

Research Orientation Day

for new faculty members

August 22, 2016
Hosted by the Office of the Vice President Research & International

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Agenda

Time	Duration	Topic	Speakers
8:30am	30 mins	REGISTRATION & CONTINENTAL BREAKFAST	
9:00am	10 mins	Overview & Welcome	Helen Burt
9:10am	30 mins	Keynote Speaker	Alan Kingstone
9:40am	15 mins	Research Roadmap	Martin Kirk
9:55am	30 mins	Finding and Securing Funding	SPARC: Martin Kirk CFI: Sharon Wu, Leonard Foster
10:25am	20 mins		COFFEE BREAK
10:45am	30 mins	Responsible Conduct of Research (Internal Audit, Research Finance, Scholarly Integrity)	Jean Chang, Betty Ang, Greg Martyn
11:15am	15 mins	Telling Your Research Story	Julie Ovenell
11:30am	45 mins	Morning breakout session	 Health Research Natural Sciences & Engineering Social Sciences & Humanities
12:15pm	15 mins	Library Presentation	Melody Burton and Allan Bell
12:30pm	60 mins	RESOURCE FAIR & LUNCH	ORS, SPARC, IPO, Animal Care, Ethics, Mitacs, IT Services, Risk Management, UBC Library, e@UBC, ARC
1:30pm	15 mins	Graduate and Post- Doctoral Students	Janice Eng
1:45pm	45 mins	Panel discussion with nearly-new faculty members/Q & A	Moderator: Gail Murphy Panelists: Elizabeth Rideout, Alex Bigazzi, Katherine Bowers, Yi Qian
2:30pm	45 mins	Afternoon breakout session	 International and community-based research Research Innovation: UILO and e@UBC Advanced Research Computing
3:15pm	10 mins	CLOSING REMARKS	Gail Murphy



Vice President's Greeting

Welcome to UBC, and congratulations on your recent appointment. We are immensely proud of the calibre of research conducted across all UBC campuses and locations, and you are a welcome addition to our thriving community of outstanding researchers and faculty members.

As part of UBC's vision "to conduct outstanding research to serve the people of British Columbia, Canada and the world," we're committed to

ensuring your research experience at UBC is a positive one. We maintain a sophisticated research infrastructure that efficiently guides investigators in all disciplines through each stage of the research process, from identifying collaborators and funding opportunities to managing knowledge mobilization beyond the campus community.

UBC is a large and complex institution, and it isn't unusual for new researchers to feel daunted by all they feel they should know. This orientation guide, in combination with our annual Research Orientation Day, will answer many of your initial questions and will put you in touch with the people and the services dedicated to supporting our research enterprise.

Thank you for choosing to join us at UBC, and best of luck in your research endeavours.

Yours truly,

Helen M. Burt, PhD,

Helen Rut.

Vice President Research & International pro tem

helen.burt@ubc.ca

Resources for New Faculty

The Office of the Vice President Research & International (VPRI) offers a number of resources and services to new faculty, including:

Research Orientation Day

A day-long orientation for new faculty members offered annually each summer, featuring a panel of experienced faculty members and representatives from research support units. Content includes where and how to secure funding, how to obtain ethics certification, institutional signatures, and more.

research.ubc.ca

The VPRI website highlights UBC's research excellence and international engagement, as well as containing a wealth of detailed information. Support and resources include tools and links to UBC's research infrastructure throughout a project lifecycle, from finding and securing funding to communicating and commercializing research discoveries.

New Faculty Luncheons

Small groups of new faculty members meet with the Vice President to share common experiences and challenges, and to discuss any research-related matters. These sessions are offered regularly throughout the academic year. Registration is limited and details are available on the VPRI website.

Research Support Map

In addition to this booklet, a separate guide has been produced to help researchers navigate many of the support services available at UBC. This guide is referenced throughout this booklet.

Questions about your Appointment?

The Faculty Relations Office is the definitive source of human resource information for new faculty members. A visit to the <u>Faculty Relations website</u> will answer most questions about recruitment, immigration, appointment, orientation, compensation, tenure and promotion, sabbatical and retirement.

You must consider a number of factors, including immigration and union requirements, before you can arrange to transfer your research staff to UBC from another institution. For assistance moving Postdoctoral Fellows and Research Associates to UBC, email fr@exchange.ubc.ca. For assistance moving Researchers, Assistants, and Technicians to UBC, contact your assigned HR Associate.

Transferring to UBC from Another Institution?

If you are transferring research funding from another institution, the Office of Research Services (ORS) can assist with the process for all grant funding. More details of the requirements are available in the Research Support Map handout Attracting and Securing Research Funding and from the ORS website.

For industry funding and transferring or coordinating the ongoing management of intellectual property developed at your previous institution, please contact the <u>University-Industry Liaison Office</u>.

Research Infrastructure

The Office of the Vice President Research & International (VPRI) oversees a broad portfolio of core research administration units and services.

Portfolio Units & Services



Vice President Research & International Office

The Vice President, Research & International Office and its portfolio units are the support hub for UBC's research activities. We work in partnership with our sister office at the Okanagan campus to provide UBC researchers with strategic information, resources and tools to support their work from grantwriting through to publicity.

We also provide strategy for major research initiatives and support international partnerships and connections in collaboration with UBC facilities and units. Our key international roles include:

- coordinating, advancing, and stewarding UBC's international vision and strategy;
- coordinating UBC's internationalization efforts;
- developing and supporting the creation of new partnerships;
- coordinating international missions aimed at developing and nurturing relations with international partners; and
- representing UBC in the world.

Research Advisors

UBC faculty members are appointed by the Office of the Vice President Research & International to represent UBC before each major federal funding agency. The coordinators work closely with researchers to ensure that information is disseminated and initiatives are developed to provide support for research and scholarship.

Canadian Institutes of Health Research (CIHR)

Advisor: <u>Dr. Lara Boyd</u> (604) 822-7197

Natural Sciences & Engineering Research Council of Canada (NSERC)

Advisor: Dr. Tim Salcudean (604) 822-3243

Social Sciences & Humanities Research Council of Canada (SSHRC)

Advisor: Dr. Alan Kingstone (604) 822-9230

Canada Foundation for Innovation (CFI)

Advisor: Dr. Leonard Foster (604) 822-8311

Advanced Research Computing (ARC)

Advisor: <u>Dr. Corey Nislow</u> (604) 827-1579

Office of Research Services (ORS)

ORS provides the UBC community with efficient administrative support to help researchers attract and secure research funding, in line with policies and regulations established by UBC, the Government of Canada, federal funding agencies, and other regulatory bodies.

Website: https://ors.ubc.ca

Research Support Map Handout: Attracting and Securing your Research Funding

University-Industry Liaison Office (UILO)

UILO enables research and innovation partnerships with industry, entrepreneurs, government and non-profit organizations. UBC researchers should contact the UILO if they wish to engage in a research partnership with industry or contracted research (excluding grants) with non-profits or government, if they have a research discovery they wish to commercialize, patent or form a spin-off company around.

Website: https://uilo.ubc.ca

Research Support Map Handout: Research & Innovation Partnerships

Support Programs Advancing Research Capacity (SPARC)

SPARC offers strategic funding development services and resources for faculty, designed to provide a competitive advantage in funding applications, enhancing capacity, collaboration and strengthening research excellence at UBC.

Website: https://sparc.ubc.ca

Research Support Map Handout: Developing Your Funding Proposal

Institutional Programs Office (IPO)

IPO provides support for the application, management and administration of major research projects. This includes projects funded by CFI/BCKDF, Western Economic Diversification (WD), Networks of Centres of Excellence and other large-scale research projects and applications.

Website: https://research.ubc.ca/institutional-programs-office

Research Support Map Handout: Applying for Infrastructure Funding

Grant Facilitation Network

Grant Facilitators are appointed across UBC, and are dedicated to providing assistance to faculty members applying for research grants from all sources. Their roles vary across faculties, and may include:

- helping to identify new funding opportunities;
- assisting with initiating and developing research collaborations;
- providing review, editing and revision of research proposals; and
- assisting with budget justification.

Website: https://ors.ubc.ca/funding-opportunities/grant-facilitators

Office of Research Ethics

The Office of Research Ethics oversees and manages the processes of reviewing and monitoring research involving human participants, and US financial conflict of interest. The research ethics office provides information on which of the six research ethics boards researchers should submit to based on the nature and site of the research.

Website: https://ethics.research.ubc.ca

Research Support Map Handout: Obtaining Ethics Approval

Research Information Services (RISe)

RISe is an online research administration tool that allows researchers and administrators to manage and track applications online through to approval, certification and awarding of funds. RISe consists of six modules: Animal Care, Biosafety, Conflict of Interest (COI), Extended Reporting (ExR), Grants Administration and Human Ethics.

Website: https://www.rise.ubc.ca

Research Finance

Once a research account has been set up, Research Finance is responsible for ongoing financial administration, including financial reporting, revenue collection and ensuring that funds are administered in compliance with funding agency, university, and accounting policies.

Website: http://finance.ubc.ca/research-trust

Research Support Map Handout: Managing Your Research Account

Animal Care and Use Program

The UBC Animal Care and Use Program is a University-wide program covering all UBC persons who work with animals in research and teaching. It consists of the Animal Care Committee and Animal Care Services and delivers training, facilities, veterinary services, protocol submission and monitoring. Research and teaching involving the use of animals at UBC must adhere to the UBC Animal Care Committee and Canadian Council on Animal Care guidelines.

Website: http://animalcare.ubc.ca

Research Support Map Handout: Care and Use of Animals in Research

Advanced Research Computing (ARC)

Along with our national partner, Compute Canada, ARC offers services and resources that will allow researchers across all disciplines, including the Sciences, Humanities, Arts and Social Sciences, to take advantage of high-performance computing facilities. ARC's services are provided free-of-charge to the UBC Community.

Website: http://arc.ubc.ca

Research Support Map Handout: Meeting Big Data & HPC Needs

Sequencing and Bioinformatics Consortium

UBC's new Sequencing and Bioinformatics Consortium (SBC) consolidates sequencing infrastructure at UBC Point Grey to provide efficient sequencing services (for small and medium sized projects). SBC trains researchers in cutting-edge bioinformatics tools, and has CAP accreditation for clinical sequencing of human genomes. SBC works closely with Advanced Research Computing to resolve data privacy and security challenges while also addressing storage issues.

Website: http://sequencing.ubc.ca

Peter Wall Institute for Advanced Studies (PWIAS)

The Peter Wall Institute for Advanced Studies offers collaborative, interdisciplinary programs for outstanding scholars at all stages of their career. It is part of an international network of University Based Institutes for Advanced Study devoted to nurturing research at the highest levels.

The Institute offers rare opportunities for UBC researchers who are likely to make breakthrough discoveries over the long term. The Institute's achievements include the creation of a significant community of scholars – more than 450 Faculty Associates in total – at the University of British Columbia and an even wider global community of individuals and partner institutions.

Website: http://pwias.ubc.ca

UBC Press

The University of British Columbia Press is Canada's leading social sciences publisher. With an international reputation for publishing high-quality works of original scholarship, the Press's books draw on and reflect cutting-edge research, pushing the boundaries of academic discourse in innovative directions. Each year UBC Press publishes seventy new titles in a number of fields, including Aboriginal

studies, Asian studies, Canadian history, environmental studies, gender and women's studies, geography, health and food studies, law, media and communications, military and security studies, planning and urban studies, and political science.

Website: http://ubcpress.ca

entrepreneurship@UBC

Whether a venture idea emerges from scientific research in the lab, is a business idea borne in a for-credit program, or is an idea from creative UBC students, faculty, staff or alumni, e@UBC provides help for the entrepreneurially minded to overcome the substantial challenges in creating successful ventures. e@UBC has developed an entire ecosystem of integrated programs that can be easily accessed by UBC students, faculty members, alumni, and staff. These programs support participants from the initial idea concept stage through to company building and securing funding.

Website: http://entrepreneurship.ubc.ca

Research Support Map Handout: New Venture Creation

Affiliated Health Authority Research Institutes

UBC operates academic space at the Vancouver Coastal Health Research Institute (VCHRI), BC Children's Hospital, BC Women's Hospital and Health Centre, the BC Cancer Agency, the BC Centres for Disease Control, and Providence Health Care. UBC faculty working at these affiliated institutes can access support services from the Point Grey campus, as well as the considerable resources through their home sites. These services include research ethics review and grant facilitation, and support from ORS to coordinate institutional signatures during major funding competitions.

Research Support Fund

The federal Research Support Fund (RSF) assists Canadian postsecondary institutions with the costs of managing the research funded by the three federal research granting agencies (CIHR, NSERC, SSHRC). For tri-council-funded awards made to faculty at affiliated health authorities, the hospital receives 67% of the RSF money, and UBC (central) receives the remaining 33%.

Website: https://research.ubc.ca/research-support-fund

UBC Policies and Procedures

Any research project carried out by a person connected with UBC and its affiliated hospitals and research institutes must conform with the <u>University's Policies</u>. These policies cover the use of facilities, budget preparations, legal authority, use of research ethics boards, studies involving human subjects, animals and biological hazards, application signing, award administration, publication, patents and licensing, travel and entertainment, and conflict of interest.

UBC policies appear on the University Counsel website. The following is a partial list of the University's policies concerning research.

Policy #	Policy Name
5	Sustainable Development
6	Environmental Protection Compliance
7	<u>University Safety</u>
9	Hazardous Materials Management
10	Procedures for Working with Biohazardous Materials
11	Radiation Safety
35	Salary Research Grants (Non-Study Leave)
37	Salary Research Grants (Study Leave)
61	Post-Doctoral Fellows
83	<u>Travel and Related Expenses</u>
84	Entertainment Expenses
85	Scholarly Integrity
86	Extraordinary Expenses
87	Research (includes signatures & overheads)
88	Inventions & Discoveries
89	Research and Other Studies Involving Human Subjects
90	Over-Expenditure on Research and Specific Purpose Trust Project/Grants
97	Conflict of Interest and Conflict of Commitment
111	Internal Audit
115	<u>Gifts</u>
122	Purchasing

Research Contacts

Office of the Vice President Research & International

Dr. Helen Burt, VP Research & International pro tem Dr. Gail Murphy, AVP Research & International pro tem Greg Martyn, Director Dr. Kyle Glenn, Senior Advisor, Strategic Initiatives Julie Ovenell, Director, Communications Jamie Hall, Manager, Communications Vanessa Power, Coordinator, Communications Brenda Carrier, Research Awards Coordinator Fred Woo, Assistant to VP Research & International Emily LeBaron, Assistant to AVP Research & Director Dmitriy Ryabika, Research Analyst	604-822-1467 604-822-4813 604-827-1439 604-827-1870 604-822-1267 604-822-6050 604-822-6010 604-822-0233 604-822-3090 604-827-2762
Dr. Adel El Zaim, Executive Director, International Jonathan Hayes, International Relations Officer Bob Korzeniowski, International Relations Officer Natasha Nobell, International Relations Officer Tangerine Twiss, Assistant, International	604-827-4140 604-822-0099 604-822-2632 604-822-2634 604-822-3114
Dr. Leonard Foster, CFI Advisor Dr. Lara Boyd, Health Research Advisor Dr. Alan Kingstone, SSHRC Advisor Dr. Tim Salcudean, NSERC Advisor Dr. Corey Nislow, ARC Advisor	604-822-8311 604-822-7197 604-822-9230 604-822-3243 604-827-1579
Office of Research Services	
RISe Support Desk General Information Dr. Martin Kirk, Director Dean Kuusela, Associate Director Yvonne Ng, Manager, Research Awards Carolyn De Melo, Assistant Manager, Research Grants Shehnaz Motani, Awards Officer, Health Sciences Animal Care Committee & Biosafety Committees Lynn Macdonald, Manager Roger Chow, Biosafety and Animal Care Assistant	604-878-7473 604-822-8581 604-822-8083 604-822-8582 604-822-1304 604-822-5117 604-822-9252 604-827-5111 604-827-5115
Risk Management & Insurance	
Ron Holton, Chief Risk Officer	604-822-4218
Research Finance	
Evelyn Miguel, RF Manager	604-822-3275

SPARC Office

<u>Dr. Martin Kirk</u> , Director	604-822-8083
Helene Dragatsi, SSH Research Development Officer	604-822-9496
Dr. Stephane Dragon, CIHR/Health Research	
Development Officer	604-822-4318
Danica Kell, SSH Research Development Officer	604-822-8778
Christy McTait , Senior Internal Review Officer (CIHR/Health)	604-827-5615
<u>Dr. Alexander Unterberger</u> , NSE Research	604-822-5386
Development Officer	
<u>Dawn Whitworth</u> , Senior Manager, SSH Partnerships	604-822-3331
Dr. David Woods, NSE Research Partnership	604-822-8789
Development Manager	

Office of Research Ethics

Laurel Evans, Director, Research Ethics Behavioural Research Ethics Board	604-827-5113
Nadia Rad, Senior Administrative Coordinator Clinical Research Ethics Board	604-827-5114
	604.075.4440
<u>Pia Ganz</u> , Manager	604-875-4149
Svitlana Franchuk, Administrative Assistant	604-875-4111 x68917
BC Cancer Agency Research Ethics Board	
<u>Kristie Westerlaken</u> , Manager	604-877-6284
Children & Women's Research Ethics Board	
Jennie Prasad, Manager	604-875-2441
Providence Health Care Research Ethics Board	
<u>Julie Hadden</u> , Manager	604-682-2344 x63496

University-Industry Liaison Office

<u>Dr. John-Paul Heale</u> , Managing Director	604-822-2199
Dr. Mario Kasapi, Associate Director	604-822-8996
Dr. Brett Sharp, Associate Director	604-822-8588
<u>Derek Gratz</u> , Associate Director, UBC Okanagan	250-807-9853

Institutional Programs Office (CFI/BCKDF/WED)

<u>Sharon Wu</u> , Director	604-827-5279
Earl Dyer, Senior Finance Manager	604-827-5281
Vicki Ferguson, CFI/BCKDF Program Officer	604-827-5170
Amanda Main, Administration Coordinator	604-822-1352

Internal Audit

Johann Boulter, Associate Director	604-822-0505
Torial III Boarter, Tissociate Bil ector	0010220303

Other UBC Resources

The following links describe services and information of use to researchers and the UBC community at large.

Administration and Governing Bodies

Provides organizational charts and websites for University bodies, student & alumni bodies, unions and associations, and committees.

Campus Services

UBC offers a comprehensive set of campus services, from Athletics and Child Care to Waste Management.

Edudata Canada

Edudata Canada is a research centre in the Faculty of Education that acts as a custodian to large education, health, and economics data sets. It supports educational research, teaching, and policy development by acting as an information broker, and offers a comprehensive meta-analysis catalogue.

Faculties, Schools and Departments

Teaching and research at UBC are conducted in 12 faculties and 11 schools, each offering a broad range of programs of study.

Risk Management Services

Risk Management has created an <u>Orientation for UBC Faculty and Staff</u> to familiarize UBC faculty with their responsibilities in ensuring a safe working environment. Included are the mandatory legal and policy elements for which faculty are personally responsible. Risk Management Services provides a research safety program that covers chemical safety, biosafety, radiation, X-Ray and LASER safety as well as environmental management.

UBC IT

UBC Information Technology (UBC IT) provides faculty a variety of services to support research, including Research Systems (RISe), Virtual Desktop interface (VDI), Virtual Server and Storage (VSS), UBC email (FASmail), and Survey Tool.

Institutes & Centres

UBC is affiliated with a number of research institutes, centres, organizations, and hospitals, many of which are located on the university's main Point Grey campus.

Supply Management

UBC Supply Management provides <u>purchasing tools</u> and support including <u>Procurement Card</u> technology and supply contracts that can dramatically reduce procurement costs.

Building Operations

UBC Building Operations provides comprehensive facilities stewardship, maintenance, operations and renovation services for land and buildings owned and operated by the University.

UBC Sustainability Initiative

UBC is Canada's leader in sustainability in campus operations, research, and teaching and learning. The UBC Sustainability Initiative oversees UBC's engagement in a variety of initiatives designed to create a community that values ecology, society, and economy. The Social Economic Development Studies (SEEDS) program brings together students, faculty, and staff in projects that address sustainability issues. Staff and faculty members can request research pertinent to their fields, UBC students earn academic credit for their work, and instructors become more fully involved in the community. So far, more than 200 UBC community members have taken part in unique projects.

Statistical Research Consulting and Research Laboratory (SCARL)

For over 25 years, the professional statisticians at SCARL have assisted UBC researchers in the statistical formulation of research questions, the design of experiments and survey samples, the choice and explanation of statistical methodology, statistical computing and graphics, statistical analysis, and the interpretation of findings. We also assist in the preparation of grant proposals and organizing presentations and short courses. An integral part of the UBC Department of Statistics, SCARL provides a level of assistance that is matched to clients' needs, ranging from brief discussion and advice to indepth collaborative research.

UBC Library

In addition to its holdings, the UBC Library offers assistance to researchers in multiple ways to enhance and maximize your scholarly output. Their Scholarly Communications and clRcle offices provide information on and the infrastructure to support funder requirements for Open Access, while also working with researchers to understand publication rights more generally, and to explore opportunities to demonstrate research impact. UBC Library also helps with the management of research data.

research.ubc.ca

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This guide is intended to be viewed electronically.

Please contact us with any inquiries.

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Navigating UBC's Research Support Landscape

This guide provides information to new faculty at UBC on institutional services offered to enhance research funding competitiveness and success.

To assist you in navigating the support services available, the stages of the research and funding cycle is described below. Most resources are provided through offices under the direction of the Vice-President Research & International (VPRI).

Knowledge Mobilization

Open access publications:

UBC Library

Commercialization and company creation:

UILO

entrepreneurship@UBC

Funding Opportunities

Funding deadlines, information and requirements:

ORS UILO SPARC

Tri-Agency (SSHRC, CIHR, NSERC) and other grants:

SPARC

Industry-sponsored research, government and non-profit contracts, and intellectual property:

UILO

Outreach on funding programs, project

and proposal development and proposal review services:

Proposal Development

SPARC Faculty grant facilitators

Data management planning:

Advanced Research Computing / Library

Large institutional grants (e.g. CFI, CFREF):

SPARC Institutional Programs Office

Faculty grant facilitators

Conducting your Research

Ethical compliance with federal and provincial laws and certifications:

Ethics

Other compliance requirements:

ACUP Biosafety Chemical/Radiation

Data Privacy & Security

Environment

High performance computing:

Advanced Research Computing

Financial management and reporting:

Research Finance

Handout included: click to access

Weblink provided: click to access

Award

Notice of Decision (NOD) from agency/funder, account set-up, and reviewing and finalizing agreements:

ORS UILO

3 **Proposal Submission**

Ensuring all eligibility requirements, calendar of UBC & external deadlines, **UBC** Research Project Information Form, and obtaining institutional signatures:

ORS Faculty grant facilitators



ATTRACT AND MANAGE YOUR RESEARCH FUNDING

Office of Research Services ors.ubc.ca

HOW WE CAN HELP YOU

We provide the UBC community with efficient administrative support to help researchers navigate the process of attracting and managing funding.

Pre-Award Resources and Services (Finding & Applying for Funding)

1 Funding Opportunities

The Calendar of Funding Deadlines maintained by ORS lists the current and upcoming funding opportunities that are most frequently applied to by UBC researchers.

2 Proposal Submission

Investigators applying for grant funding must follow specific procedures for collecting institutional signatures and submitting a proposal to a funding agency. In addition to fulfilling the requirements of the faculty and the funding agency, the investigator must also request a UBC signature before submitting the proposal to the funding agency, even when the granting agency does not require an institutional signature.

Post-Award Resources and Services (When Funding is Awarded)

3 Award Stage

The Office of Research Services should be notified whenever a sponsor agency approves a research proposal for funding. Before you can access your funding you must demonstrate that your research meets all legal, regulatory and ethical requirements.

4 Compliance Certification

This is an important administrative step to demonstrate that your research, and by extension, UBC is compliant with the requirements of the funding agency and the law. It applies to all research conducted at UBC and its affiliated sites. Contact us early so we can direct you to the relevant offices (e.g. Ethics, Animal Care, Finance, Environmental policies) to start this process, and enable you to pursue your research as soon as possible upon joining the faculty at UBC.

5 Research Account

Once you receive an award notice from the sponsoring agency outlining the project term date, awarded amount, financial reporting requirements, terms and conditions of award, ORS will open a research account on your behalf. Once your research project/grant (PG) account has been set up, you will be able to access your funding and begin your research. From this point on, most of your research administration activities will involve financial and progress reporting.

Enabling Technology (RISe)

Researcher Information Services (RISe) is an online research administration tool that allows researchers to interact with their teams, administrators, and reviewers to manage various stages in the life of a research project, including compliance, COI, and reporting.

Contact <u>risesupport@ors.ubc.ca</u> to request a training session.

ATTRACT AND MANAGE YOUR RESEARCH FUNDING

Transferring Funds to UBC

ORS can assist with the transfer of your research funds from another institution. You will need to provide copies of the following pages from your original proposal, as well as a completed UBC Research Project Information Form (RPIF):

- Front page
- Signature page
- Summary or abstract
- All budget pages, including justification;
- Any documents relating to matching funds to collaborators
- For projects using humans, animals, and/or biohazards, an individual Certificate
 of Approval for each grant from the appropriate UBC Committee referencing the
 exact project title and sponsor

Signature Application Package

Every new funding proposal submitted to ORS for institutional signature must include the following:

- A signed <u>Research Project Information Form</u> (RPIF)
- Funding Proposal Title Page
- Agency Signature Page (if applicable)
- Abstract or Summary of your Project
- Agency Ethics Certification Requirements
- Budget summary and all accompanying financial information
- All letters of support or commitment from UBC, collaborating companies or other institutions

Who to Contact at ORS:

Senior Management	Martin Kirk Director Martin.kirk@ors.ubc.ca	Dean Kuusela Associate Director Dean.kuusela@ors.ubc.ca
	Margie Heras Executive Assistant to the Director Margie.heras@ors.ubc.ca	
Awards Management	Yvonne Ng Research Awards Manager Yvonne.ng@ors.ubc.ca	Carolyn de Melo Assistant Manager, Research Grants Carolyn.demelo@ors.ubc.ca

Research Location:	Grant Application Officers	Research Awards Officers
UBC Campus	Donna Lei Donna.lei@ors.ubc.ca 604-822-8595	Lily Liew (Natural & Applied Sciences) Lily.liew@ors.ubc.ca
	OR Holly Rail Holly.rail@ors.ubc.ca 604-822-8581	Shehnaz Motani (Health Sciences) Shehnaz.motani@ors.ubc.ca Sara Yuen (Humanities & Social Science) Sara.yuen@ors.ubc.ca
Child & Family Research Institute (CFRI	Nur Eisma Coordinator, Pre/Post Awards neisma@chri.ubc.ca	
Vancouver General Hospital (VCHRI)	Kristin Rasmussen Grants Officer Kristin.rasmussen@ors.ubc.ca	Susan O'Neil Manager, Research Awards Susan.oneil@ors.ubc.ca

HOW WE CAN HELP YOU

We enable research and innovation partnerships with industry, entrepreneurs, government and non-profit organizations.

HOW TO ENGAGE WITH US

As a UBC researcher, you should contact the UILO if you: want to engage in a research partnership with industry, non-profits or government; have a research discovery you wish to commercialize; have a technology that you want to patent; or wish to create a spin-off company around UBC intellectual property or research capacity.

1 Technology Transfer

Key Stats:

- **151** patents filed this year
- 17 exclusive licenses and 14 non-exclusive licenses in 2015/16
- \$8.7 million in licensing activity revenues this year
- **13** spin-off companies created in 2015/16
- 61 spin-off companies created from 2005-2015, generating \$540 million in capital and employing 400 people

We work with the research community at UBC and its Affiliated Hospitals to translate research outputs, including patentable inventions, proprietary materials, research tools, software and other innovations, out of the academy for the betterment of society. We:

- evaluate innovations from UBC for their potential to generate positive societal, financial and economic impacts
- secure protection for intellectual property developed at UBC
- protect the rights and interests of UBC's researchers
- establish commercialization or non-commercial mobilization strategies
- aid researchers in attracting development funding for their innovation
- engage with industry partners to establish commercialization agreements
- aid in the formation of spin-off companies

Examples

Roche (Basel, Switzerland) - Dr. Rennie and Dr. Cherkasov

UBC and Roche signed a landmark exclusive license this year to develop new therapies for the treatment of prostate cancer. Dr. Rennie and Dr. Cherkasov developed drugs to treat prostate cancers that have become resistant to existing treatments. Under the terms of the agreement with Roche, UBC can expect to receive an upfront payment, and up to \$141.7 million US in pre-clinical, clinical and sales milestone payments for the first product to reach the market, and royalties thereafter. The scientists will share 50 per cent of the net revenues.

Arbutus Medical (UBC Spin-Off Company, Vancouver, BC) - student led

Arbutus Medical was founded by a team of undergraduate students working on a research project to develop better surgical tools for the developing world. Their hard work resulted in a reusable drill cover that allows surgeons in resource-constrained settings to use drills purchased at a hardware store for orthopaedic surgeries in a sterile fashion. This is economically advantageous in resource constrained clinics, and the reusable, sterilizeable drill cover results in fewer infections for patients and greatly improved health outcomes. UBC has assigned the patented drill cover to Arbutus Medical who are already putting it to use in Syria and Africa.

BirchBioMed Inc. (UBC Spin-Off Company, Vancouver, BC) - Dr. Ghahary

BirchBioMed Inc. is a commercialization-based biotech company focused on the clinical evaluation and development of proprietary anti-scarring drugs, autoimmune therapeutics/therapies and novel strategies for transplantation. The intellectual property was exclusively licensed from UBC, where it was developed in the laboratory of Dr. Aziz Ghahary.

RESEARCH & INNOVATION PARTNERSHIPS: UILO

2

Sponsored Research Group

Key Stats (FY 2016):

- \$53.2 million value of industry contracts
- 1,342 industry sponsored research projects
- \$90.8 million value of government and nonprofit research contracts (non-grants)
- 1,112 government and non-profit research contracts (non-grants)

We are responsible for establishing all contractual research relationships between UBC's researchers (at all campuses), government and non-profit partners, as well as all research relationships with industry partners.

The benefits of partnerships with government and non-profit organizations are substantive, ranging from enriching educational experiences for students, to new and improved public policies, services and products. These benefits result in improved social, health, economic and environmental conditions for Canadians.

Examples

Boehringer Ingelheim (Ingelheim am Rhein, Germany) - \$3,735,020 - Dr. Ryerson

Dr. Chris Ryerson, a clinical respirologist at St. Paul's Hospital and Assistant Professor at UBC, studies pulmonary fibrosis, a devastating disease that effects 5 million people worldwide marked by progressive loss of lung function. Dr. Ryerson designed a clinical trial to investigate the optimal method of exercising for pulmonary fibrosis patients as a means to slow progression of the disease. Boehringer Ingelheim have generously contributed \$3,735,020 to fund the study across multiple hospitals in Canada, and create a registry of pulmonary fibrosis patients.

Weston Brain Institute (Toronto, ON) - \$3,632,177 - Dr. Stoessl, Dr. Wellington, Dr. Nygaard

The Weston Brain Institute is based on the philanthropy of the Weston family in Canada. The Institute funds high-risk, high reward research into neurodegenerative diseases. During the past year the Weston Brain Institute awarded grants to three UBC researchers totaling \$3,632,177:

- Dr. Jon Stoessl, Professor and Head of Neurology at UBC based at Vancouver Coastal Health Research Institute, has received funds to investigate how imaging of a protein called "tau" may help in the diagnosis of Parkinson's Disease and monitoring disease progression;
- Dr. Cheryl Wellington, Professor at UBC based at Vancouver Coastal Health Research Institute, received a Weston grant to develop rodent models for concussions in order to investigate therapies and protocols to limit traumatic brain injuries; and
- Dr. Haakon Nygaard, a clinical neurologist and Assistant Professor at UBC, based at Vancouver Coastal Health Research Institute, received funding to investigate drugs that may address dementia occurring in patients due to genetic mutations

BC Lottery Corporation (Kamloops, BC) - \$2,000,000 - Dr. Hall

Dr. Geoffrey Hall is a Professor in the Department of Psychology at UBC, where the Centre for Gambling Research is housed. The BC Lottery Corporation has generously provided \$2,000,000 to support the Centre's mission to advance the understanding of gambling behavior and offer practical solutions for the prevention of problem gambling.

CONTACT US

Contacts & Address

Contacts: uilo.ubc.ca/about-us/contact-us

Address:

Technology Enterprise Facility III #103 - 6190 Agronomy Road Vancouver, BC V6T 1Z3 **Tel:** (604) 822-8580

Fax: (604) 822-8589

HOW WE CAN HELP YOU

SPARC offers strategic research funding development services and resources for faculty, designed to provide a competitive advantage in funding applications, enhancing capacity, collaborations and strengthening research excellence at UBC.

HOW TO ENGAGE WITH US



- Information Sessions: provide an introduction to a specific funding agency and/or competition
- Monthly SPARC Newsletter: subscribe and/or view archived newsletters on the SPARC Connects webpage (https://sparc.ubc.ca/sparc-connects)
- Networking and Community Events: meet the SPARC team at the annual VPRI Research Orientation Day or other campus events
- Individual and Unit Consultation: meetings with researchers individually or presentations and meetings tailored to Dept., unit or Faculty needs

Project Proposal & Development

- Strategic Workshops: for researchers to connect with VPRI Funding Agency Advisors, UBC grant experts, Tri-Agency representatives and peer review panel members
- **Resources:** Sample Grant Library, Guidelines, Tips and Templates, Presentation Materials and other at: https://sparc.ubc.ca/cwl-resources
- **Test Your Concept**: faculty panels for researchers interested in sharing their project concepts and receiving feedback
- One-on-One Consultation: meetings with researchers who are developing project ideas into a competitive research funding application.
- Partnership Development: environmental scans/scoping assessments by SPARC, facilitation of networking and research partnership-building
- Proposal Management: planning and management of the various requirements and stages of major institutional proposals

Proposal Review - Peer Review

- One-on-One Review: Faculty reviewers provide applicants with written feedback on proposals
- Small/Large Panels Review: small or large groups of faculty who provide written feedback and engage in group discussion to strengthen proposals
- Internal Selection Panels: faculty select applications based on mandatory quota, written feedback and group discussion on proposals

Proposal Review - SPARC

- **Full Proposal Review:** SPARC professionals provide written feedback on full applications to strengthen them prior to submission
- Module Reviews: SPARC professionals provide written feedback on a targeted section or sections of applications to strengthen them prior to submission

DEVELOPING YOUR FUNDING PROPOSAL

A FEW EXAMPLES OF OUR RESEARCH COMMUNITY SUCCESS STORIES

In the past two years UBC researchers have benefited from SPARC services in the following competitions:

- CIHR's Foundation Scheme 1st Live Pilot: UBC success rate was 18% compared to a national success rate of 11%. \$51.4m in total UBC research funding, 70% of UBC award recipients utilized SPARC support
- **NSERC CREATE Program**: UBC has been awarded 16 grants and \$26.4m in funding from 2009-2016 more than any other university.
- SSHRC Insight Development: In the latest round of the SSHRC Insight Development Grant competition (2016) new applicants using full SPARC support were 42% more successful than researchers not accessing support. Fully supported researchers achieved a success rate of 72%.
- **CFREF**: UBC's Quantum Matter Institute was awarded \$66.5m in 2015 in the first competition. SPARC was involved with VPRI colleagues at all stages of the proposal.

HOW TO CONTACT US

The major programs supported by SPARC include the federal Tri-Council Agencies (CIHR, NSERC, and SSHRC), and other large-scale institutional research funding opportunities. For more information visit https://sparc.ubc.ca.

General Contact and Information

• Administrative Assistant: Kayla Peters kayla.peters@ubc.ca | 604 822-9955

Canadian Institutes of Health Research (CIHR)

- **Foundation Grants:** Christy McTait christy.mctait@ubc.ca | 604 827-5615
- Project Scheme Grants: Stephane Dragon stephane.dragon@ubc.ca | 604 822-4318
- CIHR Programs: Elizabeth Cheu elizabeth.cheu@ubc.ca | 604 822-7971

Natural Sciences and Engineering Research Council of Canada (NSERC)

- Research Partnerships (SPG, CRD, SNG, IRC etc.): David Woods <u>david.woods@ubc.ca</u> | 604 822-8789
- **DG and CREATE:** Alex Unterberger <u>alex.unterberger@ubc.ca</u> | 604 822-5386
- NSERC Programs: Joanne Moszynski joanne.moszynski@ubc.ca | 604 827-4057

Social Sciences and Humanities Research Council (SSHRC)

- Partnership & Partnership Development: Dawn Whitworth dawn.whitworth@ubc.ca | 604 822-3331
- Insight & Insight Development: Danica Kell danica.kell@ubc.ca | 604 822-8778
- Connections: Helene Dragatsi helene.dragatsi@ubc.ca | 604 822-9496

Other Funding Opportunities

- Includes Canada Excellence Research Chairs, Networks of Centres of Excellence, Canada First Research Excellence Fund, Canada Foundation for Innovation
- SPARC collaborates with other VPRI offices on these applications. Contact us (https://sparc.ubc.ca/contact-us)



ENABLING COMPUTATIONALLY AND DATA-INTENSIVE RESEARCH.

Advanced Research Computing arc.ubc.ca

HOW WE CAN HELP YOU

UBC Advanced Research Computing (ARC) is an institutionally-dedicated service for researchers across all disciplines working on questions that have large data and computational needs.

We offer services and resources driven by transformational information technology that will allow researchers to take advantage of high-performance computing facilities.

ARC's services are provided free-of-charge to the UBC Community

SERVICES

1 Access HPC

We provide access to a wide variety of tools and resources supporting the HPC needs of researchers including computation, data storage and sharing, and visualization.

2 Grant Consultation

We are available to consult on grant applications requiring digital research infrastructure.

If you are working on or thinking about putting together a CFI application including computing infrastructure, please contact arc.consult@ubc.ca as soon as possible to get this process started.

3 Systems Hardware

We oversee the hosting and management of CFI funded and contributed hardware in the UBC University Data Centre

We provide architectural and solution design for ARC systems and tools.

Research Data Management

We also work with the Library to help researchers plan, manage, and share their research data in compliance with funding agencies.

Contact Eugene Barsky, Research Data Management Librarian, at eugene.barsky@ubc.ca.

5 Data Privacy and Security

We support UBC researchers and initiatives working with sensitive data (e.g. health, genomics, administrative etc.) to ensure compliance with legislative, ethical and institutional requirements for data privacy and security. We provide access to data privacy consultation services, tools for secure collection and transfer of data, support in drafting and executing data sharing agreements, and privacy education and training for researchers.

Contact Kaitlyn Gutteridge, ARC Research Data Privacy and Security Officer, for more information at kaitlyn.gutteridge@ubc.ca.

ENABLING COMPUTATIONALLY AND DATA-INTENSIVE RESEARCH

DOMAIN SPECIFIC SUPPORT

1

Life Sciences

We support researchers managing data in Life Sciences to overcome a number of increasingly difficult challenges, including:

- data pipeline processing
- bioinformatics, and
- platform for analyzing enormous volumes of data across largely disconnected environments.

Contact Jamie Rosner, ARC Life Sciences Analyst, for more information at jamie.rosner@ubc.ca.

2

Digital Humanities and Social Sciences

We support the advancement of Digital Humanities and Social Sciences at UBC and have dedicated staff available free of charge to consult with researchers and ascertain training and resource needs.

Contact Megan Meredith-Lobay, ARC DH/eSS Analyst at megan.meredith-lobay@ubc.ca for more information.

THE ARC TEAM

Executive Leadership	Helen M. Burt	Steve Cundy
	Vice President Research and International,	Associate Director Advanced Research
	pro tem	Computing
		steve.cundy@ubc.ca
	Gail Murphy	
	Associate Vice President Research and	Corey Nislow
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	Chris.fjell@ubc.ca	
	Jamie Rosner	
	Life Sciences Analyst	
	Jamie.rosner@ubc.ca	



APPLYING FOR INFRASTRUCTURE FUNDING

Institutional Programs Office research.ubc.ca/institutional-programs-office

HOW CAN WE HELP YOU?

We provide support for the application, management and administration of major research projects. This includes projects funded by CFI/BCKDF, Western Economic Diversification (WD), Networks of Centres of Excellence (NCE) and other large-scale research projects and applications.

CFI/BCKDF PROGRAM ADMINISTRATION

What is CFI and BCKDF?

The Canada Foundation for Innovation (www.innovation.ca) was created by the Government of Canada in 1997 to fund research infrastructure including state-of-the-art facilities and equipment. The BC Knowledge Development Fund (BCKDF) is a provincial matching funds mechanism for CFI-funded projects in BC. (http://www.gov.bc.ca/citz/technologyandinnovation/Funding/BCKDF/)

2 Pre Award Support

The Institutional Programs Office administers, reviews, and submits all CFI and BCKDF applications for UBC. Prior to submission, the IPO will arrange, for most applications and funding programs:

- Peer review of the CFI application
- Full financial review and budget development support
- Detailed review of the BCKDF Step One application
- Letter of support from the Dean for the BCKDF application
- Submission of the CFI and BCKDF applications and completion of the BCKDF Step Two application

3 Post Award Support

Once the CFI decision has been made, the IPO will set up meetings with the Project Leaders to outline the next steps for project implementation. Through the full-cycle of the CFI grant, IPO staff will lead the Project Leaders through:

- Award finalization and PG set up
- Detailed financial reporting and CFI audit support
- CFI Project Progress Reporting (PPRs)
- Project amendment requests
- Addition of CFI-funded equipment and labs to UBC and CFI online tools to promote equipment sharing and collaboration
- Set up, administration, and reporting on the Infrastructure Operating Funds (IOF) that come along with a CFI award.

SUPPORT FOR LARGE SCALE PROJECTS

1 Pre Award Support

The Institutional Programs Office Large Scale Projects team will provide support for teams putting together large research grant applications (>\$10 million). This includes budget preparation, consultation, and review, helping to obtain institutional signatures, and ensuring the project has a sustainable financial model from day one.

APPLYING FOR INFRASTRUCTURE FUNDING

2 Post Award Support

There are a number of different models for financial management support that the Large Sale Projects team may employ for a new research project or centre. This may include embedded staff within a centre to take care of the financial administration of the project, or the support of centralized IPO staff to support transaction processing, financial review, forecasting, and budgeting, financial reporting, and audit preparation.

APPLYING FOR CFI FUNDING

John R. Evans Leaders Fund (JELF) The John R. Evans Leaders fund serves the needs of individual researchers or small teams of up to three faculty members. CFI hold JELF competitions three times per year with competition deadlines on February 15, June 15, and October 15 of each year. The UBC internal deadline attracted candidates (researchers who have been with UBC for <24 months) is usually about a month and a half prior to the CFI deadline.

For more information on the JELF application process at UBC please go to: https://research.ubc.ca/support-resources/research-funding-support/cfibckdfwd-infrastructure-applications/applying-cfi

2 Other Funds

Large Scale Projects

For one-time funding opportunities through CFI, the IPO will communicate details to faculty members through the Associate Deans of Research (ADRs) and faculty grant facilitators as well as our website.

Jackie Cheung

Finance Officer

jackie.cheung@ubc.ca

WHO TO CONTACT AT IPO:

Senior Management	Sharon Wu, Director sharon.wu@ubc.ca	Dr. Leonard Foster, CFI Advisor foster@chibi.ubc.ca
CFI/BCKDF Application Support	Vicki Ferguson CFI/BCKDF Program Officer vicki.ferguson@ubc.ca	Amanda Main Research & Admin Coordinator amanda.main@ubc.ca
CFI/BCKDF Financial Administration	Andy Lam Finance Manager andy.lam@ubc.ca	Lis Boyan Financial Analyst lisrianti.boyan@ubc.ca
	Claire Xu Financial Analyst claire.xu@ubc.ca	Stacy Yang Financial Analyst stacy.yang@ubc.ca

Andrea Anthony

Senior Finance Manager

andrea.anthony@ubc.ca

Office of Research Ethics ethics.research.ubc.ca

HOW WE CAN HELP YOU

We oversee and manage the process of reviewing and monitoring research involving human participants, and US financial conflict of interest (for additional information on US financial conflict of interest, please see https://ethics.research.ubc.ca/financial-conflict-interest-usa).

KEY RESEARCH ETHICS QUESTIONS

When does research require review?

All "research" involving human participants (interviews, surveys, clinical interventions), their data (secondary use, chart reviews) and/or their tissues (body fluids, DNA, human stem cells) requires review. Some exemptions apply, primarily for quality assurance / performance improvement initiatives. If in doubt, please contact the ethics board.

Research is defined by the TCPS 2 as "An undertaking intended to extend knowledge through a disciplined inquiry or systematic investigation."

- What policies govern research ethics?
- Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans (TCPS2 2014)
 http://www.pre.ethics.gc.ca/pdf/eng/tcps2-2014/TCPS_2_FINAL_Web.pdf
- UBC researchers involved in participant-based research must take the TCPS2 course on research ethics (CORE) tutorial (as of Sept 2016): http://www.pre.ethics.gc.ca/eng/education/tutorial-didacticiel/
- UBC Policy #89: Research and Other Studies Involving Human Subjects: http://universitycounsel.ubc.ca/policies/policy89.pdf
- Where do I apply for research ethics?

There are six different research ethics boards at UBC. Where to submit depends on the site and nature of the research and the researcher affiliation. Applications should be submitted to the most appropriate UBC board for research at multiple sites.

- BC Cancer Agency REB
- Children and Women's Hospital REB
- Providence Health Care REB
- UBC Behavioural REB
- UBC Clinical REB
- UBC-Okanagan BREB
- 4 What is harmonization?
- If your research involves another BC institution (University of Victoria or Simon Fraser University) or one of the health authorities, only one ethics application needs to be submitted to the most appropriate board.
- The boards involved will work together to review and approve the ethics application. Institutional approvals must still be obtained from the different sites

OBTAINING ETHICS APPROVAL

TIPS FOR SUBMITTING AN ETHICS APPLICATION

4	Campus-Wide Login
	(CWL)

Ensure you have a CWL login. To create this account, go to https://www.cwl.ubc.ca/SignUp/cwlsubscribe/SelfSubscribeIndex.do For more information on creating an account, see https://www.rise.ubc.ca/accessing-rise

2 Register in RISe

Once a CWL account has been created, you need to register in RISe. See https://www.rise.ubc.ca/accessing-rise for details on how to register in RISe.

3 Log into RISe

RISe is the main platform used for all UBC ethics applications. To submit an application, login to the RISe website with your CWL login and password information.

4 Identify your PI

Only UBC faculty can hold PI status. Graduate students must use their supervisors. Non-faculty generally find someone to sponsor their research and act as their PI.

5 Create a new application

To create a new application, click on the Human Ethics button under the heading Create on the left hand border of the screen. This will take you to a new application form. Complete the form as required.

Guidance notes are available on each UBC board's website for instructions on how to complete the form.

6 Submit the application

When the application is complete, the Principal Investigator can submit the application. By clicking the submit button, the application will automatically be sent to your department approver.

Once this designated individual has approved the application, it will automatically be sent to the ethics board for review.

7 Review Outcome

Once the application has been reviewed, the outcome of the review will be communicated to the Principal Investigator and Primary Contact via RISe.

Once all provisos have been adequately addressed by the Principal Investigator, the application will be approved and data collection can begin.

8 Post-approval changes

If there are any changes in your research study after the initial approval, the Principal Investigator must submit a Post Approval Activity (PAA) documenting these changes. The Post Approval Activity must be submitted before the actual changes take place with the study.

HOW WE CAN HELP YOU

The UBC Animal Care and Use Program (ACUP) is a University-wide program and covers all UBC persons who work with animals in research and teaching.

ANIMAL CARE AND USE PROGRAM QUICK-START GUIDE

Find out more about UBC's Animal Care and Use Program and what you need to begin your research project.

1 Funding Opportunities

The Office of Research Services (ORS) highlights many of the upcoming funding opportunities and deadlines.

https://ors.ubc.ca/funding-sources

2 Proposal Development

The SPARC Office, ORS and selected Grant Facilitators support strategic proposal development.

https://sparc.ubc.ca/

Contact the Director,
Veterinary Services &
Research Support

The Director, Veterinary Services & Research Support would like to understand your research plans and introduce you to the UBC Animal Care & Use Program, its facilities and services.

https://animalcare.ubc.ca/planning-your-research/meet-director-veterinary-services-research-support

Obtain Access to SharePoint

You will be granted access to the ACUP SharePoint site for additional resources. https://animalcare.ubc.ca/ubc-acup-sharepoint-user-guide.

5 Choose Your Facility

Your Clinical Veterinarian can assist you with your animal care protocol development, model development, including appropriate procedures and recommended pharmaceuticals, and animal welfare.

https://animalcare.ubc.ca/planning-your-research/choose-your-facility-and-meet-your-facility-manager

6 Meet Your Clinical Vet

The SPARC Office, ORS and selected Grant Facilitators support strategic proposal development.

https://sparc.ubc.ca/

7 Proposal Submission

Investigators applying for grant funding must follow specific procedures for collecting institutional signatures and submitting a proposal to a funding agency. https://ors.ubc.ca/proposal-submission

8 Obtain RISe Access

The RISe system allows the researcher to create, view, renew and amend protocols online. https://animalcare.ubc.ca/planning-your-research/rise-access

CARE AND USE OF ANIMALS IN RESEARCH

9 Award Stage	Before you can access your funding, you must demonstrate that your research meets all legal, regulatory and ethical requirements. https://ors.ubc.ca/compliance-reporting
Submit Biosafety Applications (if needed)	Any activities conducted at UBC facilities or affiliated institutions that involve biohazardous materials must be reviewed and approved by the UBC Biosafety Committee prior to the start of the research project. https://animalcare.ubc.ca/animal-care-committee/biosafety
Submit Animal Care Protocol	Before any animals are ordered and/or any procedures are performed, you must submit an animal care protocol application to the Animal Care Committee through RISe. https://animalcare.ubc.ca/animal-care-committee/process
Animal Care Protocol Approval	You will be notified by email when your animal care protocol is approved. https://animalcare.ubc.ca/animal-care-committee/process/#Approval
Research Account Opened	Once you receive approval from the Animal Care Committee, ORS will then open a research account on your behalf. https://ors.ubc.ca/research-accounts-management
Training for You and Your Lab	All personnel who work with animals, including Principal Investigators, must have appropriate training prior to working with animals. https://animalcare.ubc.ca/training
Controlled Drugs Application	You will need to apply for an exemption if you wish to use controlled drugs or narcotics for research purposes prior to ordering animals. https://animalcare.ubc.ca/conducting-your-research/controlled-drugs-application
Order Animals and Pharmaceuticals	Once your animal care protocol is approved, you can then order animals. https://animalcare.ubc.ca/conducting-your-research/orders-deliveries-transfers

CONTACTS

Lynn MacDonald	Dr. lan Welch	
Manager, Animal Care & Biosafety Committees	University Veterinarian, Animal Care Services	
<u>lynn.macdonald@ors.ubc.ca</u>	ian.welch@ubc.ca	
604.827.5111		
	J.P Heale	
Roger Chow	Managing Director, University Industry Liaison Office	
Animal Care & Biosafety Assistant	<u>ip.heale@uilo.ubc.ca</u>	
roger.chow@ors.ubc.ca		
	Dean Kuusela	
Dr. Marcel Bally	Associate Director	
Chair, Animal Care Committee	Office of Research Services	
mbally@bccrc.ca	dean.kuusela@ors.ubc.ca	
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OBTAINING BIOSAFETY APPROVAL

UBC Biosafety Committee ors.ubc.ca/biosafety

HOW WE CAN HELP YOU

The UBC Biosafety Committee would like to ensure a smooth transition for you as you move to UBC.

The Biosafety Committee is run through the Office of Research Services (www.ors.ubc.ca). Chemical Safety and Radiation are both run through Risk Management Services (www.riskmanagment.ubc.ca).

STEPS TO FOLLOW:

- When you know you are coming to UBC and know that you will be using hazardous materials (chemical, radiation or biohazards), contact Risk Management Services to discuss whether any special arrangements are required.
- If using biohazardous materials, arrange for on-line access to RISe (Research Information Services) and submit a biosafety application. (www.rise.ubc.ca)
 - Prior to approval, biosafety training is mandatory for all personnel involved in the project. If you are a PI not directly handling the materials, a shorter biosafety training course is available. Courses can be found at: http://www.riskmanagement.ubc.ca/courses

CONTACTS

Lynn Macdonald,

Manager, Animal Care & Biosafety Committee 604-827-5111 lynn.macdonald@ors.ubc.ca

Dr. Ross MacGillivray,

Chair, Biosafety Committee ross.macgillivray@ubc.ca

Ms. Stephanie Thomson,

Manager, Research Safety stephanie.thomson@ubc.ca

Roger Chow

Animal Care & Biosafety Assistant roger.chow@ors.ubc.ca

Mr. Bruce Anderson, Director

Occupational & Research Health & Safety bruce.anderson@ubc.ca

HOW WE CAN HELP YOU

Research safety partners with researchers across campus to ensure that laboratory research is conducted safely and in accordance with applicable regulations. Two specific areas are chemical safety and radiation safety. Both the Chemical Advisory Committee and the Radiation Advisory Committee are administered through Risk Management Services by the Research Safety Manager.

SERVICES - Chemical Safety

The Chemical Safety Program is dedicated to incorporating the entire life cycle of the chemical beginning with purchasing and ending with disposal. The aim is to ensure chemicals are used and handled properly to prevent injury, illness, disease, fire, explosions or property damage.

1 Chemical Safety Training

Mandatory training for all laboratory persons handling hazardous chemicals. This training includes WHMIS and must be refreshed every 5 years.

2 Chemical Hygiene

Provide guidance and support to review the potential risks of overexposure to particular hazardous chemicals.

3 Fumehood

Fumehoods are tested annually, after any repairs have been performed and when there is a complaint of a malfunctioning fumehood to ensure that WorkSafeBC requirements are met.

4 Laboratory Hazard Door Signage

This provides anyone entering the space with a comprehensive view of the hazard classes contained within a laboratory space. It also enables emergency responders to determine the appropriate and effective response to emergency situations.

Transportation of Dangerous Goods

To ship or receive dangerous goods other than classes 1, 6.2, or 7, the general TDG course through Danatec is available. A UBC specific course is under development.

Chemical Waste Disposal

The online Chemical Waste Inventory System allows researchers to input chemical information and obtain approval from Environment Services Facility and then have their chemicals removed.

7 Decommissioning

Researchers moving spaces should contact Risk Management Services for guidance and support on the requirements for moving to a new research space.

HANDLING CHEMICALS + RADIATION SAFELY

SERVICES - Radiation Safety

The Radiation Safety Program is dedicated to the safe and legal management of ionizing radiation – materials emitting particles energetic enough to knock electrons out of any material the particles penetrate. Radiation may come from radioactive materials or be electronically generated x-rays.

Radiation Safety Training

Prior to applying for a permit or working under an existing permit, completion of Radiation Safety Training is mandatory. This training must be refreshed every 5 years, by taking a shorter version of the course: http://rms.ubc.ca/radiation-and-x-ray-safety-training/

2 Radioisotope Permits

At this time, all UBC researchers wanting to possess or use any amount of radioactive material must apply for a permit through Risk Management Services. The application form completed will differ depending on whether you will be using open or sealed source materials. http://rms.ubc.ca/radiation-permits/. Note: beginning in 2017, permit applications and amendments will be moving to RISe.

3 Radiation Purchasing

UBC researchers with valid Radioisotope Permits may place orders for radioactive materials through the online Radiation Safety Purchasing System. As part of the permitting process, Risk Management Services provides access to and support for the online Radiation Safety Purchasing System. http://rms.ubc.ca/radiation-purchase-inventories-and-disposal/

4 Disposal

Researches using high activity, long-lived radioisotopes can arrange for disposal of waste by contacting Risk Management Services

5 Decommissioning

Researchers moving away from the use of radioactive material should contact Risk Management Services for guidance and support on the requirements for terminating a Radioisotope Permit or moving to a new research space.

CONTACTS

Stephanie Thomson

Manager, Research Safety Stephanie.thomson@ubc.ca

Janet Hankins

Occupational & Research Safety Associate Janet.hankins@ubc.ca

Teela Narsih

Occupational & Research Safety Associate Teela.narsih@ubc.ca

Bruce Anderson

Director, Occupational & Research Safety bruce.anderson@ubc.ca



ENVIROMENTAL MANAGEMENT AT UBC

Environmental Services rms.ubc.ca/environment

HOW WE CAN HELP YOU

Environmental Services supports University departments seeking to meet their environmental obligations as prescribed by UBC Policy #6 - Environmental Protection Compliance and UBC Policy #9 - Hazardous Materials Management.

Through environmental audits, consultation, and the development of an Environmental Management System, Environmental Services provides the regulatory and technical guidance to:

- minimize the environmental impact of their operations;
- mitigate environmental risks; and
- prevent and control spills and releases to the environment.

Environmental Services staff also compile and submit environmental compliance reports to various agencies at the municipal, provincial and federal level.

KEY ENVIRONMENTAL MANAGEMENT QUESTIONS

Why is Environmental
Management important
to research?

More than 400 laboratories on campus use and store chemical, biological and radioactive materials. Additionally, UBC's Point Grey campus is in close proximity to the natural environment.

- What are the research related environmental risks?
- Hazardous materials use and storage
- Hazardous waste generation
- Spills and releases of hazardous materials
- Discharges to storm and sewer systems
- Research projects performed outdoors and abroad

What are the relevant UBC policies and other regulations?

3

There are 40 different regulations, acts and guidelines. Here are some examples:

- UBC Policy #6 Environmental Protection Compliance http://www.universitycounsel.ubc.ca/files/2010/08/policy6.pdf
- UBC Policy #9 Hazardous Materials Management http://www.universitycounsel.ubc.ca/files/2010/08/policy9.pdf
- Environmental Management Act http://www.bclaws.ca/civix/document/id/complete/statreg/03053 04
- BC Hazardous Waste Regulation
 http://www.bclaws.ca/civix/document/id/complete/statreg/63_88_00
- Transportation of Dangerous Goods Act & Regulations https://www.tc.gc.ca/eng/tdg/clear-tofc-211.htm
- Metro Vancouver Sewer Use Bylaw http://www.metrovancouver.org/boards/Bylaws1/GVSDD_Bylaw_299- Unofficial_Consolidation.pdf
- Fisheries Act http://laws-lois.justice.gc.ca/eng/acts/f-14/page-10.html#docCont

ENVIRONMENTAL MANAGEMENT AT UBC

4

What are your responsibilities in mitigating environmental risks?

- Safely manage and dispose of hazardous materials
- Prevent and control spills and releases to the environment; be prepared for spill response
- Assess you research projects for any environmental impact whether you are working on campus, outdoors or abroad
- Minimize the environmental impact of your research activities and operations

Who can provide you with environmental services and resources?

Risk Management Services (RMS), Environmental Services group supports departments across the University to meet their environmental obligations.

How can we help you address and minimize your environmental risks?

Environmental Services provides faculty and staff with regulatory/technical guidance through environmental audits, consultation, training, and services, with focus in these key areas:

- Hazardous waste disposal
- Aqueous waste assessment
- Lab recycling programs
- Green Labs
- Pollution prevention and spill response
- Environmental assessment of grant applications (research outdoors/abroad)
- Hazardous materials storage tanks management

Need more information?

RMS Environment Website: www.rms.ubc.ca/environment

Noga Levit

Director, Environmental Services 604-822-9280 Noga.levit@ubc.ca

Ligia Gheorghita

Advisor, Environmental Services 604-822-9890 Ligia.gheorghita@ubc.ca

HOW WE CAN HELP

Once your research account has been set up by the Office of Research Services, Research Finance is responsible for ongoing financial administration, including financial reporting and revenue collection.

KEY SERVICES - Post Award Administration

1 Compliance

We ensure that all sponsored research and specific purpose funds at UBC are administered in compliance with funding agency, University, and accounting policies by conducting spot audits and coordinating agency audits.

finance.ubc.ca/research-finance

Record Keeping + Reporting

We maintain financial reports for research funds, collect financial reports from collaborators, and submit periodical financial reports and statements to sponsors.

3 Liaison

Together with Office of Research Services (ORS) and University-Industry Liaison Office (UILO), we act as liaison between UBC researchers and sponsor agencies and provide assistance to researchers and departmental administrators with respect to research project financial issues.

4 Monitoring

We monitor research accounts to identify issues relating to elements such as deficits, end-dates and foreign currency receipts

5 Additional Support

We provide numerous other services, including:

- Establishing policies and procedures
- Conducting training, explain expense eligibility and researcher responsibilities
- Invoicing, collection and transfer of funds
- Managing cheque deposits and budget adjustments

FUNDS MANAGED BY RESEARCH FINANCE

Specific Purpose Fund

The **Specific Purpose Fund** is a budget based fund, restricted by the donor or granting agency and is administered by Research Finance. The Fund records all transactions applicable to external donations, grants and other contributions received for specific purposes other than fee-for-service, awards, sponsored research, capital, and agency funds.

Sponsored Research Fund

Sponsored Research Fund accounts for all transactions applicable to research projects and research activities. It is a budget based fund which records all transactions incurred for research projects and activities, grants, awards, donations and contract monies received for research purposes. The use of this fund is usually restricted by the sponsor or granting agency.

CONTACT US: https://finance.ubc.ca/research-finance

MISSION STATEMENT

UBC Library's Scholarly Communications and cIRcle offices provide information on and the infrastructure to support funder requirements for Open Access, while also working with researchers to understand publication rights more generally, and to explore opportunities to demonstrate research impact.

CHOOSING OPEN ACCESS: REQUIREMENTS AND OPTIONS

1 Funder Requirements

In addition to the Canadian Tri-Agencies, an increasing number of funding agencies worldwide require that funded research be made available to the general public via Open Access options. Information on the different funding agency requirements can be found via out website. SHERPA/JULIET (Sherpa.ac.uk/Juliet/index.php) also provides a database of funder mandates.

Article Processing Charges (APCs)

Some publishers provide open access options that are tied to Article Processing Charges that often cost thousands of dollars. UBC does not currently have an APC fund to support these fees; however, we do have a limited number of journal memberships that provide discounts for UBC researchers. Sometimes APCs can be negotiated down at the beginning of the publication process. Including projected APC costs in a grant application can also mitigate these fees.

3 Open Access Levels

Take note of the type of open access options available under your publication contract. *Gold open access* indicates publishing in a completely open access journal. The Directory of Open Access Journals (doaj.org) provides a listing of such journals categorized by discipline. *Green open access* provides the option of publishing a pre- or post-print of an article into an institutional repository. See more about cIRcle, UBC's institutional repository, below.

DEPOSTING IN cIRcle

1 What is cIRcle?

cIRcle is an open access digital repository for published and unpublished material created by the UBC community and its partners. You can find articles, conference and workshop papers, theses and dissertations, technical reports and working papers, books, datasets, learning objects, multimedia materials, and more.

2 What can cIRcle do?

cIRcle is presented through UBC Library's Open Collections (open.library.ubc.ca). Content is indexed through various search engines, including Google & Google Scholar, and cIRcle provides permanent URLs and DOIs for all items, so item links remain unchanged over time. All content is stored locally, backed up off-site, and preserved in a digital preservation system called Archivematica.

MAXMIZING YOUR SCHOLARLY OUTPUT

How can cIRcle help meet Open Access requirements?

3

cIRcle assists researchers in compliance with Tri-Agency policies via green open access. There is no cost to deposit items in cIRcle, which provides a mediated deposit service for researchers. cIRcle offers a number of services to help you manage and enhance your scholarly profile; contact cIRcle staff for more information about submission and services.

WORKING WITH PUBLISHERS

Understanding your rights

You have the most influence on the future use of your research when negotiating your author agreement with prospective publishers. It is important to consider issues such as copyright ownership, open access option and archiving before signing an agreement. Check the list of contacts below for help on these issues.

2 Creating your own publications

An alternative strategy to publish research is to create an Open Access journal via the UBC Library-hosted Public Knowledge Project, which uses Open Journal Systems.

WORKING WITH SCHOLARLY COMMUNICATIONS AND YOUR SUBJECT LIBRARIAN

Raising your impact factor

Scholarly Communications and your subject librarian can support you in navigating the various tools and metrics available for analyzing impact. We can provide guidance on enhancing your academic profile through social networking and the establishment of Author IDs such as ORCID, which provides a unique identifier to each researcher, facilitating linking to publications across platforms.

HOW TO CONTACT US:

Scholarly Communications	UBC Vancouver: Scholcomm.ubc.ca Scholarly.communications@ubc.ca	UBC Okanagan: library.ok.ubc.ca/wrs/csc/ csc.okanagan@ubc.ca
cIRcle	circle.ubc.ca ubc-circle@lists.ca	
Subject Librarians	directory.library.ubc.ca/subjectlibrarians/	
Copyright	copyright.ubc.ca copyright.services@ubc.ca	

HOW WE CAN HELP YOU

Whether a venture idea emerges from scientific research in the lab, is a business idea borne in a for-credit program, or is an idea from creative UBC students, faculty, staff or alumni, e@UBC is here to help the entrepreneurially minded to overcome the substantial challenges in creating successful ventures.

OUR PROGRAMS

e@UBC has developed an entire ecosystem of integrated programs that can be easily accessed by UBC students, faculty members, alumni, and staff. These programs support participants from the initial idea concept stage through to company building and securing funding.

1 Accelerator Workshops

Validating your business model

- General workshops such as Competitive Landscape.
- Lean LaunchPad intensive 5 week bootcamp to validate a business model
- Track-specific workshops such as Target Product Profile (TPP) Development
- 2 Start-up Space

Drop-in space for startup ventures, located in the Graham Lee Innovation Centre located in the Robert H Lee Alumni Centre

- Open concept office space enabling startup ventures to network and collaborate
- Biweekly lunch and learn events
- Venture community building activities

3 Open Office

Where startups work with experienced entrepreneurs, mentors, and advisors

- UBC entrepreneurs work one-on-one with Entrepreneurs-in-Residence
- Venture access to legal advisors, intellectual property advisors, NRC Concierge
- Ventures meet with e@UBC volunteer mentors
- 4 Venture Builder

Dedicated guidance in company building from e@UBC Entrepreneurs-in-residence (EIRs)

- Intensive work with dedicated EIR on a company-building plan towards strategic outcome (typically seed funding)
- Guidance from vertical specialty mentoring teams such as the human health VMT
- Eligible for the Hatch incubator space

5 Seed Funding

Financing for selected high-potential ventures through the e@UBC Seed Fund

- A key source of early stage risk capital for high potential businesses in the e@UBC ecosystem
- Cofunding with external partners
- Dedicated fund for Impact ventures

NEW VENTURE CREATION

6 Mentor Network

Over 100 volunteer industry mentors

- Mentors provide one-on-one mentoring in accelerator workshops
- Source of experienced management, board members, advisors, investors for UBC ventures
- **7** For-credit Courses

Integrating entrepreneurship into formal learning

- Sauder School of Business for-credit courses
- Entrepreneurship 101, New Venture Design, Tech Entrepreneurship
- 8 Entrepreneurial Network

Energizing the entrepreneurial community on campus

- Spotlight speakers
- Startup weekends
- Entrepreneurial social events
- Enable other entrepreneurial events such as MBA-led orphan technology startup weekend, Hatching Health
- 9 Hatch Incubator

Office and maker space for selected high-potential ventures

- e@UBC in partnership with faculties of Applied Science, Science, and Sauder, the Hatch incubator provides dedicated startup office space and workbench space for selected Venture Builder ventures
- Dedicated full time e@UBC EIR supporting ventures located in the Hatch
- Maker space equipment planned for fall 2016

PROGRAM COST

e@UBC is funded by UBC, government agencies, generous donors, and sponsors. We provide e@UBC programs and services to UBC ventures at no cost. While there is no dollar cost to you, we have high expectations for the ventures we work with. Building a venture is highly rewarding, and it is also very hard work. We manage our investment of time into ventures in terms of their depth of commitment, the ability to work effectively with EIRs and mentors, the desire to contribute to UBC entrepreneurial community building, and of course the potential of the venture itself. If your venture develops sufficiently to attract capital, the e@UBC Seed Fund may consider investing in your company on common commercial terms.

ELIGIBILITY

e@ubc and its programs are available to faculty, staff, students and recent alumni.

As a faculty member, if you intend to work on your venture full time, we can put you on the right path with programs such as the Lean Launchpad and Venture Builder, and help you to build an effective venture team with the roles and skillsets that are critical for success.

If instead you want your idea out in the world but your main focus will continue at the university, then we can facilitate the creation of an experienced founder team that will do the hard work of building a business.

CONTACT US

Visit http://entrepreneurship.ubc.ca/support-us to discover who to contact in our program and funding teams.