Innovation Across Borders

February 24-25, 2011 – MaRS Centre, Toronto, Canada



TRANSATLANTIC COOPERATION

Toronto, Canada February 25, 2011

Presented by: Richard A. Bendis President and CEO Innovation America







Darwin on Collaboration

" It is the long history of humankind (and animal kind, too) those who learned to collaborate and improvise most effectively have prevailed."

-Charles Darwin













Canada's Future is Determined By the Present









The Global Innovation Imperative

 Innovation is Key to Growing and Maintaining a Country's Competitive Position in the Global Economy and to address Global Challenges

•Collaboration among Small and Large Businesses, Universities, and Research Institutes is Essential for Innovation–

•New Institutions and New Incentives, are increasingly important to support collaboration and foster innovation

•Competitive advantages are increasingly tied to human capital and innovation

•Economic growth is closely related to education/workforce, energy, climate change, environmental, natural resource and geopolitical issues



INNOVATION MATTERS







How Leading Nations Responding to the Innovation Imperative?

They are providing four things:

•High-level Focus

- •Sustained Support for R&D: Leveraging Public and Private Funds
- •Support for Innovative SMEs
- •New Innovation Partnerships to bring new products and services to market

Note: Many countries are investing very substantial resources to create, attract and retain industries in leading sectors









Innovation Economy: Definitions & Terminology

- Knowledge is the confident understanding of a subject, potentially with the ability to use it for a specific purpose
- Knowledge economy is based on creating, evaluating, and trading knowledge
- Innovation is the creation and transformation of knowledge into new products, processes, and services that meet market need.....and interactions, entertainment forms, and ways of communicating and collaborating









Why Is Innovation Essential?

"INNOVATION DISTINGUISHES BETWEEN A LEADER AND A FOLLOWER."

-STEVE JOBS









Innovation Ecosystem



The concept of the innovation ecosystem stresses that the flow of technology and information among people, enterprises and institutions is key to a vibrant innovation process.

AMERICA





The New Locational Competition

Definition: The competition for economic activity

Canada

Intense and growing competition among nations and regions for well paid jobs and improving living standards.....



MaRS





Global Innovation Network









Global Open Innovation



MaRS

Canada





Transatlantic Cooperation FP7

Program for Research of the European Community (FP7).

European Community's main instrument for funding R&D activities in Europe, reflecting all aspects of EU research policy
Timing 2007-2013
Budget: \$53.2 billion Euros
Four Specific Programs:

- Cooperation
- People
- Capacities
- •Ideas.

AMERICA





Transatlantic Cooperation in the European Seventh Framework Programme for Research & Development A Guide for U.S. Users

A resource for researchers and institutions in the USA o build transatlantic partnerships under the FP7 COOPERATION Programme









Transatlantic Cooperation FP7

Program for Research of the European Community (FP7).

US Participation in FP7 Projects

340 total selected applications





A resource for researchers and institutions in the USA to build transatiantic partnerships under the FP7 COOPERATION Programme







Global Community for



THE TECHNOPOLICY NETWORK



Regional Innovation Policy







Transatlantic Cooperation FP7 Examples



Examples of FP7 Transatlantic Cooperation Projects

COOPERATION PROGRAMME:

HEALTH

ACRONYM: METAcancer

DURATION: 3 years

PARTICIPATION

<u>____</u>

H_N

EXAMPLES OF FP7 TRANSATLANTIC CODPERATION PROJECTS

10

TITLE: "Identification and validation of new breast cancer biomarkers based on integrated metabolomics"

U.S. PARTNERS: University of California, Davis, United States.

EUROPEAN PARTNERS: Charlte Universitatesmedizin Berlin, Germany; University of Cambridge, United Kingdom; Technical Research Centre of Finland, Finland; CBC Forschungs@mbH, Germany; tp21 GmbH, Germany; Lower Silesian Oncology Centre, Polend; HighChern LLd, Slovakia.

MAN OBJECTWE: Breast cancer is the most common cancer in women. The FP7 project METAcancer aims at characterizing the metabolism of malignant breast tumours in order to identify new biomarkers and targets for therapeutic interventions. This consortium consists of three universities, one research center and a number of molecular biologists. University of California, Davis participates in the consortium, which represents an excellent example of international coordination among clinicians, biochemists and bioinformaticians.

weasire: http://www.metacancer-fp7.eu/



COOPERATION PROGRAMME:

FOOD, AGRICULTURE AND BIOTECHNOLOGY

ACRONYM: SYMBIOSIS-EU

DURATION: 4 years

TITLE: "Scientific synergism of nano-bio-cogni science for an integrated system to monitor meat quality and safety during production storage and distribution in EU"

THIRD COUNTRY PARTNERS: Colorado State University, United States; Institute of Environmental Science and Research, New Zealand.



EUROPEAN PARTNERS: Agricultural University Athens, Greece; Cranfield University, United Kingdom; University of Manchester, United Kingdom; Zenon S.A. Robotics and Informatics, Greece; National Agricultural Research Foundation, Greece; Ecole Nationale d'ingenieurs des traveaux apricoles de Clermont-Ferrand, France; Universita delgli studi di Napoli Federico II, Italy; Stichting Dienst Landbouwkundig onderzeek, Netherlands; Technobiochip SCARL, Italy; Fiexpackaging AL SPA, Italy.

MAN GBJECTIVE: The Symbiosis-EU project will bring together 14 partners from 6 EU countries, plus one each from New Zeeland and the United States to study meat safety & quality. The overall aim is to identify and quantitatively evaluate practical and easy to use chemical, biochemical and molecular indices and establish their applicability as quality molitors for inspection of meat safety and quality.

WEBSITE: http://www.symbiosis-eu.net/

Transitilantic Cooperation in the European Seventh Framework Programme for Research & Development







Leverage the Inherent Strengths of the Transatlantic Innovation Economy.

- 1. Reaffirm open investment policies and eliminate restrictions on foreign direct investment
- 2. Drive collaboration between and among American and European universities, research institutions, and the private sector.
- 3. Facilitate R&D investment through publicprivate partnerships and long-term incentives.
- 4. Fund pre-competitive scientific research and make it more readily available for commercialization.
- 5. Prevent the erosion of intellectual property rights (IPR) and ensure their consistent and effective enforcement.



ACCELERATING THE TRANSATLANTIC INNOVATION ECONOMY

10 Innovation Policy Principles & Recommendations to Strengthen Collaboration across the Atlantic

October 2010







Leverage the inherent strengths of the Transatlantic Innovation Economy.

- Ensure that competition laws enhance efficiency and consumer welfare without restricting the commercial exploitation of IPR.
- 7. Promote the use of international standards and, where necessary, performance- based technology regulations.
- 8. Secure reliable and undistorted access to raw materials and encourage their efficient use.
- Promote national deployment and maintenance of robust information technology (IT) infrastructure and allow access to innovative technologies.
- 10. Assess the implications of government policies on the process of innovation and share lessons learned with third countries.









ACCELERATING THE TRANSATLANTIC INNOVATION ECONOMY

10 Innovation Policy Principles & Recommendations to Strengthen Collaboration across the Atlantic

October 2010



Government's Role in Innovation

- Long term vision and planning
- Identify gaps and trends in science, technology, innovation and SME development
- Be a catalyst through long-term strategic investments and partnering
- Develop a balanced and flexible research and development investment portfolio
- Encourage private sector innovation
- Establish performance-based research and development
- Accelerate the commercial exploitation of creativity and knowledge, through innovation and research, to create wealth, grow the economy, build successful businesses and improve quality of life









The Importance of Trans-Atlantic Collaboration

"No other international economic relationship comes close in terms of profitability or as a driver of innovation, research and development.

I see no reason why we should settle for less in the 21st century."



Maroš Šefčovic EU Vice President and Commissioner







Nokia and Microsoft Partnership



Image: Nokia









Canada and US Cross Border Facts

•300,000 travelers cross the Canada US Border Everyday

•35,000 trucks cross the border everyday

•\$1.6 Billion of trade everyday



The Big Table

Film and Video Incentives in Canada (2010)

Digital Media and Animation Incentives in Canada (2010)

AMERICA





Canadian Based Digital Media Cross Border Collaborations



Internet Strategies for Tapping into Foreign Markets

- •Use localization in your online marketing
- •Use local affiliate networks
- •Use local social media
- •Use the web to find local freelance expertise



Source: Christian Arno, who is the founder and Managing Director of global translation services and localization agency Lingo24.







Key Difference Between Incubators and Accelerators

Incubators - incubators allow for slower growth, although they typically have some requirements as to how long companies can remain in the incubators before they graduate.

Accelerators - as their name implies, focus on an intense, bootcamp-like experience to get new businesses up and running in a matter of months.











Accelerators



Y Combinator













European Seed Camp

•Jumpstarts the entrepreneurial community in Europe by connecting next generation developers/entrepreneurs with a top-tier network of over 400 mentors

•Seedcamp Week - Intensive week-long event held in London every September and is targeted at young entrepreneurs

•Micro seed fund to invest in startup companies €50.000 for 8-10% equity

•Funded companies are hosted in London for 3 months to grow and develop their company

AMERICA









Startupbootcamp - Denmark

 startupbootcamp is a European startup accelerator affiliated with Techstars

•Startup cash €4,000 per team member in micro capital.

•Access to our 75+ mentors – serial entrepreneurs and experts

•10 teams joining for 3 months of acceleration until Investor Day.











Soft Landing Innovation Center



The Science Center is an attractive "soft landing" place for international companies to launch their US businesses and a powerful economic engine for the regional economy.



Canadä





Science Center Global Soft Landing

- •Established in 2005
- •Focus on Asia and Europe
- Country site visits: Greece, India, China, Malaysia, Italy, South Korea, Germany, Ukraine, Turkey, Spain, and more....over 75 site visits
 Relationships with JETRO (Japan), Rhone/Alps Region (France) & Belgium Trade Office (Wallonia Foreign Trade & Investment), Spain, UK and Germany
 Project funded by U.S. Department of
- Commerce EDA
- •\$2.5M project for construction and facility programs
- •10,000 sq. ft. of wet laboratory and offices









Innovation Capital Valley of Death

"VALLEY OF DEATH"



Bootstrapping

The term comes from the German legend of Baron Münchhausen pulling himself out of the sea by pulling on his own bootstraps.



Definition: "The act of starting a business with little or no external funding"







Funding & Resources for Innovation Capital



What is An Innovation Intermediary?

An Organization at the Center of the region's, state's or country's efforts to align local technologies, assets and resources to work together on advancing Innovation.









21st Century Innovation Intermediary



Innovation Intermediary Commercialization Structure

Investigation	Technical	Market	Business
Proof of Concept	Technology Concept Analysis	Market Needs Assessment	Venture Assessment
Development Phase			
Feasibility	Technology Feasibility	Market Study	Economic Feasibility
Planning	Engineering Prototype	Strategic Marketing	Strategic Business Plan
Introduction	Pre-Production Prototype	Market Validation	Business Start-Up
Commercial Phase			
Full Scale Production	Production	Sales and Distribution	Business Growth
Maturity	Production Support	Market Diversification	Business Maturity

Global Innovation Intermediaries



http://www.nrc-cnrc.gc.ca/index.html



http://europa.eu/index_en.htm



www.startupamericapartnership.org/

AMERICA

www.innovationamerica.us







European Innovation Intermediaries







∧ innovation







http://www.innovasjonnorge.no



http://www.vinnova.se



NL Agency Ministry of Economic Affairs, Agriculture and Innovation

http://www.senternovem.nl

Fraunhofer German Innovation Intermediary



Canadian Innovation Intermediaries

NRC

BioAlliance







Développement économique

innovacorp









The National Research Council

MaRs Canadian Intermediary

MaRs Goal:To build great companies. And a vibrant and diverse Canadian economy.

•MaRS helps entrepreneurs bring new and innovative ideas to the marketplace.

•MaRs offers a comprehensive range of business services. And experienced advisors guide our clients every step of the way.

•MaRS works with entrepreneurs in a range of sectors, including:

- Advanced materials and engineering
- Cleantech
- •Information technology,
- •Communications
- Entertainment
- •Life sciences and health care
- Social innovation

∧ innovation





U.S. State Innovation Programs





New Jersey Economic Development Authority



Technology-Development-Corporation Maryland...Technology Starts Here.



)hio

Third Frontier





















Northeast Ohio U.S. Regional Ecosystem













JumpStart Ohio

•JumpStart Entrepreneurial Network:

> Intensive entrepreneurial development assistance to Northeast Ohio entrepreneurs leading high potential, earlystage companies by delivering:

•Venture Partners and Entrepreneurs-in-Residence programs through incubators.

- •JumpStart Ventures:
 - Seed Capital Fund
- Jumpstart Inclusion Advisors
 High impact minority and women-owned businesses







VENTURES

S O







Partners in International Innovation



Canada Economic Development

Canada



Venture Capital Association

http://www.evca.com/



http://www.eban.org/



http://www.astp.net/



Regional Innovation Policy

http://spice-group.net/

THE BEST WAY TO PREDICT THE FUTURE IS CREATE









Bill Gates - Microsoft

"Never before in history has innovation offered promise of so much to so many in so short a time."











innovationDAILY



Innovation and trade are keys to growth and competitiveness for small and medium enterprises around the world. Yet many entrepreneurs are unfamiliar with the opportunities for innovation across borders and the good practices that mitigate the challenges of successful international business development.

The discussion will feature global insights, practical experiences, success stories and lessons learned from SMEs operating on over a dozen of the world's mature and

AMERICA



MaRS

Get a FREE subscription to Innovation America's innovationDAILY newsletter.

Subscribe to:

www.innovationamerica.us





Richard A. Bendis President and CEO Innovation America 2600 Centre Square West 1500 Market Street Philadelphia, PA 19102 (215) 496-8102 rbendis@bendisig.com www.innovationamerica.us/daily