

Ontario's Regional Economic Development and Innovation Newsletter

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ANNOUNCEMENTS

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[The Innovation System Research Network's Fifth Publication Now Available](#)

Global Networks and Local Linkages: The Paradox of Cluster Development in an Open Economy, edited by David A Wolfe and Matthew Lucas, presents the final case studies in the Innovation Systems Research Network's five-year investigation of 26 industry clusters across Canada. It offers a preliminary cluster typology that accounts for fundamental differences in institutional linkages, knowledge dimensions, and stages of cluster growth. It describes clusters in regions as diverse as Toronto, Sudbury, and the Okanagan Valley and in industries as varied as biotechnology, tool and die making, and mining services. The case studies exhibit an important similarity in their detailed attention to the role of early historical events in shaping each cluster's mix of public/private actors, internal/external linkages, and its ability to adjust to internal and external market challenges.

EDITOR'S PICK

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[Proceedings from the 7th Annual Innovation System Research Network Conference](#)

The three day conference took place in Toronto and included presentations by ISRN members, visiting academics and public sector stakeholders. Agenda highlights include sessions on cluster development, Ontario ICT clusters, mapping and measuring clusters, life science clusters and more. The final day consisted of graduate student papers and took place on the Toronto Island.

Networking and Innovation: A Systematic Review of the Evidence

Luke Pittaway et al.

Porter and Ketels' (2003) study of British competitiveness emphasised the importance of business networking for innovativeness. Until recently insights into the dynamics of this relationship have been fragmented. This paper presents a systematic review of research linking the networking behaviour of firms with their innovative capacity. At an institutional level, national systems of innovation play an important role in the diffusion of innovations in terms of the way in which they shape networking activity. The paper provides evidence suggesting that network relationships with suppliers, customers, and intermediaries such as professional and trade associations are important factors affecting innovation performance and productivity. Where networks fail it is due to interfirm conflict, displacement, lack of scale, external disruption and lack of infrastructure. The review identifies several gaps in the literature that need to be filled. For instance, there is a need for further exploration of the relationship between networking and different forms of innovation, such as, process and organisational innovation. Similarly, we need better understanding of network dynamics and network configurations, as well as the role of third parties such as professional and trade associations.

European Productivity Gaps: Is R&D the Solution?

Christophe Meister and Bart Verspagen, DRUID

This paper investigates the potential impact of increased business R&D efforts in Europe on the total factor productivity gap between European and U.S. industry. The paper addresses Europe's ambition, expressed at the 2000 Lisbon Summit to become "the most competitive and dynamic knowledge-based economy in the world", and the 3% R&D intensity target for Europe formulated at the 2002 Barcelona Summit. Based on existing empirical models from the literature on productivity and R&D expenditures, the paper provides projections on the expected productivity impacts of increased R&D in manufacturing industries. The results suggest that raising European R&D is not a complete solution to the European productivity backlog relative to the U.S. The paper also find that the most dramatic impacts may be expected from raising R&D in so-called low-tech sectors.

The Rise of Systemic Instruments in Innovation Policy

Ruud Smits and Stefan Kuhlmann, Utrecht University

Starting from the co-evolutionary development of innovation practice, theory and policy, five functions are identified that play a crucial role in the management of present-day innovation processes: (1) management of interfaces, (2) (de-) construction and organising (innovation) systems, (3) providing a platform for learning and experimenting, (4) providing an infrastructure for strategic intelligence and (5) stimulating demand articulation, strategy and vision development. From a first analysis of innovation policy instrument portfolios it is concluded that the already existing instruments only cover a small part of the five 'systemic' functions. Furthermore it is concluded that the portfolios are heavily dominated by financial instruments. This paper argues that the development of a (relatively) new type of instrument, the systemic instruments, should be furthered in order to tune the instrument portfolio better to the needs of actors involved in innovation processes.

CLUSTERS & REGIONS

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[The Role of Clustering in the Growth \(and Survival\) of Fast-Growing U.S. High Tech Firms](#)

Elicia Maine, et al. Simon Fraser University

Although there is a large existing literature on clustering, no clear argument has been made in the literature that disentangles the various agglomeration effects from the firm, strategic perspective. This paper develops a framework to explain the differential benefits accruing to firms that locate in or near a relevant cluster. Hypotheses about the role of clustering in the growth of technology firms are drawn from this framework and tested on a cohort of 457 fastgrowing U.S. high technology firms. The locational determinants of growth of these firms between 1995 and 1999 are examined, as is the relationship between location and survival over the period 1999 to 2002. The results indicate that distance from a relevant cluster is negatively related to growth for all firms in the sample, but clustering has a greater impact on firms that rely heavily on tacit knowledge spillovers (biotech firms). In addition, location within a diversified metropolitan area only enhances growth performance for firms that rely heavily on broad, downstream supply chain effects (information and communications technology firms).

BIOTECHNOLOGY

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[Scan of Canadian Strengths in Biotechnology](#)

Science-Matrix

The study enabled identification of R&D strengths in both non-health and health related biotechnologies. For example, Canada excels in the application of biotechnology in forestry, aquatic sciences, environmental sciences, animal sciences, diabetes research, hormone research, stem cell research and research on the musculoskeletal system. A review of the literature was conducted to identify the most significant individual scientific achievements in biotechnology, some of which are in the area of infectious diseases. Strengths in the Canadian innovation system were identified in relation to such aspects as “triple-helix dynamics”, technology clusters, technology incubators, commercialization support, intellectual property regulation, venture capital and tax incentives.

EVENTS

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BioFinance 2005

Toronto, 17-19 May, 2005

BioFinance 2005 is a gathering of some of the most innovative minds in the life science industries and will feature presentations by senior management from over 100 life science companies from across Canada, the US and Europe. The range of participating firms includes large publicly traded and smaller listed companies and a wide range of private companies from larger and established to early-stage opportunities. The presenting companies will be developing new medicines, devices, diagnostics, medical technologies, research tools and health care systems.

[5th Triple Helix Conference - The Capitalization of Knowledge: Cognitive,](#)

Economic, Social and Cultural Aspects

Turin-Milan, 18-21 May, 2005

The 5th Triple Helix Conference will bring together researchers interested in the interaction between University, Government and Industry. The conference program will include 10 Track Sessions per day, made up of paper sessions dedicated to individual scientific contributions, workshops on selected specific themes and panels intended for industrial experts and policy makers.

The organizers invite contributions on issues related to the conference theme: economics of innovation, organizational sociology, regional policy, business & management, cognitive economics, finance, law & economics, industrial economics, scientific and technology policy, and political science.

R&D Evaluation: Assessing Results from Research and Technology

Atlanta, 23-26 May, 2005

Many organizations are requiring programs to produce performance indicators, but these are only part of the evaluation process. The course will help you choose key performance indicators as well as design other information-gathering activities to produce a richer understanding of how well your program is working. The course is designed for managers of research or technological innovation programs, in government or non-profit funding organizations or laboratories, planning and evaluation staff who are new to the research context, and scientists and engineers who have recently moved into strategic planning or assessment. The course combines lectures with small group and individual exercises, along with team-based exercises using common case studies with opportunities to apply the concepts and techniques to your own organizations

EECO Environment and Energy Conference

Toronto, 25-27 May, 2005

EECO is a biennial 'platform' where business leaders, elected officials, public policy makers and NGOs meet to examine priority business and environment risks/opportunities. This series fosters dialogue and debate on building a future of increased competitiveness coupled with environmental protection. The dynamic and strategically focused program highly targeted and interactive exposition, and engaging social events deliver outstanding value to delegates, sponsors and partners. In addressing the region's critical business and competitiveness challenges head on, this conference will feature the EECO Forum and four informative and exciting tracks.

Digital Communities 2005

Benevento and Napoli, Italy, 5-9 June, 2005

This conference will explore themes associated with information technology, the knowledge economy, technology policy, and the significance of place in cyberspace. The conference locations have been selected because both cities "represent more than 2,000 years of development and exemplify the ability of places to constantly change in response to social, economic and technological forces". Local authorities will look at the changes ICTs have made in the region.

Knowledge and Regional Economic Development **NEW!**

Barcelona, 9-11 June, 2005

On the path towards a knowledge economy, the crucial question arises of whether peripheral regions will be able to contribute to economic growth, and consequently catch up with the core regions. In most advanced European countries, the labour supply has already begun to fall rapidly as the population ages. The implications of this for economic growth are a matter of concern. A rapid increase in productivity will be needed to compensate for problems arising from labour shortages; production processes will have to become more knowledge-based to achieve the productivity leaps required. And to stay competitive, regions have to turn to those industries in which radical innovations are able to foster high productivity growth. The conference will focus on theoretical and empirical analyses of the following topics: Innovation and networking, determinants of knowledge, regional innovation systems, knowledge externalities, growth and regional convergence, agglomeration economies, regional labour market analysis, and economic development and regional policy.

Digital Cities: The Augmented Public Sphere

Milano, Italy, 13-16 June, 2005

Participants in this workshop will discuss the opportunities and challenges resulting from the digitalization of public space. Among the issues to be addressed are the goals and the outcomes of prior virtual public spaces, difficulties encountered by civic and community networks, the limitations of digital cities, and the new frontiers of e-participation, e-consultation and e-democracy. The workshop will focus on any topics relevant to discuss how Information and Communication Technologies are reshaping the human relationships at the urban level and the public space of our cities.

NanoForum Canada 2005

Montreal, 15-17 June, 2005

This forum will provide a venue to present the latest achievements in nanoscience and nanotechnology in Canada, inform the community on recent enhancements in research facilities, and to address questions of funding and access to newest equipment.

Cooperation for Regional Innovation: Creating Regional, National and International Networks

Helsinki, 16-17 June, 2005

The Region is full of talents and possibilities for Innovation. However, cooperation is needed to make effective use of the research capacities, entrepreneurial spirit, creativity and local strengths in your region. In a dynamic field with many actors and rapid and constant change, scientifically proven and policy tested toolkits are hard to come by. What is needed is a structure that allows decision and policy makers to learn from each others experiences. The Technopolicy Network provides the platform to facilitate this inter-organisational learning. The main issues on the agenda include the organization of regional innovation, success and failures of policy instruments, leadership and the role of the policy maker, organizing cooperation, entrepreneurship and innovative regions - between cooperation and competition.

UK eLearning Regions and Cities Conference

Oxford, UK, 21-22 June, 2005

The 2005 UK eLearning Regions and Cities Conference will bring together the most up to date information in eLearning for regional authorities. The 2005 conference will also work with groupings

of regional stakeholders (e.g. the RDA, representatives from LEAs and from HE and FE institutions, local LSCs, employers and workforce representatives, as well as locally based technology providers) to work on regional strategy and tactics. Policy is all very well, but what is needed is a sense of mutually aware action: more than just talk.

Dynamics of Industry and Innovation: Organizations, Networks and Systems

Copenhagen, Denmark, 27-29 June, 2005

The DRUID Ten Year Anniversary Summer Conference will be held at the Copenhagen Business School. The conference's scientific committee will consider all papers in the order in which they arrive with respect to novelty, academic quality and the proposed paper's relation to the theme of the conference.

Beyond Clusters: Current Practices and Future Research Strategies

Ballarat, Australia, 30 June - 1 July, 2005

The cluster conference is hosted by the Centre for Regional Innovation & Competitiveness (CRIC) at the University of Ballarat. CRIC is inviting scholars and practitioners to submit papers for presentation at the conference. The conference will address a range of critically important themes relating to clustering. Papers are welcomed on the following topics: Cluster Policy, Clustering Tools, Cluster Measurement and Benchmarking, Skills and training, Cluster investment and attraction and Beyond Clusters. The conference will result in two refereed publications: a special journal edition on clustering and refereed conference proceedings. If you are interested in contributing to one of these refereed publications, please submit an abstract of up to 400 words no later than April 29, 2005. Full papers will be due by May 27th, 2005.

Global Aspects of Technology Transfer: Biotechnology

London, UK, 4-9 September, 2005

The 2005 GRC offers opportunities to present and discuss biotechnology impacts on World economy and how it relates to scholarly research on technology transfer between government, industry, and universities/nonprofits. The meeting will have a distinctly global perspective, as the Chair and Vice-Chair believe that challenges in biotechnological technology transfer are increasingly universal in nature, and that addressing these challenges requires this perspective. Research being undertaken, for examples, by MMV, TB Alliance, the Pharmaceutical Industries, the World Bank, World Trade Organization, World Health Organization, London School of Hygiene and Tropical Medicine, the Center for Management of IP in Health R&D, and others are leading to insights on this evolution. By examining in the Gordon Conference format new and innovative ideas emerging from such research, the organizers hope to continue to stimulate thoughtful discussion, engage the participants, and catalyze the dissemination of the fruits of biotechnology to the world community in a sustainable, economically viable and socially responsible manner.

Innovations and Entrepreneurship in Functional Regions

Uddevalla, Sweden, 15-17 September, 2005

The objectives of the symposium/conference are: i) to provide a unique opportunity for scholars and senior and junior researchers to discuss path-breaking concepts, ideas, frameworks and theory-

essentials in plenary key-note sessions and parallel competitive paper sessions, and ii) to facilitate the development and synthesis of important contributions into cohesive and integrated collections for potential publication. The conference will focus on the themes of international entrepreneurship; innovation, entrepreneurship policy and regional development; entrepreneurship in the public and non-profit sector; innovation, academic entrepreneurship and high tech firms in functional regions; and SMEs, immigrant entrepreneurship and local economic development. Paper submissions will be considered until March 15, 2005.

Creative Places + Spaces 2: Risk Revolution

Toronto, 30 September - 1 October, 2005

This conference is dedicated to unlocking the creative potential of people and places through innovative social, educational, cultural, environmental and economic initiatives. In addition to onstage presentations, the conference will offer a Creativity Marketplace, which will provide organizations an opportunity to display materials and meet with delegates to exchange ideas and share information about their work in a less formal setting. We also invite the submission of feature articles and story ideas for the Creative Places + Spaces NewsJournal. The conference welcomes submissions of dynamic presentations, demonstration projects and case studies from practitioners in the fields of arts, science, business, government, education and social services suitable for the conference.

Clusters 2005

Toulouse, France, 27-29 October, 2005

This conference will bring together academic and industrial decision makers and their municipal counterparts with a view to fostering debate and discussion about best practices with respect to the creation, management and development of technology clusters.

Globelics Africa 2005

Pretoria, South Africa, 31 October - 4 November, 2005

Globelics (the Global Network for the Economics of Learning, Innovation and Competence Building Systems) is a framework for scholars who use the concepts of learning, innovation and competence building systems as part of their analytical framework. The network is especially focused on the strengthening of research on learning and innovation systems in developing countries. In the region most in need of human and economic development, Globelics Africa 2005 aims to further examine the links between innovation, development and growth. The conference also aims to build research capacity in Africa by establishing contact between researchers from Africa and from other regions of the world, both from leading academic centres, and from other developing contexts. In addition, the conference aims to rethink and reframe the challenges of the African continent in the light of insights from innovation systems research. Scholars from innovation studies will contribute a range of approaches and perspectives to guide research, policy formulation and action to bring about societal transformation through enhanced learning, innovation and knowledge competencies.

Innowest 2005 **NEW!**

Calgary, 16-17 November, 2005

This conference provides a forum where the innovation community of Western Canada can gather annually to network, review the latest developments, solve problems and take specific industry recommendations forward for action. Among the topics to be discussed are applied research, the

culture of innovation, innovation policy and innovation support.

SUBSCRIPTIONS & COMMENTS

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Please forward this newsletter to anyone you think will find it of value. We look forward to collaborating with you on this initiative. If you would like to comment on, or contribute to, the content, subscribe or unsubscribe, please contact us at onris.progris@utoronto.ca.

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