

COLLEGE INVOLVEMENT IN COMMERCIALIZATION			
Effective Date	March 8, 2018	Policy Type	Academic
Responsibility	Vice President Academics and Research Director Research & Innovation (delegated)	Cross-Reference	1. Conflict of Interest 2. Ethics and Accountability 3. Integrity in Research and Innovation 4. Intellectual Property and Ownership
Approver	Academic Council	Appendices	1. GPRC Commercialization Framework 2. Process for Right of First Refusal 3. Relationship of Ownership, Revenue, and Risk 4. Process Overview: Innovation and Commercialization
Review Schedule	5 Years		

1. Policy Statement

- 1.1. This policy clarifies and establishes guidelines for College involvement in commercialization of Intellectual Property, products, and services.

2. Background

- 2.1. The nature and scope of Grande Prairie Regional College's (GPRC) scholarly work and/or creative activity sometimes results in useful and/or commercially valuable Intellectual Property, products, and services. When, and where appropriate, GPRC may become involved in commercialization activities of intellectual property, products, and/or services.
- 2.2. Commercialization fits with the College mandate consistent with the Post Secondary Learning Act and articulated within the Comprehensive Institutional Plan. GPRC endorses commercialization of scholarly work and/or other creative works for mutual benefit of all parties.

3. Policy Objective

- 3.1. While the Intellectual Property and Ownership Policy defines four types of ownership, the purpose of this policy is to establish principles, scope, and framework related to College involvement in the commercialization of Intellectual Property, products and/or services.

- 3.2. GPRC may be involved in commercialization activities in two categories:
 - 3.2.1 Intellectual Property, products, or services protected under intellectual property law (e.g. copyright, patents, Trademarks, industrial design, and trade secrets).
 - 3.2.2 Intellectual Property, products, or services commercialized without legal protection (commonly called first-to-market initiatives).
- 3.3. This policy is intended to encourage equitable and mutually beneficial arrangements between GPRC and:
 - 3.3.1 The Owners of Intellectual Property
 - 3.3.2 Parties advancing ideas for products and services.
- 3.4. Any arrangement will respect the interests of creators, GPRC, and the wider community.
- 3.5. Principles for College Involvement in Commercialization Activities.
 - 3.5.1. GPRC retains the right to make decisions related to its involvement in commercialization; this includes decisions to go-forward, refuse, withdraw, discontinue or divest.
 - 3.5.2. College involvement in commercialization will be based on the following principles related to decision-making:
 - 3.5.2.1 Benefit: Commercialization activities have a clear, defined benefit to GPRC.
 - 3.5.2.2 Fit: Commercialization activities fit with our priorities, capacity, and resources.
 - 3.5.2.3 Viability: GPRC will assess prior to investments; commercialization will only go forward when a business case shows viability. Risks and benefits will be assessed carefully prior to a decision to invest.
 - 3.5.3. College involvement in commercialization will also be based on the following principles related to implementation:
 - 3.5.3.1 Agreements: College involvement in each commercialization activity will be clearly detailed within a written agreement.
 - 3.5.3.2 Cost recovery and revenue sharing: The College will first recoup expenses related to the development costs of commercialization for each defined commercialization activity. Revenues will then be shared as defined within the specific agreement for each commercialization.

- 3.5.3.3 Collaboration: This principle aligns with the College's core values as a community institution. We also value the benefits of collaboration during commercialization as we recognize commercialization is a complex, multi-faceted process requiring a broad range of resources and expertise. (see Appendix D for an overview of the innovation/commercialization process)

4. Scope

- 4.1. This policy shall apply to GPRC, its Employees, Students, and Contractors or Clients under contract with GPRC. Volunteers (including Board members) are excluded.
- 4.2. This policy is subject to any rights or obligations that are specified in current collective agreements with respect to ownership and use of Intellectual Property.
- 4.3. This policy is subject to applicable laws.

5. Definitions

- 5.1. Refer to the Intellectual Property and Ownership Policy for definitions applicable to this policy.

6. Guiding Principles

- 6.1. Framework for Commercialization by/with GPRC
 - 6.1.1. Immediately upon identification of an entrepreneurial opportunity that would involve GPRC (whether Intellectual Property, product and/or services), the individual or parties advancing the idea should submit a proposal to GPRC.
 - 6.1.2. The Director, Research & Innovation shall receive and be responsible for assessing commercialization potential. An analysis will be developed consistent with GPRC's business case process (e.g.: Executive Briefing Note). Executive Council shall be responsible for decisions related to the commercialization opportunity.
 - 6.1.3. Agreements based on the College's commercialization principles will be developed in collaboration between the College designate and the advancing parties.
 - 6.1.4. If GPRC chooses NOT to commercialize or NOT to continue to commercialization of a specific College-owned Intellectual Property or entrepreneurial opportunity, with or without residuals, this asset may be:
 - 6.1.4.1 Shelved (held for possible future action);
 - 6.1.4.2 Terminated out right (no further or possible further action);
 - 6.1.4.3 Sold for independent development outside of the College; or
 - 6.1.4.4 Assigned to the advancing party, an employee, or third party for development.
 - 6.1.5. Should GPRC initially pursue and then discontinue the entrepreneurial opportunity, the party who identified the entrepreneurial opportunity shall be given an opportunity to acquire rights to the entrepreneurial opportunity and any Intellectual Property developed to support the opportunity upon terms to be negotiated.
 - 6.1.6. Should parties fail to reach agreement, GPRC reserves the right to sell to a third party.

6.2. Commercialization of Non-Protected Entrepreneurial Opportunities

6.2.1. **Entrepreneurial Opportunity:** In the absence of an agreement to the contrary, commercialization of entrepreneurial opportunities emerging from work at GPRC is owned by GPRC.

6.2.2. **Advancing Party:** In the case of an individual or third party bringing forward an entrepreneurial opportunity, and/or requesting the commercialization of either intellectual property (theirs, joint, or the College's), or a non-protected idea, the advancing party must:

6.2.2.1 Be the Owner of the idea or have an agreement in place naming the advancing party as Owner.

6.2.2.2 Register as the advancing party as quickly as possible with GPRC's Intellectual Property Officer and declare interest and intent to commercialize.

6.2.3 **Timely Disclosure:** When an entrepreneurial opportunity is identified, it must be kept secret, and particulars communicated in confidence as soon as possible to the GPRC designate responsible for reviewing and assessing the commercial potential of the opportunity.

6.2.4 **Commercialization of Entrepreneurial Opportunity by GPRC:**

6.2.4.1 The decision as to whether or not to pursue an entrepreneurial opportunity is at the sole discretion of GPRC.

6.2.4.2 If GPRC elects to pursue the entrepreneurial opportunity, an agreement and a plan shall be put in place to develop and support the commercialization initiative with a view to licensing to either a third party or a legal entity (corporate spinoff; corporate offshoot or subsidiary operation) owned in whole or in part by GPRC. Note: The third party can include the advancing party.

6.2.4.3 GPRC shall establish and maintain separate accounts of expenses attributable to the entrepreneurial opportunity.

6.2.5 **Compensation to Advancing Party:** The party who brought the entrepreneurial opportunity to the attention of GPRC shall receive compensation commensurate with the potential of the entrepreneurial opportunity, which shall be not less than 10% of the net benefit received by GPRC after expenses.

6.3. Commercialization of Intellectual Property by/with GPRC**6.3.1. Commercialization of GPRC-owned Intellectual Property:**

6.3.1.1. The decision as to whether or not to commercialize GPRC-owned Intellectual Property is at the sole discretion of GPRC.

6.3.1.2. The business case including institutional priorities, risk, and capacity to commercialize, must be considered in any attempt to commercialize.

6.3.1.3. Should Intellectual Property be commercialized by GPRC, the College shall first recoup expenses advanced for developing, protecting, and commercializing the Intellectual Property.

6.3.2. Commercialization of Jointly owned Intellectual Property:

6.3.2.1. GPRC reserves the right to enter into agreements for commercialization of jointly owned Intellectual Property. This includes multi-party ownership.

6.3.2.2. If GPRC elects to pursue the commercialization of jointly-owned intellectual property, an agreement shall be established and a development plan enacted.

6.3.3. Commercialization of Third Party owned Intellectual Property:

6.3.3.1. If GPRC elects to pursue the commercialization of a Third Party-owned, intellectual property, an agreement shall be established and a development plan enacted.

6.3.4. Discontinuation of Commercialization of Intellectual Property by GPRC:

6.3.4.1. Should GPRC choose not to develop or discontinue further developing, protecting and/or commercializing of Intellectual Property, the creator will have the option to continue with commercialization (unless the reason for such a decision is a lack of cooperation by the creator). The creator's option to continue the commercialization is subject to:

6.3.4.1.1 GPRC receiving a non-transferable royalty-free license to use any Intellectual Property for non-commercial education and research purposes.

6.3.4.1.2 GPRC receiving an agreed upon share of the net revenues received by the creator upon commercialization of the Intellectual Property. Payments to GPRC shall be made quarterly.

6.3.4.2. GPRC shall retain a right of approval with respect to any assignment from the creator to a third party. GPRC may not unreasonably withhold consent, but may do so if the proposed transaction is not in the best interest of GPRC.

6.3.5. Patent coverage:

6.3.5.1. The decision as to where to seek patent protection is at the sole discretion of GPRC. Patent protection will normally only be sought in Canada and the United States. Should an Inventor be dissatisfied with the countries selected for patent coverage, the Inventor must notify GPRC in writing and in a timely fashion. The Inventor shall have the option of bearing the cost of patent coverage in countries beyond Canada and/or the United States.

6.3.6. Inventor's Right of First Refusal:

6.3.6.1. Should GPRC receive a third party offer (hereinafter the Third Party Offer) for an outright purchase of patents relating to an invention, GPRC will obtain written consent from the Inventor(s) prior to accepting the Third Party Offer.

6.3.6.2. Consent with respect to a deceased Inventor may be obtained from his/her executor/administrator, or in the absence of an executor or administrator, from his/her lawful heirs. Consent with respect to a mentally incapacitated Inventor may be obtained from his/her legal guardian.

6.3.6.3. Should GPRC be unable to obtain the Inventor's consent to the Third Party Offer, GPRC shall follow the Right of First Refusal procedure as outlined in Appendix 2.

7. Roles and Responsibilities

Stakeholder	Responsibilities
Academic Council	Approve and formally support this policy.
Vice-President, Academics and Research	Review and formally support this policy.
Deans and Directors	Review and formally support this policy.
Research Planning Committee	Review and formally support this policy.
Deans and Chairs	Review and formally support this policy.
Director, Research & Innovation	Periodically review this policy and draft amendments as required.
Employees	Work consistent with policy

8. Exceptions to the Policy

- 8.1. There are no exceptions to this policy, unless necessitated by relevant interpretations or changes in Intellectual Property law.

9. Inquiries

- 9.1. Director, Research & Innovation

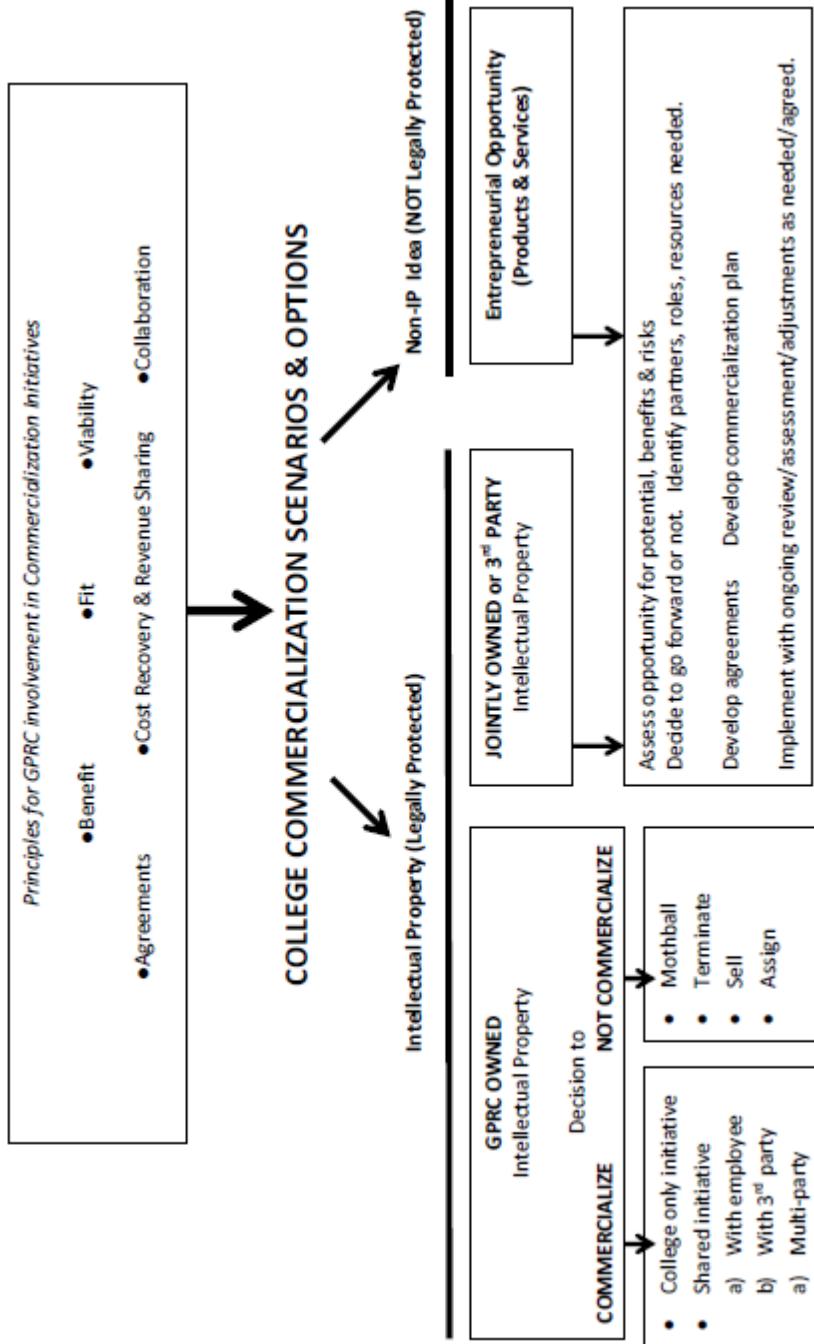
10. Amendments (Revision History)

Revisions to policy Approved by Academic Council March 8, 2018
In Effect: 10 April, 2014.

Appendix A – GPRC Commercialization Framework

APPENDIX A

COMMERCIALIZATION FRAMEWORK



Appendix B – Process for Right of First Refusal

1. A Right of First Refusal Notice shall be served upon the Inventor(s) outlining the terms of the Third Party Offer and providing the Inventor(s) with a period of 90 days in which to serve upon the office of the Vice President Academics and Research an acceptance letter expressing an intention to match the Third Party Offer. The acceptance letter must be accompanied by a certified cheque or money order representing a 10 percent deposit toward the purchase price.
2. Should the Inventor(s) duly serve an acceptance letter and deposit, the patents relating to the invention shall be sold to the Inventor(s) in a sales transaction closing 30 days after service of the acceptance letter, or such other closing date as may be mutually agreed.
3. Should the Inventor(s) fail to duly serve an acceptance letter, GPRC shall be free to accept the Third Party Offer.

**Appendix C – Relationship of Ownership, Investment, Risk, and Reward:
Commercializing IP and Entrepreneurship Options**

Active Role in Commercialization <i>Most ownership and investment Most risk and reward / revenue</i>	Passive Role in Commercialization <i>Partial ownership; minimal investment Minimal risk and defined reward (ie: royalty)</i>
Creator <ul style="list-style-type: none"> Takes charge of commercializing IP/opportunity Either creates business/corporation or works with an external corporation 	Creator <ul style="list-style-type: none"> Written contract defines details of royalty agreement (how much, how long, under what conditions and sales/business parameters)
College <ul style="list-style-type: none"> Takes charge of commercializing IP/opportunity either through a GPRC Business Development Unit or an external corporation 	College <ul style="list-style-type: none"> Written contract defines details of royalty agreement (how much, how long, under what conditions and sales/business parameters)
3rd Party <ul style="list-style-type: none"> Takes charge of commercializing IP/opportunity under 3rd party business OR a new corporation set up for this idea/product 	College and Creator <ul style="list-style-type: none"> Written contract defines details of royalty agreement (how much, how long, under what conditions and sales/business parameters) May be separate royalty agreements for GPRC and Creator
Joint Ownership <ol style="list-style-type: none"> College/creator College/creator/3rd party 3rd party/college 3rd party/creator <ul style="list-style-type: none"> What configuration of ownership is most able/best suited/has most capacity to commercialize the IP? Business done under Corporation as agreed by partners. 	Joint royalty <ol style="list-style-type: none"> College/creator College/creator/3rd party 3rd party/college 3rd party/creator <ul style="list-style-type: none"> Written contract defines details of royalty agreement (how much, how long, under what conditions and sales/business parameters) May be separate royalty agreements for all partners

Appendix D – Understanding the Innovation Process: Moving Ideas to Commercialization

By understanding the innovation process, innovators and involved College staff will have an understanding of the due-diligence and steps required to advance ideas, products, and services into the marketplace. The goal is that GPRC commercialization policies are consistent with the commercialization process.

Introduction

Two ways to increase economic output within an economy or organization are to:

- (1) Increase the number of inputs in the productive process, or,
- (2) Think of new ways to get more output from the same number of inputs.

The second option (2) is Schumpeter's concept of innovation, which is defined as "the introduction of new or significantly improved products (goods or services), processes, organizational methods, and marketing methods in internal business practices or the marketplace".

(http://en.wikipedia.org/wiki/Joseph_Schumpeter)

Innovation is a fundamental source of creating wealth within an economy or organization. The challenge is figuring out how to turn the breakthroughs of ideas and Research & Development into profitable products. This is where GPRC can leverage its applied research and innovation resources and skills into opportunities that could be new profit centres within its organization.

Product Commercialization Process

The GPRC R&I Product Commercialization Process is based on four themes:

1. Innovations and Ideas
 - Clarification and Rationale
 - Research and Networks
 - Intellectual Property Rights and Protection
 - Concept Development and Plans
 - Scenario Creation
2. Technical Feasibility
 - Initial Assessment, Performance, and Certification
 - Engineering
 - Proto-typing
 - Product Testing
3. Market Feasibility & Entry
 - Market Research
 - Market Discovery, Creation & Entry
4. Financial Viability
 - Development Funds
 - Investment Readiness
 - Angel Capital Networks

Collectively, these themes are components of commercialization planning for any new product or service.

The GPRC R&I Product Commercialization Process is foundational to the College's commercialization policy and practices.

By virtue of GPRC's partnership with Alberta Innovates (AI) under the Grande Prairie Regional Innovation Network (GPRIN, see also GPRIN.ca), we are adding more detail to the commercialization process by introducing a modified Goldsmith Model for Technology Development Stages to the discussions. The value of documenting this more detailed commercialization process is to ensure that future readers fully understand the complexity and variability of taking innovations into the marketplace.

Figure 1. Commercialization Process Phases – Detail Modified Goldsmith Model (see next page)

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Phases	Stages (A/TF)	Detailed Steps
PHASE 1: Ideas and Innovations		
	Stage 0	<p>Key Questions:</p> <ul style="list-style-type: none"> • Does this fit with our mandate & priorities? • Is there sufficient project clarity? • Do we have the people & expertise in house/available? • Is there full financial clarity? • Is the client capable & credible? • Do we have the capacity to take this on? • Is it worth it? <p>Tools to identify and answer the above questions could include the use of the Self-assessment Sheets on the Innovator, New Product & Financial; the Start-up Wheel 360 Screening tool may be of value.</p>
	Stage 1 Investigation	<p>Ownership: Explore and address Intellectual Property Rights protection. Review and apply GPRC's Intellectual Property Policies.</p> <p>Proof of concept – this is the initial stage leading to the commercialization process. Requires conducting enough research to prove that the idea is feasible and can work.</p> <p>Risk assessment: Undertake a formal risk analysis including liabilities of the idea or opportunity if successfully commercialized.</p> <p>Step 1: Technical analysis This consists of defining concept, confirm critical assumptions, identify critical barriers, and evaluate applicability and survey state of the art.</p> <p>Step 2: Market needs and Venture Assessment Conduct market overview, determine pricing structures, market barriers, risks, distribution channels, trends and competitors.</p> <p>Estimate profit potential, identification of professional and capital needs.</p> <p>Implement GPRC's Intellectual Property Rights Policies.</p> <p>Processes to enact Legal Agreements are underway and/or completed.</p>

PHASE 2: Development: technical, market & financial	
Stage 2 Feasibility	<p><i>Prototypes – takes the proof of concept and builds a working model (prototype with real world function)</i></p> <p><i>Step 3. Technical feasibility. Develop working model, test technical features, assess preliminary reducibility, safety & environmental features and finalize designs.</i></p> <p><i>Step 4: Market study. Includes identification and quantification of market size; customers, volume, prices, distribution, competitors.</i></p> <p><i>Financial feasibility consists of formulating financial assumptions, developing <i>pro forma</i>, identifying seed capital and forming advisory team. Access to Investment Readiness materials and Angel Capital.</i></p> <p><i>Capability Review: Examine what will be required for the opportunity to proceed; includes management, human resources and organizational structures. Address deficiencies.</i></p> <p><i>Pre-product testing</i></p> <p>Experiments and modifications to the prototype evolve the technology to commercial application</p>
Stage 3 Development	<p><i>Alpha Testing. This, like as a clinical trial, is the in-house testing phase of the commercial product.</i></p> <p><i>Step 5. Engineering prototype</i></p> <p>The goal is to produce an accurate prototype representing the materials and functionality of the end product. This also includes manufacturing methods, I materials, a workable production process. Test the prototype..</p> <p><i>Step 6. Strategic Commercialization and Business Planning</i></p> <p>Develop detailed business plans. This may lead to the formation of new company or an adaption to an existing company with structure and capabilities to advance and bring a new product or service to market. These plans can include the commercialization process factors along with forming & running a new product innovation company. <i>Parallel Consideration & Activities: Establish company, if required. Or adapt existing company to manage new product innovations.</i></p>
Stage 4 Intro to the Marketplace	<p><i>Beta Testing</i></p> <p>Critical stage in working to commercialization; this is the testing of the new product with end users (larger number of subjects to study safety and efficacy).</p> <p><i>Pre-commercial Product Sales.</i></p> <p>The company sells beta or non-commercial grade products (beta) to customers for testing and/or for research and development purposes only.</p> <p><i>Step 7. Pre-production Prototype. Develop production prototype and production process.</i></p> <p><i>Step 8. Market Validation and Start-up</i></p> <p>This entails conducting limited sales, analysis of sales and survey of customers and refining marketing plan.</p>

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PHASE 3: Commercializing		Company set-up, start-up and operations are in place by this point or preferably much earlier.
Stage 5 Growth	<i>Scale up-Production Design & Manufacturing</i> Company is ramping up for commercial production (involves scale up of materials, planning the production design or actual manufacturing of the product.)	
	<i>Step 9. Production</i> Production using the final commercial design; quality control is established; full production begins.	
	<i>Step 10. Product Launch & Sales</i> A commercial grade product is introduced to the market for sale and revenues generated.	
Stage 6 Maturity	<i>Sales and Distribution and Business Growth</i> Expand distribution, refine product features, monitor enterprise position, hire and train personnel.	
	<i>Step 11. Production support. Maximizing Production.</i>	
	<i>Step 12. Business Maturity</i> Includes market diversification. New products.	
Review Phase	Gather and analyse feedback on the process	