



a place of mind
THE UNIVERSITY OF BRITISH COLUMBIA

2011 / 2015

Advancing Science

UBC Faculty of Science Strategic Plan

Faculty of Science, Office of the Dean
University of British Columbia
1505-6270 University Boulevard
Vancouver, BC, V6T 1Z4

www.science.ubc.ca/about/plan

Our Vision

Advancing education and research at the frontiers of science.

Our Mission

To nurture an exceptional scientific learning and research environment for the people of British Columbia, Canada, and the world.



I'm very pleased to present Advancing Science, the 2011 to 2015 strategic plan for the UBC Faculty of Science. This document articulates our vision and mission, and our distinguishing characteristics as one of Canada's strongest and most broadly based faculties of science.

Our plan outlines commitments, goals and strategies across undergraduate and graduate education, research and community outreach—with each area of focus built on a foundation of people and infrastructure. It also highlights the Faculty's cross-cutting strategies in sustainability, internationalization, and Aboriginal engagement across each dimension.

The document you hold reflects the constructive feedback we received through five months of consultation with faculty, staff, students, heads and directors, and feedback collected more broadly through our website and at town halls. I wish to express my sincere thanks to everyone who helped us shape this living document, and look forward to working with the exceptional individuals who make up the Faculty, and the wider UBC Science community outside the University, to make it a reality.

*Dr Simon Peacock
Dean, Faculty of Science*

Strategic Areas of Focus and Commitments

Undergraduate Education and Student Learning

Deliver high-quality undergraduate science education and prepare students in the sciences to be productive members of a civil and sustainable society.

Graduate Education and Post-Doctoral Development

Deliver high-quality disciplinary and interdisciplinary educational and research experiences that prepare graduate students and post-doctoral scholars to be leaders in society.

Research

Create and advance scientific knowledge and understanding.

Community Engagement

Foster student, faculty, staff, and alumni engagement with the wider community.

People

Provide an intellectually stimulating, supportive and safe working and learning environment for a diverse community.

Physical Infrastructure

Develop and maintain safe, sustainable and accessible modern facilities to support high-quality science education and research.

Distinguishing Characteristics

As UBC Science strives to advance education and research at the frontiers of science, we seek to leverage distinguishing characteristics of the Faculty, of UBC, of Vancouver, and of British Columbia. These include:

Strong interdisciplinary clusters spanning a wide range of research areas, including biodiversity and evolutionary biology, the life sciences, genomics and biotechnology, materials science, and human-computer interaction.

A rich international culture influenced by our strong Pacific Rim educational, research, and societal connections.

Strong connections to industry, including the biotechnology sector, the minerals community, and the computer graphics and animation industry.

Our deep commitment to undergraduate education, including the efforts of our Carl Wieman Science Education Initiative, experiential learning programs, and first-year curricula.

A broad mandate for the Faculty that includes Computer Science, Microbiology and Immunology, and Earth and Ocean Sciences.

Unique inter-university collaborations, such as TRIUMF (Canada's National Laboratory for Particle and Nuclear Physics), the Pacific Institute for the Mathematical Sciences and Bamfield Marine Sciences Centre.

A commitment to sustainability, which we share with the UBC community, Vancouver and British Columbia, and the capacity to address sustainability issues at the local, regional and global scales.

Our location in spectacular British Columbia on traditional Musqueam lands, a wonderful physical setting which presents unique educational, research and engagement opportunities.

Strategic Plan Cross-Cutting Goals

Throughout the UBC Science Strategic Plan, you will find the following cross-cutting themes highlighted by colour.

a

Aboriginal Engagement

UBC Science seeks to expand educational opportunities for Aboriginal youth, and to strengthen research collaborations with Aboriginal communities.

i

International Engagement

UBC Science strives to enable educational exchange and research collaborations with international partners.

S

Sustainability

UBC Science provides educational and research opportunities in sustainability, and works to exemplify operational and economic sustainability.

Undergraduate Education and Student Learning

UBC's Faculty of Science delivers high-quality undergraduate science education and prepares students in the sciences to be productive members of a civil and sustainable society.





GOALS	STRATEGIES
Be a leader in enhancing the quality and impact of science teaching and learning for all students	<p>Develop new recruitment and admissions practices to build a diverse class of well-prepared and engaged students from around the world. i a</p> <p>Regularly review curriculum and learning outcomes for all programs in order to provide the best education possible.</p> <p>Ensure all instruction is informed by research on student learning and best practices.</p> <p>Allocate teaching resources effectively to maximize the impact of faculty time.</p> <p>Provide all UBC Science students with an opportunity to study sustainability and other multidisciplinary challenges facing our society. s</p>
Expand enriched educational experiences (E3), so that all students have an E3 opportunity in first year and in their upper years	<p>Provide all first-year UBC Science students with at least one small-group class where they meet regularly with a faculty member.</p> <p>Provide all upper-level students with an enriched experiential learning opportunity, such as research, co-op, and international exchange experiences. i</p>

GOALS	STRATEGIES
Support student well-being, personal development and positive affiliation with UBC and society through outstanding programs and service excellence	<p>Provide students with the tools to develop a four-year career education plan (My Learning Plan).</p> <p>Support My Learning Plan with an integrated system of advising.</p> <p>Support My Learning Plan with programming on careers, wellness, research, community involvement and leadership.</p>




Graduate Education and Post-Doctoral Development

UBC Science delivers high-quality disciplinary and interdisciplinary educational and research experiences that prepare graduate students and post-doctoral scholars to be leaders in society.

GOALS	STRATEGIES
Increase the quality, impact, and effectiveness of graduate and post-doctoral education and research	<p>Promote a high standard of excellence in all graduate programs.</p> <p>Create a learning environment that encourages interdisciplinarity. </p> <p>Emphasize critical thinking and communication skills.</p> <p>Enhance teaching, professional, and leadership development opportunities for graduate students and post-doctoral scholars.</p>
Enhance UBC's profile as an international leader in graduate student and post-doctoral training	<p>Increase the number of PhD students in our graduate programs.</p> <p>Increase recruitment of outstanding graduate students and post-doctoral scholars from around the world.  </p> <p>Facilitate industry, government, and international research experiences for graduate students. </p> <p>Provide competitive financial support for all graduate students and post-doctoral scholars.</p>

Research

UBC's Faculty of Science creates and advances scientific knowledge and understanding.

GOALS	STRATEGIES
Increase the quality, impact, and visibility of UBC's world-class science research	<p>Recruit and retain world-class researchers.</p> <p>Support areas of research excellence, emerging fields, and cross-Faculty initiatives such as sustainability and science policy. </p> <p>Promote excellence in grant and contract applications.</p> <p>Develop targeted communications strategy for UBC Science research.</p>
Improve infrastructure and operational support for leading-edge scientific research	<p>Promote and facilitate infrastructure grant applications.</p> <p>Advocate for operational support to better leverage our research infrastructure and faculty member resources.</p>
Increase collaboration with industry, national, and international partners	<p>Promote connections and joint funding opportunities with industry, government, and international partners. </p> <p>Promote knowledge translation to governments, industry and other stakeholders. </p>

Community Engagement

UBC's Faculty of Science fosters student, faculty, staff and alumni engagement with the wider community.

GOALS

Strengthen education and research connections with community groups, organizations, and industry

Develop world-class UBC Science public education outreach spaces and programs

STRATEGIES

Support participation by students, faculty and staff in community-service learning, community-based research, undergraduate co-op, graduate internships, and partnerships with industry. **S**

Develop and expand the pool of engaged UBC Science alumni.

Develop targeted communications strategies to inform the public about science and UBC Science activities.

Promote science in K-12 schools in partnership with other community groups.

Support and coordinate UBC's aboriginal science education initiatives in K-12. **a**

Create a UBC centre (both physical and virtual) for public science education. **S**




People

UBC's Faculty of Science provides an intellectually stimulating, supportive, and safe working and learning environment for a diverse community.

GOALS	STRATEGIES
Recruit and retain the best faculty, staff, students, and post-doctoral scholars	<p>Enhance our recruitment processes to showcase UBC Science's education and research programs, facilities, and our working environment. i</p> <p>Develop policies for dual career hiring within UBC Science and support the development of university-wide policies.</p> <p>Promote available resources and benefits, such as the new housing policy and maternity and parental leave policies.</p> <p>Advocate for expansion of the range and availability of child care support and affordable on-campus housing.</p>
Increase the diversity of the UBC Science community	<p>Design policies and practices that support a diverse pool of applicants. a</p> <p>Work with HR to expand the pool of applicants with disabilities.</p>

GOALS	STRATEGIES
Increase career support for faculty, staff and post-doctoral scholars	<p>Ensure high quality mentoring and support of faculty and post-doctoral scholars.</p> <p>Actively promote work-life balance for faculty, staff and post-doctoral scholars.</p> <p>Provide professional and leadership development opportunities for faculty, staff and post-doctoral scholars.</p> <p>Ensure that everyone has the necessary training, time and support required to be effective.</p>
Promote and celebrate the achievements of the UBC Science community	<p>Highlight and celebrate the achievements of our faculty, staff, students and post-doctoral scholars in teaching, research and service.</p> <p>Actively promote faculty, staff, students, and post-doctoral scholars for national and international awards. i</p>
Foster a respectful working, teaching and research environment that supports success	<p>Actively promote UBC's Respectful Environment Statement for Students, Faculty and Staff.</p>

Physical Infrastructure

UBC's Faculty of Science develops and maintains safe, sustainable, and accessible modern facilities to support high-quality science education and research. 

GOALS	STRATEGIES
Improve undergraduate UBC Science teaching and learning spaces	<p>Develop annual and long-range plans to improve teaching and learning spaces, and support teaching innovation.</p> <p>Identify sources of funding to renew undergraduate learning spaces every year.</p> <p>Ensure all teaching and learning spaces are equipped with suitable technology.</p>
Improve research facilities to support leading-edge scientific research	<p>Develop annual and long-range plans to improve research facilities.</p> <p>Identify sources of funding to initiate the next major building projects.</p> <p>Ensure current building projects (ESB, Bioscience Renew) are completed successfully.</p>

GOALS	STRATEGIES
Ensure reliability and continuity of UBC Science operations	<p>Identify, and where necessary renovate, mission-critical building systems.</p> <p>Develop and regularly review response plans for building emergencies.</p> <p>Regularly evaluate levels of operational support for major teaching and research initiatives.</p>
Strengthen core services to support science teaching, research and staff operations	<p>Explore opportunities to better coordinate technical and administrative services with units outside the Faculty of Science.</p> <p>Explore opportunities to better coordinate technical and administrative services within the Faculty of Science.</p>

