

2012 AAAS Annual Meeting, Vancouver

Symposium

Searching for the right space for innovation

Logistics:

Organizer: Dr. Peter W.B. Phillips, Professor, Johnson-Shoyama Graduate School of Public Policy,
University of Saskatchewan, Peter.phillips@usask.ca,
Date: Friday, February 17, 2012
Time: 1:30 PM to 4:30 PM
Facility: Vancouver Convention Center, Room 121

Synopsis:

Three distinct but interrelated theories of development, innovation and growth compete to explain innovation and the appropriate role for the state. The earliest and most popular among policy makers is that the pursuit of policies that create 'special places' (Marshall 1890 and Porter 1990) where 'agglomerations' of firms and industries generate economies of scale and traded interdependencies. In the 1980s the 'special processes' approach to systemic innovation (Lundvall 1992) emerged, positing that economies of scope generate untraded interdependencies between people and firms that co-locate. At the turn of the millennium, a new hypothesis emerged that 'special people' working creatively are at the core of the innovation process (Florida 2002). Each theory offers different policy prescriptions for governments seeking to shape their local economic futures. The dominant implicit counterfactual is the 'theory of comparative advantage' held by economists, that economic activity is inexorably driven to match relative endowments with the production function, with the result that proactive economic development is futile at best or damaging at worst. This session will present the results of a 10-year, multi-community, critical empirical test of the competing theories in the pan-continental Canadian economy, and offer lessons from the theory and practice.

Moderator:

Dr. Brian Lewis, Professor and Dean of Faculty of Arts & Science, Concordia University,
dean@artsci.concordia.ca

Part 1: Innovation in Mega-cities

Dr. Chad Gaffield, FRSC, President, Social Sciences and Humanities Research Council of Canada

Title: Opening remarks on SSHRC Major Collaborative Research Networks and the ISRN

Dr. David Wolfe, Royal Bank Chair in Public and Economic Policy and Director, Program on Globalization and Regional Innovation Systems (PROGRIS), Munk School of Global Affairs, University of Toronto, david.wolfe@utoronto.ca

Title: Toronto: Innovation in a Megacity

Summary: The great strength of the economy of the Greater Toronto Area is its incredible breadth and diversity with traditional strengths in manufacturing areas, such as the automotive and food processing industries and a dynamic financial services and cultural industries sector. One of the key anchors of the regional economy is the depth of its labour market and the international reputation of its research institutions. At the same time, the scale of the regional economy often impedes and limits the effective flow of knowledge across the region. As traditional manufacturing industries are subjected to cost pressures, the challenge for the regional economy is to capitalize on its research and talent strengths by mobilizing its knowledge base more effectively to support existing and expanding industries. This requires improving linkages among existing clusters and within the regional innovation system more broadly.

Dr. Charles Davis, Professor and E.S. Rogers (Sr.) Research Chair, Rogers Communication Centre, Ryerson University, c5davis@ryerson.ca

Title: Locating innovation in the urban creative economy: the case of Toronto

Summary: Creative industries are an important source of income and employment in practically every major urban area, and many policies and program initiatives have been put in place to promote development of these industries. But innovation in the creative industries is much less well understood than R&D-based technological innovation, and important debates are taking place about how the creative industries grow and affect the broader economy. This paper examines four generic innovation pathways (Frontier Economics, 2007) that affect the urban creative economy, illustrated with examples from Toronto's cultural and creative sector. In the commercialization pathway, creative goods and services are purchased as inputs in adopter firms. In the knowledge spillover pathway, creative industries develop unique capabilities through adoption of advanced ICTs. In the product spillover pathway, creative products and services induce demand for complementary products and in other industries. In the network spillover pathway, creative districts induce changes in the surrounding environment. I conclude with some reflections on the implications for innovation management and policy in the creative industries.

Dr. Diane-Gabrielle Tremblay, Professor and Canada Research Chair on the Socio-organizational Challenges of the Knowledge Economy, Télé-université of the University of Québec à Montréal, tremblay.diane-gabrielle@teluq.ca

Title: The role of social actors in metropolitan governance and innovative capacity of a region: the case of Montreal

Abstract: The presentation will develop on the characteristics of governance in the Montreal metropolitan area and its contribution to an innovative and creative capacity. The role of space and cooperation will be discussed. The paper identifies a high level of cooperation around metropolitan scale issues on the part of various types of organizations. In the Montreal region, government agencies as well as private corporations demonstrate readiness to work alongside civil society organizations on joint projects. Evidence of this type of collaboration is particularly strong in the case of economic development, neighbourhood revitalization and cultural initiatives. This form of cooperation is perceived as a manifestation of the so-called “Quebec model” and is an asset for the Montreal metropolitan region. The paper demonstrates that a governance mode that involves social and civic organizations is more likely to be successful in terms of innovation and creativity than those that turn their back on these organizations.

Part 2: Innovation in knowledge intensive urban centres

J. Adam Holbrook, P.Eng., Adjunct Professor and Associate Director, CPROST, Simon Fraser University, jholbroo@sfu.ca

Title: Vancouver: Globalizing Technology-Intensive Knowledge Clusters

Summary: The studies carried out by the Innovation Systems Research Network in Canada, have demonstrated that there are substantial regional differences across the country in the development and management of technology-based industries. While Vancouver has a substantial research community, it has no real manufacturing base to use the intellectual property developed. Its history, geography and high cost of labour all mitigate against conventional models of high-tech manufacturing driven by research and development. Thus the region’s real output, in high technology industries, is intellectual property. These industries and technology-based services retain a competitive position in global markets, due to the stickiness of its labour market and its pivotal position on the Pacific Rim. The presentation will discuss a number of cases, which include not only industrial clusters that develop and use advanced technologies, but clusters such as the motion picture industry that require high levels of technical skills but which are not usually thought of as being knowledge-intensive. While Vancouver’s situation is not unique, it does differ markedly from the conventional innovation systems models based on the innovation systems models developed in eastern North America and Europe. The consequence of this is that national, provincial and local policy makers need to understand these differences, and devise policies and programs that support and enhance Vancouver’s knowledge-based industries. Some policies may fall into the conventional ambit of high-tech industrial promotion, but others will be unique, reflecting more on Vancouver’s competitive “space” for innovation and its ability to attract talent and human capital.

Dr. Peter W.B. Phillips, Professor, Johnson-Shoyama Graduate School of Public Policy
University of Saskatchewan, Peter.phillips@usask.ca

Title: Saskatoon: Strategies for competing in the global bio-science industry

Summary: Facing immiserising growth based on a primarily agricultural and resource economy, Saskatoon has pursued a range of strategies to exploit traded and untraded interdependencies and to attract and motivate creative individuals. As a result, the small, regional, great-plains city has carved out a niche role in the global agri-food sector, assembling world-scale research that has produced world-first innovations in the grains, oilseeds and pulse sectors. This presentation will critically assess the strategies and their impacts.

Dr. Cooper Langford, FRSC, AAAS Fellow, Professor, Faculty of Communication and Culture,
University of Calgary, chlangfo@ucalgary.ca

Title: Calgary: Innovation in a Resource Centre

Summary: Calgary is “Canada’s energy capital” with an overwhelming majority of oil and gas headquarters. This should not be taken to mean an economy of direct involvement in resource extraction. Rather, it is a knowledge economy encompassing the managerial, technical and financial knowledge required by projects in its Alberta hinterland, across Canada, and globally. The result is an economy rated high in diversity according to standard statistical employment categories. This is misleading. A very wide range of knowledge housed in firms in a variety of industrial categories is required for oil and gas activity. This diversity of inputs converges to support a common commodity market that responds to internationally set prices. There is no doubt that there is lively local knowledge flow, much of it tacit, supporting firm innovations. But, the knowledge flow is largely internal to the oil and gas knowledge platform. The rich diversity of knowledge and firm type within the platform is not providing diversity of activity those cushions against the fluctuations in energy prices. It is characterized as related knowledge diversity (RKD) despite spanning many professional knowledge bases. Resiliency for Calgary depends on spin-out of knowledge to grow industries addressing other markets. This is happening and encouraging it is a central policy concern. We suggest this may be a typical profile for a resource based centre as growth reaches the scale to support RKD.



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