# Ontario Network on the Regional Innovation System

# OMRIS

# Ontario's Regional Economic Development and Innovation Newsletter

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# **British Columbian Forest-Research Partnership Launched**

A new partnership known as the Forest Research Opportunity B.C. (British Columbia) was recently brought together on the 1st of June. It is a collaborative effort to harness the research and innovation capabilities present in British Columbia and to improve the competitiveness of the forest industry and increase the economic and social value of Canada's forests which are vital parts of Canada's economy and society. The partnership brings together the governments of Canada and British Columbia, as well as universities and industry from the B.C. area. It will focus on delivering results that meet industry and public policy needs in areas such as sustainable forest management and forest products, climate change and energy supply.

# Ottawa High Tech Investments Rebound to Highest Level Since 2002

Data released recently by the Ottawa Centre for Research and Innovation (OCRI) indicate investor confidence in Ottawa high technology companies is on the rebound. In the second quarter of this year, Ottawa-based technology companies attracted nearly \$215 million in venture capital, the highest level since the fourth quarter of 2002. The second quarter investment figure was more than six times greater than the \$34 million invested in the first three months of this year. The first and second quarterly totals for this year--roughly \$249 million--already exceed the \$248 million invested in all of 2004. In light of this data, OCRI officials are predicting venture capital investments in Ottawa-based companies will top \$300 million by year's end.

# **Canadian Health Insurance May be a Competitive Advantage**

A recent op-ed piece from the *New York Times* profiles some of the factors that lead to Toyota's decision to locate in Canada. Paul Krugman argues that the level of skill of the Ontario workforce was significant in the consideration. He suggests that the public nature of Canadian health insurance also contributes to cost savings despite higher tax rates and contends that this has important implications for American policy.

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# **Report of the Strengthening America's Communities Initiative**

Strengthening America's Communities Advisory Committee

Underscoring globalization, the report points to entrepreneurship and innovation as the two keys to success in economic development providing the "twin engines for wealth creation and a rising standard of living". The report calls for making higher education a bigger partner, tying federal assistance to performance rather than entitlement, and re-focusing resources where the need is greatest in areas demonstrating the greatest potential for improvement. Specific recommendations include: increasing technical assistance funding for innovation-based strategy development; requiring long-term, innovation-based, regional and community development strategies as a prerequisite for follow-on federal assistance; the replacement of entitlement grants with performance-based challenge grants within 10 years; and, to create effective forums for propagation and sharing of best practices in economic and community development. The program will consolidate dozens of existing federally funded programs.

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# **Incentives for ICT Adoption: Canada and its Major Competitors**

Jacek Warda, ITAC

This paper illustrates how countries that are serious about promoting the use of information and communications technology to improve productivity and overall economic performance have used a broad array of incentives to spur the use of technology. The paper notes that while a number of OECD countries have incentives for ICT adoption, Canada lags its competitors in the provision of incentives for activities that facilitate technology adoption. Even more alarming is the rapid rate at which emerging economies, such as Korea, India and China, have instituted measures to spur adoption. China, for example, deploys a range of measures including depreciation schemes, investment allowances and allowances for technological innovation. Korea offers a tax credit for acquisition of machinery and equipment by small companies. It also offers a tax credit specifically for productivity enhancing facilities of 7 per cent. Korea is also one of a number of jurisdictions that offers tax credits for training in ICT use. Others that offer incentives for ICT training include France, Austria and the Netherlands. This paper advocates that Canada should actively provide incentives for the adoption of technology.

# Intellectual Property and Competition Policy in the Biotechnology Industry

**OECD Policy Brief** 

The science of biotechnology has been pushing the frontiers of human knowledge and intellectual property ("IP") for three decades. As scientists developed techniques for isolating and creating genetic material and began to apply them commercially, a new industry grew and so did its appetite for patent protection. The number of patent applications from the biotechnology industry has grown faster than the number of patent applications from other industries over the past several years. The thousands of biotechnology patents issued annually contribute to new products, services, and tools in agriculture, pharmaceuticals, and industrial products. Inventors who develop biotechnological innovations rely on IP rights to protect and validate their work. They also rely on IP licenses to gain access to needed tools and technologies. In addition to spurring important inventions, however, the rising tide of biotechnology patents has brought concerns that they are being granted too freely and too broadly. Too many patents that cover too much ground will not only harm competition, but will also stifle innovation by making further research riskier, more difficult or more expensive. At the same time, certain licensing techniques that are used in the biotechnology industry can aggravate those problems. This Policy Brief addresses how government officials can cooperate to foster innovation without stifling competition, as well as some ways in which licensing behaviour that can fall foul of the competition laws

# National Innovation Systems - Analytical Concept and Development Tool

Bengt-Åke Lundvall, DRUID

This paper reflects on the origin and use of the national innovation system concept in terms of theory and practice. It argues that the concept has some characteristics in common with an engineering approach but also with critical theory and grounded theory. It criticizes attempts to make the concept 'more rigorous' through organizing the definition and analysis around a list of 'functions', 'factors' and 'activities' and presents the principles used to organize the Danish DISKO-project as an alternative and less agnostic approach. Here a core of the system is defined and it is illustrated that it is necessary to both to understand micro-behavior in the core and understand 'the wider setting' within which the core operates. The final section of the paper discusses what further developments are needed to make the concept relevant and applicable to developing countries. Here special attention is given to institutions and capabilities supporting learning. Here there is a need to give more emphasis to the distribution of power, to institution building and to the openness of innovation systems.

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# Spaces of Knowledge Flows: Clusters in a Global Context

Meric S Gertler, ISRN

At the very foundation of the cluster concept is the idea that proximity matters. This is manifest in a number of important ways. First, the geographical clustering of economic actors is said to facilitate the exchange of knowledge between them, through both traded and untraded means. The interaction that supports this is formal/planned as well as informal/unplanned, with spatial concentration facilitating both forms of contact. Common conventions and norms, and readily available knowledge about the reliability and trustworthiness of individual economic actors further support the local flow of knowledge – both tacit and codified – within local industry clusters. The same conditions are said to enrich close, collaborative vertical interaction with local customers and suppliers, in which learning-through-interacting generates mutual benefits for technology users and producers alike. Finally, the geographical clustering of firms in the same industries accentuates competition – and the innovative dynamism arising from it – by enhancing firms' ability to learn from one another through observation and monitoring.

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#### Fishing Upstream: Firm Innovation Strategy and University Research Alliances

Maryann Feldman, Rotman School of Management

This paper examines how innovation strategy influences firms' level of involvement with university-based research. Our results suggest that firms with internal R&D strategies more heavily weighted towards exploratory activities allocate a greater share of their R&D resources to exploratory university research and develop deeper multi-faceted relationships with their university research partners. In addition, firms with more centralized internal R&D organizations spend a greater share of their R&D dollars on exploratory research conducted at universities. In contrast to other external partners, we find evidence suggesting that universities are preferred when the firm perceives potential conflicts over intellectual property.

**STATISTICS** 

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#### Wireless in British Columbia: 2005 BC Wireless Industry Survey Results

PriceWaterhouseCoopers and the Wireless Innovation Network BC (WINBC)

This report summarizes the results of a survey of wireless companies in British Columbia, Canada, conducted between April and May 2005. A list of companies was compiled from the WINBC directory and from publicly available sources. The list included BC-based organizations developing and deploying wireless technologies and services as a significant portion of their business, and organizations from other jurisdictions with significant wireless-related operations in the Province. Participants were asked to comment specifically on the wireless portion of their business.

# Economic Performance: Highlights of a Workshop on Economic Performance Measures

US Government Accountability Office (GOA)

The quality of the economic performance assessment of federal programs has improved, but gaps still remain in the application of the measures used. This report highlights the findings and recommendations of a panel convened in December 2004 to discuss economic performance measures. The panel of government and academic participants sought to discuss the use of economic analysis, such as benefit cost or cost effectiveness, for helping to assess federal programs' performance. Participants were selected based on various qualifications related to the subject matter. It finds that the quality of the economic performance assessment of federal programs has improved but is still highly variable and not sufficient to adequately inform decision-makers. The gaps in applying economic performance measures are that they are not widely used, mechanisms for revisiting a regulation or program are lacking, retrospective analyses are often not done, and homeland security regulations present additional challenges and typically do not include economic analysis. To expand the use of measures, panelists suggested evaluating existing programs retrospectively and applying the measures to homeland security issues.

Panelists also outlined a number of recommendations toward improving the general economic principles and guidance that economic performance analysis is based upon: developing a minimum set of principles and abbreviated guidelines for economic performance analysis; developing one-page summaries and scorecards of analysis results; standardizing some key values for assumptions; and, creating an independent and flexible organization to provide guidance and develop standards.

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# **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 andnon-profit sector; innovation, academic entrepreneurship and high tech firms in functionalregions; 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 News Journal. 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.

# Big Lessons from Small Places: A Forum on Governance in Rural North America and the North Atlantic Rim №№

# Twillingate, Newfoundland, 13-15 October, 2005

This conference includes field trips dealing with a number of important themes in rural governance including: economic diversification, fisheries, tourism, heritage and culture and health. Parallel sessions cover governance tools in small jurisdictions, managing urban-rural interaction, fiscal management, devolving power-building capacity, services and infrastructure, natural resource management and regional diversification.

# **Building a Brighter Future: Building Tech Based Economies**

### Atlanta, 19-21 October, 2005

The urgent need to focus public investment on the more distant horizon has been the recurring and underlying theme for all of the national discussion on unbalanced federal R&D budget priorities, the need for a national innovation strategy, and the challenge and opportunity presented by a "flat world" (to borrow a phrase from Thomas Friedman). SSTI's 2005 conference in Atlanta provides a unique and timely forum to advance understanding of the states' and regions' evolving roles as leaders in fostering the continued competitiveness of the U.S. economy.

# **Creative Clusters**

#### Belfast, UK, 24-26 October, 2005

This is the only annual international conference on policy for the creative industries. The growth of creative industries has been explosive - communities, cities, regions and nations are embracing this shift, leveraging their culture to build valuable assets that can transform their economies. In the UK creative industries are growing twice as fast as any other - at a rate of 8% per year. Creative Clusters are accepting presentation proposals on the following four conference themes: Investing in Creativity, Delivering Skills for Creativity, Inclusion through Creativity, and an open session.

#### 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

## 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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