

# Ontario's Regional Economic Development and Innovation Newsletter

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# ANNOUNCEMENTS

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# Federal Government Invests \$48.5 Million in Microsystems Research at Canadian Universities

David McGuinty, Member of Parliament for Ottawa South, on behalf of the Honourable David L. Emerson, Minister of Industry and Minister responsible for the Natural Sciences and Engineering Research Council (NSERC), recently announced that NSERC will provide \$48.5 million over five years to CMC Microsystems to accelerate the development of Canadian-made microsystems for key economic sectors including health care, security, environment, aerospace, automotive and natural resources. CMC is a unique Canadian organization that provides academics with tools that are state of the art in industry to move theory into practical applications. Through its network of more than 40 universities, CMC makes it possible for some 2,400 researchers and graduate students to design, manufacture and test prototype microsystems. As a result of cash and in-kind contributions from industry and other sources, the total program value will be more than \$100 million.

### Ontario Government Strengthens Prosperity By Boosting Innovation In Heavy Truck Industry

A new heavy-truck manufacturing research centre will boost innovation and prosperity in Ontario, Minister of Economic Development and Trade Joseph Cordiano announced at the facility's recent official opening. This new Centre for Innovation is another key building block that's strengthening Ontario's innovation economy. The jurisdictions that invest in innovation will be the ones that create the best jobs and enjoy the highest quality of life. And companies, governments and universities each need to participate.

Ontario has contributed a total of \$32 million to International Truck and Engine Corporation's investment in Ontario. Of the \$32 million, \$27 million support the centre for innovation located at the University of Windsor, and \$5 million go toward skills training at the company's Chatham assembly facility.

### The Future of Industrial Research in Canada

The 5th Annual Research Money Conference is coming up fast - next week on November 8 at the Ottawa Congress Centre. The conference addresses the changing nature of R&D in the global knowledge economy. Canada has been an attractive place for foreign multinationals to locate R&D centers and for research-intensive firms to grow. Will this situation persist? How does Canada maintain and grow its industrial research base? What are other countries doing? What policies will make Canada an attractive place for research-intensive businesses to operate and grow? Willam Owens (Nortel Networks), Tom Jenkins (Open Text), Fred Gault (Statistics Canada), David Fransen (Industry Canada) and Andrew Dearing (European Industrial

Research Management Association) are among the speakers, plus three private sector panels. The conference takes place on November 8, 2005 at the Ottawa Congress Centre.

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#### Activating Knowledge

Luc Soete, MERIT

The paper is one of the six papers that have been prepared for the UK Presidency of the EU by leading figures and authors in their fields, with a view to stimulating further discussion. According to the paper "boosting" and "activating" knowledge investment in Europe is an essential part of our discussions on the reform of the European social model, much like the "Active labour" market reforms of the 1980's and 1990's. These reforms opened up labour markets, making them more flexible without putting in jeopardy the essence of the social security protection model.

INNOVATION & RELATED POLICY

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### Rising Above the Gathering Storm: Energizing and Employing America for a Brighter Economic Future

Committee on Prospering in the Global Economy of the 21st Century: An Agenda for American Science and Technology, National Academy of Sciences, National Academy of Engineering, Institute of Medicine

This report addresses a number of questions relevant to American policy makers: What are the top ten actions, in priority order, that federal policy makers could take to enhance the science and technology enterprise so the United States can successfully compete, prosper, and be secure in the global community of the 21st Century? What implementation strategy, with several concrete steps, could be used to implement each of those actions? The United States must prepare with great urgency to preserve its strategic and economic security. Because other nations have, and probably will continue to have, the competitive advantage of low-wage structure, the United States must compete by optimizing its knowledge-based resources, particularly in science and technology, and by sustaining the most fertile environment for new and revitalized industries and the wellpaying jobs they bring. To that end, this report presents a range of recommendations.

### NRC Annual Report: Science at Work for Canada

#### National Research Council of Canada (NRC)

The National Research Council Canada (NRC) performs world-class research that is relevant to Canadians. The success stories featured in Science at Work for Canada, the 2004-2005 annual report, highlight just a few of NRC's achievements and their impact on the lives of Canadians. NRC researchers help find solutions to national challenges in fields such as health, sustainable technologies, security, information technology and clean energy. They also conduct research in other areas that will affect our future wellbeing.

### University Research Management: Developing Research in New Institutions

#### OECD

Given the increasing competitiveness and greater geo-political significance of higher education and research, and the under-developed profile of many new Higher Education Institutions (HEIs), this study seeks to examine the processes and strategies being devised by new HEIs to grow research. By focusing on new HEIs, this book provides a unique profile of the experiences of a group of institutions that has hitherto been unidentified and unexplored. It analyses results drawn from an in-depth study of twenty-five HEIs from across sixteen countries: Australia, Belgium, Canada, Czech Republic, Denmark, Finland, Greece, Hong Kong China, Hungary, Ireland, Japan, New Zealand, Portugal, Spain, Sweden, United Kingdom. (This is a *read only* document).

## **CLUSTERS & INNOVATION SYSTEMS**

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### The Evolution and Performance of Biotechnology Regional Systems of Innovation

#### Jorge Niosi and Marc Banik

The paper maintains that biotechnology regions develop as complex systems: they start with star scientists in research universities, generating knowledge spillovers, then move progressively towards regional technology markets. In the process they attract venture capital (or modify the behaviour of existing venture capital firms with the addition of biotechnology portfolios). The routines of universities are also modified with the addition of intellectual property and technology transfer offices intervening as sellers in the newly

created knowledge markets. The paper also considers whether companies located in regional agglomerations grow faster than isolated ones, and whether companies spun-off from universities have a better performance than start-ups. This study is based on about 90 Canadian-based publicly quoted biotechnology companies.

### From Regional Development Coalitions to Commercial Innovations

#### Age Mariusson, NordRegio

This report is a comparative study of the Nordic innovation systems as they pertain to the business sector. Important national varieties in styles and modes of innovation are described and analyzed. These differences are then related to different geographical, historical and political preconditions to deepen the understanding of why national innovation systems differ. The project takes as a point of departure that the identification of best case policies cannot be done simply by comparing numbers in terms of indicators of innovation.

An understanding of indicators depends on an analysis of the processes of innovation, which has produced them. The report accordingly studies regional innovation systems (RIS) within their national system contexts (NIS). Through the analysis of the NIS and RIS statistics, certain patterns tends to emerge, which makes it possible to improve the analytical understanding on the importance of national systems.

### **STATISTICS**

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### Innovation in information and communication technology service industries: Results from the Survey of Innovation

Statistics Canada

This paper highlights aspects of innovation in information and communication technology (ICT) service industries. It is based on data from the 2003 Survey of Innovation, which covered all ICT service industries; selected professional, scientific and technical service industries; selected transportation industries; and support industries for the mining and forestry sectors. The survey is a collaborative project undertaken with Industry Canada, Natural Resources Canada and Transport Canada

### Canada's Top 50 Research Universities

#### Re\$earch Infosource

In Fiscal 2004, for the first time ever,

Canada's top 50 research universities posted \$5.04 billion in sponsored research income, a 17.7% increase over Fiscal 2003. Sponsored research income includes both government and non-government sources. The University of Toronto remained in top position on Canada's Top 50 Research Universities List 2005, reporting \$624 million in sponsored research income for Fiscal

2004, increasing 16.8% over Fiscal 2003. Increasing their research income by 58.6% over last year, gave McGill University 2nd spot this year, up from 4th with \$543.5 million. Université de Montréal was #3, moving down 1 spot from last year with \$446.2 million, increasing 13.1%. University of British Columbia came in 4th place this year, down from 3rd last year with \$363.3 million of research income, increasing moderately by 4.1%. University of Alberta also with a significant increase of 31.9%, rounded out the top 5 with \$360 million, moving up 1 place to 5th from 6th last year. <u>Analysis document</u>.

#### **EVENTS**

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### **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.

### **Converging Medical Technologies**

### King City, Ontario, 3 November, 2005

The next wave of business opportunities for convergent medical technologies (CMT) is already taking shape. By 2010, it has been estimated that the drug-device combination product market alone will be worth \$9.5B USD. In order to remain competitive in today's global economy, companies are moving towards the creation and adaptation of new products from multiple technologies. Companies that are able to find new ways to exploit these technologies through innovative combinations and partnerships will become leaders in the healthcare marketplace. Find out why the convergence of the former "silos" such as Bio-Pharmaceuticals, ICT, Medical Devices and Nanotechnology/Advanced Materials will have important implications for your business. Learn from leaders of change in the industry on how to create and exploit these new markets.

### The Future of Industrial Research in Canada

### Ottawa, 8 November, 2005

Canada's ability to compete as a nation in the global knowledge economy depends to a large extent on the vitality of its private sector. There is evidence that during the economic boom in the latter half of the 1990s, Canada experienced a drop in the number of firms conducting R&D here. Business leaders from the major high tech sectors will describe their global business strategies and how R&D fits into the overall picture. The conference includes presentations from multinational corporations active in Canada, entrepreneursrunning Canadian firms large and small, investors and other experts. They will assess the overall environment for knowledge-based business in Canada and recommend approaches for successful commerce in a global context.

### The 8th Annual Conference of the Competitiveness Institute

### Hong Kong, China, 8-11 November, 2005

China's emergence onto the world stage has created unprecedented opportunities and challenges to business people and policy makers from all over the world. China has become a market, an investment location, a production platform, and a competitor. But what is China's true underlying competitiveness? In which industries will China lead and in which will it lag? What and where are China's major clusters and how strong will they be? What is China's influence on other economies in the region and the world? How will other economies compete with China? How can companies understand China's different regions and benefit from China's regional development? What programs and policies will be necessary to develop competitive clusters in the new environment? How do my nation or regions' own clusters stack up against the world's best? Several of the world's leading experts on clustering and regional development will address these questions and others at this conference, organized by the Hong Kong Institute of Economics and Business Strategy of The University of Hong Kong.

### World Summit on Cities and Local Authorities on the Information Society NEW!

### Bilbao, Basque Country, 9-11 November, 2005

The aim of the event is to obtain "an overall vision for cities and regions on how to leverage IT for economic and social development at the local level, learn about local best practices, and, above all, look at ways to cooperate among local authorities so that no community is left behind".

### Responsibilities of Citizenship and Public Service: Crisis or Challenge?

### Toronto, 10-12 November, 2005

It is often said that the strength of a democratic society rests on the engagement of its citizens. In fact, the need for active participation in the life of the community is greater now than ever. Yet only 60 percent of Canadians voted in the last federal election, and fewer people are willing to serve in government, religious groups, universities, foundations and other public organizations. Are Canada's positive social values sufficient to rekindle the flame of civic and public engagement, or have frustration, suspicion and cynicism become a real threat? This conference will look at this question and examine issues of trust in government, the interaction of government and civil society in promoting the public good, and accountability and ethics in government and civil society. It will also focus on the next generation: where will responsible civic leaders be found, and how can they be nurtured, encouraged and supported?

### BioFinance 2005: Early Phase NEW!

### Toronto, 16 November, 2005

This is a one-day program that will feature presentations by CEOs of 36 emerging life science companies. The presenting companies will be developing new medicines, devices, diagnostics, technologies and systems. These companies will likely have some angel, private or seed financing already in place and will be starting the search for investment up to a range of \$ 2 to 5 million. The conference also features expert panel discussions on topics including: Early Stage Financing; Aspects of the Deal; U.S. Financing Sources and Issues; and I Did It My Way – Advice from Biotech Entrepreneurs. About 250 people are expected to attend, which will include seed fund managers, angel investors, venture capitalists, private equity managers, legal and consulting industry leaders, pharmaceutical executives, biotechnology industry service providers, and media.

### 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.

### Charting the Future of Post-Secondary Education in Canada NEW!

### Ottawa, 27-29 November, 2005

This is a national gathering of researchers, policymakers, educators and opinion leaders in the field of post-secondary education. The Dialogue will feature the latest Canadian and international research, new Statistics Canada data and the contributions of prominent scholars, federal and provincial deputy ministers, university and college presidents, and opinion leaders from business, labour, media and politics as speakers over the two days and evenings of the event.

### Discovery 2006: Bridging the Innovation to Commercialization Gap NEW!

### Toronto, 7 February, 2006

Ontario Centres of Excellence Inc. brings leading edge innovators and thought leaders together in an annual conference. Discovery 2006: Bridging the Innovation to Commercialization Gap assembles the world's best from business, academia and government to explore issues around innovation, collaboration and commercialization -- both within Ontario and globally. From practical to policy, from hands-on to hypothetical, Discovery 2006 will bring together the issues and the people that drive innovation to commercial and competitive outcomes.

### Socio-Economic Conference

### Ottawa, 16 - 17 May, 2006

The Statistics Canada Socio-economic Conference provides an annual forum for empirical research focusing on issues of concern to Canadian public policy. The conference focuses on studies discussing: emerging economic trends and their underlying causes; and the social implications of economic trends and the ability of various groups to participate in the economy. Topics relevant to the Conference include, but are not restricted to, innovation; productivity; international trade; agriculture; environment-economy linkages; natural resources and energy;

transportation; industrial development; urban and rural development; health; education; families; income and wealth and their distribution; and labour markets. The Conference focuses on studies directly relevant to Canada, while at the same time welcoming comparative international studies that shed light on Canadian public policy issues. It places a premium on empirical studies making innovative use of Canadian data.

#### Networks for Innovation

### Athens, Greece, 11-14 June, 2006

The 2006 International Society for Professional Innovation Management (ISPIM) Conference will be held in Athens this summer. Many topics will be discussed such as: academic-industry networks for innovation, learning and the entrepreneurial mindset, managing knowledge, SMEs: opportunities & threats, public policy to stimulate networks. Deadline for submitting an abstract: January 27, 2006.

### The Future of Science Technology and Innovation Policy NEW!

### Sussex, 11-13 September, 2006

This conference, besides celebrating the 40th Anniversary of SPRU (Science and Technology Policy Research), offers the opportunity to engage in a critical evaluation of the present and future research agenda of the Science, Technology and Innovation (STI) field. This conference seeks to explore empirical, theoretical and applied policy approaches that can enable us to conceptualise the contradictory nature of modern science and technology and innovation, and thus provide practical policy guidance. Such a conference is particularly timely because many of the existing conceptual frameworks are apparently undergoing a period of what Kuhn called 'normal science' where their assumptions are rarely questioned, and where they are institutionally and academically isolated from criticism. We aim to identify fruitful new ways forward in the field of STI policy by subjecting these established frameworks to structured debate and critical evaluation. The conference will be organised in the form of plenary sessions, parallel sessions and set debates. It will cover a series of broad themes. These include: Ownership, Accountability and Relevance of Science - for example, the deficiencies of peer review, the pros and cons of patenting in universities, the shifting boundary between public and private knowledge, and processes for allocating resources between disciplines. Technology, Security and Sustainability - for example, the dual relationship between technology and security, changing environment and energy policy, the balance between sustainability and growth, and the role of technology in sustainable development. Dynamics of Innovation Interfaces - for example, the management and dynamics of innovation processes, and the connection between innovation and entrepreneurship.

### **SUBSCRIPTIONS & COMMENTS**

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