

# Ontario's Regional Economic Development and Innovation Newsletter

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## ANNOUNCEMENTS

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## Canadian universities collect record-high revenues in 2001/02

Universities collected record-high revenues in 2001/02, with public sources having increased at a faster rate than private sources for the first time in 15 years. Of the \$16.9 billion taken in during the academic year 2001/02, revenues from public sources increased by 5.6% from the previous year to \$9.4 billion, while revenues from private sources grew by a more modest 3.4% to \$7.6 billion. Contributing to the gain from private sources was a 6.5% increase in revenues from student fees.

## Canadian ICT service industries continue to grow

According to this latest update by Statistics Canada, the ICT services industries kept growing in 2002 (7.9%), with a substantial increase of \$2.1 billion in telecommunications services' output, making it the only part of the ICT industry not to have suffered the ICT downturn. As for the ICT manufacturing industries, output continued to decrease in 2002 by 16.3%. The most affected of the manufacturing industries were - for the second consecutive year - the wired communications equipment industry (-32.0%), followed by the communication wire and cable industry (-25.8%) and the electronic component industry (-14.4%).

# EDITOR'S PICK

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#### NEW BOOK: <u>Clusters Old and New: The Transition to a Knowledge Economy in</u> <u>Canada's Regions</u>

## D. Wolfe, ed. University of Toronto

The volume presents the initial results of a study into the formation and growth of industry clusters across a wide range of Canadian locales in both knowledge intensive sectors as well as more traditional ones. As the papers in this volume suggest, the process of cluster formation is complex and may extend over decades. While public policy plays a critical role in supporting the establishment and growth of clusters, the range of factors that contribute to their success is quite varied. The collection of papers provide not only a basis for beginning to understand the process of cluster formation from an evolutionary perspective but also some criteria for determining the presence or absence of true cluster dynamics in the cases under investigation. Contributors include: C. Ryan and P. Phillips, P. Cooke, C. Davis and N. Schaefer and, H. Johnstone and R. Haddow.

## **INNOVATION & RELATED POLICY**

# Impact of Advanced Technology Use on Firm Performance in the Canadian Food Processing Sector

#### J. R. Baldwin et al., Statistics Canada

This paper investigates the evolution of industrial structure in the Canadian food processing sector and its relationship to technological change, especially the impact of adopting advanced IT-based manufacturing technologies. The authors find that plants which adopted advanced technologies were typically larger, foreign controlled, and tended to be more innovative along a number of dimensions other than just their technological orientation. Moreover, they were the ones who adopted a number of advanced business production processes that made use of advanced technologies, and developed a human resource strategy focused on developing a skilled workforce. These firms also enjoyed superior productivity growth and saw their market share increase.

#### **Evaluation of the Finnish Innovation Support System**

#### L. Georghiou et al., for the Finnish Ministry of Trade and Industry

This evaluation provides a thorough analysis of the role of public support in industrial innovation, describes the specific features of the Finnish innovation system, and concludes with a discussion on Finland's implementation of innovation policy. The report finds that the Finnish innovation support system as a whole is functioning well and the different public organizations have each a clear task in it. The public sector has a distinctive task in the national innovation system in areas that could not otherwise be covered by the market sector, at least in a way that is optimal for the national economy. However, in the future, support organizations will have to meet the challenges of internationalization, and pay more attention to the balance and overlaps of public and private activities in each area.

#### Networks and Hierarchies in Bioscientific Research Management

#### P. Cooke, Centre for Advanced Studies, Cardiff University

The paper responds to the rapid decline in the capabilities of large pharmaceutical companies to develop in-house new therapeutic drug treatments (particularly those deriving from biotechnology), compared to the rapid rise in that precise capability on the part of networks of small, dedicated biotechnology firms. It focuses on the core elements of network effects in acquisition, exchange and use of knowledge, along with the processes of integrating knowledge from different communities and the impact of this on systems of management control of highly complex processes. While some corporations adopted a strategy of downsizing central laboratories and decentralizing R&D both to branches and to the supply chain, such attenuation of the R&D function has not been sought by pharmaceuticals firms, but rather represents a failure to deal with a thoroughgoing paradigm shift. The paper examines the nature of that shift and explores ways in which 'big pharma' is seeking to manage its response.

# Business Incubation: Emerging Trends for Profitability And Economic Development in the US, Central Asia and the Middle East

# C. Johnsrud, R. Theis and M. Bezerra, Pathfinder Research Inc., for the US Department of Commerce

This study reviews the literature on models and trends in the field of business development and incubation in the US (and in the last chapter, other regions), with the intent of uncovering new approaches to business incubation. The authors find that whereas past business incubation efforts were geared towards economic development, more recent approaches emphasize investments leading to direct or indirect profitability for one or more investors or organizations. Included are profiles of various types of incubators such as corporate venture arms, incubating operating companies, and corporate-sponsored incubators.

#### **EVENTS**

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# Knowledge and Innovation in Creating and Sustaining Regional Growth in a Global Environment

#### Eindhoven, 10-12 July, 2003

This workshop intends to explore the processes that create and sustain regional growth in a global environment focusing on the link between firm behaviour and the processes that in turn transmit themselves into region wide growth. Themes include: the role of a few large and multinational firms and the tensions between regional capability and firm specific

capability; the role of other kinds of international linkages (markets, networks, diaspora); and studies of partial successes in regional growth that illuminate upon the factors that create and sustain regional growth.

#### **Clusters, Industrial Districts and Firms: The Challenge of Globalization**

#### Modena, 12-13 September, 2003

Organized in memory of Professor Sebastiano Brusco, this conference focuses on the international competitiveness of industrial districts and clusters, and the effects that globalization has on SME's and their interactions with markets and institutions. Questions to be raised relate to how clusters' internal networks, productive patterns and specializations are changing; how the cluster firms themselves are changing; what factors determine the competitive advantage of industrial districts; and finally, how their international competitiveness can be enhanced. Invited speakers include Charles Sabel, AnnaLee Saxenian and Frank Wilkinson.

# Business Innovation and Growth from the Exploitation of Academic Research (BIGEAR) Open Conference

#### Vienna, 18-19 September 2003

This conference will be an open meeting to present and discuss good practice and issues on Business Innovation and Growth from Exploitation of Academic Research. Supported by the European Commission's Directorate-General for Enterprise as part of the Innovation and SMEs program, BIGEAR aims to understand and disseminate best practice in the effective exploitation of academic research to stimulate business growth in Europe.

#### Communities and Technologies (C&T 2003)

#### Amsterdam or Bonn, 19-21 September, 2003

This international conference is a forum for stimulating and disseminating research into all facets of communities and information technology. Attendees represent multidisciplinary research efforts from applied computer science and social science. The 2003 conference will focus on presentations and discussion of empirical and conceptual research on a wide range of topics including (Virtual) Community formation and development; Virtual communities vs. location-based communities; Digital cities, and Design methods for communityware.

# Workshop at C&T 2003: The ambiguous role of ICT in regional inter-firm clusters: Towards a better empirical knowledge base for theorizing

This workshop, organized by <u>Steinfield</u> and colleagues from Michigan State University, will focus on the role of ICT in inter-firm networks in light of the mixed evidence regarding ICT usage and benefits in clusters, both for internal coordination in the cluster (e.g. CSCW and collaborative commerce) and for contact with external markets (e.g. B2B and B2C ecommerce).

# Information Technology in Regional Areas Conference (Itira)

#### Caloundra (Australia) 5-7 November, 2003

This conference will focus on strategies that link ICT-enhanced economic, social and cultural development efforts and opportunities in such areas as electronic commerce, community and civic networks, tele-centres, electronic democracy, on-line participation, self-help and virtual health communities, advocacy, and cultural enhancement. This event, geared to practitioners, and policy makers in developed and developing countries, will provide a platform for sharing ideas across practice, research and policy. A call for papers has been issued with a deadline of May 10, 2003 for proposals.

#### What Do We Know About Innovation? A Conference in Honour of Keith Pavitt

#### Brighton, 13-15 November, 2003

This conference is in recognition of the lifetime contribution of Professor Keith Pavitt to the study of innovation. Keith's work was based on a deep empirical understanding of innovation and firm behaviour, and he placed particular emphasis on the development of new data, methods, and taxonomies. His contributions spanned economics, management and science and technology policy. The conference is organized around the major themes of his work, including the structure, dynamics and management of innovation processes, the relationship between basic research and technical change, knowledge and the theory of the firm, the globalization of R&D, and science and technology policy.

## <u>New Directions in Technology Management: Changing Collaboration Between</u> <u>Government, Industry and University</u>

#### Washington D.C. 3-7 April, 2004

This Conference of the International Association for Management of Technology will discuss new directions in technology management and their influence on innovation and the creation of economic growth and prosperity. Special attention will be give to the necessary mechanisms of knowledge generation, science and technology policy, and the collaboration required to accomplish national and organizational objectives. Best practices in technology development and utilization will be presented. The academic institution's role in preparing the needed human resources for the technological environment of the 21st century will also be addressed. *Submission of Abstract*: October 15, 2003

# WILL YOU BE ONE OF OUR REGIONAL REPORTERS? [Table of Contents]

Yes, you! In an effort to improve our coverage of Ontario's regional economies in this newsletter, we are looking for a few people who are 'plugged in' to the latest local economic development and innovation happenings in their regions. All we ask is that you send us a short message once a month highlighting recent news and research initiatives from your region - please forward items that you would like to share with newsletter recipients, as well as other items of interest, to: <u>onris.progris@utoronto.ca</u>.

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