

## Research Toolkit

# Research Toolkit

*FANSHAWE COLLEGE CENTRE FOR RESEARCH & INNOVATION  
(CRI)*

FANSHAWE COLLEGE PRESSBOOKS  
LONDON ONTARIO



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# Research Toolkit



Welcome to the Research Toolkit, created by the Centre for Research & Innovation (CRI) at Fanshawe College. This toolkit offers practical advice and guidance for individuals who intend to engage in funded research in the college sector. The content in this toolkit may be adapted for noncommercial purposes only. We request that attribution be given to the Fanshawe College Centre for Research & Innovation.

If you adapt or build on this material, you must license your resource under identical terms.

This resource is intended to function as:

- An onboarding and training resource for CRI personnel, including college employees hired to work on research projects with industry partners.
- A toolkit for college researchers interested in learning more about the research and research administration process related to sponsored projects.

## Contents

1. Understanding the College Research Landscape
2. Planning the Research Project
3. Preparing a Funding Submission
4. Conducting the Research
5. Sharing your Findings

# MODULE 1: UNDERSTANDING THE COLLEGE RESEARCH LANDSCAPE

## Module Overview

- Types of Research in a College Setting
- Research Partnerships in a College Setting
- Benefits of Applied Research
- Researcher Pathways
- External Funding Options for College Researchers
- Internal Funding for Fanshawe Researchers
- Fanshawe Project Showcase
- Common Researcher Questions



# Types of Research in a College Setting

College researchers engage in research across many disciplines and with a variety of objectives.

## Applied Research

Applied research seeks to solve a specific problem or provide innovative solutions to issues affecting a sector, group, or community. Much of the funding that is made available to colleges is in support of partnerships with industry and community organizations.

Watch the video below for a more thorough explanation of applied research.

*Video from Mohawk College © Used with permission.*

## Discovery Research

This is also known as academic research or basic research. Discovery research is designed to increase our understanding of fundamental principles in a wide range of areas. Unlike applied research, the practical objective of the research is often of secondary consideration to the investigation itself.

## Scholarship of Teaching and Learning (SoTL)

This type of research examines pedagogy, teaching practices (including their implementation in the classroom and their impacts upon student learning), technological enhancements to teaching, and all aspects of student learning and engagement in higher education. In this case, researchers are encouraged to develop their skills as educators with a particular focus on meeting student needs.

# Research Partnerships in a College Setting

In a college setting, research partnerships can take many forms. Often, research activities do not occur in isolation, but may, in fact, cycle through different types of engagement with the same partner and/or at different stages of a research project.

## Partner-Based Research

- Projects are jointly carried out by a college and an external partner.
- The goal is for an industry partner to solve an identified challenge through access to the talent and research infrastructure at the college.
- Typically, grant monies are leveraged to help fund the collaborative research project, with the external partner providing a matching contribution (comprised of cash and/or in-kind support).
- This often results in intellectual property that the business commercializes.

## Capstone-in-Class

- These are also known as a culminating project or experience.
- They often involve external partners as part of the experiential learning process.
- Typically, projects such as student research are delivered without grant funding.
- The activity is considered part of the classroom/program-related work.

## Internships

- Internships enable industry to solve a challenge by adding a talented student to the team for a finite period of time.

## Contract

- Contract research partnerships require the industry partner to pay cash for the R&D rather than leveraging grant funds.

# Researcher Pathways

We've outlined the many types of research opportunities available to you in the college sector.

At this point, you may be considering where you fit into the researcher spectrum and the next steps you can take to accomplish your particular goals.

## Possible Steps on Your Researcher Pathway:

### 1. Explore

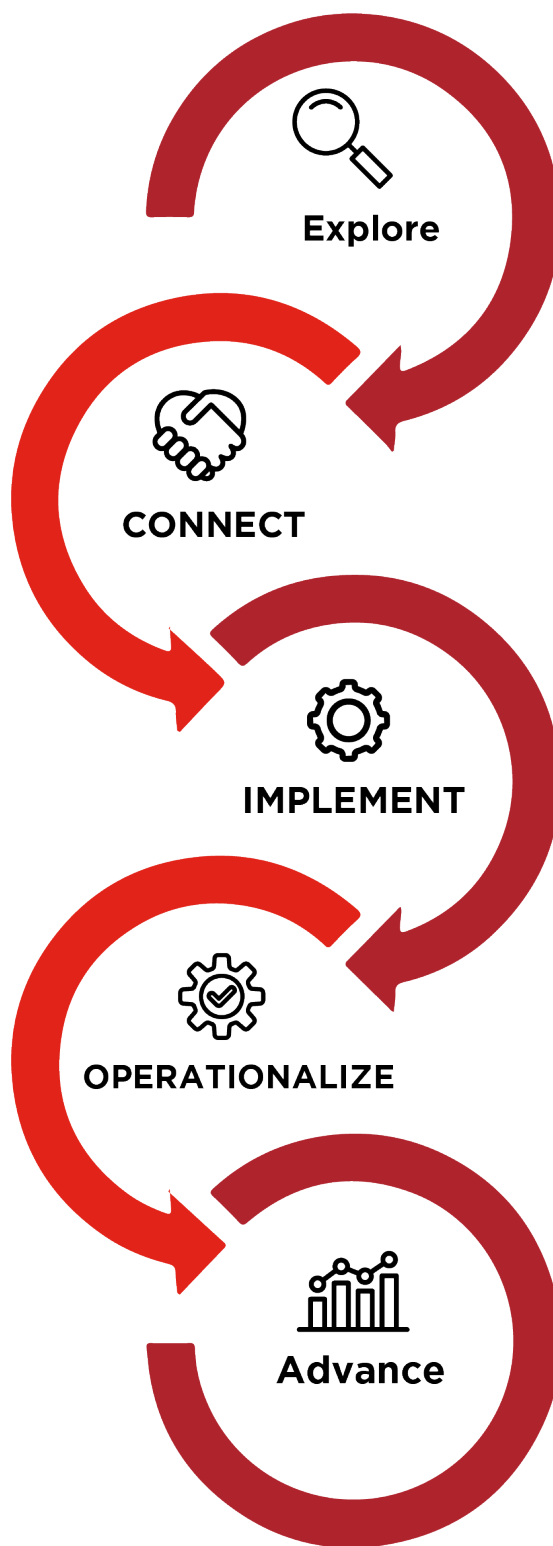
- If you are an early-stage researcher, you are encouraged to learn about funding opportunities, project roles and responsibilities, and college policies related to research.
- Attend webinars and gather resources (including CRI materials, such as this toolkit).
- At this stage, you may have a research idea in mind, but not necessarily. This could be shaped by funding calls, college programming changes, your community connections, etc.

### 2. Connect

- Regardless of whether you are a novice or experienced researcher, reach out to CRI to discuss your potential project and learn about support that may be available (financial and/or personnel).
- Have conversations with possible collaborators, such as internal or external colleagues, who may want to work on a project with you. This is a good time to initiate discussions with potential external partners who may be willing to provide financial and/or in-kind contributions.
- If you are a faculty member and plan to request course release, or if your project has the potential to possibly impact the curriculum, you will want to have a conversation with your Associate Dean to enlist their support.

### 3. Implement

- Once you feel ready to take the leap, start planning your project and drafting a proposal.
- Many early-stage researchers often utilize internal funding to gain beneficial research experience. The Research &



Research pathways by Sanaz Habibi CC BY-NC-SA 4.0

Innovation Fund, which is internal funding for research offered by CRI, is perfect for projects which may be small in scope and short in duration. A RIF project could have the potential to lead to larger, externally-funded projects down the road.

Guidance on this step will be provided in Module 2: Planning the Research Project and Module 3: Preparing a Funding Submission.

## **4. Operationalize**

- Congratulations! You have received funding!
- It's time to begin the active phase of your research project. This includes hiring project participants, completing mandatory training, and creating your research tools.
- Complete the project, ensuring that you meet all conditions of funding.

Guidance on this step will be provided in Module 4: Conducting the Research.

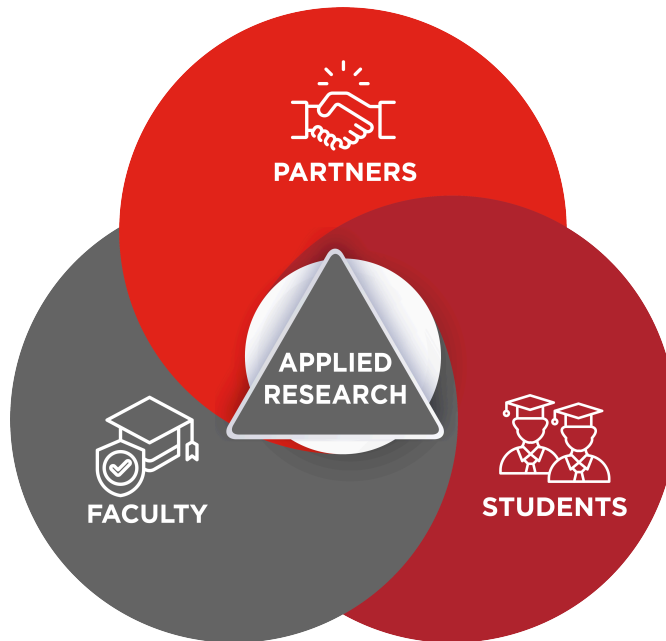
## **5. Advance**

- With a successful research project under your belt, you may feel equipped to take on another project.
- This toolkit has outlined many of the external funding opportunities available. Internal funding is also available for “Stream 2” projects, making larger sums available for partner-based projects.
- Don't forget to promote your researcher profile and your findings. This could include an ORCID ID, so your colleagues and potential funders can quickly access your research.

Guidance on this step will be provided in Module 5: Sharing your Findings.

# Benefits of Applied Research

We can think of applied research in college as conferring three kinds of interrelated benefits for partners, faculty, and students.



*"Benefits of applied research" by Sanaz Habibi, CC BY-NC-SA 4.0*

1. Research partnerships often lead to improved processes, the creation of new products, and the integration of new technology. Through these collaborations, industry partners gain access to highly-skilled researchers and cutting-edge college facilities.
2. Faculty can lead research projects and gain skills and experience which will inform their teaching practice and enhance the curriculum.
3. Training and mentoring experiences can prepare students to work as professionals in their field.

# External Funding Options for College Researchers

Colleges often rely on external funding to support the applied research process.

If you'd like to explore the possibility of seeking funding for your research, here are the funders we often engage with. It is helpful to visit funder websites to understand their missions, research priorities, and funding calls.

## Canadian Funding Agencies

Click on the agency name to pop open a description of each one. Please note that you may need to apply as a college affiliate to access funding. Connect with CRI to discuss eligibility criteria and compensation.

### **Canada Foundation for Innovation (CFI)**

Commonly accessed by colleges, institutes and CEGEPs for infrastructure and equipment funding.

### **Canadian Institutes of Health Research (CIHR)**

Is focused on healthcare research. This funding agency rarely funds college-applied research.

### **Canada's Regional Development Agencies (RDA)**

Works closely with businesses and innovators in specific regions to fuel economic growth. Fed Dev Ontario is an example of an RDA which occasionally funds large-scale applied research initiatives.

### **Mitacs**

Provides funding to businesses and builds partnerships between industry and academia. Creates opportunities through student research internships.

### **Ministry of Training, Colleges and Universities (MTCU)**

Will fund research and innovation projects through grants like the Ontario Research Fund if they align with MTCU priorities and improve knowledge in areas of post-secondary education, training, labour markets, and employment.

### **National Research Council (NRC)**

Runs national research and collaboration centres and sponsors the Industrial Research Assistance Program (IRAP), which provides funding to support business undertaking research and innovation activities.

### **Natural Sciences and Engineering Research Council of Canada (NSERC)**

Oversees the College and Community Innovation Program which includes: Applied Research and Development (ARDs), Mobilize, and Technology Access Centres (TACs) grants, and the College and Community Social Innovation Fund (CCSIF). A key national funder of applied research.

### **Provincial Funding Agencies**

Provide funding to supporting innovation and fostering entrepreneurship through organizations like the Ontario Centre for Innovation (OCI).

### **Social Sciences and Humanities Research Council (SSHRC)**

Mostly funds scholarly research but will occasionally fund collaborative applied research through programs such as the Partnership Engage Grant (PEG).

**Southern Ontario Network for Advanced Manufacturing Innovation (SONAMI)**

Sponsors a network of colleges (including Fanshawe) and one university, who, through their respective research centres are collaborating with SMEs to turn innovations into commercialized projects. Funded by FedDev Ontario.

### **Resource: CRI Tri-Agencies Research Funding Guide**

CRI has developed this Guide to Tri-Agencies Research Funding. Each agency funds research in its own way, through a unique set of funding programs.

# Internal Funding for Fanshawe Researchers

The Research & Innovation Fund (RIF) is provided by the Centre for Research and Innovation (CRI) to financially assist Fanshawe faculty and staff who wish to engage in collaborative research projects.

The RIF is intended to build internal research capacity, strengthen engagement with industry and community partners, and familiarize researchers with sponsored research opportunities and procedures.

If you would like to learn more about eligibility criteria and funding streams, all RIF resources are available on the CRI website. CRI staff also host webinars and offer individual consultations for potential applicants.

## Research & Innovation Fund (RIF) Guidelines

If you are interested in submitting an application for internal funding from CRI, please review these Research & Innovation Fund (RIF) Guidelines. You are encouraged to contact CRI if you have an idea for a research project and would like to see if it is eligible for internal funding.



# Common Researcher Questions

Here are some common questions when a researcher has not engaged with CRI before and/or is in the early stage of a research project. Please reach out to CRI if you have your own question.

**Q: I may want to get involved in a research project but do not feel quite ready yet. What steps can I take to build my knowledge and skill set?**

A: There are many options available to you, depending on your research interests and where you position yourself on the researcher spectrum. If you classify yourself as a novice researcher, and do not not feel quite ready to lead a project, there are many resources (like this one!) and training sessions are available to you through CRI.

This is a good time to attend webinars hosted by CRI, complete self-paced online modules available in Fanshawelearns, and consider potential topics you may want to research. CRI staff can also inform you of smaller project roles that may be available to you. Additionally, the Research & Innovation Fund (RIF) is an internal source of funding for projects which are, typically, smaller in scope and shorter in duration than external grants. Often, Fanshawe researchers utilize RIF funding to build their research and project management skills. By serving as the Principal Investigator on a RIF project, for instance, you can gain confidence and expertise that could lead to additional external funding opportunities down the road.

**Q: How does Fanshawe distinguish between Independent and Individual research?**

A: Independent Research is that which you might undertake on your own, without your institutional affiliation. In this case, as the PI, you have the sole responsibility for application preparation, research conduct, and administration of the research grant. This type of research may limit your access to institutional support and facilities.

Individual Research requires your college affiliation in order to receive funding. As such, there is institutional support available to you. As the PI, you are hired by the college for your subject and/or technical expertise and will oversee project activities. While the college is ultimately responsible for the administration of the funds, you will help ensure legal, fiscal, and ethical compliance.

**Q: What are the steps in the grant process?**

A: There are typically three main stages in the grant process, and within each stage there are specific tasks that need to be completed. We generally speak of those three stages as:

1. Pre-Award Phase – Funding Opportunities and Application Review
2. Award Phase – Award Decisions and Notifications
3. Post-Award – Implementation, Reporting, and Closeout

**Q: What is involved in applying for a grant as a Fanshawe-affiliated researcher?**

A: Firstly, you will need to connect with CRI to indicate your interest in applying for funding, along with verifying your eligibility for the funding and reviewing any key dates or requirements for the application. You will then establish a research objective, timelines and deliverables (with an external partner, if you have one). You will then use this information to outline the scope of your project, a work plan, and a budget. A grant application may also require CVs, letters of support, and a literature review. Increasingly, funding opportunities require consideration of data management planning and equity, diversity, and inclusion. CRI's Research Facilitators can assist with each step of this process.

**Q: What support is available to me as an applicant?**

A: While we want you to understand the time and work that applying for funding entails, you don't have to go it alone. The Centre for Research & Innovation (CRI) can help you navigate the grant application process by directing you to helpful personnel and resources.

**Q: Once I submit an application, when will I know if I have received funding?**

A: It really depends on the size of the grant and the specific sponsor. Some funders will notify researchers in a matter of weeks, while larger grants may take six to twelve months to review.

**Q: What role does CRI play once I have received funding?**

A: CRI serves as the grant administrator, overseeing disbursement of all funds in compliance with all funder rules and College policies, reporting on spending and funded activities, contracting of the research team, and purchasing of all project materials. As the Principal Investigator, you will work closely with CRI to ensure project success. Consistent communication is important to ensure payment to project participants, accurate accounting of expenditures, and fiscal and legal compliance to the college and the sponsor.

# MODULE 2: PLANNING THE RESEARCH PROJECT

## Module Overview

- Commonly Used Research Terms
- Key Project Roles
- Project Scoping
- Resource: Research Consultation Notebook
- The Role of the Principal Investigator (PI)
- Research Agreements

# Commonly Used Research Terms

The following is an overview of the terminology used by researchers, funders, and research administrators. If you intend to submit an application for funding and/or serve as a project participant, it is important to familiarize yourself with these terms.

## **Budget Justification**

A narrative explanation of each component of the budget to “justify” the cost in terms of the proposed work and outcome.

## **Cash Contribution**

In many instances, a granting agency requires that an external partner provides a cash contribution to support the direct costs of the research project. While these may vary in size, cash contributions are typically 25-50% of the costs. Cash contributions may be paid directly to the college or the funder (who then allocates the grant money to the college).

## **Commercialization**

The process of introducing a new or improved product, process, or production method into the commercial market.

## **Deliverables**

A tangible or intangible good or service developed as a result of a project. The intent is often to deliver this good or service to a partner.

## **Full-Time Equivalent (FTE)**

This is a common term used as part of a grant application process. FTE refers to the number of hours required to be considered Full Time.

For example, if two research assistants work for 10 hours/week, that is considered to be a .50 FTE, or 20 hours of a 40-hour work week.

FTE can also be used to refer to the number of employees on staff.

## **Funding Ratio**

An informal way of referring to the ratio of grant cash to partner cash. Common breakdowns include 25%/75%, 30%/70%, and 50%/50%.

## **Grant**

An award, usually financial, is given by one entity (such as a company, foundation, or government) to another entity (such as an institution or an individual) to facilitate a goal.

## **Highly Qualified Personnel (HQP)**

Most grants will want to know how your project will help enhance the knowledge, skills, and experience gained by students, research assistants, and college staff. The people imparting the skills are generally referred to as HQPs.

## **Industry Sector**

Typically refers to an area of business. Some grants may require the applicant to specify the North American Industry Classification System (NAICS) code.

## **In-Kind Contribution**

A non-financial contribution is provided by a partner organization, the college, or the researcher. It generally takes the form of cash-equivalent goods or services and can include time contributed to the project.

#### **Letter of Intent (LOI)**

A short proposal that informs a funding agency that you will be submitting a full application for funding. Some funding agencies will evaluate LOIs before allowing you to move to the next application stage. Some applied research offices may also ask you to submit an internal LOI before you apply for external funding, especially if the funding agency allows for only a limited number of applications from each college.

#### **Notice of Intent (NOI)**

A short proposal that informs a funding agency that you will be submitting a full application for funding. Unlike LOIs, NOIs are not normally evaluated.

#### **Overhead/Administration**

Ongoing expenses not directly attributed to the research project work. Every college and/or research office will have a percentage of the project cost that will be used to calculate overhead costs such as the cost of grant application support, project reporting, invoicing, finance, operations, etc. Most grants and funding programs will set a max percentage or dollar figure for overhead.

#### **Partner**

The public, private sector, or community organization that is driving the need for the research project and whose staff/owner will actively collaborate with the college and researchers on the project. In most situations, there is a contractual agreement between the college and the external partner to stipulate roles and responsibilities of the participants, ownership of Intellectual Property, etc.

#### **Principal Investigator**

The leader of a research team who is responsible for the leading the research and directing the actions and executing of the research team. Sometimes referred to as the "Research Lead".

#### **Project Plan/Work Plan**

This is a description of all stages of the project, broken down week by week or month by month. It is commonly prepared during the grant application process and factors in management of resources, partner communications, and risk management.

#### **Research Contract**

An agreement to perform research for a sponsor under specified conditions in exchange for payment of direct and indirect costs.

#### **Research Ethics Board**

A committee which is affiliated with the college, but which operates independently to ensure that a research study that uses human or animal participants adheres to ethical guidelines and ensures that the rights of study participants are protected.

#### **Research Proposal**

A document or set of documents that is submitted to an organization with the intent of securing funding for a research project.

#### **Research Question**

A question that the research project aims to answer. In the case of applied research, the question is usually linked to a specific concrete partner objective, such as "Can this new packaging increase the shelf life of our product?"

**Scope**

Refers to the combined objectives and requirements needed to complete a project. Accurately defining the scope of a project and determining what is “in scope” or “out of scope” will help keep the project on track in terms of cost and time.

**Small- and Medium-Sized Enterprises (SMEs)**

These are businesses whose personnel numbers fall below certain limits (often 5-500 employees).

**Sponsor**

An individual, company, institution, or organization which takes responsibility for the initiation, management, and/or financing of a research project. Also referred to as “funder” or the “funding body/organization”.

**Subject Matter Experts (SMEs)**

The same SME acronym used for businesses can also be used to refer to subject matter experts. SME is a broad term which can refer to project researchers, technicians, external experts and more.

**Supplemental Funds**

The process of using two or more grants to fund research projects. Some grants have a process in place that will allow combining grants such as MITACS + NSERC. Some funders may refer to it as joint or complementary funding.

**Resource: Glossary of Research Terminology**

CRI has created a PDF version of this Glossary of Research Terminology if you would like to download it for easy reference.

# Key Project Roles

To ensure project success, it's important to understand the roles and responsibilities of research administrators and project participants. Clear communication channels and coordination of work is essential.

## Grant Administration

### The Centre for Research & Innovation (CRI)

At Fanshawe College, CRI provides access to funding sources, including government grants and industry partnerships, to support various research initiatives.

At times, CRI will assist in the drafting of a proposal and/or submit an application on behalf of an affiliate researcher (in the case of an institutional grant, for instance).

When an application is successful, the research funds are administered by CRI. This includes the hiring of project participants and ensuring (with the PI) fiscal, legal, and ethical compliance.

## The Research Team

### Principal Investigator (PI)

The Principal Investigator is the project lead. The PI has the subject and/or technical expertise to execute the project and guide all research activities and participants to project completion.

CRI may hire a college researcher to work on a specific project with an industry partner. Alternatively, a college researcher may approach CRI with a project idea and potential partner in order to explore funding prospects.

At Fanshawe, for HR and Budget purposes, a PI is hired as a "Research Associate".

### Co-Investigator

Some grants allow for one or more Co-Investigators. While the PI will serve as the key contact on the application, Co-Investigators share in the responsibility of executing all tasks and ensuring project success.

### Partner

The public, private sector, or community organization that is driving the need for the research project. It is typically expected that the owner and/or staff members will actively collaborate on the project with the college and researchers. As well, a partner is expected to cover at least a portion (25%, 50%, or more) of project costs, such as faculty course release, student wages, technical and/or support staff wages, equipment, supplies, travel, and overhead costs. Sometimes, an "in kind" contribution is sufficient.

### Collaborator

This is usually an optional role. A Collaborator is someone who contributes to the intellectual direction of the project and actively engages in specific research activities. A Collaborator typically does not have access to grant funds and may be engaged for a finite period of time.

## **Research Assistant**

At Fanshawe, students are typically hired to serve as Research Assistants. For HR and Budget purposes, different pay bands are assigned depending on the nature of the project work, the research environment, the ability to work independently, etc.



# Project Scoping

A very important step of any project is the scoping process. Determining the objectives of your research, the various logistical requirements (access to facilities, materials), the personnel who may need to be involved (other college researchers, external partners), and the timeline of your project can spare you from making potential mistakes later on.

CRI Research Facilitators assist with the Project Scoping Process and typically utilize a structured, stage-gate approach.

## The 3 stages of the Project Scoping Process:

1. Project Verification
2. Research Project Overview
3. Research Project Plan

### Stage One – Project Verification.

Projects brought forward by a potential partner typically start here. At this stage, these are the questions that need to be addressed:

- Is the proposed partner eligible to work with the college?
- Does the partner operate in an area in which we have research capacity/capability?
- Can the partner's desired research outcome be achieved?
- Is the partner's timeline feasible?

### Stage Two – Research Project Overview.

Projects brought forward by college researchers typically begin at this stage, and CRI might ask you the following questions:

- Do you have the eligibility, availability, and expertise to serve as the lead (Principal Investigator) on the project?
- Alternatively, if a partner approaches the college with a project idea, CRI would identify a potential researcher.
- Is there a clear, agreed upon objective and set of deliverables?
- Is there an identified source of funding?
- Are the required resources (e.g. facilities, personnel) available during the proposed time frame?
- Can the partner participate in the required ways and make necessary contributions (financial or in-kind)?

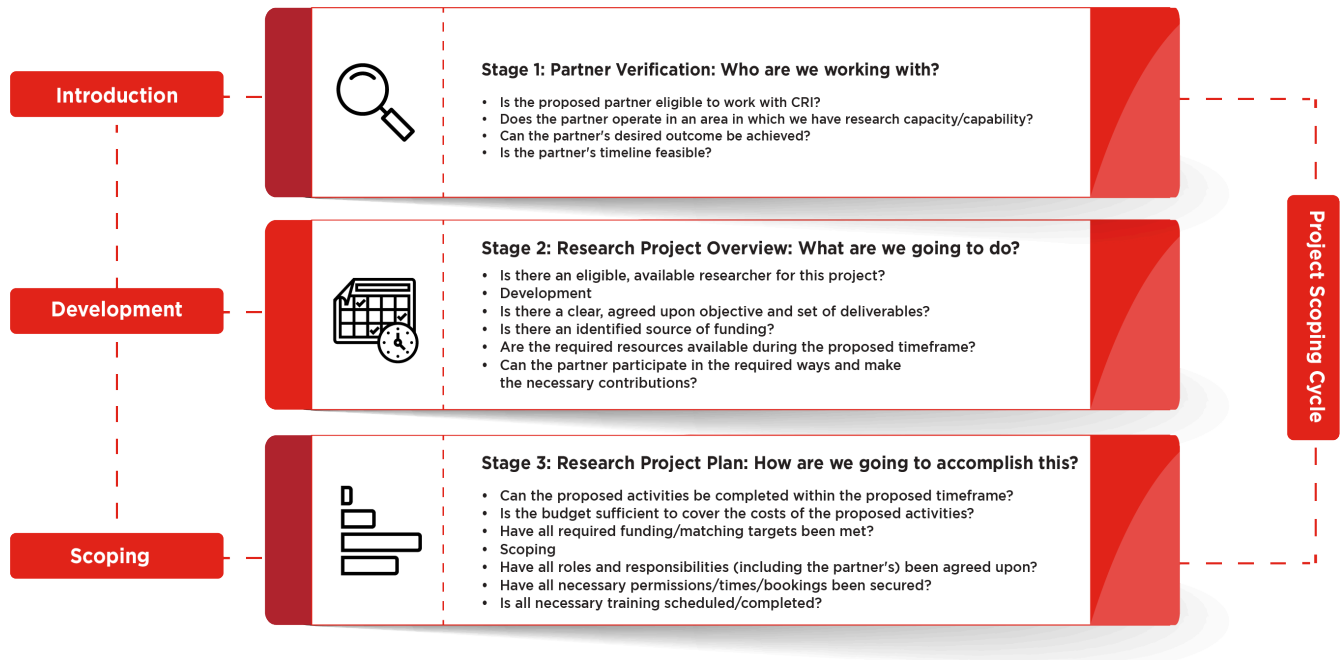
### Stage 3 – the Research Project Plan

Finally, in this stage, the project plan is articulated. You will be asked to outline how the project is going to be accomplished.

- Can the proposed activities be completed within the proposed time frame?
- Is the budget sufficient to cover the cost of the proposed activities?

Have all the required funding/matching targets been met?

- Have all the roles and responsibilities been agreed on?
- Have there been discussions related to data management?
- Has ownership of arising Intellectual Property been determined?
- Have all necessary permissions/bookings been secured?
- Is all necessary training scheduled or completed?



*"Project scoping" by Sanaz Habibi, CC BY-NC-SA 4.0*

This is simply a demonstration of Project Scoping. The Centre for Research & Innovation can provide guidance related to your unique project.

# Resource: Research Consultation Notebook

## Resource: Research Consultation Notebook

To help you prepare for a research consultation with our office, you may want to consider the following questions. Your work can be saved and exported at the end of the activity.

If you do not feel ready to answer all these questions, that's ok! You can return to this notebook after completing the remaining modules, or CRI staff can assist you



An interactive H5P element has been excluded from this version of the text. You can view it online here:

<https://ecampusontario.pressbooks.pub/crresearchertoolkit/?p=577#h5p-2>

If you would prefer to utilize a print copy, a printable version of this module is also available.

# The Role of the Principal Investigator (PI)

As the PI is the project lead, it is important to elaborate on the roles and responsibilities of this position. The PI has the subject and/or technical expertise to execute the project and guide all research activities and participants to project completion.

CRI may hire a college researcher to work on a specific project with an industry partner. Alternatively, a college researcher may approach CRI with a project idea and potential partner in order to explore funding prospects. In this instance, the researcher – i.e. the grant applicant – is responsible for the following activities, with support from CRI:

## Pre-Award

- Drafting of an application which aligns with sponsor priorities and clearly articulates a plan to achieve research objectives within determined timelines and with an accurate budget.
- Submission of a Curriculum Vitae and/or Researcher Profile.
- Ethics approval if required.

## Post-Award

- Ensuring the completion of all project work by all participants, as described in grant application and in compliance with funder and college guidelines and policies.
- Training and supervision of Research Assistants.
- Submission of interim reports, tracking of expenditures, and final reports.
- Consulting with CRI regarding project progress and expenditures and communicating any issues that may arise.

### Resource: PI Primer

CRI has created a PI Primer: The role of a Principal Investigator. This handout elaborates on the Pre- and Post-Award activities a PI undertakes.

### **Resource: PI Checklist**

This PI Checklist can help you keep track of the various tasks you must complete.

### **Further Learning: The Role of a Principal Investigator**

If you would like to do a deeper dive into this topic, there is an online module called The Role of the Principal Investigator available in Fanshawelearns. This module is mandatory for all researchers hired by CRI to serve as PIs.

This and other resources can be accessed from the CRI Research Playlist.

# Research Agreements

Depending on the nature of the research, the funding that is made available, and the intended outcome of the project, you may need to develop a formal research agreement with your partner. You are encouraged to have these discussions early in the project planning stage, to ensure that everyone is on the same page and to avoid potential disagreements later on.

## Intellectual Property

An important element of the Project Scoping process is determining ownership of Intellectual Property. The Centre for Research & Innovation can help researchers navigate college IP policies and facilitate access to resources and external supports.

At Fanshawe, ownership of IP rests with the creator. Ownership as a concept revolves around the ability to “publish” or “exploit” IP. This means that, ideally, there is a tangible outcome of a research project. For instance, a non-profit organization may create a new policy, or a local business may bring a new product to market (with the intention to “commercializes” the IP).

It is important to understand that IP ownership and management depends on context. At Fanshawe, for example, different considerations apply to Teaching and Learning resources compared to funded research outcomes.

As well, colleges do not receive funding to assist with the commercialization of IP. As such, it is very unlikely that a college will have facilities (such as a Tech Transfer office) or personnel with the expertise to provide guidance in this particular area. We can, however, direct researchers to external support.

You are encouraged to review Fanshawe’s Intellectual Property Policy and its Commercialization Policy.

### Resource: IP in the Ontario College Research Sector

If you would like to learn more about the ways that colleges contribute to the creation of IP, and how our activities differ from those of the university system, this infographic will be of interest to you.

### Further Learning: Intellectual Property at Fanshawe

If you would like to do a deeper dive into this topic, there is a module called Intellectual Property at Fanshawe, available in Fanshawelearns.

This and other resources can be accessed from the CRI Research Playlist.

## Data Sharing Agreements

In the early stages of project development, consideration should also be given to how the research data will be shared at the end of the project. For instance, if you are planning to conduct research with human participants, it is important to obtain permission to share project outcomes and, potentially, the data itself if appropriate.

Please review the Research Data Management section of this toolkit for more information on this topic.

This Framework for a Data Sharing Agreement illustrates the many aspects of decision-making regarding data governance and sharing permissions.

CRI personnel can also provide support in this area.

# MODULE 3: PREPARING A FUNDING SUBMISSION

## Module Overview

- Developing Your Research Framework
- Elements of a Grant Application
- Sponsor Review Criteria
- How to Write an Abstract
- How to Write a Researcher Profile
- Creating the Project Budget
- Additional Application Criteria
- Increase your Chances of Success

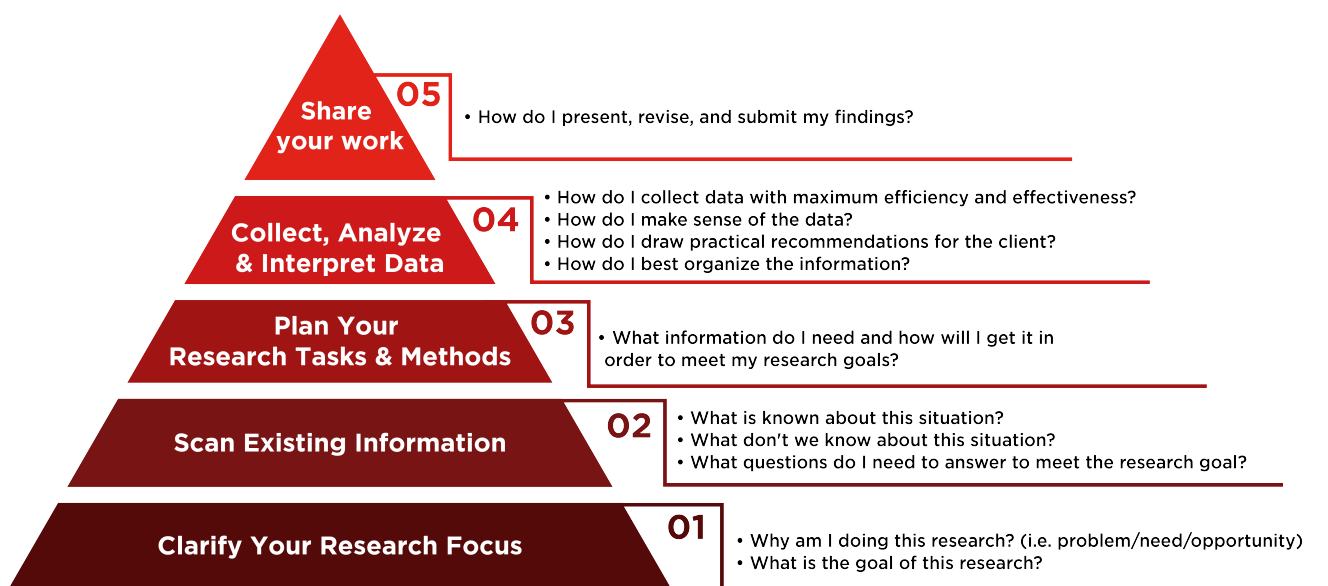


# Developing Your Research Framework

If you intend to submit an application for funding, you can expect to be assessed on all aspects of your Research Design. This is the framework of research methods and techniques chosen by a researcher to ensure successful completion of the project. Clear articulation and justification of those selected methods could persuade a potential sponsor to fund your project.

While not all projects follow a perfect linear sequence, these are key project activities:

1. Clarify your Research Focus and determine the goal of your research
2. Scan Existing Information to identify previous research and/or gaps in the field
3. Plan your Research Methods
4. Collect, Analyze & Interpret Data
5. Share your Findings



*Developing your Research Framework by Sanaz Habibi CC BY-NC-SA 4.0*

This dropdown contains the text of the above image

## 01. Clarify Your Research Focus

- Why am I doing this research? (i.e problem/need/opportunity)
- What is the goal of this research?

## 02. Scan Existing Information

- What is known about this situation?
- What don't we know about this situation?

- What questions do I need to answer to meet the research goal?

### 03. Plan Your Research Tasks and Methods

- What information do I need and how will I get it in order to meet my research goals?

### 04. Collect, Analyze & Interpret Data

- How do I collect data with maximum efficiency and effectiveness?
- How do I make sense of the data?
- How do I draw practical recommendations for the client?
- How do I best organize the information?

### 05. Share Your Work

- How do I present, revise, and submit my findings?

#### Further Learning: Research Project Planning at Fanshawe

If you would like to do a deeper dive into this topic, there is a module called Research Project Planning for Beginners in Fanshawelearns.

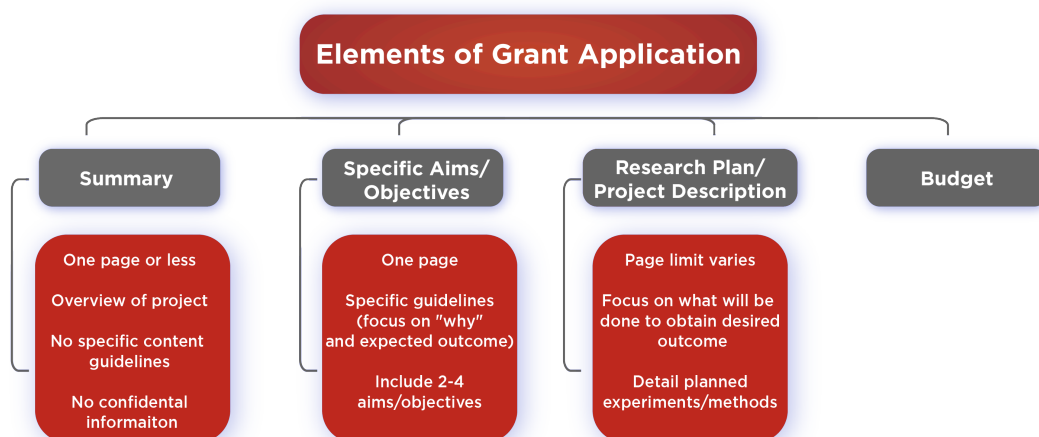
This and other resources can be found in the CRI Research Playlist.

# Elements of a Grant Application

Elements of a grant application include:

- **Summary** – Includes a brief (one-page or less) overview of the project. There are no specific content guidelines and confidential information should not be included.
- **Specific Aims/ Objectives** – Includes a page of specific guidelines focusing on project goal and expected outcomes. It should include 2-4 aims or objectives.
- **Research Plan/Project Description** – The page limit varies, but this section should focus on what will be done to obtain the desired project outcome, as well as a description of the experiments or methods to achieve the outcome.
- **Budget** – The details of what goes into a budget will be discussed in-depth in the chapter Creating the Project Budget.

While a sponsor may provide applicants with a specific template to use, applications generally follow this structure:



*"Elements of a Grant Application" by Sanaz Habibi, CC BY-NC-SA 4.0*

# Sponsor Review Criteria

The funding agency will identify their mission, priorities, and the problems they wish to address with funding, and specific application requirements. In general, however, reviewers will review your application in order to seek answers to the following questions:

- Why is this project significant enough that it should be funded? Why does the research matter?
- What is new about the research objective? Is it filling any gaps? What will be its impact?
- What is the approach the researchers will take to answer the research question?
- Who are the key personnel and do they have the subject matter and/or technical expertise and experience to pull off the project?
- What is the research environment? Will protocols be in place to ensure the safety, privacy, and/or mentorship of project members and participants?
- Does the project fit the budget?
- How will the project work be evaluated by the researchers? How will success be measured?
- How will the researchers share their findings?

## Resource: Grant Review Rubric

This example of a simple Grant Proposal Scoring Rubric demonstrates common sponsor expectations and essential application criteria. Additionally, you may wish to view this NSERC rubric which includes very detailed, program-specific criteria and a score breakdown.

This dropdown contains a plaintext version of the sample rubric linked above.

Criterion	4: Exemplary	3: Adequate	1: Needs Improvement	0: Insufficient Evidence	Comments Notes
<b>Innovation</b>	Project represents the implementation of a new insight or idea, with potential benefits of change made clear.	Project represents local implementation of emerging innovation or trend, with potential benefits specified.	Project represents practice(s) commonplace within field, or an adoption of a change with well-established benefits.	No innovation described or specific potential improvement defined.	
<b>Justification</b>	Strong rationale and significance of proposed work. Addresses specific need(s) common among peer institutions.	Rationale or significance of project trends toward the too-specific or too-general, but overall argument holds.	Weak presentation of institutional or community need, or tenuous argument for grant's ability to address need.	Unconvincing or no evidence of need presented, or grant proposal does not address stated need.	
<b>Relationship to Organizational Strategic Vision and/or Community's Goals</b>	Project outcomes or activities align with both organizational vision and goals of greater community.	Project elements align with goals of either the organization or its greater community, but not both.	Project tangentially but not directly related to organizational strategic vision or community goals.	No explicit relationship between project and the agenda of its organization or community.	
<b>Feasibility</b>	Personnel, project activities timeline, and budget expenditures congruent with project description and outcomes.	Deficiencies or over-estimations exist in personnel, timeline, or budget within tolerable range, outcomes appear achievable despite gaps or leaps.	Project's assembled personnel, timeline, or budget expose weakness in plan design. Outcomes unlikely to be achieved in project's current form.	Insufficient information about personnel, project activities timeline, or budget expenditures to gauge feasibility.	

# How to Write an Abstract

An Abstract should focus on the overall design and purpose of the project. As Abstracts are often posted publicly post-award, they should not include confidential information.

A Technical Abstract may contain complicated and field-specific terminology when written for a panel of research experts. A Lay Abstract should use simple terminology, keeping in mind that the audience may not have the same technical background.

Key Elements	Common Mistakes	Tools and Tricks
<ul style="list-style-type: none"><li>• What, why, and how?</li><li>• Needs, goals, aims, and outcomes</li><li>• No preliminary data</li></ul>	<ul style="list-style-type: none"><li>• Inconsistency</li><li>• Going over space limitations</li><li>• Interdependency</li></ul>	<ul style="list-style-type: none"><li>• Create an outline</li><li>• Create a logical flow</li><li>• Have the abstract reviewed by someone who has not read the full proposal</li><li>• Have the abstract reviewed by an expert and a non-expert from the field</li><li>• Edit with the Audience in mind</li></ul>

# How to Write a Researcher Profile

Some grants, particularly those for larger sums of money, may also require Researcher Profiles of the senior/key personnel and other significant contributors of the grant application.

A Researcher Profile may also be called a Biographical Sketch (or “Bio Sketch”). Reviewers utilize the bio sketch to ensure that individuals are equipped with the skills, knowledge, and resources necessary to carry out the proposed research.

Key Elements	Common Mistakes	Tools and Tricks
<ul style="list-style-type: none"><li>• Education</li><li>• Employment and positions</li><li>• Professional experience and extracurricular activities</li><li>• Publications and contributions to the field</li><li>• History of previous research funding</li></ul>	<ul style="list-style-type: none"><li>• Not following formatting instructions</li><li>• Not following content instructions</li><li>• Inclusion of inaccurate information</li></ul>	<ul style="list-style-type: none"><li>• Follow the template and instructions carefully</li><li>• Review each bio sketch</li><li>• Request the investigator's CV to find any missing information</li><li>• Select publications and products that are most relevant</li><li>• Make sure personal statements define the investigator's role and experience</li><li>• Use online tools such as SciENcv to maintain and format bio sketches</li></ul>

If you would like more guidance on this topic, you may wish to review NSERC Research Contributions guidelines.

# Creating the Project Budget

Each sponsor will outline what expenses are eligible/ineligible and what cash and/or in-kind contributions may be required. The Project Budget is typically drafted by the Principal Investigator in coordination with CRI, to ensure accuracy.

While the preparation of a rough budget should be one of the earliest activities (part of Project Scoping), the Budget which is submitted to a potential funder should strive for as much accuracy as possible.

A key part of the application is also the Budget Justification. In 1-3 pages, you will explain how you arrived at your numbers and why these amounts are necessary for successful project completion. Aim for fiscal prudence if possible and definitely do not go over budget.

If you wish to build your understanding of the principles that govern the post-award administration process, review the Tri-Agency Guide on Financial Administration.

## Budget Considerations

Key Elements	Common Mistakes	Tools and Tricks
<ul style="list-style-type: none"><li>• Personnel</li><li>• Travel</li><li>• Equipment</li><li>• Subcontractors and/or consultants</li><li>• Materials, supplies, and other costs</li><li>• Indirect costs</li></ul>	<ul style="list-style-type: none"><li>• Inconsistencies</li><li>• Under/over-estimating time commitments and costs</li><li>• Lack of detail</li><li>• Exceeding budget caps</li><li>• Inaccurate project period length</li><li>• Including unnecessary personnel</li></ul>	<ul style="list-style-type: none"><li>• Justification should follow the budget</li><li>• Carefully read and follow all instructions on allowable or unallowable costs</li><li>• Create Templates</li><li>• Provide a budget template to any subcontractor</li><li>• Relate the costs to the aims and approach of the study</li><li>• Double check that all budget expenditures are compliant</li></ul>

Keep in mind that eligibility criteria for expenses differ from funder to funder or for specific grants. For instance, one funder may allow a researcher to budget for course release while another funder provides financial compensation instead. Budget caps on specific categories differ as well.



## Resource: Sample Budget Template

This is the Budget Template utilized for the Research & Innovation Fund (RIF).

This version contains sample data to demonstrate its use.

This dropdown contains a plaintext version of the above template

Project Name:	
Project Start Date:	
Project End Date:	

Salaries	Hours/wk	Rate	Weeks	Total
PI (name, role, school)		*		\$ -
PI (name, role, school)		*		\$ -
Student 1		**		\$ -
Student 2		**		\$ -
Student 3		**		\$ -
Student 4		**		\$ -

Total Salaries	\$ -
----------------	------

Equipment & Materials		Unit Cost	Units	Total
item		\$ -		\$ -
item		\$ -		\$ -
item		\$ -		\$ -
item		\$ -		\$ -
item		\$ -		\$ -

Total Equipment & Materials	\$ -
-----------------------------	------

Travel		Rate	Units	Total
mileage				\$ -
hotel				\$ -
meals				\$ -

Total Travel	\$ -
--------------	------

Networking/Knowledge Dissemination			Total
item			\$ -
item			\$ -
item			\$ -
Total Networking/KD		\$ -	
Subtotal		\$ -	
HST (If applicable)		\$ -	
Total		\$ -	

# Additional Application Criteria

## Equity Diversity & Inclusion (EDI)

Many Canadian funding agencies have committed to achieving a more equitable, diverse, and inclusive research ecosystem.

An applicant may be prompted to describe EDI considerations in relation to the **research design, team composition, recruitment practices** that will be employed, **training** that will be provided, and efforts that will be employed to create an inclusive **research environment**.

You may wish to read NSERC's Guidelines on the Assessment of Contributions to Research, Training, and Mentoring.

### Resource: EDI Handbook

The Centre for Research & Innovation has created an EDI Handbook for Researchers. This resource includes specific strategies researchers can use when drafting a grant application and includes numerous links to resources for further learning on the topic of EDI.

This handbook and other materials can be accessed from the CRI Research Playlist.

## Resource Data Management (RDM)

Increasingly, funding agencies and journals are requiring applicants to submit **Data Management Plans (DMPs)** as a condition of funding or publication. RDM refers to the processes applied through the lifecycle of a research project to guide the **collection, documentation, storage, sharing** and **preservation** of research data.

### Further Learning: Research Data Management in the College and Small Institution Context

This OER on Research Data Management will provide more thorough coverage of the topic.

This resource will teach you about:

- Data Curation
- Data Sharing and Data Governance
- Data Deposits and Repositories

- Industry Data and Research Partnerships

### **Resource: Data Management Assistant**

If the funder requires a Data Management Plan, you can use a free online tool called the Data Management Assistant.

# Increase your Chances of Success

## Tips to Increase Your Chances of Success

- ☐ Begin early, especially for complex proposals and large grants.
- ☐ Follow the application guidelines exactly.
- ☐ Meet all deadlines. There may be an internal deadline before submission to an external funder to allow time for review and signatures.
- ☐ Answer all questions clearly and concisely. Do not exceed word limitations.
- ☐ Be explicit and specific as to how your project matches sponsor mission and funding priorities.
- ☐ Be realistic in designing the project. You can expect research methods, timelines, and budget to be scrutinized.
- ☐ Make explicit the connections between your research questions and objectives, your objectives and methods, and your methods and results.
- ☐ If rejected, consider revising your proposal and applying again if there is another call.

# MODULE 4: CONDUCTING THE RESEARCH

## Module Overview

- Standards of Conduct and Operational Considerations
- Research Integrity
- Scholarly Exchange
- Research Safeguards
- Training and Mentorship

# Standards of Conduct and Operational Considerations

*“In order to maximize the quality and benefits of research, a positive research environment is required. For researchers, this implies duties of honest and thoughtful inquiry, rigorous analysis, commitment to the dissemination of research results, and adherence to the use of professional standards.”*

– Tri-Agency Framework: Responsible Conduct of Research

As the project lead, a Principal Investigator is expected to adhere to professional, ethical, and legal standards of conduct.

This section provides an overview of key standards of conduct in research. You may need to engage in additional learning on these topics and, in turn, ensure that team members (including students) and research participants are also apprised of their rights and responsibilities.

- Research Integrity
- Scholarly Exchange
- Research Safeguards
- Protection of Research Participants
- Training and Mentorship

## Further Reading: Fanshawe Policy on Scholarship Research & Creative Activity

Fanshawe College Policy A201 provides useful guidance in navigating standards of conduct.

# Research Integrity

## Honesty

- Use funds only in the manner stipulated by the research contract.
- Accurately report data, results, methods, and procedures.
- Strive to avoid or minimize bias or self-deception.

## Transparency

- Disclose the methods, materials, assumptions, analyses, and other information utilized to achieve research objectives.
- The use of Generative AI falls within this category.

### Review: AI Guidelines in Research

Fanshawe College's AI Framework includes content related to the use of AI in funded research. These AI in Research Guidelines are based on current government guidance and may be subject to change. Researchers are encouraged to connect with CRI for assistance.

## Conflicts of Interest

- Avoid situations whereby you or project participants may have a personal advantage or interest in the research outcome.
- This may compromise results and/or create the perception of compromised results.
- Personal, interpersonal, or financial relationships may create conflicts of interest.
- Economic and/or academic interest (e.g. an individual holds dual roles at an institution) may also compromise the integrity of the research.



# Scholarly Exchange

## Openness in Research

- Aim to facilitate access to interested persons to the underlying data, processes, and research findings.
- Balance this with the need for safeguarding of data that should not be shared (e.g. confidential info, proprietary content, etc.)

# Research Safegaurds

## Data Management

- Keep good records of research activities, such as data collection, research design, and communication between project participants.
- Optimize the potential for data sharing by utilizing strong metadata and persistent identifiers.

### Further Learning: Data Management Planning in the College Context

If you would like to do a deeper dive into this topic, there is a module called Data Management Planning in the College Context in Fanshawelearns.

This and other resources can be found in the CRI Research Playlist.

## Protection of Project Participants

- Treat all potential participants with respect from the time you request their possible participation (even if they decline to be involved) to the end of the project and beyond.
- Inform participants of the intended outcomes of the project, potential risks, and their ability to withdraw at any time.
- Seek permission to share research findings and deposit datasets which are anonymous and/or de-identified.
- Research Ethics Board (REB) approval may be a condition of funding.

### Resource: Informed Consent Guidelines

These guidelines are used by Fanshawe for the creation of Informed Consent Documents.

## Confidentiality

- Ensure that confidential and/or sensitive information is safeguarded.
- Put in place protection measures to ensure the privacy of research participants.
- Do not share any proprietary information that has the potential to be commercialized.
- It is common for partner-based research contracts to include **Non-Disclosure Agreements**

## Resource: Sample Non-Disclosure Agreement

This sample Non-Disclosure Agreement template demonstrates the permissions and waivers that are typical of an NDA.

## Further Learning: Tri-Council Course on Ethics

The Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans is a free online course which provides guidance that applies to all research involving human participants, including their data and/or biological materials. Completion of the TCPS 2 CORE may be a condition of funding. TCPS 2 CORE consists of nine modules and a knowledge consolidation exercise:

1. Module A1 – Introduction
2. Module A2 – Scope of TCPS 2
3. Module A3 – Risks and Benefits
4. Module A4 – Consent
5. Module A5 – Fairness and Equity
6. Module A6 – Privacy and Confidentiality
7. Module A7 – Conflicts of Interest
8. Module A8 – Research Ethics Board Review
9. Module A9 – Research Involving Indigenous Peoples
10. Knowledge Consolidation Exercise

# Training and Mentorship

## Health & Safety Training

- Take all precautions to ensure the health and safety of all project team members and participants.
- Apprise yourself of federal and college policies, including procedures related to laboratory safety and/or potentially hazardous biological materials, if applicable.
- Connect with Organization, Development & Learning for training options.
- CRI can provide direction on the Management of Change (MOC) procedures.

### Resource: Management of Change Form

This sample MOC form demonstrates some of the details a researcher may need to provide in a lab setting to ensure the safety of participants and adequate provision of materials.

## Mentorship

- Ensure that high-quality training is available to novice researchers and/or students.
- Consider EDI in all aspects of the research process.
- Aim to impart research and professional skills and knowledge.
- Provide appropriate supervision at all times, while also aiming to foster increasing independence.
- You may wish to read NERC'S Guidelines on the Assessment of Contributions to Research, Training, and Mentoring to get a sense of funder requirements.

### Resource: CRI Principle Investigator/Research Assistant Agreement

CRI encourages researchers to utilize this CRI Principal Investigator/Research Assistant Agreement template so that all project participants have a clear sense of roles and responsibilities.

# MODULE 5: SHARING YOUR FINDINGS

## Module Overview

- Closing the Project
- Data Deposit
- Facilitating Access to your Research

# Closing the Project

At project close, most funding entities require a researcher to identify one or more mechanisms for sharing their research findings.

## The Final Report

The Final Report is a common condition of funding. In the case of partner-based research, the “*Findings and Recommendations*” section is particularly important.

A Final Report typically includes:

- Summary with key points on what you did and what you found.
- An introduction explaining what this research does and why.
- Background providing relevant and necessary information (such as equipment used, methodology, etc.)
- Limitations of the study or challenges you may have experienced.
- Findings and Recommendations:
  - What should your partner do based on your findings?
  - Why is it important? Provide a rationale for your recommendations.
  - How might the recommendations be implemented?
- Appendices – such as references.

### Resource: CRI Final Report Template

This Final Report Template is utilized by CRI as a condition of funding. This can serve as an example for you. A funder may provide you with a different specific template to utilize.

# Data Deposit

## The Current Research Landscape

Increasingly, funding agencies and journals are requiring researchers to share the data that supports their findings. Depending on the context, a researcher may make available all digital **research data**, **metadata**, and **codebooks**.

This does NOT mean that ALL data should be shared openly.

“Grant recipients are not required to share their data. However, the agencies expect researchers to provide appropriate access to the data where ethical, cultural, legal, and commercial requirements allow...”

-Government of Canada. (2021). Tri-Agency Research Data Management Policy.

It is very important to identify when data can be shared appropriately and when it is essential to restrict access. There are many instances when you may determine that access to your data should be restricted.

- You may be in possession of sensitive data (e.g. it contains personal identifiers).
- There may be commercial constraints (e.g. it is proprietary data and/or you have signed an NDA).
- You did not receive consent from project participants to share the data.
- Your research is embargoed for a period of time.
- You and your partner did not set up a Data Sharing Agreement.

Share whenever possible. Restrict when necessary.

CRI staff can provide guidance in this area. We can assist with the **data curation** process, for instance.

## Repository Options

There are templates which enable you to use standardized metadata and provide rich descriptions of your datasets which will make it easier for other researchers to find your research online.

Fanshawe College has two institutional repository options available to you:

1. **FIRST** – This is used to showcase the academic output of employees and students. It is an open repository, meaning that anyone (including members of the public) can search FIRST and read journal pre-prints, employee dissertations, student capstone projects, and so on.
2. **BOREALIS** – This is intended to host datasets (research data, metadata, codebooks) specifically. This institutional data repository has additional benefits:
  - Researchers can set permission levels. For instance, you make certain data sets open but restrict access to specific files (e.g. sensitive data).
  - There are templates which enable you to create rich descriptions and use standard metadata standards to help others find your research online.
  - It is hosted on Canadian servers and is a stable and secure environment for long-term preservation.

## Resource Borealis Quick Guide

If you would like to learn more about how to deposit in Borealis, there is a Fanshawe Borealis Quick Guide that will assist you in use of the service.

## Further Learning: Data Deposit from a College Perspective

If you would like to do a deeper dive into this topic, there is a module called Data Deposit from a College Perspective in Fanshawelearns.

This and other modules can be accessed from the CRI Research Playlist in Fanshawelearns.



# Facilitating Access to your Research

## Persistent Identifiers

You have put in a lot of time and effort into your research project. You want to make sure that other people can find your research.

Persistent Identifiers are an integral component of this process.

## What is a PID?

It is made up of an **ID**entifier, a string of unique characters that identify an object.

This identifier is **P**ersistent – It will never be assigned to anything/anyone else and will exist as long as the organization or agency which records the PID remains.

There are different types of Persistent Identifiers. Some examples include:

- Digital Object Identifiers (DOIs) – A repository like Borealis will automatically assign your publication a DOI when you deposit. This is a way to ensure that researchers can find your research using search engines or repository registries like re3org.com.
- ORCID IDs – You can sign up for a free researcher identifier. When people click on your ORCID ID, they will instantly see your academic profile and published research. Visit ORCID to learn more.
- RORs – Post-secondary institutions like Fanshawe College may also obtain a PID from a Research Organization Registry and use this to better track and showcase the research of its community.

## Other Dissemination Options

There are many other ways to make your research known. There are both traditional and non-traditional methods worth exploring.

- A journal related to your discipline may be interested in publishing your findings.
- If copyright allows, add your work to the institution's open repository, FIRST.
- Submit a proposal to speak at a conference and/or do a poster presentation.
- Look for opportunities to be involved in research events at your institution.
- Offer to present your findings to your colleagues at a departmental meeting.
- Utilize social media channels such as LinkedIn.
- Include your ORCID ID in your email signatures and social media profiles so people can quickly access your researcher bio.

Feel free to ask CRI staff for more ideas. We are always happy to showcase the work of our researchers on our internal and external websites.

# Appendix 1: AI in Research Guidelines

## AI in Research Guidelines

### Accountability and Responsibility

- Accountability rests with the researcher/author/grant applicant and/or research administrator.
- Be aware of and adhere to any applicable policies and guidelines of the funding body and/or institution.
- Obtain necessary permissions if required.
- Human oversight is mandatory, including ensuring the accuracy and appropriateness of AI-generated results to the best of one's ability.

### Research Design and Implementation

- Clearly document AI methodologies, datasets, and algorithms used.
- Implement strategies to identify and mitigate biases in AI systems.

### Informed Consent

- Obtain informed consent from participants before collecting or analyzing their data with the assistance of AI tools. Special consideration should be given to security issues relating to data analysis by AI tools.
- Safeguard personal data and ensure compliance with relevant privacy regulations.

### Peer Review

- For Fanshawe employees performing peer review as part of their duties to protect the privacy and potential intellectual property of applicants, AI tools may not be used in the review process (e.g. Research & Innovation Fund (RIF), Research Ethics Board (REB), etc.)

### Transparency

- If required, disclose the use of AI tools in the application and/or research process.
- This may be a conversation with a manager, project collaborators (co-investigators, industry partners, classmates, etc.)
- This may be formal disclosure (to the funding body, industry partner, publisher, instructor, etc.) in the form of a citation or acknowledgement.
- Disclosure may include citation/reference/footnotes/acknowledgement or inclusion of prompts used.

### Data Privacy and Security:

- It is the responsibility of the researcher to ensure compliance with relevant privacy regulations (e.g. institutional, federal, funder).
- To the best of your ability and abiding by current protocols, safeguard the personal data of project participants and industry partners.
- Do not enter confidential, personal, or proprietary data.

# Acknowledgements

This guide was created by the Centre for Research & Innovation (CRI) in partnership with the OER Design Studio and the Library Learning Commons at Fanshawe College in London, Ontario. This work is part of the FanshaweOpen learning initiative and is made available through a Creative Commons Attribution-NonCommercial-ShareAlike 4.0 International License unless otherwise noted.



The content in this toolkit was drafted by Donna Sevenpifer, faculty at the Centre for Research & Innovation (CRI) at Fanshawe College.

This resource was guided by policies and recommendations of the Canada Research Coordinating Committee (CRCC) and the Tri-Agency Council (CIHR, NSERC, and SSHRC).

There has been excellent work in support of college research in recent years. A notable resource is the Intro to Applied Research online workshop created by Mohawk College, which inspired the creation of this toolkit.

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## Collaborators

- Rosalyn Bourne, *Instructional Design*
- Catherine Steeves, *Quality Assurance*
- Andrew Stracuzzi, *Quality Assurance & Accessibility*
- Freddy Vale, *Graphic Design Student*
- Sanaz Habibi, *Graphic Design Student*
- Shauna Roch, *Project Lead*
- Wilson Poulter, *Copyright Officer*

# Version History

This page records changes made to the open textbook since its initial publication. If the change is minor, the version number increases by 0.1. If the change involves substantial updates, the version number increases to the next full number.

Version	Date	Change	Affected Web Page
1.0	July 12, 2024	Publication	N/A