

Research Guide

2024

(Updated April 2024)

CONTENTS

UNBC RESEARCH GUIDE	5
ORGANIZATIONAL STRUCTURE	5
Office of the Vice-President, Research and Innovation	5
Office of Research and Innovation	6
Mission and Vision Statements	6
Summary of Research Resources and Support Services	6
Office of Research and Innovation Organizational Chart	7
6 Steps to Research Administration	8
CONTACTS	17
Pre-Award Administration Contacts	17
Post-Award Administration Contacts	17
RESEARCH FACILITATION NETWORK	18
Research Institutes and Facilities	18
Research Chairs	20
FINDING FUNDING	20
Funding Opportunities Directory	20
Internal Funding Opportunities at UNBC	20
BC Real Estate Foundation Partnering Fund	20
RDC Research award	20
Research Grant in Lieu of Salary	21
Research Strategic Initiatives Grant (RSIG)	21
University excellence in research award	21
External Funding Opportunities	21
Tri-Agency Grants	21
PREPARING YOUR GRANT APPLICATION	22
Grant Applications: Before you Begin	22
Eligibility Requirements	22
Proposal Development	23
Equity, Diversity and Inclusion	23
EQUITY, DIVERSITY AND INCLUSION	23
UNCONSCIOUS BIAS	23
INDIGENOUS RESEARCH	24

SEX AND GENDER BASED ANALYSIS (SGBA+)	24
Research Security	24
Research Data Management	24
Budget Development	24
Direct Costs	25
Eligible Use of Funds	25
Personnel	25
Salaries and Benefits	25
Travel and Accommodation	25
Space	26
Taxes	26
Indirect Costs	26
Follow Application Guidelines Exactly	27
CONTRACTS	27
Procedures for Contract Negotiation	27
SUBMITTING YOUR GRANT APPLICATION	28
External Grant Application Submission Process	28
Internal Grant Application Submission Process	30
Internal Funding Opportunities	30
Special Requirements & Ethics Review of Application	30
BC Biobank Registration	30
Meaning of Signatures	31
POST-AWARD ADMINISTRATION	32
General	32
Release of Funds Procedure: Projects Involving Animals, Biohazards, or Human Participants	32
Financial Management	33
Financial Planning	33
Financial Transactions	33
Financial Monitoring	33
Financial Reporting	33
Over-Expenditures	33
Policies and Procedures	34
Responsible Conduct of Research	34
Matters with Sponsors	34

Research Personnel	34
Budgeting for Salary and Benefits	35
INTELLECTUAL PROPERTY	
Commercialization of Intellectual Property	35
APPENDICES	
Appendix A: Policies and Procedures	37
Appendix B: Research Requiring Certification	38
Research Ethics Board	38
Research Involving Animals	39
Research Involving Biohazardous Materials	40
Research Involving Controlled Goods	41
Research Involving Controlled Substances	41
Research Involving New Substances	41
Research Involving Transportation of Dangerous Goods	42
Research Requiring Environmental Assessments	42
Appendix C: Frequently Used Acronyms	43

UNBC RESEARCH GUIDE

Knowledge creation and dissemination are important mandates of UNBC. Our faculty, staff and students make highly valuable research contributions to these mandates. The Office of Research and Innovation continues to foster this research ethos. The purpose of this guide is to ensure our researchers and research partners have access to key information that enables them to meet their research goals. It is a living document, and we, thus, appreciate your constructive feedback.

ORGANIZATIONAL STRUCTURE

Office of the Vice-President, Research and Innovation

The Vice-President, Research and Innovation (VPRI) is an advocate and facilitator of UNBC research locally, nationally, and internationally. A key role of the VPRI is to ensure that multidisciplinary research groups are continuously sought and developed while keeping the UNBC research community abreast of new developments and opportunities. The VPRI ensures that UNBC continues to develop research partnerships with private and public sectors and identifies discoveries and new knowledge that can be transferred to appropriate receptors resulting in societal benefits. University Research is complex and multifaceted. The VPRI ensures that all research is conducted with strict adherence to the highest ethical standards while meeting all legal requirements. Paula welcomes the opportunity to meet with researchers and work with them to ensure that their research goals and aspirations are supported and advanced. Please visit our website https://www2.unbc.ca/research for additional information.

Primary Contact: Dr. Paula Wood-Adams



Vice-President, Research and Innovation Email: paula.wood-adams@unbc.ca Phone: 250-960-6110 / Fax: 250-960-5156

Executive Assistant to the Vice-President, Research and Innovation

Email: nicole.legault@unbc.ca ext. 6687

Office of Research and Innovation

The Office of Research and Innovation (ORI) supports UNBC researchers during the preparation, submission, and execution of research proposals (pre- and post-award). The ORI identifies and communicates relevant research opportunities and provides additional grant writing supports to researchers to ensure top-quality applications are submitted to funding agencies. The ORI maintains relationships with funders and keeps up to date with ever-changing provincial and federal innovation and prosperity initiatives. The ORI team also stays abreast of ever-evolving research policies, procedures, and requirements that impact how research is conducted. Building strong relationships with community, provincial, and national partners underscores our commitment to enhancing the success of UNBC research. We encourage you to visit our office, located on the first floor of Charles J. McCaffray Hall in room 1065 (CMH-1065).

MISSION AND VISION STATEMENTS

MISSION STATEMENT

To grow capacity and opportunities for research and creative activities at UNBC by engaging our people and partners, leading to the discovery of new knowledge that has transformative academic, economic, or social benefit for the region, province, nation, and beyond.

VISION STATEMENT

To build a flourishing research culture facilitated by state-of-the-art infrastructure and efficient support services, enabling UNBC scholars to undertake leading-edge local, national, and international research with respect for humanity and nature.

SUMMARY OF RESEARCH RESOURCES AND SUPPORT SERVICES

The ORI is the primary contact for the federal granting agencies (CIHR, NSERC, and SSHRC), government ministries, industry, associations, and foundations that typically provide financial support for scholarships, research, and creative activities. The ORI exists to promote and enhance research success of faculty, students, and partners of UNBC. We do this by:

- providing faculty members with support services to develop outstanding research programs in all disciplines, including offering advice on sources of funding, helping develop proposals, providing institutional letters of support, and negotiating funding agreements;
- ensuring that we meet or exceed all relevant regulatory standards for research, maintaining our eligibility for funding from the agencies with the most stringent standards;
- assisting with maintaining and growing our research infrastructure;
- assisting with the development of research partnerships with local, provincial, national, and international agencies and industry collaborators;

- supporting technology transfer and commercialization of research discoveries;
- managing and maintaining relationships with major research funding agencies, so that the local research community has access to the best advice on successful research funding strategies, and acting as the primary institutional contact for these agencies;
- engaging in high-level advocacy with all levels of government to promote an environment in which world-class research may flourish at UNBC.

For more information, visit: https://www2.unbc.ca/research.

Office of Research and Innovation Organizational Chart

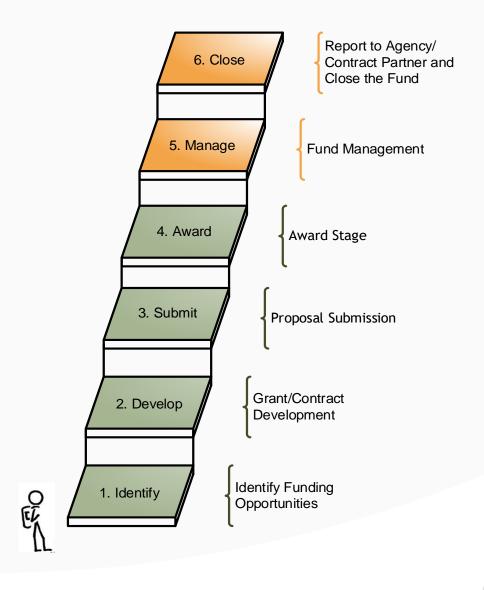
An updated org chart will be added soon.

6 Steps to Research Administration

Below is a visual road map to the steps required to access research funding.

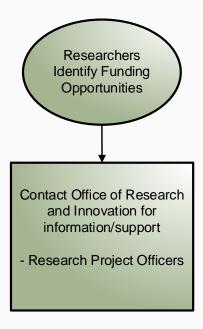
6 Steps to Research Administration

The Office of Research and Innovation provides support to researchers in all aspects of pre- (first four steps in green) and post-award (last two steps in orange) of the research administration process.



Step 1: Identify

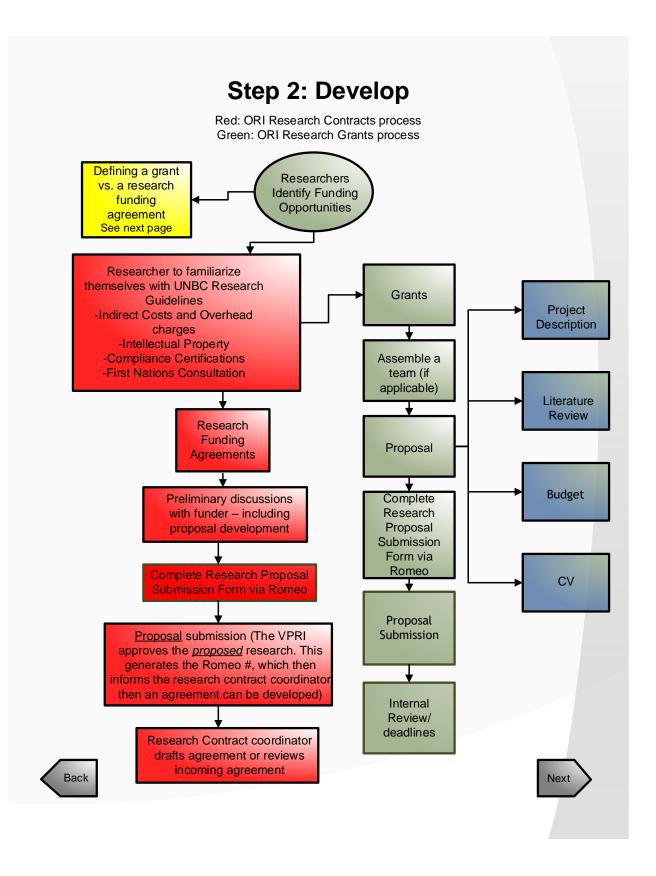
Where to find funding information:
-Research Project Officers
-Websites (e.g. Community of Science, Tri-council, catalogue of provincial / national funding)
-UNBC Institutes such as NRESI, CDI, HRI, ISR





Office of Research and Innovation Contacts: https://www2.unbc.ca/office-research-and-innovation/contact





Step 2: Develop cont'd

Defining a grant vs. a contract

What is the difference between a contract and a grant?

The determination of whether a funding agreement is a grant or a contract is not always clear. One way to differentiate them relates to the expectation of set deliverables. While both grants and contracts are legally binding agreements, funds are *granted* to a researcher with an expectation - but not the requirement – that the task can be accomplished. A funding agreement with a defined scope of work, obligations and responsibilities can include ramifications to the researcher or institution if the task is not accomplished.

Grant	Contract
Likely no confidentiality restrictions	Could require signing a confidentiality agreement
Ownership of any intellectual property resides with the institution	Includes intellectual property options and licensing arrangements
Unrestricted rights to publish research results without pre-review or time delay involving the sponsor	Includes intellectual property options and licensing arrangements
Annual renewal - no termination provisions	Termination provisions
Flexible time frame; no detailed schedule of work. Research proposal and direction of research lies with the researcher	Detailed work schedule, including milestones and date for final deliverables. Restrictions on scope of research
Few deliverables - could be progress or final report	Specific deliverables, report requirements and timelines defined
Funds are paid in advance or in installments to the University	Payments are based on actual expenditures, some portion of the payment may be withheld (holdbacks) until the final report is submitted and accepted
The project/budget can be changed by the principal researcher without notice	Changes to scope of work-budget could require consent of sponsor
There is no honorarium or other payment to the principal researcher and co-investigators	Can include honorarium to the principal researcher and co- investigators
Ownership of equipment purchased for project vests with University	Equipment purchased for project may revert back to sponsor at conclusion of project

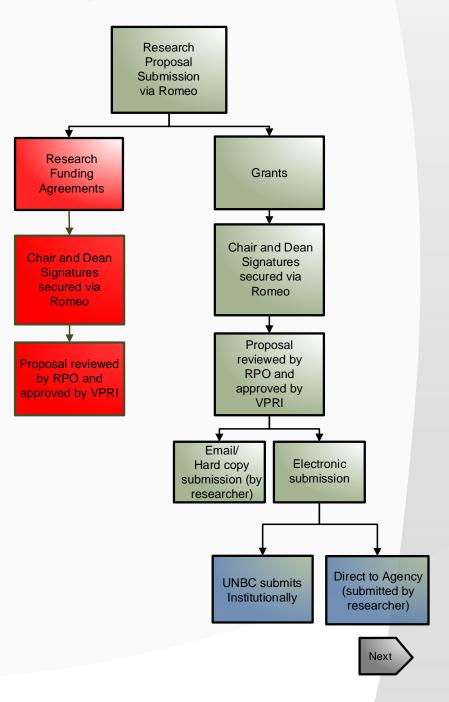
Negotiation and Administration of Research Agreements

Only the University has the authority to enter into research agreements that are binding on the University. This includes funding agreements, transfer agreements, contribution agreements, service agreements and the like. Thus, agreements concerning research undertaken at the University must be between the Governing Board of the University of Northern British Columbia and the sponsoring agency, and cannot be written in the name of an individual, Department, Institute, Centre, School, or Faculty. All agreements and proposals concerning research must first be reviewed by the Office of Research and Innovation and signed by the Vice President Research and Innovation to be legally binding.

Types of Agreements

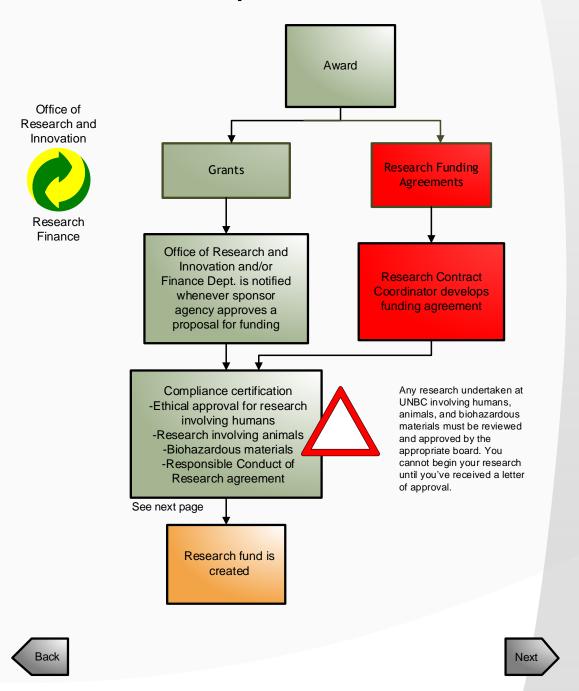
Incoming \$	Outgoing \$	Other
Grants	Funding transfers (sub-awards)	Non-disclosure
Contribution agreements	Research services contracts	Material transfer
Service (consulting) agreements		Data use
		Research collaborations
		Community research agreements
		Intellectual property
		MOUs
		Waivers



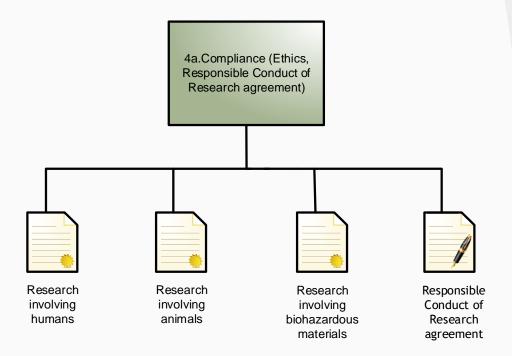


Back

Step 4: Award



Step 4: Award cont'd

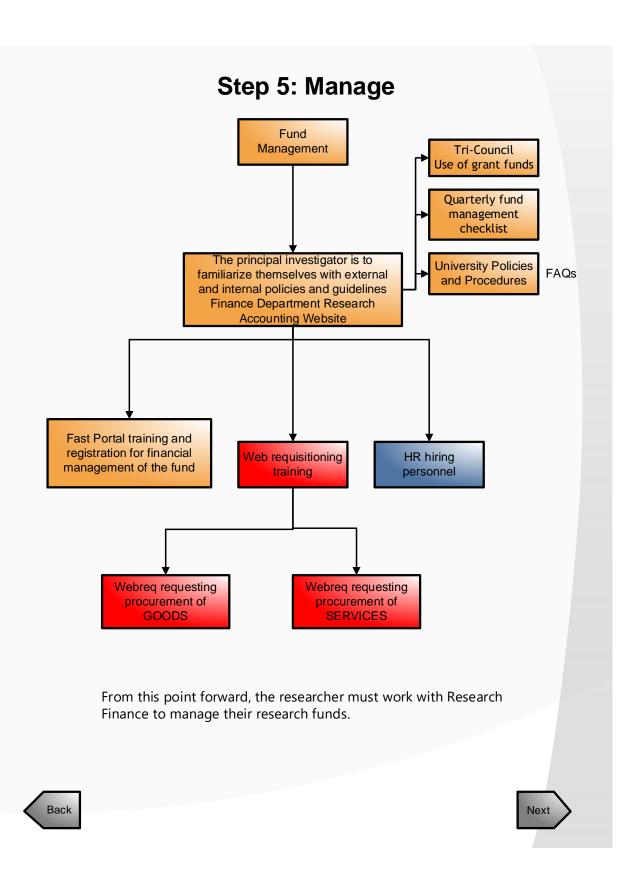


^{*}Ethical certification is only valid for 12 months and must be renewed after expiry if research is ongoing.

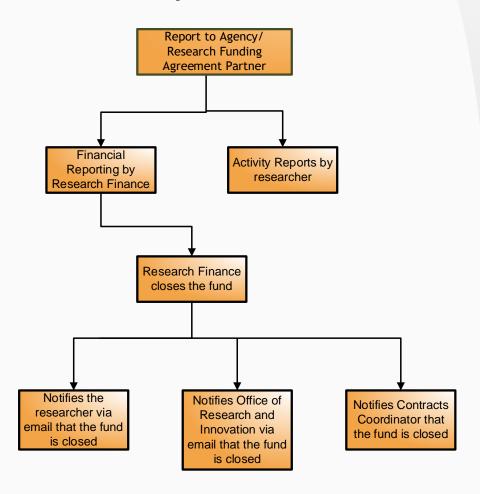
The researcher must apply for certification which states the study complies with regulations. This detailed process typically involves review by a committee and can require changes to the proposal.

*Compliance requirements are identified in the Grant and Contract form. This information is entered into Romeo, and funding is only released once the certificates are issued. Funds will be frozen if renewal is not obtained after 12 months.

^{*}In principle approvals are available for limited release of funds.



Step 6: Close





CONTACTS

The ORI oversees all matters pertaining to pre- and post-award research at UNBC. Any questions, concerns, or queries should be directed to a member of the ORI. Current contact information can be found on the ORI website: https://www2.unbc.ca/research/contact.

The ORI ensures that pre- and post-award documentation is completed according to the policies and procedures of UNBC, granting agencies, foundations, and other entities. The <u>Research Support</u> section of our website provides information about Romeo (our internal grant management system), Research Guides, and Forms.

PRE-AWARD ADMINISTRATION CONTACTS

All research grant applications and contracts must meet university requirements as set out by the ORI. This includes the proper and timely completion of forms, proposals, and any other required documentation.

Finding suitable sources of funding is a continuous process. It is important to keep up to date with opportunities for funding through the emails provided by the ORI and information provided on the website: https://www2.unbc.ca/research/funding-opportunities.

POST-AWARD ADMINISTRATION CONTACTS

Research Finance is committed to providing fiscal accountability for faculty-held research funds from public and private sectors by maintaining, monitoring and disseminating data between the sponsor, faculty and administration. Our staff will help disburse your funds and track your spending.

Website: https://www2.unbc.ca/finance/research-accounting

General email: researchaccounting@unbc.ca

Research Contracts, in collaboration with Contracts and Supply Chain Management, procures materials, supplies, equipment and services required by UNBC faculty, staff and researchers.

Website: https://www2.unbc.ca/contracts-supply-chain-management

General email: researchcontracts@unbc.ca

SAFETY AND RISK MANAGEMENT

The Risk and Safety Office provides centralized health and safety services in support of the university's mandate.

Website: https://www2.unbc.ca/safety

OTHER CONTACTS

Group	Website
Animal Care and Use Committee (ACUC)	https://www2.unbc.ca/research/research-ethics-safety-animal-subjects
Human Resources	https://www2.unbc.ca/human-resources
Vice-Provost Indigenous Initiatives	https://www2.unbc.ca/indigenous-resource-dati/indigenous-initiatives
IT Services	https://support.unbc.ca/CherwellPortal/IT
Research Ethics Board	https://www2.unbc.ca/research/research-ethics-safety-human-participants

RESEARCH FACILITATION NETWORK

Research Institutes and Facilities

A wide variety of institutes and facilities exist to facilitate research at UNBC.

Institute or Facility	Website
Aleza Lake Research Forest (ALRF)	https://alrf.unbc.ca/
Community Development Institute (CDI)	https://www2.unbc.ca/community-development-institute
Centre for Technology Adoption for Aging in the North (CTAAN)	https://www.ctaan.ca/
Dr. Donald Rix Northern Health Sciences Centre	https://www2.unbc.ca/northern-medical-program/campuses
Dr. Max Blouw Quesnel River Research Centre (QRRC)	https://www2.unbc.ca/quesnel-river-research-centre
Genetics Lab	https://www2.unbc.ca/genetics
GIS & Remote Sensing Lab	https://gis.unbc.ca/
Health Research Institute (HRI)	https://www2.unbc.ca/health-research-institute

Herbarium	https://www2.unbc.ca/research/unbc-herbarium
High Performance Computing Lab (HPC)	https://web.unbc.ca/~hpcweb/
IK Barber Enhanced Forestry Lab (EFL)	https://www2.unbc.ca/enhanced-forestry-lab
Institute for Social Research (ISR)	https://www2.unbc.ca/institute-social-research
John Prince Research Forest (JPRF)	http://www.jprf.ca/home
National Collaborating Centre for Indigenous Health (NCCIH)	https://www.nccih.ca/en/
Natural Resources and Environmental Studies Institute (NRESI)	https://www2.unbc.ca/nres-institute
Northern Analytical Laboratory Services (NALS)	https://www2.unbc.ca/northern-analytical-lab-service
Northern BC Archives	https://libguides.unbc.ca/archives/home
Pacific Institute for Climate Solutions at UNBC (PICS)	https://www2.unbc.ca/pacific-institute-for-climate-solutions
Research Data Centre (RDC)	https://library.unbc.ca/collections/data-statistics/rdc
Tree Ring Lab	https://www2.unbc.ca/dendro-lab
Women North Network / Northern FIRE	https://www2.unbc.ca/northern-fire

Research Chairs

UNBC hosts a number of research chairs. The holders of these research chairs are leaders in their fields who contribute to UNBC's success as a research-intensive university; enhancing UNBC's ability to carry out locally inspired and internationally significant research in our strategic research areas. Websites: https://www2.unbc.ca/office-research-and-innovation/unbc-research-chairs

FINDING FUNDING

Funding Opportunities Directory

A list of prominent internal and external funding is available under the Funding Opportunities heading on the ORI website at https://www2.unbc.ca/research/funding-opportunities.

Internal Funding Opportunities at UNBC

UNBC researchers are eligible to apply for a variety of internal grants administered by the ORI. Please visit the Internal Funding Opportunities website for current opportunities, guidelines, and application processes.

Applications for the BC Real Estate Foundation Partnering Fund, RDC Research Award, and RSIG must be completed and submitted via Romeo (https://www2.unbc.ca/research/romeo).

Website: https://www2.unbc.ca/research/internal-funding-opportunities

BC REAL ESTATE FOUNDATION PARTNERING FUND

The goal of the BC Real Estate Foundation Partnering Fund is to support research and educational programs, following objectives specified in the competition application form. Initiatives should involve collaboration among university entities and public, non-profit and/or professional organizations. Funding is available to faculty and graduate students, the latter with the agreement of their supervisor.

Website: https://www2.unbc.ca/research/real-estate-foundation-bc-partnering-fund-projects

RDC RESEARCH AWARD

The Office of Research and Innovation and Research Data Centre (RDC) have developed the RDC Research Award to support the development and implementation of research projects conducted in the RDC.

Website: https://www2.unbc.ca/research/internal-funding-opportunities

RESEARCH GRANT IN LIEU OF SALARY

Under certain conditions, a faculty member, professional librarian, and academic administrator may be permitted to receive a research grant in lieu of salary, through a mechanism which includes peer review.

Please see the UNBC policy titled *Research Grant in Lieu of Salary* for more information at: https://www2.unbc.ca/policy.

Website: https://www2.unbc.ca/research/internal-funding-opportunities

RESEARCH STRATEGIC INITIATIVES GRANT (RSIG)

The Research Strategic Initiatives Grant (RSIG) welcomes requests from all UNBC faculty, research organizations, graduate and undergraduate student groups engaged in research. Funds are directed towards research activities for which other sources of funding are not available.

Website: https://www2.unbc.ca/research/internal-funding-opportunities

UNIVERSITY EXCELLENCE IN RESEARCH AWARD

The University Excellence in Research Award seeks to acknowledge Faculty Association Members who are deemed exceptional researchers and scholars.

Website: https://www2.unbc.ca/research/internal-funding-opportunities

External Funding Opportunities

Please visit the UNBC Office of Research and Innovation website (https://www2.unbc.ca/research/funding-opportunities) for a list of the most common sources of external funding for UNBC research.

TRI-AGENCY GRANTS

CANADIAN INSTITUTES OF HEALTH RESEARCH

The Canadian Institutes of Health Research (CIHR) provides funding opportunities for four themes of health research: Biomedical; Clinical; Health services; and Social, Cultural, Environmental and Population Health. This integrated approach brings together researchers, health professionals, and policymakers from voluntary health organizations, provincial government agencies, international research organizations and industry, and patient groups from

across the country. To receive up-to-date information, including deadlines, please visit the agency's website: https://cihr-irsc.gc.ca/e/193.html. The ORI will provide updated information in a timely manner as it is received by the agency.

NATURAL SCIENCES & ENGINEERING RESEARCH COUNCIL

The Natural Sciences & Engineering Research Council (NSERC) supports both basic university research through Discovery Grants and project research through partnerships among universities, governments, and the private sector, as well as the advanced training of highly qualified personnel. NSERC's role is to make investments in people, discovery, and innovation for the benefit of all Canadians. To learn the most up-to-date information, including deadlines, please visit the agency's website: https://www.nserc-crsng.gc.ca/index eng.asp.

SOCIAL SCIENCES AND HUMANITIES RESEARCH COUNCIL

The Social Sciences and Humanities Research Council (SSHRC) is the federal agency that promotes and supports university-based research and training in the humanities and social sciences. SSHRC programs also provide support for research training and communication activities. SSHRC administers the Canada Research Chairs Program (see External Funding Opportunities above) and the New Frontiers in Research Fund. SSHRC partners with a variety of government, business, and non-profit organizations to develop and fund strategic research programs. Please visit the agency's website to remain most current with the events sponsored by SSHRC, including deadlines: https://www.sshrc-crsh.gc.ca/home-accueil-eng.aspx.

PREPARING YOUR GRANT APPLICATION

It is up to the researcher to familiarize themselves with the research related policies and procedures that exist at UNBC. Please see attached <u>Appendix A</u>.

Grant Applications: Before you Begin

Find a funding source to meet your research goals and objectives. Contact the ORI for assistance. Before completing the application, be sure to have well thought-out objectives and a clear research plan.

The ORI hosts information sessions and workshops that will aid in crafting your grant proposal. Information on research events will be regularly updated on the ORI website and distributed by email. However, the best way to keep up to date is by staying in contact with the respective Research Project Officer.

Eligibility Requirements

Review the funding sponsor's eligibility criteria to ensure that you are eligible to apply for the grant.

Proposal Development

Contact your Program Chair, Dean, the VPRI, and/or a Research Project Officer in the ORI. You may be eligible for faculty-specific seed funding programs or other awards to support development of new proposals. For more information, see the Internal Funding Opportunities at UNBC listed in this guide or listed on the website: https://www2.unbc.ca/research/funding-opportunities

Equity, Diversity and Inclusion

The following resources are available to ensure that you are familiar with all aspects of EDI and your research proposal is well-aligned with the current guidelines.

EQUITY, DIVERSITY AND INCLUSION

UNBC has endorsed the Tri-Council <u>Dimensions: Equity, Diversity and Inclusion Canada Charter</u> and the <u>Universities Canada Inclusive Excellence Principles</u>. In support of an equitable, diverse and inclusive research and teaching environment, UNBC researchers must consider EDI principles when building their research teams and preparing their training plans. Researchers are advised to consider these principles well in advance of preparing a grant application and should be sure to keep up to date with requirements as they evolve.

- Equity, Diversity and Inclusion at UNBC: https://www2.unbc.ca/equity-diversity-inclusion
- Best practices in Equity, Diversity and Inclusion in Research is a resource developed by the
 Tri-Agencies for applicants to the New Frontiers in Research Fund competitions, however,
 applicants to any funding opportunity will find this to be a helpful resource:
 https://www.sshrc-crsh.gc.ca/funding-financement/nfrf-fnfr/edi-eng.aspx
- CIHR Resources: https://cihr-irsc.gc.ca/e/51709.html
- NSERC Best Practices Guide: https://www.nserc-crsng.gc.ca/ doc/EDI/Guide for Applicants EN.pdf
- SSHRC Guide to Addressing Equity, Diversity and Inclusion Considerations in Partnership Grant Applications: https://www.sshrc-crsh.gc.ca/funding-financement/apply-demande/guides/partnership edi guide-partenariats guide edi-eng.aspx.

UNCONSCIOUS BIAS

- CIHR Resources: https://cihr-irsc.gc.ca/e/51709.html
- CRC Resources: https://www.chairs-chaires.gc.ca/program-programme/equity-equite/bias/module-eng.aspx?pedisable=false

INDIGENOUS RESEARCH

Indigenous Research is defined by SSHRC as "research in any field or discipline that is conducted by, grounded in or engaged with First Nations, Inuit, Métis or other Indigenous nations, communities, societies or individuals, and their wisdom, cultures, experiences or knowledge systems, as expressed in their dynamic forms, past and present." Regardless of the methodologies used, researchers who conduct Indigenous Research must do so by building "respectful relationships with all Indigenous peoples and communities" (SSHRC). Researchers should be aware that it takes time to build reciprocal, trusting relationships and that First Nations, Inuit and Métis people must have a role in shaping the research that affects their communities (TCPS 2 (2018) – Chapter 9).

- UNBC Indigenous Resource Dati: https://www2.unbc.ca/indigenous-resource-dati
- CIHR Resources: https://cihr-irsc.gc.ca/e/51709.html
- SSHRC/NSERC Resources: https://www.sshrc-crsh.gc.ca/society-societe/community-communite/indigenous research-recherche autochtone/index-eng.aspx
- Truth and Reconciliation Commission of Canada: Calls to Action:
 https://www2.gov.bc.ca/assets/gov/british-columbians-our-governments/indigenous-people/aboriginal-peoples-documents/calls to action english2.pdf
- United Nations Declaration on the Rights of Indigenous Peoples:
 https://www.un.org/development/desa/indigenouspeoples/declaration-on-the-rights-of-indigenous-peoples.html

SEX AND GENDER BASED ANALYSIS (SGBA+)

• CIHR Resources: https://cihr-irsc.gc.ca/e/50833.html

Research Security

The Government of Canada provides guidelines for research security in Canada. https://www2.unbc.ca/office-research-and-innovation/research-security-resources

Research Data Management

Research data management (RDM) refers to the organization, collection, storage, documentation, preservation, and dissemination of research data. https://www2.unbc.ca/office-research-and-innovation/research-data-management

Budget Development

It is important for the researcher to understand the cost of performing research as it is the researchers who are entirely responsible for their budget.

Please see the *Quarterly Fund Management Checklist* to help with financial management of research projects at:

https://www2.unbc.ca/sites/default/files/sections/finance/quartely_checklist.pdf

DIRECT COSTS

Direct costs of research include payroll costs of PDFs and research assistants, consultants, consumables, taxes, equipment and capital expenditures, materials and supplies, sometimes space cost (per area), travel, and any applicable taxes.

ELIGIBLE USE OF FUNDS

Eligible expenses are determined by the sponsor or funding agency. For example, Tri-Agency (CIHR, NSERC, and SSHRC) information on expenses can be found at: https://www.nserc-crsng.gc.ca/InterAgency-Interorganismes/TAFA-AFTO/guide-guide_eng.asp

PERSONNEL

Information on budgeting for research personnel is included in the section titled "Research Personnel".

SALARIES AND BENEFITS

In many cases, such as in the case of Tri-Agency grants, the salary of the principal investigator is not an eligible research expense. However, for more information, or for unique cases involving in-kind contributions of the principal investigator's compensation, please consult with the ORI. Please see the section of the guide titled Pre-Award Administration Contacts for their contact information

Please contact HR as listed in the <u>Other Contacts</u> section above for clarification of all other queries on salaries and benefits.

TRAVEL AND ACCOMMODATION

The procedures that all UNBC employees must follow when incurring travel-related expenses are included in the *Travel Reimbursement* policy found at: https://www2.unbc.ca/policy.

In cases of Tri-Agency travel expenses, the *Travel Claims* document can be viewed at: https://www2.unbc.ca/sites/default/files/sections/unassigned/travelclaimeffectivejune222023. pdf.

Please contact HR and/or Research Finance as listed in the <u>Other Contacts</u> section above for more information.

SPACE

If this is an eligible expense, contact Facilities for current space costs for your area.

Douglas Kean, Capital Projects & Space Allocation Coordinator

Phone: 5158

Email: douglas.kean@unbc.ca

Website: https://www2.unbc.ca/facilities

TAXES

Researchers must account for taxes when assembling their budgets. GST has an after-rebate rate of 1.65% and PST has a rate of 7%.

INDIRECT COSTS

The indirect costs of research are also known as *overhead costs*, *facilities and administrative* costs, or *facilities and services* costs. They are the operating expenditures that UNBC incurs to undertake its research mandate; they do not include expenses which are directly associated with the research project (e.g., researcher travel expenses, student stipends, research materials, etc.). These indirect costs include, but are not limited to, the provision of institutional facilities; space within those facilities (including the costs of maintenance and utilities); maintenance, repair, and even replacement costs of research and other equipment*; computing resources; library resources; insurance; technical support for communal equipment and facility operation; intellectual property management costs; etc.

Overhead, or indirect costs on grants are an eligible expense, and these costs must also be included in the budget for all contracts, contract proposals, and contract letters of intent. Researchers are not permitted to negotiate indirect costs of research (overhead) rates with funders/sponsors. UNBC's minimum rate is 25%. This rate may only vary if the funder/sponsor does not allow this cost, or they have a different posted rate on their website or in their grant information package.

UNBC Indirect Costs and Overhead Charges for Research and for Instructional Services Surpluses
Policy can be found at:

https://www2.unbc.ca/sites/default/files/sections/policy/fm1indirectcostsandoverheadcharges forresearchandinstructionalservicesnovember2022.pdf

*Equipment maintenance repairs in the laboratory building must follow the UNBC policy Equipment Maintenance Repairs in Laboratory Building (Policy #73) at: https://www2.unbc.ca/policy.

For any questions about the above costs, please contact the Office of Research and Innovation (research@unbc.ca).

Website: https://www2.unbc.ca/research/

Follow Application Guidelines Exactly

Each granting agency or foundation has their own guidelines and what they would like to see in an application. The success of your application will depend on your ability to convince the reviewer(s) about the importance of the proposed work and your or your team's ability to conduct the proposed research. To this end, the ORI offers grant writing workshops in which many useful grant writing tips will be shared. Funding agencies also provide many grant writing tips, and these are available on their websites. Some of these are listed below.

Note: If your research involves Indigenous communities directly or indirectly, please contact the Associate Vice-President, Indigenous Initiatives in the Office of Indigenous Initiatives for advice. Contact information can be found above in Other Contacts.

Please contact the appropriate RPO for additional help, including one-on-one grant writing consultations with a draft grant proposal. This information can be found above in the Pre- and Post-Award Administration Contacts section or at: https://www2.unbc.ca/research/contact.

We strongly recommend that you build in time to have your proposal reviewed by a colleague for invaluable peer feedback. Researchers should feel free to arrange for their own peer review or contact the Office of Research and Innovation a minimum of 6 weeks in advance of the agency deadline and the Office would be happy to arrange for peer review on the researcher's behalf.

CONTRACTS

PROCEDURES FOR CONTRACT NEGOTIATION

If you are arranging a research contract with an industry partner, government agency or other organization, please submit your funding proposal and budget, or complete and submit the Request for Research Agreement Form, along with the completed External Grant and Contract Form via Romeo to the ORI at least 5 business days prior to the deadline for proposal submission. Your Chair and Dean will review and approve (or return the file to you for additional information). Your proposal will then be reviewed by one of the Research Project Officers (RPOs).

The purpose of the review is to ensure that:

- your application is complete;
- your budget is in accordance with UNBC rates and policies, is well justified, and includes indirect costs of research (see above);
- your application is free of spelling and grammatical errors
- your application is well presented
- all required information for contract negotiation is included (dates, deliverables, etc.)
- the contact information for the funding agency Contract Coordinator is included

Once the proposal has been reviewed and approved, the RPO will notify the Research Contract Coordinator via Romeo to initiate preparation of the legal contract. All communications about the contract will take place via the general research contracts email address (researchcontracts@unbc.ca) to ensure that all contract information is accessible by the research contracts team.

Please feel free to contact one of the Research Project Officers to discuss your proposal and/or contract requirements and seek advice or guidance regarding your ideas and potential funding focus. We are here to facilitate the research funding process and work in partnership with you to submit successful proposals.

Once the contract has been signed by both the external entity and UNBC's VPRI, the completed External Grant and Contract Form information is then used to establish a fund/org number which enables the distribution of funds.

As a final step, please advise the Office of Research and Innovation whether or not your proposal was successful.

The General Research Policy can be found at: https://www2.unbc.ca/policy.

SUBMITTING YOUR GRANT APPLICATION

UNBC aims to hold the highest standards of accountability in the administration of its research activities. UNBC has a process in place for the submission of applications and for the use of research funds. By following these procedures, a sound and effective basis for accountability and ethical integrity takes place in research. Below is an overview of useful information that has been provided to assist in fulfilling your role in research.

External Grant Application Submission Process

When you are ready to submit your grant application, please follow these steps:

Your completed grant application along with the completed External Grant and Contract Form must be received in the Office of Research and Innovation at least five business days prior to the funding agency deadline (other internal deadlines may be posted). Please allow enough time for Chair and Dean approval. Your application will then be reviewed by one of the Research Project Officers.

Please note: An External Grant and Contract Form is required any time funds will be transferred to UNBC (e.g. you are a co-investigator on a research project and a portion of the funds will be transferred to UNBC for your use).

The purpose of the internal review by the ORI is to ensure that:

- your application is complete;
- your application is consistent with all of the funding agency application requirements/guidelines;
- your budget is in accordance with UNBC rates and policies, includes Indirect Costs (see above) and is well justified;
- your application is free of spelling and grammatical errors;
- your application is well presented.

In addition to ensuring that the highest quality grant applications are submitted by UNBC researchers, the internal review is necessary to ensure that the legal obligations and requirements of UNBC, the funding agency, and other stakeholders are met. As an institution, we endeavor to conduct research activities in accordance with the highest standards of professionalism, safety, and ethics.

Once your grant application has been reviewed and approved by the VPRI, your application can be submitted to the funding agency. This may occur electronically through the ORI, as is the case for many Tri-Agency grants, or through an online portal or as an attachment to an email to the funding agency.

The completed External Grant and Contract information is then used to establish a fund/org number which enables the distribution of funds if your application is successful.

Please note: If you wish to have your grant application peer reviewed (i.e., to receive an expert opinion on the content), the ORI would be pleased to seek such expertise. Please allow six weeks for a peer review. Please also consult your unit for any process that is in place to enhance your success in the grant competition.

If your grant application requires an Institutional Letter of Support, please complete and submit the <u>Institutional Letter of Support Request Form</u> to the ORI at least 10 business days prior to the funding agency deadline. The information you provide on this form will assist Research Project Officers with the development of the content of the letter.

Please do not hesitate to contact one of the Research Project Officers to discuss your grant application and/or letter of support requirements.

As a final step, please advise the Office of Research and Innovation whether or not your application was successful.

You will find a quick link to Romeo on our website at: https://www2.unbc.ca/research/romeo, as well as links to all of our forms on our website at: https://www2.unbc.ca/research/forms.

Internal Grant Application Submission Process

INTERNAL FUNDING OPPORTUNITIES

Please visit the Office of Research and Innovation Internal Funding Opportunities <u>webpage</u> for current opportunities, guidelines, and application processes.

Special Requirements & Ethics Review of Application

Some funding agencies and governing bodies specifically request that necessary certifications (e.g. Animal Care, Biohazard, and Research Ethics) are met prior to applying for the funding, or that necessary certifications are in place prior to funding release. Therefore, it is important to read the Research Guidelines of the sponsoring agencies carefully. Researchers are encouraged to contact the appropriate committee Chair to determine if there are special requirements that may impact the proposal's budget. For projects involving animal and human participants and requiring certification, please complete the Certifications and Registrations tab within the Grant/Contract Submission Form in Romeo, paying particular attention to questions 3.6, 3.7 and 3.8. If you require a release of funds prior to obtaining animal care or human ethics certification, you will need to agree to the conditions outlined in 3.7. You will also need to indicate by which time you plan to have certification approval in 3.8. Answering these questions will allow for setup of a 'Release of Funds' approval. Under the 'Release of Funds,' no research can be conducted with animal or human participants until the full certification approval has been obtained.

Any research activity involving the use of animals, biohazards, or human participants, must be approved by the appropriate certification committee prior to commencing such work. Please see the attached Appendix B titled "Research Requiring Certification" in this guide for more information, or visit Research Ethics & Safety online at: https://www2.unbc.ca/research.

BC Biobank Registration

Any research entity which collects, processes, stores, and/or uses human biospecimens and associated data for research purposes (including research projects, studies, clinical trials, and formal multi-user biobanks) at a site in British Columbia will be required to register in the CTRNet Biobank Certification program.

Inclusion criteria for registration:

Biospecimen collections stored long-term (>3 months) for research use

Exclusion criteria:

- Biospecimen collections for industry-sponsored studies which are NOT stored long-term (>3months) at the site of collection
- Biospecimen collections used in their entirety for research analyses immediately or shortly after collection (<3 months)

Biobanks in British Columbia are required to register in the CTRNet Biobank Certification Program (www.ctrnet.ca). Registration is the first step of the certification program and involves completion of a short online form and introductory education module (1-3 hours of work). Completion of registration results in a **Registration Record** document. The requirement for registration will be implemented through existing institutional research approval processes.

To review the registration process and the educational module requirement, create an account at: http://dev.biobanking.org/brc/users/signup/biobank-registration/ca_academic

Meaning of Signatures

The UNBC policy and that of most external agencies requires that all outgoing applications for external research funding require the following minimum signatures:

- Principal Investigator indicates acceptance of academic, professional, scientific, and technical responsibility for the project. In addition, it represents an undertaking to observe sponsor and university policies and procedures, as well as any special award conditions. They have informed in writing the Chair and/or the Dean about any specific requirement that must be made to conduct the proposed research.
- Program Chair, Faculty Deans and Division of Medical Sciences —indicates that the
 department is willing to accommodate the project; that required facilities and services are
 available; and that the principal investigator meets known university and sponsor
 eligibility requirements. It also represents general acceptance of expressed or implied
 time commitments, including willingness to recommend leave or other special
 arrangements as specified in the application. It also asserts the fact that space and any
 alteration costs thereto are available from Faculty resources and that if this is not the case,
 they will obtain prior approval from the Provost and Vice-President, Academic (such
 approval to be attached), VP Research and Innovation or VP Finance and Administration
 as appropriate.
- Research Project Officer recommends to the VPRI whether to approve the application.
 The Research Project Officer will leave comments regarding concerns with the grant
 application for the VPRI to consider. Common concerns pertain to non-compliance issues.
 These include non-compliance with institutional, funding agency, and government
 procedures, policies, and laws.
- VPRI confirms that the institution will accept and administer funds in accordance with agreed terms and conditions or will negotiate acceptable terms if these are not established at the time of application; that all certification required to conduct research will be secured; that the principal investigator will have access to normal use of UNBC facilities and services.

For the purposes of research grant applications and contract proposals, institutional signing authority has been delegated to the VPRI.

POST-AWARD ADMINISTRATION

Once your application is successful, a new research account must be established; typically one for each agency that is funding your project (if separate reporting is required). The ORI facilitates this process in collaboration with Research Finance and certification committees, if applicable.

General

UNBC, as a steward of the research funds provided through an award, has established a series of policies and procedures (see attached <u>Appendix A</u>) aimed at ensuring:

- the ability to comply with the regulations of the research sponsor;
- the proper management of the funds;
- accountability to the sponsor and other university stakeholders; and
- the effective conduct of the research activities in accordance with the highest standards of professionalism, safety, and ethics.

UNBC delegates the overall responsibility for the pursuit and management of the research proposal to the principal investigator as an employee of UNBC and as the person who is most knowledgeable about the research proposal. UNBC supports the principal investigator in meeting their responsibilities by providing organizational infrastructure to support compliance with the requirements of UNBC and the sponsor.

Principal investigators are responsible for conducting their research as indicated in the proposal, and for the overall sound administration of all research funds allocated to them, including:

- the proper allocation of research funds and sound financial management;
- human resource management and supervision of employees and students;
- ensuring a safe working environment;
- ensuring compliance with the terms and conditions governing the grant or contract; and
- ensuring that expenditures do not exceed the value of the award.

Release of Funds Procedure: Projects Involving Animals, Biohazards, or Human Participants

Any research activity involving the use of animals, biohazards, or human participants, must be approved by the appropriate certification committee prior to commencing such work. Please see the attached Appendix B titled "Research Requiring Certification" in this guide for more information, or visit Research Ethics & Safety online at: https://www2.unbc.ca/research.

Financial Management

The Principal Investigator holds the full financial administrative responsibilities of the funds they receive. Moreover, it is required that the Principal Investigator adheres to the expectations and deliverables of the funding agency. Contact the Research Grants Officer, Post-award in the ORI for assistance.

Accountability of the research funds falls under the following categories:

FINANCIAL PLANNING

It is required that all principal investigators plan, allocate and distribute their expenditures in a manner which will provide for reasonable completion of their project within the financial limits of the award. Principal investigators must ensure eligibility of all expenses in accordance with the rules and regulations of the sponsor, and plan for contingencies.

FINANCIAL TRANSACTIONS

The principal investigator initiates and approves all requests for commitments and transactions for supplies, services, and enumeration, complying with UNBC policies and procedures.

FINANCIAL MONITORING

The principal investigator ensures constant supervision and monitoring of the funds by reviewing the monthly accounting statements provided by Research Finance and identifying and reporting any discrepancies, errors, or inconsistencies to Research Finance.

Research Finance contact information can be found <u>here</u>.

FINANCIAL REPORTING

The principal investigator must review all financial reports prepared by Research Finance, as required by the sponsor, and approve them for submission in a timely manner.

OVER-EXPENDITURES

Principal investigators are accountable and responsible for all deficits resulting from over-expenditures, expenses deemed ineligible by the sponsor, or for failure of the principal investigator to comply with the rules and regulations of the sponsor.

POLICIES AND PROCEDURES

Principal investigators must know, understand, and apply all applicable policies and procedures of UNBC and of the sponsor. Where there is a difference between the policies of UNBC and the sponsor, the more stringent requirement will be followed.

RESPONSIBLE CONDUCT OF RESEARCH

Principal investigators are responsible for adhering to UNBC's policies on the responsible conduct of research, including the Responsible Conduct of Research - Integrity in Research and Scholarship policy (currently under review). Responsible conduct of research involves:

- completing the <u>CITI RCR online training program</u> (see <u>UNBC RCR webpage</u> for access instructions)
- doing the work, monitoring, and controlling the progress of the project in a professional manner;
- ensuring compliance with <u>UNBC policies and procedures</u>;
- ensuring compliance with UNBC Faculty Association Collective Agreement (Article 29);
- ensuring compliance with the sponsor's rules and regulations and contractual terms and conditions;
- ensuring that all scientific and technical discussions with, and reporting to, the sponsor are conducted in a timely manner; and
- supervising their support staff and students, in accordance with UNBC's policies and procedures, including the HR document titled <u>Research Personnel Recruitment Guide</u>.

MATTERS WITH SPONSORS

The principal investigator is responsible for all interactions with the sponsor related to the technical aspects of the research project. The principal investigator must inform and provide any correspondence/documentation to the ORI, for all matters related to any changes to the research project.

Only a duly authorized officer of UNBC is **authorized** to sign applications, proposals, contracts, or contract amendments on behalf of UNBC. After review and approval by Research Finance, financial statements, reports, and invoices are to be submitted as directed by the sponsors.

RESEARCH PERSONNEL

Hiring and employment of personnel is subject to policies that govern their treatment. Grant holders, as supervisors, are responsible for being aware of and following these policies including the *Academic Services Positions*, and *Statement of Principles on the Treatment of Postdoctoral Fellows*. These policies are found at: https://www2.unbc.ca/policy.

Additional guidelines related to the hiring of research support personnel can be found on UNBC's <u>HR website</u> and the ORI document titled <u>Research Personnel Recruitment Guide</u>.

BUDGETING FOR SALARY AND BENEFITS

Researchers should review the guidelines set out in the "Use of Grant Funds" section of the *Tri-Agency Financial Administration Guide* found on the NSERC website: https://www.nserc-crsng.gc.ca/InterAgency-Interorganismes/TAFA-AFTO/index eng.asp

If the funding agency does not have guidelines or regulations regarding compensation, the rate of pay is negotiated with the student/non-student on an individual basis, but must fall within UNBC's HR guidelines.

Benefits will vary with the personnel category, whether the person will be working full or parttime, and the anticipated term of employment.

Please contact HR here for further clarification, or for more information and forms.

Website: https://www2.unbc.ca/human-resources/employee-recruitment

INTELLECTUAL PROPERTY

The Director, Office of Research and Innovation is happy to assist with finding community and industrial partners for any researcher at any stage of research. The ORI likes to identify research leading to technologies with commercial potential in the earliest stages, when possible, to give the best services to researchers.

To view UNBC's *Intellectual Property* policy, please visit: https://www2.unbc.ca/policy

Commercialization of Intellectual Property

Recognizing the unique role of universities as public institutions of higher learning with a mandate to produce new knowledge, UNBC strives to produce benefits to society by publicising research findings and, where appropriate, encouraging the application of research results in tangible ways which may include commercial activities.

The Director, Office of Research and Innovation works with the creators of IP to determine the appropriate path for commercialization based on the IP and the abilities and desires of the creator. Possibilities include sale or licensing of the IP and building a company around the IP.

The Director, Office of Research and Innovation encourages the disposition of IP in ways that assure maximum benefit to the creators, UNBC, and society-at-large.

For methods of preserving IP with respect to the federal IP guidelines, please visit the Canadian Intellectual Property Office:

Website: www.cipo.ic.gc.ca
Email: cipo.contact@ic.gc.ca
Phone: 1-866-997-1936

To learn more, please visit Community & Industry Partnerships at https://www2.unbc.ca/research.

With any other queries, please contact the Director, Office of Research and Innovation.

Please see the <u>Pre-Award Administration Contacts</u> section of this guide for full contact information.

APPENDICES

Appendix A: Policies and Procedures

The following is a list of research-related policies and procedures that exist at UNBC:

- Academic Services Positions
- Adjunct Faculty
- Animal Care and Use
- Appointment of Adjunct Faculty at UNBC
- Carry Forward from University Research Operating Contributions to Canada Research Chairs
- Centres and Research Institutes
- Conflict of Interest
- Ethics Review of Research Involving Human Participants
- Equipment Maintenance Repairs in the Laboratory Building
- Field Work Safety
- First Aid
- General Research
- General Research Ethics
- Hazardous Waste Identification & Reporting
- Incident/Accident Reporting & Investigation
- Indirect Costs and Overhead for Research and for Instructional Services
- Intellectual Property
- Occupational Health and Safety Office, Research and Storage Space
- Protective Clothing & Equipment
- Radionuclides & Radiation Hazard
- Research Grant in Lieu of Salary
- Research Involving Human Participants
- Research Space Allocation
- Research Vehicle Parking
- Software Acquisitions
- Software Licensing
- Statement of Principles on the Treatment of Post-Doctoral Fellows
- Vacating Research Laboratories
- Visiting Scholars and Guest Speakers

Of notable importance is UNBC's "General Research" policy. It governs all research and research related activities conducted under the aegis of UNBC. Please see https://www2.unbc.ca/policy for details.

Appendix B: Research Requiring Certification

UNBC is responsible for ensuring that research is carried out in compliance with the guidelines of agencies, institutions, and foundations. All federally funded research must abide by the Responsible Conduct of Research Guidelines developed by the Tri-council. Research that involves human participants must be conducted in accordance with the ethical principles and articles of the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2 2022)*, and the UNBC policy *Ethics Review of Research Involving Human Participants*.

UNBC has committees to review research while ensuring compliance with ethical guidelines. These committees are the Research Ethics Board (REB), the Animal Care and Use Committee (ACUC), and the Laboratory & Field Safety Committee (LFSC).

It is recommended that all investigators apply for the appropriate UNBC approval either prior to, or immediately after receiving funding, to ensure that all funds are released in a timely manner.

Please see the section titled <u>Pre-Award Administration Contacts</u> in this guide for any unspecified contact information for the following.

RESEARCH ETHICS BOARD

The Research Ethics Board (REB) is responsible for ensuring university-wide understanding of, and compliance with, all applicable external and internal requirements. Prior to commencement of research and teaching activities involving the use of human participants, the REB must review and approve the activities.

Researchers must be aware that ethics certification is only valid for 12 months. If the research is ongoing, ethics certification must be renewed after expiry.

Please see the <u>website</u> for more information, including the REB Membership, Terms of Reference Policy, Policies and Procedures on Research Involving Human Participants, REB Submission Deadline and Meeting Schedule, and necessary forms; the REB Terms of Reference Policy includes its internal guidelines and approval process.

EDUCATION

The Interagency Advisory Panel on Research Ethics has developed an Online Tutorial, TCPS2: <u>Course on Research Ethics (CORE)</u>. It is recommended that the tutorial be completed prior to applying for research ethics review. It was designed to support the Canadian research community's implementation of TCPS2, and to provide a common understanding.

For more information on TCPS2, please visit: https://ethics.gc.ca/eng/policy-politique tcps2-eptc2 2022.html

The Canadian Institutes for Health Research have publications on ethics such as *Best Practices for Protecting Privacy in Health Research and Aboriginal Ethics Policy*. For more information about ethics at CIHR, visit the <u>CIHR site</u>, including the Online Research Ethics Tutorial, Aboriginal Ethics Policy, and Ethics at CIHR.

NORTHERN HEALTH AUTHORITY

If you are conducting research in conjunction with Northern Health, please contact their Research Review Committee for information at: researchcommittee@northernhealth.ca on their review processes or visit their webpage with the link below. You are also required to complete the Northern Health Authority Operational Approval form and attach your UNBC REB application, which can also be found below.

Please see the website below for more information, including the Northern Health Authority's Application Guidelines & Deadlines, and Application for Research Approval.

Website:https://www.northernhealth.ca/for-health-professionals/research/nh-research-review-committee

HUMAN PARTICIPANT HARMONIZED RESEARCH ETHICS REVIEW

If your research involves human participants, and is being conducted with research collaborators or site access at other research institutions and/or multiple health authorities within British Columbia, it may be possible to complete a single multi-jurisdictional application. Please reference the list of network members at Research Ethics BC. The application and review process is supported on the Provincial Research Ethics Platform (PREP) which is hosted on the Research Information System (RISe) at UBC. Please visit Research Ethics BC for further information and resources. If you have questions, contact the Research Ethics Officer at the Office of Research and Innovation.

RESEARCH INVOLVING ANIMALS

Researchers who will be working with animals, and those individuals working in their labs (students, research assistants, etc.), are required to complete a Medical NHSRF Lab Animal Addendant History Questionnaire and the Animal Training Certification Course. This includes researchers and others who may have previous experience.

The Medical History Questionnaire must be completed and submitted to the Manager, Animal Care and Welfare/Biological Safety Officer before any work with animals can be started. The form can be retrieved from the <u>website</u>.

For information about the Animal Training Certification Course, or to register for the program, please contact the Manager, Animal Care and Welfare/Biological Safety Officer.

The Animal Care and Use Committee (ACUC) is responsible for ensuring university-wide understanding of, and compliance with, all applicable external and internal requirements. Prior to commencement of research and teaching activities involving the use of animals, the ACUC must review and approve the activities.

Any research or teaching conducted under the auspices of UNBC involving the use of animals (including fish and invertebrates) must conform to the UNBC policy on *Animal Care and Use* and must have the prior approval of the UNBC ACUC.

Please see the <u>website</u> for more information, including the policy on Animal Care & Use, ACUC Membership, Terms of Reference, and the required forms; the Terms of Reference includes ACUC's internal guidelines and approval process.

RESEARCH INVOLVING BIOHAZARDOUS MATERIALS

At this time, UNBC is only registered to work with substances/toxins classified as a Risk Group 1 or 2. Before any researcher, student or employee can work with a Risk Group 2 substance/toxin, they are required to complete Biosafety Level 2 training. Please contact the <u>Biological Safety Officer</u> to register. This training will be required before you can apply for any permits or purchase any biohazardous materials.

Any protocol using biohazardous substances/toxins must be reviewed and approved by the <u>Laboratory Safety Committee</u> (LSC) prior to any use.

Research involving any biohazardous material requires special permits. These include bacteria, viruses, plasmids, cell-lines, recombinant DNA, and/or primate body fluids, including blood. Researchers who are proposing to use biohazardous materials or notifiable biological substances must obtain a permit before purchasing these items or commencing laboratory work. An application form for a permit can be obtained from UNBC's Biological Safety Officer. The Biological Safety Officer can also provide a copy of the UNBC Laboratory Biological Safety Manual, as well as information regarding the procedure that will occur following submission of a completed application form.

The LSC is responsible for all matters pertaining to biosafety, x-ray, laser, chemical and general laboratory safety at UNBC and is mandated to fulfill the responsibilities of a Research Institution as described in the most current version of the *Government of Canada, Canadian Biosafety Standards and Guidelines* (1st edition, 2013) and the Ministry of Labour. Health and safety at UNBC abides by procedures described in the *Government of Canada, Canadian Biosafety Standards and Guidelines* and the *Occupational Health and Safety Act*.

The LSC reports to the Risk and Safety Management Office. For more information about safety in biology or chemistry labs, please refer to the <u>Risk and Safety Management Office</u> members.

RESEARCH INVOLVING CONTROLLED GOODS

Some research undertaken at UNBC may be subject to export controls administered by Public Services and Procurement Canada, particularly in the Faculties of Science and Environmental Engineering.

Funding agencies do not take any responsibility for UNBC's compliance, including the actions of applicants. Applicants and their associated institutions bear direct responsibility for ensuring compliance with the laws and regulations regarding controlled goods.

External contact: Public Services and Procurement Canada

Controlled Goods

Website: https://www.tpsgc-pwgsc.gc.ca/pmc-cgp/index-eng.html

RESEARCH INVOLVING CONTROLLED SUBSTANCES

UNBC works in collaboration with Health Canada, to ensure that controlled substances are handled effectively and remain in legal distribution channels; and that valid commercial, medical and scientific activities are not interfered with.

Research organizations require licensing and permits to obtain, make, store or transport controlled substances. Some research undertaken at UNBC may be subject to import and export controls administered by Health Canada. All legislative documents related to controlled substances can be found on the Health Canada website below.

External contact: Health Canada

Office of Controlled Substances

Phone: 613-954-2177

Email: OCS-BSC@hc-sc.gc.ca

Website: https://www.hc-sc.gc.ca/hc-ps/substancontrol/substan/index-

eng.php

RESEARCH INVOLVING NEW SUBSTANCES

Any researcher who intends to import or manufacture a "new substance" in Canada, whether organic or inorganic, animate (live) or inanimate (lifeless), is required to submit a new substance notification (NSN) package to Environment Canada's New Substance Division prior to importing or manufacturing. Otherwise, all substances acquired by UNBC must be located on Canada's Domestic Substances List.

External contact: Environment Canada, New Substances Division

Phone: 1-800-567-1999 Email: substances@ec.gc.ca

Website: https://www.ec.gc.ca/subsnouvelles-newsubs/

RESEARCH INVOLVING TRANSPORTATION OF DANGEROUS GOODS

Any researcher who will be transporting dangerous goods or controlled products off the UNBC campus may fall under the *Transportation of Dangerous Goods Act*. This includes, but is not limited to, the transportation of dangerous goods (TDG) into or out of the field, community or other institutions by air, rail or road. If you ship, receive or transport dangerous goods, you must be trained and carry a valid TDG certification card, or work under the direct supervision of someone who is trained. To receive TDG training, please send an email to safety@unbc.ca for further instructions. Please refer to the *British Columbia Transportation of Dangerous Goods Act* (at: https://www.bclaws.ca/civix/document/id/complete/statreg/10 203 85) and for further information on this legislation.</code>

There are exemptions to the TDG regulations if the quantity of goods to be shipped is below the exemption limit. To check the limits for each dangerous good, contact UNBC as set out below or view the following Government of Canada website.

External contact: Public Works and Government Services Canada

Transportation of Dangerous Goods (CANUTEC)

Phone: 613-992-4624 (call collect)

Email: canutec@tc.gc.ca or tdg-tmd@tc.gc.ca

Website: https://www.tpsgc-pwgsc.gc.ca/comm/index-eng.html

Internal contact: Laboratory & Field Safety

Website: https://www2.unbc.ca/safety/lab-safety

RESEARCH REQUIRING ENVIRONMENTAL ASSESSMENTS

In Canada, environmental assessments (EA)s are triggered whenever a federal department or agency, such as NSERC, proposes a project, provides financial assistance, transfers control of federal land to enable a project, or provides a license, permit or an approval as listed in the *Law List Regulations* to enable a project. Any research project, which involves any of the activities which trigger an EA, will be reviewed for environmental sensitivity and identify any potential liability for the institution.

All NSERC applications are reviewed by NSERC during the peer review process for compliance to the *Canadian Environmental Assessment Act*. Individual researchers are required to provide more specific environmental information in Form 101 (Appendix A). Please see NSERC's *Guidelines on Environmental Review and Assessment* at the website below.

External contact: Natural Sciences and Engineering Research Council of Canada

Environmental Assessment Unit

Phone: 613-995-8079

Email: enviro.assess@nserc-crsng.gc.ca

Website: https://www.nserc-crsng.gc.ca/NSERC-CRSNG/policies-

politiques/enviroassess-enviroeval eng.asp

Appendix C: Frequently Used Acronyms

ACUC Animal Care and Use Committee

BC British Columbia

CDI Community Development Institute
CIHR Canadian Institutes of Health Research

CRC Canada Research Chair

COPE Contracts and Supply Chain Management
CUPE Canadian Union of Public Employees

EA Environmental Assessment

HR Human Resources

HRI Health Research InstituteIT Information TechnologyIP Intellectual Property

LSC Laboratory Safety Committee
MOU Memorandum of Understanding

NRESi Natural Resources and Environmental Studies Institute

NSERC Natural Sciences and Engineering Research Council of Canada

NSN New Substance Notification

ORI Office of Research and Innovation

PDF Post-Doctoral Fellow

PICS Pacific Institute for Climate Solutions
PIO Partnership and Innovation Officer

PO Purchase Order

REB Research Ethics Board
RFP Request for Proposal
RPO Research Project Officer

SSHRC Social Sciences and Humanities Research Council of Canada

TCPS2 Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans

TCPS2 2022

TDG Transportation of Dangerous Goods

Tri-Agency Three agencies: Canadian Institutes of Health Research (CIHR); the Natural

Sciences and Engineering Research Council of Canada (NSERC), and the Social

Sciences and Humanities Research Council of Canada (SSHRC)

UNBC University of Northern British ColumbiaVPRI Vice President, Research and Innovation