by province-wide consultations with business, academic and non-profit leaders.
- A blueprint to guide Ontario's transition to a knowledge-based economy.
- Holds a broad view that recognizes innovation as the key to social and economic prosperity.
- Helps Ontario to extract economic and social value from research, commercialization and knowledge transfer.



# ONTARIO'S INNOVATION AGENDA - GOALS

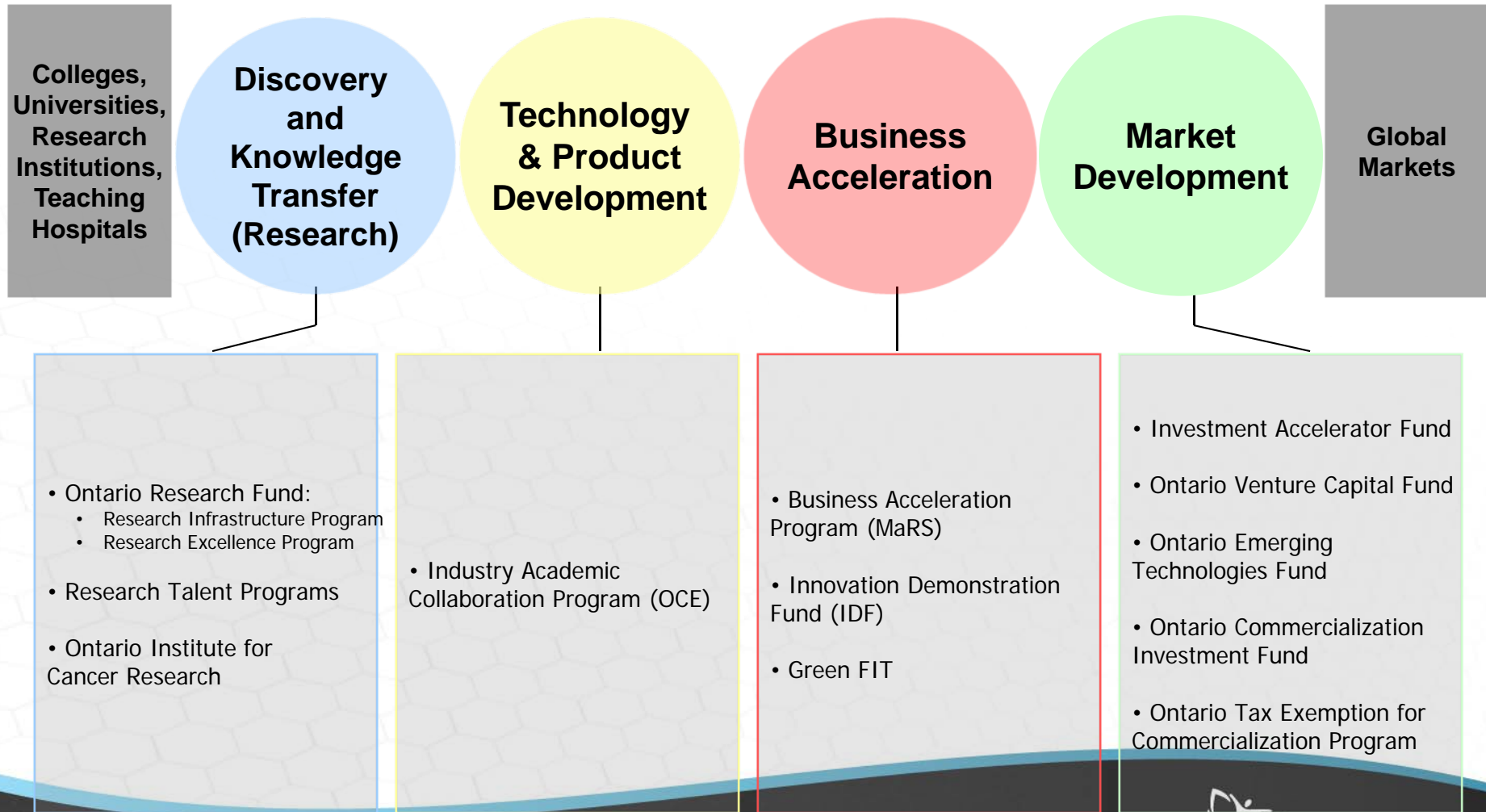
- **Support excellence** through innovation investments - ensuring value and relevance to Ontario's priorities
- **Target investments** in opportunities where Ontario can be a global leader
  - Advanced Health Technologies
  - Digital Media and ICT
  - Bio-economy and Clean Technologies
  - Pharmaceutical Research and Manufacturing
- Leverage Ontario's **skills and knowledge advantage** in research, entrepreneurship and business
- Promote an innovation-friendly **business climate**
- Ensure government is the **catalyst for innovation**



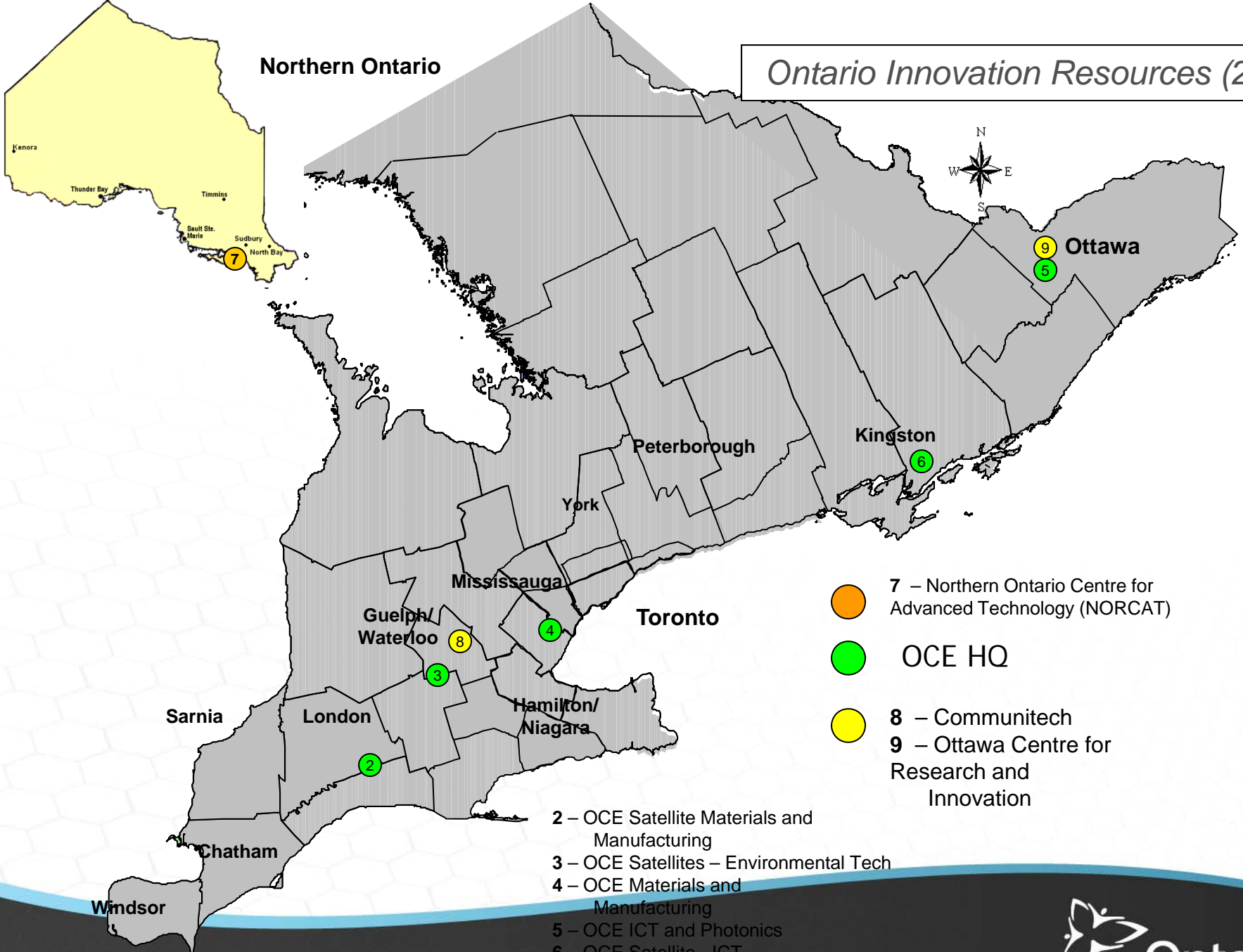


# MRI PROGRAM OVERVIEW

**RESEARCH** → **DEVELOPMENT** → **MARKETS**



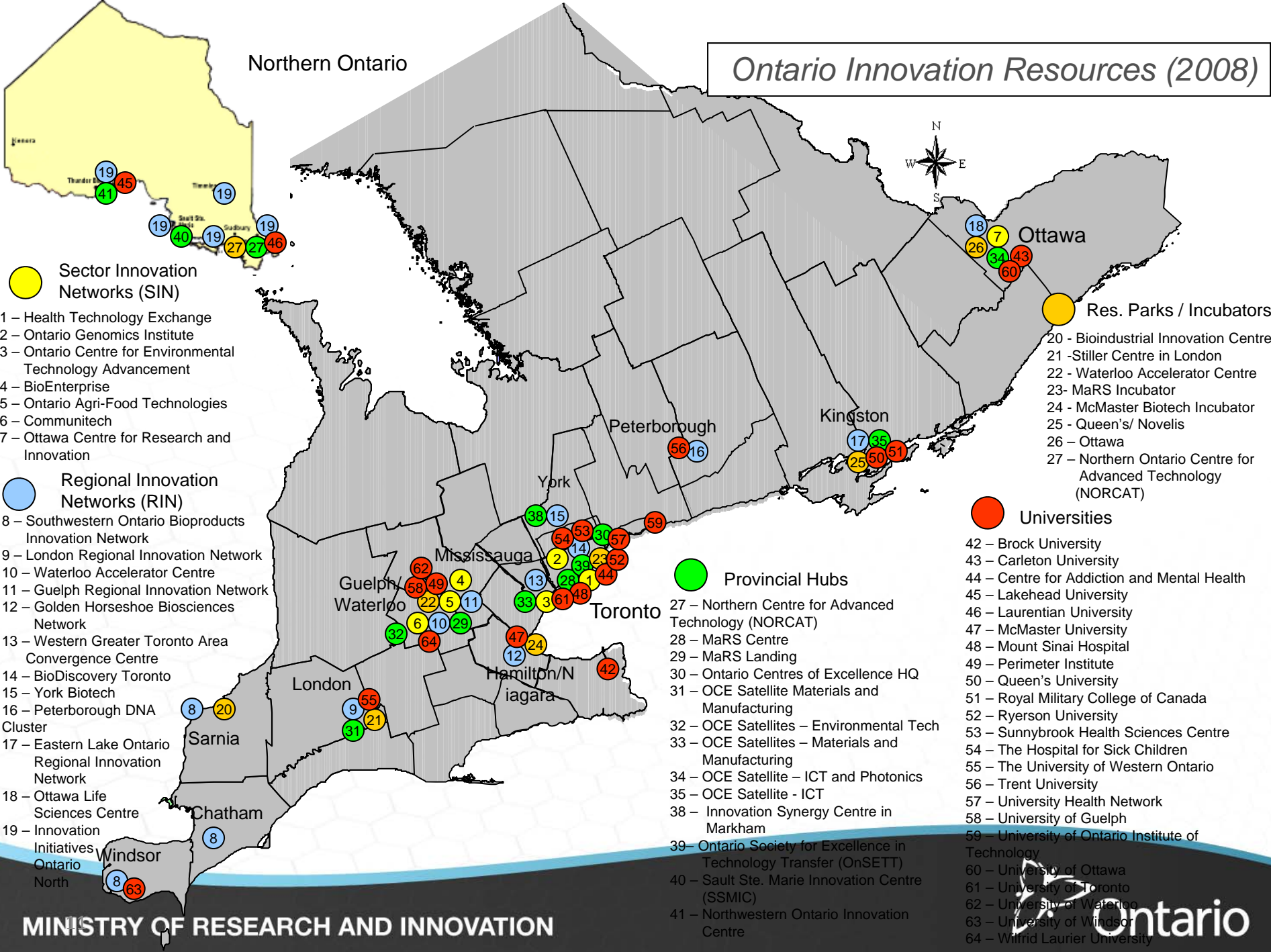
# Ontario Innovation Resources (2002)



- 7 – Northern Ontario Centre for Advanced Technology (NORCAT)
- OCE HQ
- 8 – Communitech
- 9 – Ottawa Centre for Research and Innovation

- 2 – OCE Satellite Materials and Manufacturing
- 3 – OCE Satellites – Environmental Tech
- 4 – OCE Materials and Manufacturing
- 5 – OCE ICT and Photonics
- 6 – OCE Satellite - ICT

# Ontario Innovation Resources (2008)



**Sector Innovation Networks (SIN)**

- 1 – Health Technology Exchange
- 2 – Ontario Genomics Institute
- 3 – Ontario Centre for Environmental Technology Advancement
- 4 – BioEnterprise
- 5 – Ontario Agri-Food Technologies
- 6 – Communitech
- 7 – Ottawa Centre for Research and Innovation

**Regional Innovation Networks (RIN)**

- 8 – Southwestern Ontario Bioproducts Innovation Network
- 9 – London Regional Innovation Network
- 10 – Waterloo Accelerator Centre
- 11 – Guelph Regional Innovation Network
- 12 – Golden Horseshoe Biosciences Network
- 13 – Western Greater Toronto Area Convergence Centre
- 14 – BioDiscovery Toronto
- 15 – York Biotech
- 16 – Peterborough DNA Cluster
- 17 – Eastern Lake Ontario Regional Innovation Network
- 18 – Ottawa Life Sciences Centre
- 19 – Innovation Initiatives Ontario North

**Provincial Hubs**

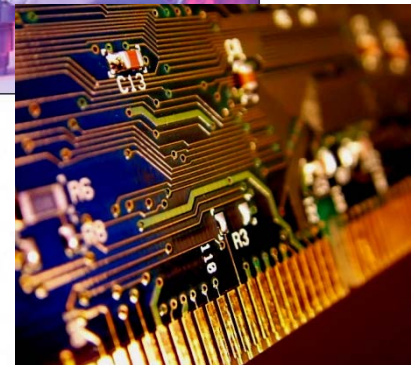
- 27 – Northern Centre for Advanced Technology (NORCAT)
- 28 – MaRS Centre
- 29 – MaRS Landing
- 30 – Ontario Centres of Excellence HQ
- 31 – OCE Satellite Materials and Manufacturing
- 32 – OCE Satellites – Environmental Tech
- 33 – OCE Satellites – Materials and Manufacturing
- 34 – OCE Satellite – ICT and Photonics
- 35 – OCE Satellite - ICT
- 38 – Innovation Synergy Centre in Markham
- 39 – Ontario Society for Excellence in Technology Transfer (OnSETT)
- 40 – Sault Ste. Marie Innovation Centre (SSMIC)
- 41 – Northwestern Ontario Innovation Centre

**Universities**

- 42 – Brock University
- 43 – Carleton University
- 44 – Centre for Addiction and Mental Health
- 45 – Lakehead University
- 46 – Laurentian University
- 47 – McMaster University
- 48 – Mount Sinai Hospital
- 49 – Perimeter Institute
- 50 – Queen's University
- 51 – Royal Military College of Canada
- 52 – Ryerson University
- 53 – Sunnybrook Health Sciences Centre
- 54 – The Hospital for Sick Children
- 55 – The University of Western Ontario
- 56 – Trent University
- 57 – University Health Network
- 58 – University of Guelph
- 59 – University of Ontario Institute of Technology
- 60 – University of Ottawa
- 61 – University of Toronto
- 62 – University of Waterloo
- 63 – University of Windsor
- 64 – Wilfrid Laurier University

# Innovation in a Regional Context

- Innovation is a dynamic process
- Focused on learning and knowledge sharing
- Social, political, and cultural environments guide and constrain activities
- Cooperation and competition are important
- Importance of both local and non-local knowledge and skills



# Innovation in a Regional Context contd...

- Innovation tends to concentrate in a small number of places – ‘Spiky’
  - Sources of Knowledge
    - Research Institutions, Hospitals
    - Technology-intensive firms
    - Patents
  - Knowledge Flows
    - Agglomeration – reduction of transactions costs
    - Proximity – quality of information
  - Sector Diversity



# Strengthening Ontario's Innovation System

## *Ontario's Network of Excellence*

- To build globally competitive firms by offering a suite of programs focused on bringing new technologies and services to the global marketplace.
- To leverage the capacity of Ontario's research institutions to support industry-driven commercialization activities.
- To build a world-class knowledge and technology transfer network for Ontario's public research institutions

## Mesh Network Model

- ONE will be based on a “mesh” network with multiple entry points rather than a hub and spoke model.

## Centralized Coordination

- Coordination through:
  - **Ontario Centres of Excellence (OCE)** for programs & services where firms want to collaborate with a public research institution
  - **MaRS** for programs & services that directly support entrepreneurs and firms such as training, business mentorship, market intelligence, product development and access to equity capital.

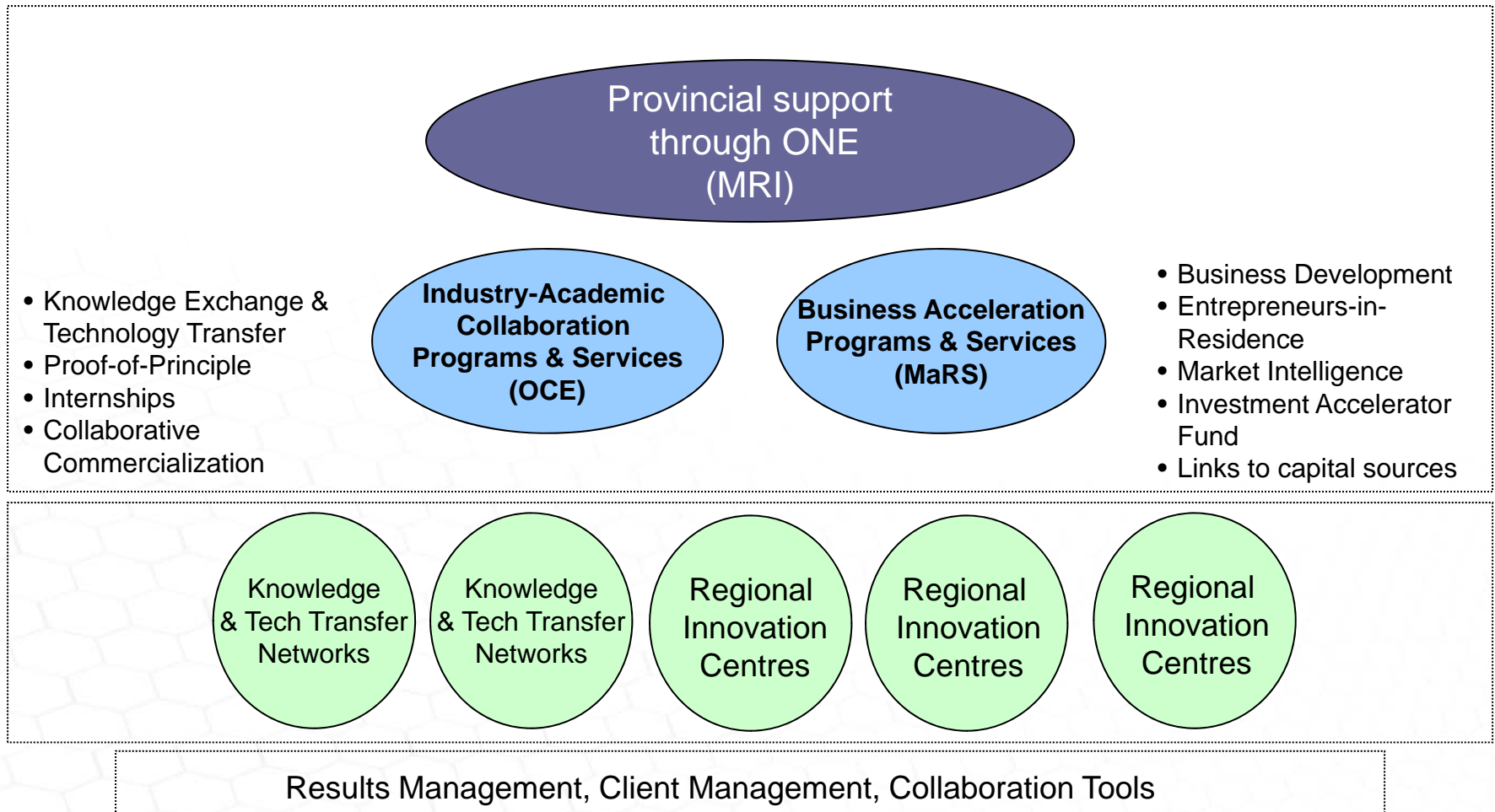
## Regional Delivery

- Through Regional Innovation Centres

## Sector-based Expertise

- Sector-specific specialized services

# Ontario Network of Excellence





# For More Information.....

## www.ontario.ca/innovation

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*Inspire* - Celebrating Ontario's innovation success.

VIDEO TRANSCRIPT

FEATURE

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- Strategic Opportunities Program (SOP)