

The background of the page is a photograph of a rocky shoreline. In the foreground, a hand is holding a blue, textured tray or container. The tray is partially filled with water and contains some small, green, leafy plants or seaweed. The background shows a rocky shore with various types of seaweed and small plants growing on the rocks.

# **SUPPORTING EXCELLENCE & IMPACT**

**UBC RESEARCH, INNOVATION & CREATIVE ACTIVITY**

**2024/25**



**THE UNIVERSITY OF BRITISH COLUMBIA**

**Office of the Vice-President, Research & Innovation**



We acknowledge that UBC’s campuses are situated within the traditional territories of the Musqueam, Squamish and Tsleil-Waututh and in the traditional, ancestral, unceded territory of the Syilx Okanagan Nation and their peoples. UBC’s research and scholarly activities take place on Indigenous lands throughout British Columbia and beyond.

The Vice-President, Research and Innovation (VPRI) portfolio is grateful to collaborate with units, departments, schools and Faculties across our campuses and affiliated health authority research institutes in delivering support to the UBC research community.

UBC researchers investigate coastal biodiversity along Vancouver shoreline  
Photo credit: UBC, Clare Kiernan

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# About UBC's VPRI

UBC is one of the world’s top research universities, recognized for the excellence and impact of its research on local, national and global communities.

The VPRI portfolio works with colleagues across the university’s campuses and affiliated health authority research institutes to provide support throughout the research life cycle. This support includes identifying, securing and managing funding; supporting the ethical and secure conduct of research; developing shared research platforms; celebrating and recognizing research success; and helping researchers and their partners generate positive social, health, environmental and economic impacts.

We are guided by the needs of UBC researchers and by UBC’s *Strategic Directions 2025-2030*, in supporting excellence and impact in research, innovation and creative activity.

To meet the university’s vision, our portfolio works to enhance UBC’s research capacity and infrastructure and promotes collaboration that builds on UBC’s recognized disciplinary strengths. These strengths span business, creative and performing arts, engineering, health, humanities, law, life sciences, physical sciences and social sciences. We help UBC researchers and scholars connect with partners to generate transformative new products, treatments and ventures and to contribute to advances in practice and policy that improve lives in British Columbia and around the world.

The VPRI executive team extends its sincere gratitude to the more than 500 people who drive forward the initiatives and priorities of the VPRI portfolio and ensure its operational effectiveness in supporting UBC researchers every day. This includes members of the VPRI portfolio as well as the faculty advisors, associate deans of research, Research and Innovation Council members, volunteer faculty peer reviewers, committees and working groups. We also extend our gratitude to the Faculties and departments with whom we collaborate to provide extensive support to our research community.

**VPRI Executive Team (as of September 1, 2025)**

**Dr. Gail C. Murphy**, Vice-President, Research & Innovation

**Dr. Rachel Fernandez**, Associate Vice-President, Research & Innovation

**Dr. Lisa Sundstrom**, Associate Vice-President, Research & Innovation

**Dr. Heather Frost**, Assistant Vice-President, Research

**Dr. Matthew Evenden**, Associate Vice-President, Research & Innovation (to October 1, 2024)

**Okanagan**

**Dr. Suzie Currie**, Associate Vice-President and Vice-Principal, Research & Innovation

**Dr. Ed Hornibrook**, Associate Vice-Principal, Research & Innovation

**Dr. Karis Shearer**, Associate Vice-Principal, Research & Innovation *pro tem* (September 2023 to May 2025)

**UBC Faculty Research Advisors 2024/25**

**Dr. Purang Abolmaesumi**, Sciences & Engineering Advisor (NSERC)

**Dr. Jehannine Austin**, Canada Foundation for Innovation Advisor (CFI)

**Dr. Kelly McNaghy**, Health Advisor (CIHR)

**Dr. Christina Laffin**, Social Sciences & Humanities Advisor (SSHRC)

# Providing Support

## FROM IDEA TO IMPACT

Each year, UBC researchers and scholars engage in approximately 10,000 projects that attract funding from government, industry and non-profit partners. The VPRI portfolio collaborates with Faculties and departments to provide extensive support to researchers throughout the life cycle of their projects.

**ATTRACTING RESEARCH FUNDING**

We work with colleagues across the university to help identify and increase awareness of appropriate funding opportunities for researchers at all career stages. This includes helping to facilitate and develop connections with potential partners and funders for major national and international research consortia.

UBC’s researchers develop outstanding funding applications with support from our teams. We also verify that grant proposals meet eligibility and submission requirements and provide the institutional signature before submission.

Our portfolio oversees institutional research chair programs, including Canada Research Chairs, and coordinates the development and submission of major infrastructure proposals, including for the Canada Foundation for Innovation (CFI) and other major strategic programs.

**MANAGING RESEARCH FUNDS**

We set up research project accounts and offer training and guidance to help researchers and their teams to manage their funds effectively. Our teams also provide support to researchers over the lifespan of their projects, helping them to develop initial project budgets and meet funder and reporting requirements.

**ETHICS, SAFETY AND BEST PRACTICES IN RESEARCH**

We support researchers in meeting the highest ethical standards in their research and scholarship. This includes obtaining the necessary approvals for projects involving human participants or animals, and other safety and regulatory certificates.

We support researchers to responsibly and ethically collaborate on research projects with Indigenous partners, and in research that engages Indigenous communities, peoples or lands, in a manner that protects Indigenous rights and advances reconciliation.

Our team offers training and guidance to safeguard research and assess risk in the context of privacy and security. We also provide support to navigate and comply with the security requirements of national and international funding competitions.

We provide guidance and training to integrate equity, diversity and inclusion (EDI) principles into research and help support best practices in effective research data management.

**BUILDING COLLABORATIONS**

Our teams help to develop ongoing strategic national and international partnerships and negotiate all contractual terms relating to industry-sponsored research as well as contractual agreements with government and non-profit organizations.

Expertise and support are also available to help researchers ensure their collaborations with Indigenous communities are based on community-led interests, reciprocal relationships and principles of mutual accountability.

**CONDUCTING RESEARCH**

We collaborate with departments across the university to provide funding, tools and resources for researchers to conduct and share research at the highest standards of excellence.

We also support faculty by providing access to cutting-edge research equipment and facilities through shared research platforms in a range of disciplines and specialties.

**GENERATING IMPACT**

We help researchers generate social, economic, environmental, cultural and health impacts from their work through partnerships, knowledge mobilization, entrepreneurship and commercialization.

This includes working with researchers to assess the commercial potential of inventions and advancing high-potential discoveries by developing and enacting suitable patenting strategies; creating and supporting the growth of spin-off companies; or licensing UBC discoveries to most effectively support the transition from discovery and invention to impact.

Through UBC Press, authors in the social sciences can publish sophisticated and transformative works that push the boundaries of scholarly discourse and make vital contributions to the democratic exchange of ideas.

**PRIZES AND RECOGNITION**

We celebrate our researchers through internal institutional awards programs and support UBC researchers and scholars to develop applications and nominations for major external research prizes and awards that recognize their outstanding achievements nationally and internationally.



# Creating Opportunities

FOR UBC'S RESEARCH COMMUNITY

The VPRI has developed and is a partner in multiple internal programs and initiatives aimed at enhancing research excellence. These programs build on our core support services and address both the shared and specific needs of the research community at each UBC campus.

## COLLABORATIVE AND INTERDISCIPLINARY APPROACHES

## COLLABORATIVE RESEARCH MOBILITY AWARDS

The UBC Collaborative Research Mobility Awards support research collaboration across UBC in Vancouver and the Okanagan by providing funding to initiate new or strengthen existing research collaborations; enable travel to access unique infrastructure/core facilities at each location or to hold research meetings; and support travel, *per diems* and accommodation.

UBCV | UBCO

## RESEARCH EXCELLENCE CLUSTERS

Research clusters are interdisciplinary networks of researchers addressing key societal and cultural problems, working together to solve challenges that transcend traditional boundaries associated with departments, institutions and funding agencies.

UBCV | UBCO

## PUBLIC HUMANITIES HUB

The UBC Vancouver Public Humanities Hub (PHH Vancouver) provides tailored support and networks for humanities scholars to advance knowledge in the public humanities.

UBCV

**GLOBAL RESEARCH EXCELLENCE INSTITUTES**

UBC's Global Research Excellence (GREx) Institutes integrate fundamental and translational research while generating global impacts.

UBCV | UBCO

CLIMATE SOLUTIONS  
RESEARCH COLLECTIVE

The Climate Solutions Research Collective builds connections among UBC climate researchers, groups and initiatives and encourages new collaborative research on climate change solutions.

UBCV | UBCO

## COMMUNITY-UNIVERSITY ENGAGEMENT SUPPORT (CUES) FUND

The CUES Fund augments partnerships that benefit communities across the province and advance collaborative research, teaching and learning opportunities between communities and the university. The fund is jointly administered by the offices of the Vice-Presidents, Research and Innovation, and External.

UBCV | UBCO

ǰəl sic snpaǰnwix<sup>w</sup>tn

Opening in 2026, ƛəl sic snpaḵnwx̱w̱ṯn is a campus building at UBC Okanagan that will bring together scholars and students in a new and innovative way. Uniquely organized into neighbourhoods, the building will be shared by interdisciplinary research teams working to solve complex societal challenges from multiple perspectives. It will also be home to UBC's Interior Salish language fluency programs and the Interior Salishan Studies Centre.

UBCO

## CAMPUS AS A LIVING LAB (CLL)

CLL is a collaborative framework that enables researchers, students, staff and external partners to leverage the university's campuses to explore, develop and test new ideas, and share the knowledge gained from these experiences.

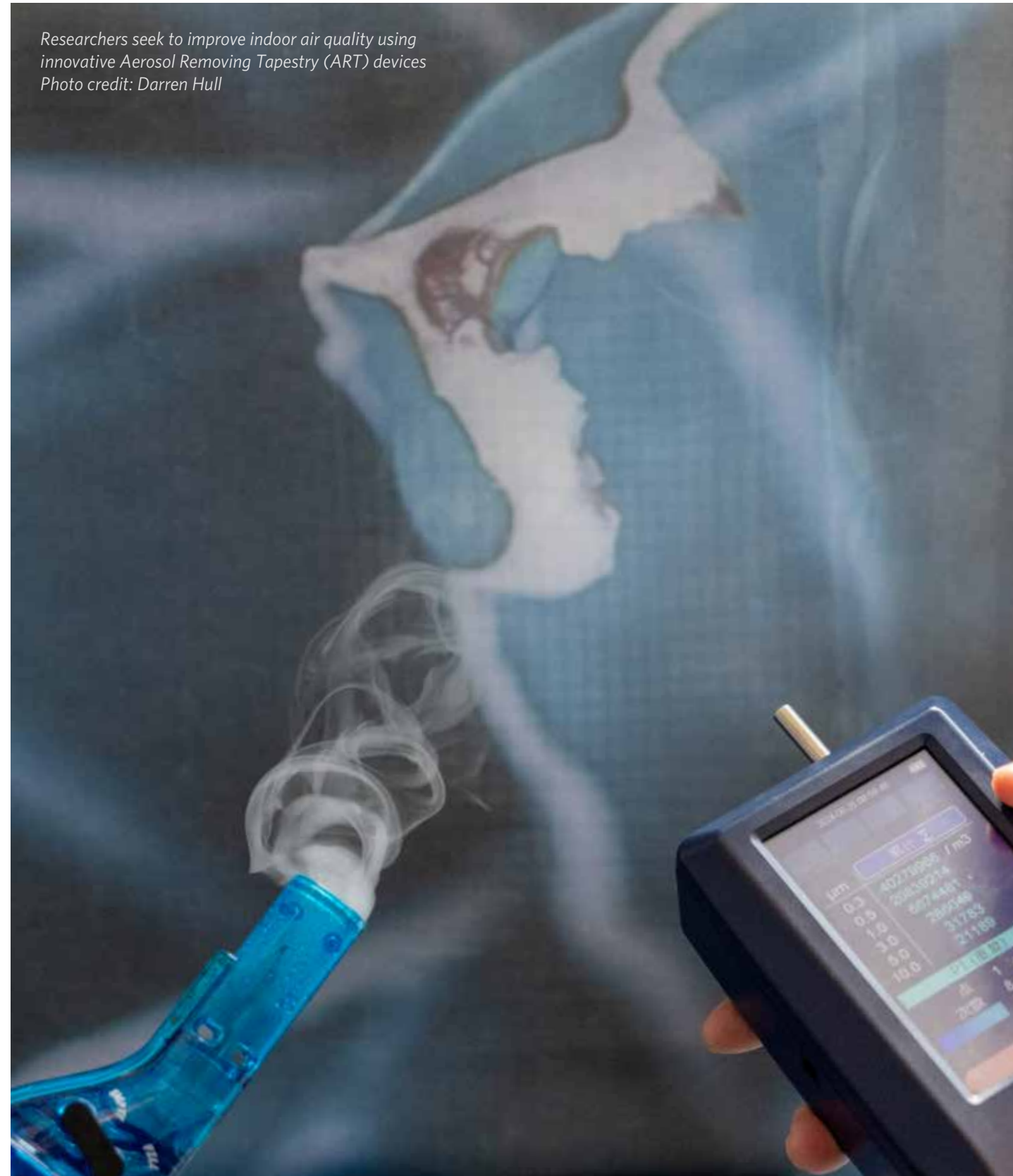
UBCV | UBCO

**UBC OKANAGAN RESEARCH INSTITUTES**

At the Okanagan campus, research institutes overseen by the Office of the Vice-Principal, Research and Innovation provide opportunities for researchers from diverse disciplines to collaborate and share knowledge with each other and with the communities they serve, as well as with national and international colleagues.

UBCO

Researchers seek to improve indoor air quality using innovative Aerosol Removing Tapestry (ART) devices  
Photo credit: Darren Hull



ENHANCING OPPORTUNITIES FOR EXCELLENCE

EARLY-CAREER RESEARCHERS

HAMPTON NEW FACULTY GRANTS

Grants to support the research programs of recently hired tenure-track professors in the social sciences and humanities.

UBCV | UBCO

ASPIRE PROGRAM

Grants provided to supplement the one-time start-up funding from Faculties to new professorial recruits so that new faculty members have the resources required to develop a robust research career at UBC Okanagan.

UBCO

PRITCHARD GRADUATE STUDENT GRANTS

Stipends for UBC Okanagan graduate students undertaking health-related research projects with local clinical collaborators. The goal of the fund is to strengthen collaborative research activity among UBC Okanagan, the Interior Health Authority and BC Cancer - Kelowna.

UBCO

RESEARCH EQUIPMENT AND TOOLS

RESEARCH FACILITY SUPPORT GRANTS

Funding to extend the useful life of shared equipment at UBC Vancouver through support for their operation, replacement of parts, repair or upgrading.

UBCV

CRITICAL RESEARCH EQUIPMENT AND TOOLS FUND

Support for the acquisition, development, repair, replacement or creation of critical research infrastructure at UBC Okanagan. Through this program, we aim to improve the range and quality of our research infrastructure, keep pace with technology and provide opportunities for student research training.

UBCO

SOCIAL SCIENCES AND HUMANITIES

BRIDGE FUNDING

Support for faculty members applying to SSHRC grants to improve and resubmit applications that were previously unsuccessful, including provisions for knowledge sharing, planning or data collection, publication costs and other justified expenses aimed at strengthening the SSHRC grant application.

UBCV | UBCO

SCHOLARLY PUBLICATION FUND

Grants administered by the UBC Library to support scholars in the social sciences and humanities to pay for costs related to publishing, such as publisher subventions, indexing and image clearances.

UBCV | UBCO

SSHRC INSTITUTIONAL GRANTS

Funding for small-scale research and research-related activities to develop, maintain or strengthen research capacity and excellence in the social sciences and humanities.

UBCV

SSHRC EXPLORE/EXCHANGE GRANTS

Seed funding to develop research projects or conduct pilot work in the social sciences and humanities, or to share research results through knowledge mobilization and attendance at conferences or similar venues for knowledge sharing.

UBCO

OPEN ACCESS FUND FOR HUMANITIES AND SOCIAL SCIENCES RESEARCH

Grants administered by the UBC Library to support UBC faculty members with the costs of making books or journal articles accessible without subscription or paywalls.

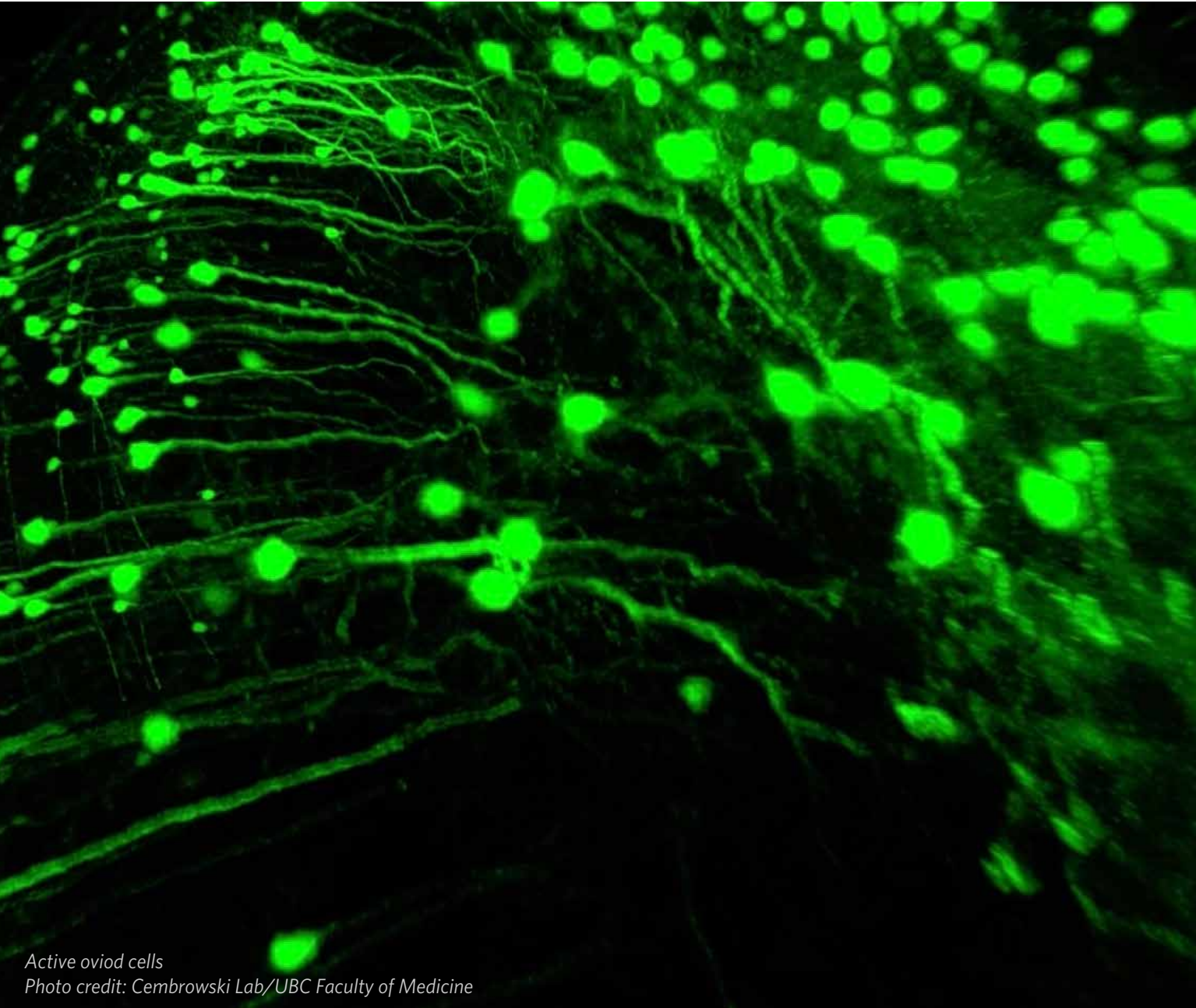
UBCV | UBCO

ENHANCING EXCELLENCE

PETER WALL LEGACY AWARDS

Valued at approximately \$4 million annually, a suite of awards to support research and scholarly programs that will help move BC and the world forward in sustainable approaches to pressing global issues. Wall Fellowships and Wall Research Awards are made possible and supported by the more than \$100 million Peter Wall Legacy Fund.

UBCV | UBCO



Active ovid cells  
Photo credit: Cembrowski Lab/UBC Faculty of Medicine



# Support from the VPRI Portfolio

## AT A GLANCE

### UBC VANCOUVER

The following units and teams have offices or facilities physically located at UBC Vancouver but are available to serve all UBC researchers where indicated.

#### OFFICE OF THE VICE-PRESIDENT, RESEARCH AND INNOVATION

Oversees management of institutional research support units and provides strategic support for major institutional initiatives and competitions, including the teams listed below. [research.ubc.ca/about-vpri](https://research.ubc.ca/about-vpri)

- Horizon Europe
- Institutional Chair Programs
- Research Security
- Shared Research Platforms (UBCV)
- Strategic Initiatives and Internal Competitions (UBCV and cross-campus)

SUPPORTS: [UBCV](#) | [UBCO](#)

#### ADVANCED RESEARCH COMPUTING

Supports high-performance computing and data management needs; provides consultations, expertise and access to digital research infrastructure. [arc.ubc.ca](https://arc.ubc.ca)

SUPPORTS: [UBCV](#) | [UBCO](#)

#### ANIMAL CARE SERVICES

Provides research and administrative support, veterinary services, compliance, training, procurement, animal housing and technical services, and works with UBC's Animal Care Committee in support of the UBC Animal Care and Use Program. [animalcare.ubc.ca](https://animalcare.ubc.ca)

SUPPORTS: [UBCV](#) | [UBCO](#)

#### INDIGENOUS RESEARCH SUPPORT INITIATIVE (IRSI)

Provides research support and services to Indigenous communities and university researchers to undertake collaborative projects based on community-led interests, reciprocal relationships and principles of mutual accountability. [irsi.ubc.ca](https://irsi.ubc.ca)

SUPPORTS: [UBCV](#) | [UBCO](#)

#### INNOVATION PARTNERSHIPS

Provides cross-sector expertise to identify opportunities that stimulate innovation through building high-impact, mutually beneficial partnerships between UBC researchers and industry, government and non-profits. [innovation.ubc.ca/partner-ubc](https://innovation.ubc.ca/partner-ubc)

SUPPORTS: [UBCV](#) | [UBCO](#)

#### INNOVATION UBC

Works with UBC's researchers to support and accelerate the translation of their research into real-world impacts. Through research partnerships, technology transfer and venture-building services, UBC researchers have access to a robust ecosystem of services and support to strengthen their translation opportunities. [innovation.ubc.ca](https://innovation.ubc.ca)

SUPPORTS: [UBCV](#) | [UBCO](#)

#### INSTITUTIONAL PROGRAMS OFFICE

Manages the full cycle of major federal, provincial and regional funding awards, including those offered by the CFI, the British Columbia Knowledge Development Fund (BCKDF) and Pacific Economic Development Canada (PacifiCan). [ipo.ubc.ca](https://ipo.ubc.ca)

SUPPORTS: [UBCV](#)

#### OFFICE OF RESEARCH ETHICS

Oversees and manages the process of reviewing and monitoring research involving human participants or animals; provides training and leadership on emerging issues in research ethics; is responsible for reviewing radiation, biosafety, and chemical safety; and manages regulatory compliance with US financial conflicts of interest. [researchethics.ubc.ca](https://researchethics.ubc.ca)

SUPPORTS: [UBCV](#) | [UBCO](#)

#### OFFICE OF RESEARCH PRIZES AND AWARDS

Provides strategic guidance and nomination support for external awards and oversees UBC's internal faculty research awards program. [prizes.research.ubc.ca](https://prizes.research.ubc.ca)

SUPPORTS: [UBCV](#) | [UBCO](#)

#### OFFICE OF RESEARCH SERVICES (ORS)

At UBC Vancouver, ORS helps researchers obtain the institutional signature for research grant applications, manage ongoing compliance requirements, set up research accounts and spending limits, transfer research funds and report on research funding. [ors.ubc.ca](https://ors.ubc.ca)

SUPPORTS: [UBCV](#)

#### RESEARCH FINANCE

Provides financial administration support and training to help ensure all sponsored research funds are spent in compliance with policies and guidelines, ensures funds are collected from sponsors, prepares and submits financial reports to funders and helps to resolve any funding issues. [finance.research.ubc.ca](https://finance.research.ubc.ca)

SUPPORTS: [UBCV](#)

#### SPARC (SUPPORT PROGRAMS TO ADVANCE RESEARCH CAPACITY)

Provides strategic research development services and resources designed to develop capacity, build collaborations and increase Tri-Agency funding application success rates. [sparc.ubc.ca](https://sparc.ubc.ca)

SUPPORTS: [UBCV](#)

#### UBC PRESS

Publishes high-quality works of original scholarship as Canada's leading social sciences publisher. [ubcpublishing.com](https://ubcpublishing.com)

SUPPORTS: [UBCV](#) | [UBCO](#)

#### SHARED RESEARCH PLATFORMS

Facilities funded jointly by the VPRI with Faculties and departments to offer specialized research services to UBC and external research communities; these facilities are physically located at UBC Vancouver.

[research.ubc.ca/shared-research-platforms](https://research.ubc.ca/shared-research-platforms)

- Advanced Research Computing (VPRI unit)
- Animal Care Services (VPRI unit)
- Facility for Infectious Disease and Epidemic Research (FINDER)
- Pacific Centre for Isotopic and Geochemical Research (PCIGR)
- Plant Care Services
- Sequencing + Bioinformatics Consortium
- UBC Bioimaging Facility
- Upright Open MRI

SUPPORTS: [UBCV](#) | [UBCO](#)



Students use virtual reality to transform stroke recovery  
Photo credit: Paul Joseph, UBC

UBC OKANAGAN

The following units, teams and research institutes have offices or facilities physically located at UBC Okanagan but are available to serve all UBC researchers where indicated.

OFFICE OF THE VICE-PRINCIPAL, RESEARCH AND INNOVATION

Oversees management of research support units and offers internal competitions on the Okanagan campus; provides strategic support for major campus and institutional initiatives, including from the teams listed below. [research.ok.ubc.ca/contact](#)

- Partnerships (including Venture Mentoring Service)
- Strategic Initiatives and Institutional Programs (UBCO)

SUPPORTS: [UBCO](#)

OFFICE OF RESEARCH SERVICES (ORS)

At UBC Okanagan, ORS provides research facilitation and administrative services, helps researchers find funding and provides grant program and application support. They also supply the institutional signature for grant applications, manage new and ongoing compliance requirements, and set up and provide ongoing maintenance of research accounts.

[ors.ok.ubc.ca](#)

SUPPORTS: [UBCO](#)

SHARED RESEARCH PLATFORMS

Shared research platforms at the Okanagan campus include cutting-edge instrumentation, advanced technologies, data processing and analysis. These facilities are physically located at UBC Okanagan.

[research.ok.ubc.ca/funding-support/shared-platforms](#)

- Biosciences Facility
- Fipke Laboratory for Trace Element Research (FiLTER)
- Plant Growth Facility
- Research Data Centre
- UBC STAR (Survive and Thrive Applied Research)

SUPPORTS: [UBCV](#) | [UBCO](#)

UBC OKANAGAN RESEARCH INSTITUTES

Current research institutes overseen by the Office of the Vice-Principal, Research and Innovation at the Okanagan campus include:

- Analytics in Medical Sciences (AiMS) Institute
- Canadian Institute for Inclusion and Citizenship
- Institute for Community Engaged Research
- Institute for Healthy Living and Chronic Disease Prevention
- Materials and Manufacturing Research Institute
- Okanagan Institute for Biodiversity, Resilience, and Ecosystem Services (BRAES Institute)

SUPPORTS: [UBCV](#) | [UBCO](#)

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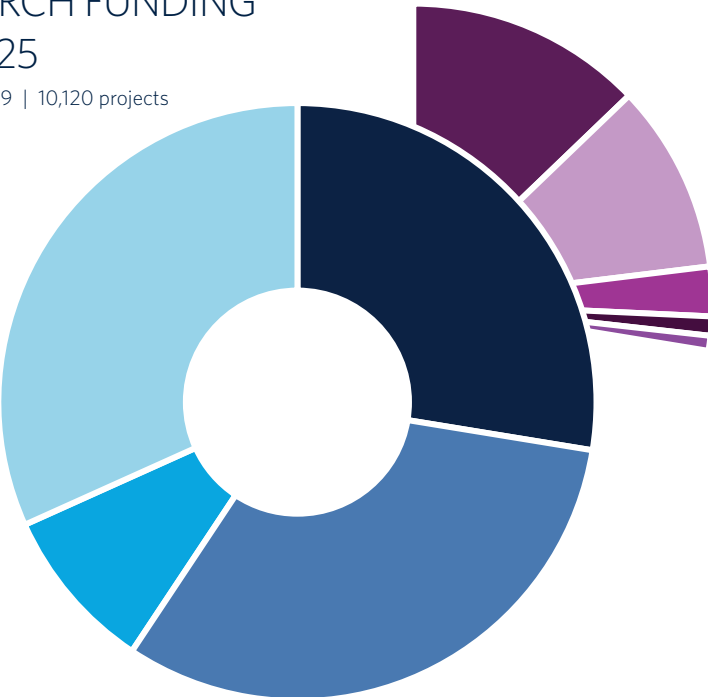
Left: A fish is released with an electronic tag as part of study to find ways to improve salmon survival.  
Photo credit: Steve Johnston



# UBC Research by the Numbers

## RESEARCH FUNDING 2024/25

\$936,365,099 | 10,120 projects



### TOTAL FUNDING BY SOURCE | \$936,365,099

- Government (Tri-Agency)**  
\$258,208,315 | 3,235 projects
  - CIHR  
\$120,069,331
  - NSERC  
\$95,851,606
  - SSHRC  
\$25,043,271
  - New Frontiers in Research Fund  
\$9,700,683
  - CBRF  
\$7,543,423
- Government (Other)**  
\$297,360,179 | 1,660 projects
- Industry**  
\$83,722,355 | 1,064 projects
- Non-Profit**  
\$297,074,251 | 4,161 projects

In 2024/25, 10,120 research projects were supported by a combined budget of \$936.4 million. This total research funding is the highest recorded at UBC. 2024/25 saw new highs in the value of non-profit funding, other government funding (non-Tri-Agency) and industry funding for research projects. New funding highs were experienced by researchers on each campus, with UBC Okanagan researchers attracting \$47.1 million for more than 1,000 research projects.

Investments in research infrastructure from the CFI, BCKDF and other matching sources help UBC researchers address critical challenges and remain at the forefront of exploration and knowledge generation. Due in part to the cyclical nature of major infrastructure funding competitions, most notably the Biosciences Research Infrastructure Fund in 2024/25, CFI and related funding reached a record high of \$160.4 million in 2024/25.



### INFRASTRUCTURE FUNDING | \$160,395,120

- Canada Foundation for Innovation (CFI)**  
\$89,765,458 | 270 projects
- British Columbia Knowledge Development Fund**  
\$48,031,506 | 56 projects
- CFI Matching**  
\$22,598,156 | 229 projects

### FUNDER LOCATION | \$936,365,099

- Canada**  
\$841,251,815 | 9,133 projects
- US**  
\$75,858,629 | 749 projects
- Other Foreign**  
\$19,254,656 | 238 projects

Ninety per cent of UBC's research funding is from Canadian sources. Eight per cent of UBC research funding in 2024/25 came from the US, and two per cent from other sources outside of Canada.



**41**  
Times Higher Education Ranking  
(2024)

**313**  
Fellows of the  
Royal Society of Canada

**272**  
Total spin-off companies created

**47**  
ARWU Ranking  
(2024)

**201**  
Canada Research Chairs

**\$13B**  
Estimated cumulative value of  
sales of products incorporating  
licensed UBC technologies

**24**  
Highly Cited Researchers  
(2024)

**6**  
Canada Excellence  
Research Chairs

**8**  
Nobel Prize winners  
affiliated with UBC



A new device detects common drink-spiking drugs  
Photo credit: UBC Applied Science



# In the News

## ADVANCING HEALTH AND WELLBEING



### Scientists discover high-risk form of endometrial cancer—and how to test for it—using AI

Using artificial intelligence (AI) to spot patterns across thousands of cancer cell images, UBC researchers have pinpointed a distinct subset of endometrial cancer that puts patients at much greater risk of cancer recurrence and death, but would otherwise go unrecognized by traditional pathology and molecular diagnostics.

The findings, published in *Nature Communications*, will help doctors identify patients with high-risk disease who could benefit from more comprehensive treatment.

The discovery builds on work by Dr. Jessica McAlpine and colleagues at BC's Gynecologic Cancer Initiative, who in 2013 helped show that endometrial cancer can be classified into four subtypes, with each posing a different level of risk to patients. The team then went on to develop an innovative molecular diagnostic tool, ProMiSE, that is now widely used to guide treatment decisions.

To advance the tool further, Dr. McAlpine recently turned to fellow UBC researcher Dr. Ali Bashashati to try and further segment the category using advanced AI methods.

Dr. Bashashati and his team developed a deep learning AI model that analyzes images of tissue samples collected from patients. The AI was trained to differentiate between different subtypes, and after analyzing over 2,300 cancer tissue images, pinpointed the new subgroup that exhibited markedly inferior survival rates.

The team is now exploring how the AI tool could be integrated into clinical practice alongside traditional molecular and pathology diagnostics, thanks to a grant from the Terry Fox Research Institute.

UBCV

Photo credit: UBC

### UBC-Rogers partnership creates opportunities for AI-enabled research to redefine emergency room patient care

The Timely and Extended Monitoring in Emergencies and Disasters (Tx MED) project is using Internet of Things (IoT) sensors, AI and 5G to create a low-cost wearable system to monitor the vital signs and location of patients in emergency departments. The project aims to mitigate instances where extended wait times in emergency departments can have fatal consequences.

UBCV

### Telerehabilitation provides benefits for stroke survivors

A new program led by UBC researchers enhances the continuum of care for stroke survivors, increasing access to rehabilitation programs that improve quality of life.

UBCO

### Insomnia therapy reduces postpartum depression: study

Researchers from UBC's Okanagan and Vancouver campuses led a trial that demonstrated the effectiveness of cognitive behavioural therapy for treating insomnia among new mothers.

UBCV | UBCO

### Scientists develop AI tool to predict sepsis in apparently healthy newborns

The tool has the potential to help healthcare workers diagnose sepsis among babies earlier, including in lower and middle-income countries where neonatal sepsis is of particular concern. Researchers at UBC and SFU led the study in collaboration with the Medical Research Council Unit The Gambia.

UBCV

### Students use virtual reality to transform stroke recovery

Graduate students in computer science and psychology are collaborating on a project that leverages augmented- and virtual-reality tools to provide immediate, customized feedback to help the brain's ability to relearn skills after a stroke.

UBCO

### One in 20 people in Canada skips doses or prescriptions due to cost

New UBC research surveyed more than 223,000 Canadians ages 12 and older, and found that five per cent of respondents skipped prescribed medications due to cost.

UBCV

### Pilot study shows medical cannabis can ease addiction recovery

A new study examined how medically supervised cannabis use in a residential recovery home may support people in treatment for substance use challenges. The study also highlighted the need to reduce stigma.

UBCO

### Indigenous-led solutions to health crises: UBC researchers tackling pandemic inequities

A new UBC research excellence cluster is centering Indigenous-led solutions to health crises in the context of the COVID-19 pandemic and beyond.

UBCV

### Spinal cord injuries from mountain biking exceed hockey, other high-risk sports

New research reveals an alarming number of people suffering spinal cord injuries from mountain biking, often leading to permanent and life-altering paralysis.

UBCV

### AI can tell if a patient battling cancer needs mental health support

Researchers at UBC and BC Cancer have developed a new AI model that can accurately predict if a person receiving cancer care will require mental health services during their treatment journey.

UBCV

### Diabetes prevention program rolls out across Canada

Thousands of Canadians can now access a program proven to lower their risk of developing Type 2 diabetes.

Dr. Mary Jung and her Diabetes Prevention Research Group, with support from Diabetes Canada, designed the Small Steps for Big Changes program based on close to a decade of clinical trials on behaviour change. Okanagan YMCA locations then piloted the program for people at risk of Type 2 diabetes.

The program was expanded and, by the end of 2025, is expected to be available at more than 40 YMCA locations across Canada as well as four locations in Australia.

Small Steps for Big Changes is offered at no cost to participants, who receive YMCA access for one month, plus one-on-one sessions with a coach specifically trained to deliver the program. Each session includes a discussion on nutrition and physical activity followed by supervised exercise.

"One in eight Canadians are at risk of Type 2 diabetes and we know that up to 80 per cent of Type 2 diabetes cases are preventable by adopting healthy behaviours," says Dr. Jung. "The goal of Small Steps for Big Changes is to help as many Canadians as possible make this change. The YMCA, by virtue of its many locations across Canada and commitment to inclusiveness, is helping us make a giant leap forward."

UBCO





# ADDRESSING CLIMATE CHANGE AND PROMOTING RESILIENCE

## Robotics and AI advancing wildfire and agricultural research

Researchers at UBC Okanagan are using robotics and AI to address two of Canada's biggest challenges: wildfire mitigation and sustainable agriculture.

For wildfire, Dr. Mohamed Shehata's team is exploring how autonomous robots guided by AI could perform high-risk tasks like creating fire lines. For example, a mobile robot could be equipped with fire ignition tools or high-pressure water hoses, reducing the need for firefighters to enter high-risk areas.

Working alongside drones for real-time data and mapping, the robot could navigate rough landscapes and assist in targeted fire suppression, making wildfire management safer and more precise.

"We're looking at how we can send these robots into difficult terrain and control them remotely," Dr. Shehata says. "Instead of putting firefighters at risk, we can use AI-powered navigation and real-time data visualization to guide operations from a safe distance."

For agriculture, these robots can also use AI to help farmers detect weeds and monitor crop health. This automation can reduce chemical use, improve crop yields and make farming more sustainable—key priorities for Canada's agricultural sector.

"Using AI and sensor-equipped drones, we can map fields and identify exactly where intervention is needed—whether it's watering, fertilizing or targeted weed removal using lasers instead of herbicides."

UBCO



Photo credit: Clearpath Robotics

## From mine tailings to carbon sinks: UBC spinoff captures carbon in rocks

Founded on UBC research, Arca is on a mission to remove millions of tonnes of CO<sub>2</sub> from the atmosphere every year by leveraging a reaction known as 'chemical weathering' to capture carbon in rocks from mine tailings.

UBCV

## Renewable energy is more popular than politicians realize: study

The UBC study, published in *Nature Energy*, showed how local policy-makers routinely underestimate public support for renewable energy infrastructure, potentially making decisions contrary to their constituents' wants and needs.

UBCV

## An equitable world can have sustainable fashion, art and wine

A UBC professor's new book proposes that these consumer industries require sweeping, transformative change to reduce their waste, make them more sustainable, and meet the rising social consciousness of consumers.

UBCO

## Climate change could bring more severe bacterial infections, including in corals

A new UBC study shows that climate warming can potentially make bacterial and fungal infections deadlier for cold-blooded animals.

UBCV

## Researcher uses AI to help understand climate change's effects on global food production

A UBC professor is part of a team developing an AI-based tool to help learn and predict what a heating planet will do to global food supplies and what we can do to keep the world fed.

UBCV

## A hidden waterway comes alive through community art

Partly underground before it appears as a channelized waterway, a section of Brandt's Creek in Kelowna often goes unnoticed. But for doctoral student Madeline Donald, there's still a sense of vitality in the living things that survive there, albeit under difficult circumstances.

UBCO

## Basic income could solve global poverty and stop environmental destruction: study

A UBC researcher led an analysis of 186 countries which found that providing regular, set payments to all adults in the world could boost global GDP by about 130 per cent.

UBCV

## Student's research examines how microbes, fungi could remove heavy metals from soil

A graduate student from the Advanced Geomaterials Research Lab is exploring the potential of organisms as a sustainable way to clean up contaminated soils. The project has potential to be used in a variety of industries.

UBCO

## Bamboo takeout containers, free of "forever chemicals," offer alternative you can compost at home

A UBC student has developed bamboo-based takeout containers that are as durable as conventional options and that break down quickly in natural conditions.

Forever chemicals, or per- and polyfluoroalkyl substances (PFAS), are commonly used in disposable packaging for their oil- and grease-resistant properties. However, they persist in the environment and have been linked to plastic pollution and serious health concerns.

With support from industry partner Bamboos Lifestyle Concept Limited, Camryn Collette, a forestry master's student, has developed takeout plates made from bamboo and a natural, starch-based PFAS alternative. This biodegradable substance provides similar grease resistance to PFAS without the environmental cost, and meets U.S. Food and Drug Administration safety standards.

The ultimate goal of the research is to make bamboo a viable, eco-friendly alternative, says Prof. Chunping Dai, a bamboo expert in the UBC Faculty of Forestry, who supervised the work.

"Bamboo grows incredibly fast: you could grow a small forest in a couple of months. It's a renewable resource that can reduce our reliance on plastics while offering the durability takeout containers need, without polluting landfills for decades."

UBCV



Photo credit: UBC





**New Indigenous parenting app provides culturally grounded parenting advice**

UBC researchers and Indigenous Elders and members of the səxʷkíxítəlx kíl' áəcmála? Central Okanagan Aboriginal Early Years Table have launched Two-Eyed Seeing for Parents, a new mobile phone app designed to support young Indigenous parents and contribute to revitalizing language within the Okanagan Nation community.

The app combines Indigenous wisdom and contemporary knowledge and is now available for download on Google Play and Apple's App Store. Once downloaded, it can be used offline, reducing potential cost and connectivity barriers for communities where internet access and cellular data costs may be challenging.

Tailored to meet the unique needs of Okanagan Nation families, the app provides information on nutrition, health, safety and traditional parenting approaches. It reflects the preferences of Okanagan Nation parents, who expressed a desire for content that integrates syilx parenting values, histories and traditions, including a mix of content in nsyilxcən and English to support language revitalization efforts.

The app was developed through a collaborative effort led by Elders Wilfred “Grouse” Barnes, Pamela Barnes and Margaret Eli, and facilitated by UBC nursing professor emeritus Dr. Wendy Hall, in partnership with the Interior Health Authority and multiple community service providers.

“We recognize the importance of preserving our language and passing down our cultural teachings to future generations,” said Elder Margaret Eli. “Through this app, we hope to strengthen our community by empowering parents with the knowledge and tools they need to raise healthy, thriving children.”

UBCV

Photo credit: Keligraphic/UBC Applied Science

**Helping others is good for our health. But how do we balance our own needs?**

UBC psychologists are exploring how those already juggling childcare, work, health concerns, financial challenges and countless other responsibilities can strike the right balance between giving to others and taking care of their own needs.

UBCV

**When is a war canoe not a war canoe?**

UBC research explored how Canoe Kayak Canada’s officially sanctioned war canoe differs greatly from traditional Indigenous “war canoe” practices and origins, and how colonialism influenced Canadian culture and sport.

UBCV

**UBC researcher uses her pain to empower youth affected by violent crime**

A UBC researcher is leading an NSERC PromoScience project to launch a mentorship program for up to 30 youth affected by violent crime. The youth participants, nominated by community partners, are paired with graduate student mentors who will guide them in building a science fair project.

UBCV

**Study determines students use AI ethically to enhance their learning**

The findings of a new UBC paper contradict common concerns about students' use of AI and show that students used generative AI to speed up tasks, not just boost grades.

UBCO

**Beyond backlash: how feeling threatened by diversity can trigger positive change**

The study found that when companies propose EDI initiatives, it’s important to create opportunities for honest dialogue. That way, when the dominant group feels uncertain or threatened, they can be given information and strategies that lead to understanding rather than resistance.

UBCV

**TikTok users are more productive—and negative—when they use AI voice**

New UBC research showed that TikTok creators produce longer videos and more videos per week when using an AI voice, but the sentiment of those videos was more negative.

UBCV

**Insidious generative AI tactics threaten elections, democracy: report**

A UBC report examined the growing threat that emerging tactics, such as deepfake robocalls and AI-generated harassment campaigns, pose to democracy while also advocating for a balanced response.

UBCV

**Enriching family literacy in the Okanagan one kit at a time**

UBCO researchers collaborated with the Okanagan Regional Library to develop library kits to enhance young learners’ literacy skills at home.

UBCO

**New study explores how people react to online hate**

Two UBC doctoral students launched a study exploring how individuals respond to incidents of online hate using either commercial or legal remedies. They hope their findings will help bridge the gap between how legislators and those in the justice system think about the law and how people who are victims of hate actually experience it.

UBCV

**Can meeting on Zoom affect a first impression?**

A study found that in-person and video chat perceptions were equally positive, but that poor internet connections had negative effects on first impressions.

UBCO





## UNCOVERING INSIGHTS FROM THE NATURAL WORLD

### Introduced bumblebee dominates Lower Mainland pollinator surveys

In BC, important agricultural industries such as blueberries, raspberries and strawberries benefit from wild bumblebee pollination. But when master's student Sarah Knoerr recently surveyed agricultural sites in Delta and Richmond, the *Bombus impatiens*—an introduced species—was the most common species she found: a potential issue for local bee populations.

"Growers are meant to destroy the colonies at the end of their life cycle for hygiene and biosecurity reasons, so we shouldn't see them in the wild," explains Dr. Risa Sargent, an associate professor in the Faculty of Land and Food Systems who supervised Knoerr's survey.

But Knoerr's survey shows they may now be breeding in the wild all over metropolitan Vancouver. Sargent continues, "While we don't have direct evidence of their impacts yet, we suspect they could compete with local bees for nesting sites and flowering resources...We're worried that the growing numbers of *Bombus impatiens* could reduce the population persistence and health of our native bees."

The team is calling for legislation to increase the adoption of agricultural practices that help protect native bees, while emphasizing that the public can also support by adopting bee-friendly landscaping and buying low-pesticide foods.

"There's a lot that people can do!"

UBCV

### New super-black wood can improve telescopes, optical devices and consumer goods

Researchers developed a new super-black material that absorbs almost all light. Trademarked as Nxylon, it was initially discovered by sheer accident.

UBCV

### Conserving nature can shield Canadian cities from floods

A UBC study finds that conserving just five per cent of watersheds (two per cent of Canada's land) could shield more than half of Canada's urban floodplains, safeguarding millions of people.

UBCV

### Research shows healthy plants help rivers meander

The study, recently published in *Nature Communications*, highlights a clear connection: rivers with healthy vegetation tend to meander more easily than those flowing through landscapes barren of plant life.

UBCO

### Study reveals 15 ways to improve salmon survival after capture-and-release

Using smaller hooks, avoiding landing nets, and de-hooking and measuring fish in water are three of 15 solutions recommended to help released salmon thrive.

UBCV

### Newly discovered brain cell allows you to remember objects

UBC researchers discovered a new type of brain cell that plays a central role in our ability to remember and recognize objects.

UBCV

### Deep diving with elephant seals offers unique insights into human health

Study highlights key physiological traits in seals that could inspire new information and treatments for conditions such as chronic obstructive pulmonary disease (COPD) and acute pulmonary edema in humans.

UBCO

### The intersection of culture and cuisine: How food shapes our identity

Professors in psychology, sociology, history and migration studies offer perspectives on the role that food plays in cultural and gender norms, power dynamics and inclusion.

UBCV

### UBC researcher studies how immune cells affect fetal development

A dentistry researcher is investigating how immune cells affect fetal craniofacial development, which could lead to a better understanding of how a mother's oral health affects the growing baby.

UBCV



# DEVELOPING TECHNOLOGY FOR A BETTER WORLD

## Quantum photonic chip technology to advance through new collaboration

A collaboration between UBC researchers and UBC spinoff Dream Photonics is working to overcome challenges in embedding quantum light sources into semiconductor-based platforms—an important step in improving quantum-based data communications and the energy efficiency of data centres.

The project leverages quantum-dot nanowire light source technology invented at NRC and the hybrid silicon photonics integration technology used and developed at UBC. It is supported with funding from the NRC and NSERC as part of a joint initiative to advance Canada’s National Quantum Strategy.

“Our goal is to make the commercialization of plug-and-play quantum light sources a reality and simplify their integration with chips,” said Matthew Mitchell, a UBC alumnus who is now a senior scientist at Dream Photonics. “The project will pave the way for more cost-effective and practical applications in optical communication, quantum computing and sensing technology.”

UBCV

## How much microplastic are you drinking? New tool can tell you in minutes

Researchers have developed a low-cost, portable tool to accurately measure the plastic released from everyday sources like disposable cups and water bottles. When paired with an app, the device uses fluorescent labelling to detect plastic particles too small to be detected by the naked eye—and delivers results in minutes.

UBCV

## Air filters disguised as canvas artwork clean UBCO’s air

Low-cost and quiet Aerosol Removing Tapestry (ART) devices were developed by the Airborne Disease Transmission Research Excellence Cluster and placed in classrooms at UBC Okanagan as part of the Campus as a Living Lab initiative.

UBCO

## Postdoc’s water treatment system brings clean water to Kenyan school

The system, constructed on the school grounds, uses sand filters and solar-powered UV LEDs to disinfect collected rainwater.

UBCV

## Genetically engineered bacteria move from lab to real world

A new partnership with UBC spinoff Melius Microbiomics will use groundbreaking made-at-UBC technology and leverage the gut microbiome to potentially treat various health conditions.

UBCO

## Researchers’ heart valve technology is a made-in-Canada breakthrough

In collaboration with BC-based company ViVitro Labs, UBCO researchers created iValve: a replacement heart valve that combines the best of mechanical and tissue replacement technology to make life easier and safer for patients.

UBCO

## New stir stick detects drink spiking in seconds

UBC researchers have developed a seemingly ordinary stir stick capable of detecting common drink-spiking drugs, potentially preventing assaults.

UBCV

## Blood vessel-like coating could make medical devices safer for patients

The new material, designed to mimic the natural behaviour of blood vessels, could allow for safer use of blood-contacting devices, especially in cases where blood clots are a significant concern.

UBCV

## UBC engineers develop all-in-one solution to catch and destroy “forever chemicals”

Chemical engineers at the University of British Columbia have developed a new treatment that traps and treats PFAS substances—widely known as “forever chemicals”—in a single, integrated system.

PFAS are notoriously difficult to break down, whether they’re in the environment or in the human body, explained lead researcher Dr. Johan Foster, an associate professor of chemical and biological engineering in the Faculty of Applied Science. “Our system will make it possible to remove and destroy these substances in the water supply before they can harm our health.”

The UBC system combines an activated carbon filter with a special, patented catalyst that traps harmful chemicals and breaks them down into harmless components on the filter material. Scientists refer to this trapping of chemical components as adsorption.

“The whole process is fairly quick, depending on how much water you’re treating,” said Dr. Foster. “We can put huge volumes of water through this catalyst, and it will adsorb the PFAS and destroy it in a quick two-step process. Many existing solutions can only adsorb while others are designed to destroy the chemicals. Our catalyst system can do both, making it a long-term solution to the PFAS problem instead of just kicking the can down the road.”

The team believes the catalyst could be a low-cost, effective solution for municipal water systems as well as specialized industrial projects like waste stream cleanup.

They have set up a company to explore commercial options for their technology.

UBCV

# Celebrating Excellence and Achievement

## AWARD WINNERS

Numerous UBC researchers and scholars were recognized nationally and internationally for their innovative and influential scholarly achievements in 2024/25. The Office of Research Prize and Awards provides support for nominations to many of these competitions and manages UBC’s internal faculty research awards.

### INTERNATIONAL

**American Academy for the Advancement of Science (AAAS)**  
Dr. [Dolph Schluter](#) was named a Fellow of the Academy.

**Royal Society of the United Kingdom**  
Dr. [Sally Otto](#) was named a fellow of the society.

### NATIONAL

**A.G. Huntsman Medal for Marine Sciences**  
The medal was awarded to Dr. [William Cheung](#).

**Canadian Academy of Health Sciences**  
Drs. [John S. Gill](#) and [Cheryl Wellington](#) were named fellows.

**Canadian Medical Hall of Fame**  
Dr. [Pieter Cullis](#) was inducted.

**Engineering Institute of Canada**  
Drs. [Julian Cheng](#), [Peter Englezos](#), [Kasun Hewage](#) and [Zheng Liu](#) were recognized for their excellence in the engineering profession and society.

**Dorothy Killam Fellowship**  
Dr. [Mark Schmidt](#) was awarded the fellowship to continue his work in machine learning and numerical optimization.

**Governor General’s Innovation Awards**  
Dr. [Andrew Martindale](#), with colleagues as part of the Canadian Archaeological Association Working Group on Unmarked Graves.

**Killam Prizes**  
Drs. [Marco Marra](#) and [Peter Zandstra](#) were awarded a Killam Prize each in Health Sciences and Engineering, respectively.

**King Charles III Coronation Medals**  
At least 28 current or emeriti UBC faculty members were honoured for upholding values in service, the environment and sustainability, and Canada’s diversity.

**Order of Canada**  
Drs. [Yusuf Altintas](#), [Lindsay Machan](#) and [Marco Marra](#) were named as Officers; and Drs. [John Cairns](#), O.B.C., and [Jack Taunton](#) were named as Members of the Order of Canada.

**Royal Society of Canada**  
Seven faculty members were named as fellows: Drs. [Barbara Dancygier](#), [Patricia Duff](#), [Torsten Nielsen](#), [Gina Ogilvie](#), [Cindy Prescott](#), [Margo Seltzer](#) and [Edward Slingerland](#).

**College of New Scholars, Artists and Scientists**  
Eight faculty members joined as members: Drs. [Mohammad Arjmand](#), [Marie Auger-Méthé](#), [Kayla King](#), [Andrea Reid](#), [Dylan Robinson](#), [Manish Sadarangani](#), [Azim Shariff](#), and [Heidi Tworek](#).

**Kitty Newman Memorial Award in Philosophy**  
Dr. [Azim Shariff](#) received the award.

### UBC

**2025 University Killam Professors**  
Professors [Isabel Grant](#), FRSC, [Marco Marra](#), FRSC, O.B.C., O.C., and [Jamie Peck](#), FRSC each received the highest honour that UBC can confer, in recognition of exceptional teaching, research and leadership in their fields.

#### INTERNAL FACULTY RESEARCH AWARDS

**Jacob Biely Research Prize**  
Dr. [Brian Kwon](#)

**President’s Award for Public Education Through Media**  
Dr. [Andrew Trites](#)

**Charles A. McDowell Award for Excellence in Research**  
Dr. [Mohammad Arjmand](#)

**UBC Killam Accelerator Research Fellowships**  
Drs. [Jeff Clune](#), [Jean-Thomas Cornelis](#), [Alannah Hallas](#), [Govind Kaigala](#), [Jocelyn Stacey](#) and [Leanne ten Brinke](#)

**UBC Killam Research Fellowships**  
*Early Career*  
Drs. [Megan Daniels](#), [Emily Murphy](#), [Naomi Schwartz](#), [Sharon Stein](#) and [Mila Zuo](#)

**UBC Killam Research Prizes**  
ARTS AND HUMANITIES  
*Early Career*  
Drs. [Alfred Hermida](#) and [Daniela Palombo](#)  
*Established*  
Drs. [Jonathan Ichikawa](#), [Vin Nardizzi](#) and [Victoria Savalei](#)

APPLIED SCIENCE, MEDICINE, SCIENCES  
*Early Career*  
Dr. [Tao Huan](#)  
*Established*  
Drs. [Shahria Alam](#), [Alison Lister](#), [Takamasa Momose](#) and [Todd Woodward](#)

#### UBC OKANAGAN 2024 RESEARCHERS OF THE YEAR

HEALTH  
Dr. [Lesley Lutes](#)

NATURAL SCIENCES AND ENGINEERING  
Dr. [Adam Ford](#)

SOCIAL SCIENCES AND HUMANITIES  
Dr. [Wendy Wong](#)



Micro and nanoplastics under a microscope  
Photo credit: Peter Yang, UBC



# Supporting Excellence and Impact

## VPRI PORTFOLIO DEVELOPMENTS

As new challenges and opportunities emerge each year, our portfolio remains dedicated to demonstrating excellence in service for the UBC research community. Across our offices and teams, several initiatives were launched or revised in 2024/25 to support the specific needs of our research community on both campuses. Following the launch of *Strategic Directions 2025-2030*, we will build upon the strengths of our community to meet the renewed vision and path set ahead.

Updates from the service units and teams of the VPRI portfolio include:

### OFFICE OF THE VICE-PRESIDENT, RESEARCH AND INNOVATION

A new strategy for shared research platforms at UBC Vancouver was proposed, including the provisioning of a new competition that launched in Spring 2025 to support new shared research platforms located at the UBC Vancouver campus.  
UBCV

Available through UBC workplace learning, a new course was launched specifically developed for faculty, staff and students involved in research to support the learning and implementation of appropriate EDI practices in research. The course was launched in partnership with the UBC Equity and Inclusion Office.  
UBCV | UBCO

With support from the UBC Alma Mater Society, the VPRI launched a pilot call for proposals to offer matched funding to support undergraduate research opportunities. The pilot sought to expand existing undergraduate research funding programs or establish new opportunities to further engage students in research activities that complement their academic and professional development. Eight UBC Vancouver Faculties were successful in the call, with at least 145 net-new undergraduate research positions expected for the 2025 summer term.  
UBCV

The Research Security team conducted several workshops, developed new materials and provided customized consultations to support researchers in understanding and implementing best practices for safeguarding research. In particular, the workshops and materials focused on new requirements introduced by the Government of Canada's Policy on Sensitive Technology Research and Affiliations of Concern, as well as the expansion of the National Security Guidelines for Research Partnerships (NSGRP) in Spring 2024.  
UBCV | UBCO

In collaboration with SPARC, strategic support for UBC researchers seeking research consortium funding through Horizon Europe was made available in Fall 2024, with several workshops held to inform researchers on accessing and navigating the program's many opportunities.  
UBCV | UBCO

In partnership with UBC Development and Alumni Engagement and the Faculty of Graduate and Postdoctoral Studies, the VPRI supported the launch and adjudication of the first competition of the Peter Wall Legacy Awards in Spring 2024. A second cycle launched in early 2025. Drs. Michelle Tseng and Stepan Wood each received \$1 million Wall Legacy Fellowships, while three faculty members, five faculty teams and 19 graduate students received research awards.  
UBCV | UBCO

This year, our portfolio supported faculties in welcoming 20 new Canada Research Chairs (CRCs) and celebrated the renewal of 15 other CRCs in a wide range of disciplines and specialties.  
UBCV | UBCO



Researchers discovered super-black wood that reflects less than one per cent of visible light; initial applications include watch design.  
Photo credit: UBC Forestry/Ally Penders

### OFFICE OF THE VICE-PRINCIPAL, RESEARCH AND INNOVATION

Dr. Suzie Currie joined the university as Vice-Principal and Associate Vice-President, Research and Innovation in October 2024, succeeding Dr. Phil Barker. Through the role, she provides strategic direction and oversight in supporting and advancing research, scholarly activity and innovation at UBC's Okanagan campus.  
UBCO

A "cluster hire" was launched in collaboration with the School of Engineering, Faculty of Health and Social Development, and the Irving K. Barber Faculty of Science to recruit three Canada Research Chairs to support interdisciplinary work in the priority area of climate change mitigation and resiliency.  
UBCO

The City of Kelowna-UBCO Research Alliance was established through a formal agreement to leverage the organizations' shared expertise and resources. The coordinated effort aims to benefit the community by supporting collaborative, cross-sectoral projects that advance research, innovation and knowledge exchange.  
UBCO

The Canadian Institute for Inclusion and Citizenship—a cross-campus research institute focused on promoting social justice, equality and the wellbeing of all citizens—received the esteemed Renata Shearer Award in December 2024. The Vancouver branch of the United Nations Association bestows the award, which celebrates individuals and organizations making significant contributions to advancing human rights, dignity and justice in British Columbia.  
UBCV | UBCO

Following a competitive selection process, nine interdisciplinary teams were selected to move into ʔəl sic snpaʔnwixʔtn when it opens in 2026. The teams will investigate solutions to some of society's most important issues, including immunotherapies, climate adaptation, and communication and language connected to social and mental health.  
UBCO

The Exeter-UBC Okanagan Sustainability and Resilience Partnership launched as a pilot designed to encourage and expand academic research, education and exchange in support of scholarship related to adaptation to climate and ecological change, innovative health initiatives and social justice. The program is administered in collaboration with the UBC Okanagan Provost and Vice-President, Academic, and the College of Graduate Studies.  
UBCO



New UBC catalyst removes "forever chemicals" from water supplies  
Photo credit: UBC Applied Science/Paul Joseph

INNOVATION UBC

In Spring 2025, the units formerly known as the University-Industry Liaison Office, entrepreneurship@UBC and entrepreneurship@UBCO were restructured under Innovation UBC, with enhanced services offered to support sponsored research and translating research into impact through entrepreneurship and venture building. New services focusing on increasing flexibility and transparency, as well as prioritizing support for research-based spin-off companies, are available to researchers on both campuses.

UBCV | UBCO

UBC and Simon Fraser University received funding to co-lead the expansion of a nationally funded innovation program for Lab2Market; the expansion will be known as the Lab2Market Pacific Hub. The hub will deliver entrepreneurship and venture-building programming to research-based teams from eight post-secondary institutions across British Columbia.

UBCV | UBCO

With support from the Innovation UBC inventions and licensing team, 15 new UBC spinoffs were created in 2024/25. Many of these spinoffs also accessed services from the entrepreneurship and venture-building team to form their companies. They are:

- Amphoraxe
  - Aquafer Technologies
  - Arrowsmith Genetics
  - CereCura Nanotherapeutics
  - Cyanoworks
  - Insu Therapeutics
  - Lunar Therapeutics
  - Melius Microbiomics
- NanoVation Therapeutics
  - Narval Energy
  - nPhyla Technologies
  - Sinedore
  - SmartParent Mobile Health
  - Sora Fuel Corp
  - Sustainable Bioproducts Innovations

UBCV | UBCO

ADVANCED RESEARCH COMPUTING

Advanced Research Computing launched ARC OnDemand in February 2025, providing researchers with a user-friendly interface to access the Sockeye compute platform without needing to use the command line or batch scripting. Sockeye supported the high-performance computing needs of more than 1,900 researchers in 2024/25.

UBCV | UBCO

INNOVATION PARTNERSHIPS

The Innovation Partnerships team continues to facilitate the UBC-Rogers Communications partnership in 5G, including projects with additional partners such as BC Hydro and Microsoft. The team is also pursuing emerging opportunities for research with partners in Asia and Europe. Several strategic opportunities were launched in 2025 with new and existing partners to support projects with faculty members across the university:

- lululemon athletica: research relating to raw materials and sustainability of athletic apparel
- Metro Vancouver: research to support the planned upgrade of the Iona wastewater treatment plant
- Samsung Research: preventative health solutions, data security and wearable devices

UBCV | UBCO

KNOWLEDGE EXCHANGE

A new online course, *KxM (Knowledge Exchange and Mobilization) Research to Impact Foundations*, launched for members of the UBC community whose research aims to create social impact by informing practice and policy, or expanding public dialogue.

UBCV | UBCO

RESEARCH ETHICS

The Behavioural Research Ethics Board (BREB, part of UBC Research Ethics) launched a new self-guided screening tool designed for researchers to determine if their academic project requires research ethics review. It also provides guidance around ethically sound practices for projects that are exempt from research ethics review and approval. The tool is available on a pilot basis.

UBCV | UBCO

BREB developed and, in Spring 2025, launched a pilot of an alternate ethics application for Indigenous-focused research in response to the goals and aims of the *Indigenous Strategic Plan*. The pilot ethics application was developed with the support of the BREB Indigenous Strategic Plan Working Group and reflects feedback received from Indigenous faculty and graduate students at UBC.

UBCV | UBCO

NEW UBC RESEARCH FACILITIES AND PROGRAMS

Several research facilities and programs launched in 2024/25 that expand the research and teaching capacity of both campuses.

Highlights from across the university include:

UBC joined the launch of the Rio Tinto Centre for Future Minerals in Spring 2024 as the only Canadian member. The centre is a collaboration aimed at fundamentally changing how minerals needed for modern technologies and the clean energy transition are produced, used and recycled. It is housed at Imperial College London. Other centre members include the University of California, Berkeley, the Australian National University and the University of the Witwatersrand, Johannesburg.

UBCV | UBCO

Co-led by Drs. Mathieu Bourbonnais (UBC Okanagan) and Lori Daniels (UBC Vancouver), the UBC Centre for Wildfire Coexistence launched to support innovative approaches and novel discoveries that proactively adapt forestry and land management practices, aiming to restore healthy and resilient forests as communities adapt to a changing climate. The centre receives support from the Office of the Vice-Principal, Research and Innovation at UBC Okanagan.

UBCV | UBCO

The Faculty of Applied Science celebrated the launch of the Smart Hydrogen Energy District (SHED), one of the first initiatives to combine hydroelectric, solar and hydrogen energy at a single site, connecting these renewable energy sources to a unified micro-grid.

UBCV

A new Battery Innovation Centre opened in Summer 2024, located in UBC Okanagan’s Innovation Precinct. The centre is led by Dr. Jian Liu, who is already working with Canadian and international industry leaders to design, develop and create prototypes of the next generation of batteries.

UBCO

The Faculty of Creative and Critical Studies opened a cutting-edge creative and interdisciplinary research hub at UBC Okanagan’s Innovation Precinct in Fall 2024. The research hub combines three separate creative labs and studios, an audio control room and a large performance space; it was made possible with funding from the Canada Foundation for Innovation matched by the BC Knowledge Development Fund.

UBCO

As the first of its kind in Canada, the James M. and Cathleen D. Stone Centre on Wealth and Income Inequality opened at the Vancouver School of Economics in Fall 2024, one of 11 such centres worldwide. The centre was launched with a \$5.4 million gift from the James M. and Cathleen D. Stone Foundation, placing UBC among an esteemed cohort of leading global institutions that host similar centres—including Harvard University, Brown University and the University of California, Berkeley.

UBCV

UBC Okanagan and FortisBC launched a new hydrogen research hub, called H2LAB, in February 2025. The 2,000-square-foot H2LAB, located in UBCO’s Innovation Precinct, will explore how hydrogen can be safely blended into natural gas supply systems and used across multiple industries, including aerospace, automotive and marine transport. The facility was established with \$2.3 million in funding from UBC, supplemented by \$500,000 from FortisBC and \$800,000 from the Natural Sciences and Engineering Research Council of Canada.

UBCO

In Spring 2025, the university celebrated the opening of the Gordan B. Shrum Building as the new home of the School of Biomedical Engineering at UBC Vancouver. The five-storey, 158,000-square-foot facility includes specialized labs, collaborative research spaces and teaching facilities to support biomedical engineering and life sciences innovation.

UBCV



# VPRI Portfolio Support by the Numbers

## PROVIDING SUPPORT FROM IDEA TO IMPACT

### GRANT APPLICATIONS

**4,150** applications reviewed and approved by ORS Vancouver

**11,050** budget transactions completed by ORS Vancouver

**505** applications reviewed and approved by ORS Okanagan

**1,250** budget transactions completed by ORS Okanagan

### SHARED RESEARCH PLATFORMS

**1,760** MRI scans conducted for research studies at Upright Open MRI

**100** research projects supported through Plant Care Services at UBC Vancouver

**26** studies supported through the Plant Growth Facility at UBC Okanagan

**51,000+** samples processed using Sanger sequencing at the Sequencing and Bioinformatics Consortium

### RESEARCH ETHICS

*calendar year 2024, includes UBCV, UBCO and affiliated research ethics boards*

**2,767** new human ethics applications received

**10,509** active human ethics applications monitored

**18,583** post-approval activities conducted by Research Ethics

### GRANT FACILITATION

**524** grant applications benefited from grant facilitation support services or workshops from SPARC

**190** researchers benefited from grant facilitation support services or workshops from ORS Okanagan

### ADVANCED RESEARCH COMPUTING

**3200+** users, including principal investigators, accessed ARC services and resources

**19** active projects at UBC Okanagan's Statistics Canada Research Data Centre

### ANIMAL CARE AND USE

**3,141** samples processed at Animal Care Services' diagnostic laboratory

**791** students, faculty and staff completed Animal Care Services' virtual animal-use training courses

**174** new applications reviewed by the Animal Care Committee

**118** new applications reviewed by the biosafety committee

### FINANCIAL MANAGEMENT

**5,300** financial statements submitted to research funders for UBC Vancouver

**8,991** invoices for research funding created for UBC Vancouver

**205** attendees to Research Finance workshops at UBC Vancouver

### INNOVATION AND IMPACT

**1,064** industry-sponsored research collaborations

**343** patents filed

**144** invention disclosures

**86** new licence assignments and agreements to UBC technologies

**581** active licences to UBC technologies

**15** new spinoffs created

**\$6.7M** revenue generated from technology licensing

**27** ventures supported through entrepreneurship programming at UBC Okanagan

**51** ventures supported through entrepreneurship programming at UBC Vancouver

**1,800+** titles published through UBC Press (to date)

### AWARDS AND PRIZES

**108** nominations reviewed by ORPA for submission to **35** unique external competitions

**52** nominations submitted by ORPA to **25** unique competitions

**29** peer reviewers adjudicated **81** nomination packages



UBC spinoff Arca's autonomous rover on the Mt. Keith nickel mine tailings field  
Photo credit: Arca

CREATING OPPORTUNITIES FOR  
UBC'S RESEARCH COMMUNITY

COLLABORATIVE AND  
INTERDISCIPLINARY

**22** Collaborative Research  
Mobility Awards disbursed

**30** partnerships supported  
through the CUES Fund

**2** PHH Vancouver Priority  
Thematic Public Humanities  
Incubator Grants disbursed

**10** Climate Solutions Scholars  
comprised the inaugural cohort

**14** Climate Solutions Scholars  
selected for 2025/26

**565** participants at **22** events  
hosted by the Climate Solutions  
Research Collective

**45** research excellence clusters  
at UBC Vancouver and **11** at UBC  
Okanagan received funding

**2** teams received Campus as  
a Living Lab funding at UBC  
Okanagan

**9** awards disbursed through  
the Exeter-UBC Okanagan  
Sustainability and Resilience  
Partnership

**9** teams selected to occupy  
łəl sic snpałnwixʷtn at UBC  
Okanagan

**4** recipients of the Public  
Humanities Hub (PHH) Vancouver  
Graduate and Postdoctoral  
Research Grants

**2** groups funded through the  
PHH Vancouver Research Cluster  
Grants

**24** events hosted, sponsored or  
co-sponsored by PHH Vancouver

ENHANCING EXCELLENCE IN  
RESEARCH & SCHOLARSHIP

**7** faculty members received  
awards through the Aspire  
Program at UBC Okanagan

**40** Hampton New Faculty Grants  
awarded

**3** Pritchard Graduate Student  
Grants awarded at UBC Okanagan

**65** SSHRC Institutional Grants  
awarded at UBC Vancouver

**7** SSHRC Explore/Exchange  
Grants awarded at UBC Okanagan

**4** Scholarship of Teaching and  
Learning Linkage Grants awarded  
at UBC Vancouver

**23** grants awarded through the  
Open Access Fund

**13** awards disbursed through the  
Scholarly Publication Fund

**2, 3 & 5** fellowships, faculty  
and teams awarded via the  
inaugural Peter Wall Legacy  
Awards

**29** Principal's Research Chairs  
supported at UBC Okanagan

**5** projects received strategic  
support from the VPRI Okanagan

**17** awards for SSHRC bridge  
funding provided at UBC  
Vancouver

RESEARCH FACILITIES

**18** Research Facility Support  
Grants awarded at UBC  
Vancouver

**12** grants awarded through UBC  
Okanagan's Critical Research  
Equipment and Tools Fund

**2** facilities received support  
through the UBC Okanagan  
Shared Research Platforms Fund

Learn More About  
UBC Research

UBC VANCOUVER

- **Applied Science**  
apsc.ubc.ca/research-industry
- **Arts** arts.ubc.ca/research
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- **Education** educ.ubc.ca/research
- **Forestry** forestry.ubc.ca/research
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landfood.ubc.ca/research
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- **Sauder School of Business**  
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- **Science** science.ubc.ca/research
- **Graduate and Postdoctoral Studies**  
grad.ubc.ca/research

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- **Creative and Critical Studies**  
fccs.ok.ubc.ca/research-creation
- **Health and Social Development**  
fhds.ok.ubc.ca/research
- **Irving K. Barber Arts and Social  
Sciences** fass.ok.ubc.ca/research
- **Irving K. Barber Science**  
science.ok.ubc.ca/research
- **Management**  
management.ok.ubc.ca/faculty/research
- **Okanagan School of Education**  
education.ok.ubc.ca/research-partnerships
- **School of Engineering**  
engineering.ok.ubc.ca/research
- **College of Graduate Studies**  
gradstudies.ok.ubc.ca
- **Southern Medical Program**  
smp.med.ubc.ca/research



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