

## Summary Paragraph

Grande Prairie Regional College (GPRC) is a member of both the Alberta Association of Community Colleges and Technical Institutes (AACTI) and the Association of Canadian Community Colleges (ACCC). GPRC has been an active participant and contributing to the voice in support of stable and meaningful funding to create the required capacity within Canada's College and Technical Institutes, the institutions closest to Canada SME community.

GPRC created the Center for Research & Innovation (CRI) to lead institutional initiatives in applied research and innovation. The CRI was created in partnership with the Peace Region Economic Development Alliance (PREDA) through a merger with the College's Integrated Research Unit (applied research) and PREDA's The Innovation Network (technology commercialization services) in order to meet the needs of regional innovators (inventors/SMEs) and the applied research needs of the region's MNEs. GPRC now considers applied **research** to be an integral part of student learning and embraces **innovation** as a contribution to regional economic development. The CRI model was developed after careful consideration by PREDA and the College in consultation with regional business leaders (SMEs, MNEs) and clients; technical and economic development agencies; and regional service providers. As a successful recipient of a NSERC CCI Round 5 applied research grant, and a leader in rural innovation, we believe the CRI model is a leading example of how Colleges in Canada, who are close to the community (business, industry, innovators), can provide excellent R&D value for Canada. Stable and ongoing funding to establish and grow the base from which these services and developments can proceed is imperative.

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## Feedback on Consultation Paper Questions

### **1. In addition to the R&D activity defined by the OECD, should government be funding other business activities related to the commercialization of R&D? If so, what and why?**

One business activity that requires funding attention is Investor Readiness. An Angel Investor looking to invest in the development of a new product (third point) consider both scalability (second) and management ability first. When entrepreneurs hear that they must improve their management skills, they often balk, but when asked if they are 'investor ready' – are interested in learning how to do that.

### **2. Does Figure 2, the model of business innovation presented above, capture the key structural factors and inputs to innovation? If not, what is missing?**

While the components may be captured – the figure does little to 'capture' the intangibles of innovation. Innovation is primarily driven by a 'way of thinking' and is therefore overarching to model and must not be relegated to one of five components and 'buried' within corporate culture. It is the key driver to successful innovation. Also, that the use of these inputs only leads to 'increased productivity' is flawed thinking (or maybe a difference in terms). These inputs can also lead to new products and services, which can increase profitability, or which can weaken or bankrupt a company if not applied carefully.

### **3. Regarding capital, is there an adequate supply of risk capital for Canadian firms at each stage of their growth (start-up, small, medium, large)? If not, why not? Where returns on investments are low, what are the reasons and potential solutions?**

Simply NO. There is a paucity of Angel Capital available throughout most of Canada primarily because most investors do not understand the Angel Capital opportunity. For example, an entrepreneur with capital to invest may buy another company that s/he owns and controls rather than invest in some else's start-up for which s/he has more limited control. Angel Capital training is a recommended solution and worth the investment. Policy changes (i.e. tax implications) are a reasonable additive tool.

### **4. Regarding ideas and knowledge, do you believe it is important for Canadian firms to perform their own R&D and, if so, what do you believe are the key factors that have been limiting business R&D activity in Canada?**

Yes, however, providing SMEs with support from Canada's Colleges and Technical Institutes will increase the probability of success. Also, how do growing and emerging SMEs obtain that capacity? Direct support, in the form of collaborations with Colleges and Technical Institutes is an effective tactic to grow into robust R&D capability.

### **5. Regarding networks, collaborations and linkages, what are the main impediments to successful business-university or business-college partnerships? Does the postsecondary education system have the right capacity, approaches, and policies for effective partnerships with business?**

Creating, nurturing and reaping the benefits of business-college partnerships takes time, talent and money. Thus stable ongoing funding, for Applied Research and Innovation Leaders is essential. One position in every College and Technical Institute in Canada is an worthwhile goal.

The post-secondary education system has the right capacity, has many of the right approaches (see AACTI-Innovation in AB), and have developed/and is implementing the policies for effective partnerships. The R&D review must have seen that the ACCC member institutions is full of excellent examples of these partnerships in action.

**6. Regarding the creation of demand for business innovation, what role, if any, do you believe that government should play in being a “first customer” for R&D investments in Canada?**

This “first customer” role for the outcomes of R&D investments is a natural extension of those investments. Our innovation services clients have new products that will benefit from a continuation and expansion of this program. It is recommended that all levels of Government (Federal, Provincial and Municipal) adopt this program at 3-5% of their purchases, and actively participated in further product development in conjunction with the business-institution client to advance the uptake of the outcomes of those R&D investments.

**7. Regarding talent, is Canada producing sufficient numbers of graduates with the right skills to drive business innovation and productivity growth? If not, what changes are needed? Where demand for advanced skills is low, what are the reasons and what changes, if any, are needed?**

Innovative thinking, (applied) research techniques, creative problem solving, entrepreneurship and creativity need to become a driver of our training and education system, not a sidebar to knowledge transfer. The internet and unlimited access to information is changing the way we need to train and educate – we need to catch up to this reality. Innovation and research based programs will be the most successful within this decade.

**9. With which federal programs supporting business or commercially oriented R&D in Canada do you have direct experience and knowledge? In your view:**  
**a. Which of these programs are working, and why?**  
**b. Which programs are not working, and why not?**

Western Economic Diversification (WED) - This federal funding was instrumental in the development of The Innovation Network which partnered with GPRC to develop some of its programs and then it merged with the College’s Integrated Research Unit to form the Center for Research & Innovation. Our region’s innovators have benefited directly from this investment. The College continues to see WED as a funding partner for this region’s developmental needs.

NSERC –CCI – GPRC was able to secure a CCI Round 5 grant for its Pollutants to Products Initiative with 15 regional partners including everyone of the region’s forestry companies, a major oil & gas company, three silviculture companies and municipal governments and utility companies.

NRC-IRAP: many of our innovation services clients use the services of IRAP. This program is the has the most effective and direct benefit to our region’s SMEs and innovators. Expansion for Small Project funding would be appreciated. In addition, the project funding program has supported numerous TIN and CRI initiatives over the years and is greatly beneficial to the College and its clients. [a provincial program that is worthy of consideration is the Innovation Voucher program

of the Alberta Government – Rounds 1 & 2 were the most effective programs to date at driving technology commercialization projects forward and creating business-college relationships].

**10. If you have direct experience and knowledge of the SR&ED tax credit, what are your views in relation to the following:**

**a. Does the current structure of the SR&ED tax credit encourage incremental investment in R&D? Yes Does it free up capital to invest in other aspects of innovation activities in the firm? No, it tends to return funds to companies who then use them to further develop their new products, Does this vary by size, ownership, sector or nationality of firm? Absolutely, the smaller the firm the more difficult to take advantage of (size of expenditure may seem ‘not worth the effort to claim’; lack of capacity to claim).**

**b. What are the strengths and weaknesses of the refundable portion of the SR&ED tax credit for Canadian-controlled private corporations and to what extent does it encourage the growth and commercial success of SMEs? Strengths: it provides funds (cash) back to eligible Canadian firms; it encourages firms to develop good practices (the record keeping requirements – although many do not see that as an advantage at first). Weaknesses: it has not changed the culture of R&D investment in Canada – particularly compared with the US.**

**c. Bearing in mind the improvements being made by the Canada Revenue Agency, are there additional opportunities for change to simplify the administration of the SR&ED tax credit and facilitate the applications process? Improved simplification while ensuring compliance is a good target.**

**11. How could the Government of Canada lighten the administration requirements of its programs on recipients and improve outreach to business?**

Consider implementing a two or three tiered approach may be helpful. An under \$1m company - a simple ‘short form’; between \$1 and say \$10 (moderately detailed); and over \$10 (full requirement) – something like that.

**12. How could the Government of Canada be more innovative and responsive to meet new needs or opportunities, and try alternative service delivery-approaches in its programs?**

ACCC is an effective organization in that it represents the collective voice of Canada’s Community Colleges (and Technical Institutes). Respond more rapidly to what its representatives are saying – we are skilled at research and development, we are in touch with the businesses in our communities. Let’s continue to work together for more effective collaboration.

**13. Are there any gaps in the Government of Canada’s support to business and commercially-oriented R&D? Do firms performing R&D in other countries have an advantage over Canadian firms because of access to programs that are not available in Canada? What would be the principal features of new programming to fill these gaps?**

Please review what Norway has implemented (GPRC-CRI is currently completing a review paper that will be completed by the end of March). It is simple, effective and is completely consistent with the Canada Innovation Strategy – especially in the area of Rural Innovation.

**14. What lessons and best practices can be taken from provincial business and commercially oriented R&D programs, and how should the two orders of government align their programming?**

Alberta has the Innovation Voucher program has been very effective for our regions' innovators (technology commercialization) – especially Rounds 1 & 2. It provides funds (75% to a maximum) directly to innovators (SME's) to assist in the development of their inventions; it engages them with College and Technical Institutes as service providers (thus creating an ongoing relationship).

Alberta is considering the implementation of Technology Development Advisors – full alignment with IRAP's Industrial Technology Advisors will enhance effectiveness.

Alberta Advanced Education and Technology provided funds to AACTI to create AACTI – Innovation (three years at \$2m per year). This funding enabled the development of a collaborative culture within the province, seed fund for Colleges and Technical Institutes to start Applied Research and Innovation offices; and a variety of other developmental activities. This simple investment has yielded significant benefits to member institutions and more importantly, member institutions clients and community/industry partners. Check it out!

While the Centre for Research & Innovation at GPRC is unique in its approach, it is one of many within the AACTI system. It is worth checking out as a model for rural innovation. Locating an ITA at the CRI is a natural alliance.