The Innovation Systems Research Network: An Experimental Design for Knowledge Management

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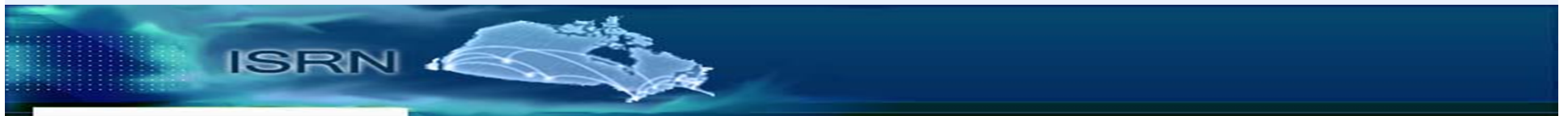University of Toronto

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Context

- Innovation Systems Research Network (ISRN)
- Established in 1998 to support interaction among researchers and their partners
    - SSHRC, NSERC, NRC funding
    - Diffuse research findings to public and private sector partners
- ISRN cluster initiative launched in 2001
    - Support from SSHRC and other federal and provincial partners
- To investigate the process of cluster development in:
    - knowledge-intensive and traditional sectors
    - metro and non–metro regions
- Structure mirrors regions being studied
    - Research methodologies tailored to regions being studied

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Objectives

- Encourage the creation of linkages and the exchange of ideas and information among the academic community, private sector firms and associations, government policy makers that will lead to a better understanding of the nature of innovation in the Canadian context;
- Develop agendas for research on the relationship among innovation, the new knowledge-based economy, and regional economic clusters;
- Encourage the development of graduate students with the interests and skills necessary to contribute to future research in this area and/or to practice as managers of science-based innovation; and
- Improve innovation systems and thereby strengthen Canadian competitiveness, by influencing public policy and corporate strategy.

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Design Features

- Nodal Structure
- Five sub-networks
- Multidisciplinary membership
- Research dissemination
  - Regional workshops
  - National meetings
  - Web sites and electronic newsletters
  - Annual publication
- Links with extensive network of government partners
  - Policy advice tailored to the regions

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Cluster Initiative

- ISRN cluster initiative launched in 2001
  - Support from SSHRC and other federal and provincial partners

- To investigate the process of cluster development in:
  - knowledge-intensive and traditional sectors
  - metro and non–metro regions

- Structure mirrors regions being studied
  - Research methodologies tailored to regions being studied

- Builds upon the capabilities and partnerships of ISRN
  - Links with extensive network of government partners
  - Strong network of international collaborators – RAC

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Cluster Case Studies

- Size and composition of the cluster
- History of the cluster's evolution, including key events (intentional and accidental)
- Relationships between firms
- Relationships between firms, research infrastructure, other institutions/organizations
- Geographical structure of these relationships
- Role of finance capital (especially angel investors and venture capitalists)
- Role of local social capital and 'civic entrepreneurs'

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Social Dynamics of Economic Performance in City Regions?

How do local social characteristics and processes in city-regions interact to affect their economic vitality and dynamism as centres of innovation and creativity?

Three Key Issues

- Social learning dynamics and knowledge flows between economic actors in dynamic city-regions
  - Social consequences of scale and the implications for mid-size and smaller urban regions
- Social implications of size for role of talent, inclusion and quality of place
- Social conditions for strategic management of economic trajectories of urban centres

Research Dissemination

- Web Site: www.utoronto.ca/isrn
  - Sub-networks
  - Bibliography

- Electronic newsletters
  - Rin – Le Bulletin Innov
  - Thecis Newsletter
  - ONRIS – OREDI Newsletter

- Extensive network of public sector partners/presentations
  - Federal, provincial, regional and local
  - Letter of understanding with IRAP
    - Presentation to IRAP Regional and National Meetings
  - Presentation to Industry Canada Cluster Working Grou
    - Presentation to IC/HRDC Regional Executives
  - Industry Canada/NRC Policy Workshop
  - International Presentations
    - DRUID, AAAS, TCI, Canada-Nordic Clusters Seminar

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