

**Stewart Beck,
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Talking Points for Research Money Speech,
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I am pleased to be here today to help build a dialogue with policy makers and practitioners of business R&D.

This is an important international issue: Foreign Affairs and International Trade has an SME Advisory Council which has strong views on the effectiveness of SR&ED; while our network of investment and S&T Officers at posts increasingly are raising concerns about the competitiveness of Canada's business R&D regime.

I want to briefly describe our latest thinking about how our global network should be responding to enable business R&D to be more effective.

Innovation and investment are key growth drivers of Canada's future productivity

Equally key is building Canada's international innovation capacity so business R&D translates into successful market outcomes.

DFAIT is developing its global network of S&T and Technology Partnering Officers (TPOs), and our innovation support services to target better innovation results in the global market-place

Canada only carries out 2.5 % of global R&D; and Canada's current commercialization results rank in the bottom third in the OECD.

To remain competitive Canadian companies must access international research and technology and achieve robust commercialization of our technology in global markets.

Over the past year, we listened to business and have addressed the value-added our global service network provides.

We consider our first innovation priority should be to act as a catalyst to connect Canadian business clients with world-class technology opportunities and key international research partners.

Our international innovation network at posts abroad will focus on S&T partnerships and research collaborations and on corporate and institutional calls on S&T research

We will then connect these Canadian companies and researchers with international opportunities to adapt or adopt world class technologies and ideas.

These linkages will give Canadian businesses and researchers a competitive edge in their business goods, services and processes.

We are actively looking at new models of effective partnerships that encourage research and commercialization. The Canada-California Strategic Innovation Partnership is a good example – it brings together universities, business and government to develop new ideas and innovations and match our competitors efforts to adopt advanced technologies. It also encourages firms to take the results of this research to global markets.

The DFAIT network also works with Canadian universities to build on existing international educational linkages and promote S&T opportunities and careers in Canada.

The Innovation network will mentor innovative Canadian firms and match them with qualified partners in foreign markets in order to participate in global supply chains and to build foreign distribution capacity

Trade Commissioners' business development services identify commercialization opportunities for Canadian business clients and helps them respond effectively to competitors challenges.

Our services also promote Canada's business environment to encourage inward foreign investments flows and venture capital

The Global Commerce Strategy recognizes that to remain competitive Canadian business needs to exploit the two-way benefits of trade, investment and technologies.

Our Strategy uses an integrated approach with the Government's competitiveness agenda and the S&T Strategy, to support business development support and encourage all partners in the Canadian S&T community to focus on performance, driven by market results in technology adoption in and in commercialization.

In this context, our service capacity is highly dependent upon effective collaboration with you, to build a client-sensitive and market-focussed network for Canadian business and researchers.

The long term objective is to drive Canadian technology into global markets. To achieve this, Canada's commercialization results must improve.

International Trade and its global network of Trade Commissioners is committed to support business R&D with a collaborative Innovation network connect your R&D results with international opportunities.

Beyond the Canada-California partnership, we also have some tools to improve international R&D performance.

For some time our Going Global Science and Technology (S&T) Program has supported Canadian researchers from private companies, universities and non-government research centres to participate in international R&D opportunities. The Going Global Program supports projects designed to bring Canadian researchers together with key players in foreign countries to foster identified opportunities for collaborative partnerships.

This Program can enhance networking for global R&D opportunities in key sectors, and facilitate acquisition and dissemination of information on innovative technologies.

We have also have in place a larger scale program for key emerging economies. The International S&T Partnerships Program (ISTPP) is a five-year, \$20-million program to increase bilateral research projects with good commercialization potential between Canada and Israel, India, China, and in time Brazil.

The Israel component is being delivered through the Canada-Israel Industrial Research and Development Foundation (CIIRDF). I am also pleased to inform you those contribution agreements for the India and China components were signed on Wednesday with a new delivery organization - International Science and Technology Partnerships Canada.

Also, the ISTPP will support projects proposed by companies and universities/colleges and other private sector research and development institutes. There will be an emphasis on industry-industry partnerships and university-industry partnerships to stimulate bilateral S&T partnerships and collaborative research, which can accelerate transfer of technologies and the commercialization of R&D.

Both of these programs are aimed at encouraging access to the world's best facilities, equipment, talent and knowledge and to foster the global networks critical to improved commercialization. Despite their size, we intend to leverage this support with business and public partners to improve global linkages for Canada's innovative goods and services.

An important aspect of our heightened focus on market performance will be much more follow-up and focus on aftercare that supports stronger commercialization results of business R&D efforts.

Here's an example: last week, a US VC firm approached our New York office to identify Canadian companies with novel cardio technologies, primarily on diagnostics (monitoring, imaging) with a secondary focus in the therapeutic area.

Our network of regional offices and other contacts in Canada received this lead and within three days provided information on at least 12 Canadian medical device as well as 4 Canadian VCs interested in including this US VC in their Canadian syndicate deals.

In addition two other technologies which are still within a University Tech Transfer office are being assessed by this group.

Our office in New York will follow up. We've also been working with our Consulates in Boston and San Francisco for 2 years with the Ottawa Centre for Research and Innovation and the Ottawa Life Sciences Council to organize financing forums across the US.

Participating Canadian companies are the award winners of Canada's Top 10 Life Sciences and Canada's Top Bioproduct/Energy/Environmental Technology competitions, and have been vetted by Canadian and US VCs.

As result of this initiative, about 2 months ago, Variation Biotechnologies, an innovative vaccine development company and a 2006 Canada's Top 10 Life Science Company

Competition Winner, announced a \$41.6 million dollar financing deal with US-based Clarus Ventures, ARCH Venture Partners and 5AM Ventures.

The S&T program in the U.S. market combines a formal partnership with Federal Departments under the Enhanced Relationship Initiative (ERI), and active engagement of Science-Based Departments and Agencies, Research Universities and their offices of Technology Transfer, as well as provincial research entities and of course business clients.

We have deployed specialized Technology Partnering Officers (TPOs) in select U.S. markets, to build on existing S&T R&D clusters and pools of venture capital funding. The development of specialized technology networks and collaboration efforts with American and Canadian researchers and companies has been particularly successful. This has included the development of a Stem Cell Network with research collaborations between virtually all of the leading institutions on both sides of the Canada-U.S. border.

We are linking our Regional Offices to NRC IRAP and their technology officers, to improve support to business clients which need both technology and international links. We already work well with NRC-IRAP on international missions, including recent open houses in Holland and Copenhagen.

We look forward to building a collaborative, responsive international innovation network together with business, academia and federal and provincial partners, to build on Canada's strong domestic S&T base, but focused on better performance by our firms and clients world-wide.

Your views are important about what you need to achieve better performance. We want to improve Canada's international results. We consider that by working together, we can achieve a doubling of global research collaborations and project partnerships.

What's more, we can double technology sourcing requests from foreign posts. I consider it critical to match our competitors' drive to achieve global technology excellence and stronger results in global markets.

Some of you will know Henri Rothschild, who is the president of the new organization which will deliver ISTPP. We also have our program Manager for Going Global, Krista Miller, as well as other departmental staff, to respond to any detailed questions you may have on this important issue of effective business R&D.

I would be pleased to respond to any questions.

Research Money Q+A

RESPONSIVE BACKGROUND:

1. Why do you talk about technology acquisition and adoption, rather than research collaborations.
 - International research collaborations are important, but International Trade is not a science department - our **innovation network is science-based** to support Canada's objective to support Canada's global research excellence. Our partners have made clear that they drive international research projects, so they want DFAIT to focus on our value-added – the international dimension.
 - The ultimate objective of any research collaboration is technology transfer, and/or commercialization results; so this is where our services concentrate their efforts and where DFAIT's innovation network can best make a real contribution to better performance.
 - We will maintain our base with our S&T partners by supporting Canadian firms and researchers to identify and establish new collaborative research and development (R&D) initiatives with foreign partners; by improving sourcing of global technologies to spread new S&T ideas and market intelligence to Canadian knowledge producers; and also benchmarking global best practices so Canadian policy makers are aware of our competitors achievements.
2. How can Trade Commissioners help?
 - Trade Commissioners business development services **identify market opportunities** for firms and their technologies, then work with firms to **grow their commercialization results** by: identifying contacts, making introductions and matchmaking, advising on potential partners, local laws, and government policy from IP to investment; providing market research, advocating with government officials on business developments; and following-up on corporate partnering, project development and market support for post branding efforts in trade missions and special events.
 - Over the next five years, DFAIT will work with business clients, and federal, provincial and university partners to identify:
 - innovative foreign firms and organizations seeking to partner Canadian capabilities or source our technology;
 - new bilateral research projects funded with major S&T partners;
 - support new links between clients/NRC-IRAP/ and various foreign partners or customers; as well as research collaborations operating with private and public sectors;
 - And follow-up support to improve commercialization results.
 - Network support will enable firms and researchers seeking research partners, technology adoption or commercialization targets, by:
 - Corporate and institutional calls at posts to identify technology adoption and/or commercialization opportunities;
 - Initial calls and follow-up aftercare by international innovation teams at our Regional Offices across Canada;

- diffusion of reports on new technology opportunities, regional developments and market intelligence to match with Canadian S&T client capabilities.

3. What accomplishments are there in the US?

- The S&T program in the U.S. market combines the formal partnership with Federal Departments under the Enhanced Relationship Initiative (ERI), with active engagement of Science-Based Departments and Agencies, Research Universities and their offices of Technology Transfer, provincial research entities, the NRC-IRAP network, funding agencies such as the Canadian Foundation for Innovation, NSERC, CIHR, Genome Canada, industry technology associations, and our S&T network of officers and consulates across the U.S.
- The deployment of specialized Technology Partnering Officers (TPOs) in select U.S. markets, build on existing S&T R&D clusters and pools of venture capital funding. These officers contribute to support the existing network of Investment officers and Trade Commissioners, allowing for identification of partnering and collaboration opportunities, and the engagement of our in-Canada S&T partnership network.
- The development of specialized technology networks and collaboration efforts with American and Canadian researchers and companies has been particularly successful. This has included the development of a Stem Cell Network with research collaborations between virtually all the leading institutions on both sides of the Canada-U.S. border.
- The Canada-California Strategic Innovation Partnership (CCSIP) is a combined effort of Canadian and California research university cooperation, with private sector/VC entities and federal/provincial government support. Seven working groups in cancer research, stem-cell and regenerative medicine, ICT, energy, infectious diseases. The venture capital/intellectual property working group is developing an IP template for cross-border collaborative research and commercialization.

4. Details on ISTPP?

- DFAIT's Trade Commissioner service wants to work with business clients to **improve linkages with the world's best knowledge and talent, facilities and equipment**, and develop the **global networks critical to improved commercialization of innovative Canadian goods**, services and processes.
- The ISTPP networking and matchmaking activities that further new international partnerships will **focus on small and medium-sized enterprises to improve access to international technologies and promote Canada's R&D capacity**; as well as **position Canada as a destination for foreign technology-based investments**;
- We also anticipate that better international R&D linkages will **encourage the mobility of researchers, promote Canada** as a career destination for foreign researchers and highly qualified personnel.
- Leveraging successful S&T research collaborations, technology partnering, venture capital funding, and commercialization outcomes is a collaborative effort among a diverse partnership and networks.

- These increased global S&T partnerships will accelerate the commercialization of research and development (R&D) and strengthen Canada's overall science and technology results.

5. Where does DFAIT stand on SR&ED tax credits – should they be improved?
What are foreign competitors doing?

- Firstly, tax support provided to encourage business R&D by the Government of Canada is the responsibility of the Minister of Finance, so I will leave to Finance officials comments on SR&ED.
- I note that the focus of the Conference is on the effectiveness of business R&D and that the Economic and Fiscal Update in November stated the Government will work to ensure a **business environment that encourages its private sector to translate research into economic opportunity, and encourage deeper linkages between research and markets.**
- The policy commitments in the Update included **improving accountability to demonstrate the results achieved from the annual expenditures on R&D and support strong and enduring partnerships among universities, government and business to accelerate the translation of knowledge into practical applications.** This is a good guide for any adjustments to SR&ED.
- For International Trade, our investment and S&T officers have noted that Canada's very generous tax credits do not appear to be regarded as highly by foreign investors – this is of concern for TCS promotion efforts to position Canada as a desirable R&D partner. This is also important because nearly 40 % of Canada's business R&D is carried out by foreign-owned firms.
- Our reviews of foreign systems see our competitors succeed with more balanced approaches that use both grants and tax support, and they appear to achieve better synergy between business and public research in doing this. Our general view is that what is most important is the synergy among programs to connect end-users and researchers, and not the specific amounts of programs themselves.
- On that score Canada also is challenged to consider whether Canada's top-of-the-OECD reliance on SR&ED or tax supports is the most effective approach to increase business R&D. Certainly our Nordic competitors are strongly of the view that tax supports are very expensive and do not work well. This is something for Canadian officials to take into consideration is assessing how to improve the current system. Our **basic view is that any changes should be results driven.**

6. US success stories

- Efforts in building Photonics networks with partners in the New York and New England markets are leading to wider network partnering efforts across Canada and the U.S. Similarly, many nanotechnology events and partnership are being formed through efforts of our U.S. posts to link Canadian entities with their U.S. counterparts.
- LARTA Foundation Partnering Venture Forum – with the support of our Consulate General in Los Angeles, seven Canadian technology firms were selected and groomed to position their ICT and medical devices technologies at the LARTA Venture Forum in 2006.
- The Canadian Consulate General offices in Boston, New York and San Francisco and the Ottawa Life Sciences Council have contributed to Variation

Biotechnology Inc.'s landing of largest Ottawa-area life sciences VC deal of 2006 totalling \$41.6 million with U.S.-based Clarus Ventures.

- The Consulates General of Canada in New York and Buffalo have created a multi-phased technology partnering outreach program for Canadian technology firms active in the Northeast US Homeland Security technology market.
- The Canadian Consulate in Minneapolis, in partnership with *CATAAlliance*, Canada's largest high tech association, championed 58 Canadian technology organizations (research institutions, tech firms, government labs) in presenting their technologies to Fortune-500 firm 3M. Five leading edge Canadian technologies have been identified for potential development, commercialization, down-stream production with 3M Corporation and 3M Canada. Similar technology partnering initiatives are under way with a number of other Fortune 500 firms, and we are assessing how to extend this model to work with other posts.
- With the support of our Canadian Consulates in Phoenix and Tucson, Arizona, and cooperation with OCRI, Carlton University and the University of Arizona will sign an MOU to expand their existing relationship in Optics/Photonics to include several additional areas of joint strategic research leading to commercialization outcomes.