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### MESSAGE FROM THE DEAN

#### LALITHA RAMAN-WILMS



It is with great pride and enthusiasm that I welcome you to the 2024 edition of the UBC Faculty of Pharmaceutical Sciences *Year in Review*. This past year has been one of remarkable growth and achievement, reinforcing our Faculty's commitment to excellence in education, research, and practice in pharmacy and the pharmaceutical sciences. Together, we have continued to drive innovation, make meaningful contributions to the healthcare system, and build a more inclusive and sustainable future.

Some highlights include celebrating two outstanding alumni who embody the values and impact of our Faculty. At the Robert H. Lee Alumni Centre in March, we honoured Suzanne Solven (BSc(Pharm)'87) as our 2024 Alumni Agent of Change and Dr. Sumreen Javed (PhD'22) as the Alumni Future Agent of Change. Their inspiring work serves as a testament to the transformative power of pharmacy and pharmaceutical sciences.

In alignment with our responsibility as educators, we also continued to integrate planetary health into pharmacy education and practice. Faculty members Robert Pammett and Dr. Karen Dahri have been leading these efforts with others across Canada to address the environmental impact of pharmaceuticals, demonstrating our commitment to sustainability.

In addition, key milestones in our academic programs were achieved. In May, we proudly graduated the first cohort from our Bachelor of Pharmaceutical Sciences (BPSc) degree program, marking a new chapter in our Faculty's history. In September, we welcomed the inaugural cohort of students into our Graduate Diploma in Pharmacy Leadership (GDPL) program—the first of its kind in Canada.

June marked one year since pharmacists in the province gained <u>expanded prescribing authority for minor</u> <u>ailments and contraception</u>. This regulatory change has significantly improved access to care, and our Faculty has been instrumental in preparing pharmacists to embrace these new responsibilities.

In the past year, the Faculty has taken several initiatives to enhance research excellence, including appointing a new Associate Dean, Research, <u>Dr. Colin Ross</u>, and strengthening partnerships with academic institutions, health authorities, and industry. The 9th Annual Nanomedicine Day, co-chaired by <u>Dr. Joel Finbloom</u> and <u>Dr. Urs Häfeli</u>, showcased UBC's leadership in biomedical nanotechnology. We have also expanded support for early-career researchers through mentorship programs and research development workshops.

At the Canadian Pharmacy Education and Research Conference (CPERC) in Quebec City in June 2024, our faculty, students, and researchers showcased an impressive array of presentations and posters. This event reaffirmed our leadership in advancing knowledge and driving meaningful change in the profession.

October brought the launch of <u>TRxending</u>, our new podcast exploring trending topics in pharmacy and the pharmaceutical sciences. Additionally, we <u>recognized a decade of impact</u> from the UBC Pharmacists Clinic, which has played a vital role in optimizing medication use and addressing healthcare gaps across Canada.

Ensuring an inclusive and supportive environment for our faculty, staff and students remain central to our mission. In this regard, last year, we supported initiatives such as Al-driven education, mentoring programs for junior faculty, dedicated support for Indigenous students, and workshops focused on sexual orientation, gender identity, and expression (SOGIE). These efforts ensure that our Faculty remains current in fostering an equitable and welcoming learning and working environment for all.

I would like to take this opportunity to express my gratitude to Dr. Larry Lynd, who served as Dean *pro tem*. His leadership and dedication to our Faculty have been invaluable, and we thank him for his service during this period of transition.

None of these achievements would have been possible without the incredible efforts of our entire community—our faculty members, staff, students, alumni, donors, partners, and supporters. Your unwavering commitment and passion drive our success, and I am truly grateful for all that you do to advance our shared mission.

I invite you to read on and explore the many accomplishments that have shaped this past year. As we look ahead, we remain steadfast in our pursuit of excellence, innovation, and impact. With the continued dedication of our community, I am confident that we will achieve even greater milestones in the years to come.

Thank you for being part of this journey.

#### **Lalitha Raman-Wilms**

Dean, Faculty of Pharmaceutical Sciences

### AT A GLANCE



Worldwide Canada
2024 QS World Rankings
by Subject



Publications



Presentations



**Awards** 



Media Mentions



Grants

### **Our Vision**

To be a catalyst for change in pharmacy practice and the pharmaceutical sciences.

### **AT A GLANCE**

 $^{\star}27$  BPSc students graduated in 2023 Winter Term 2

#### EDUCATION

	'23 Winter Term 2	'24 Summer Term	'24 Winter Term 1
E2P PharmD Students	868	647	887
Flex PharmD Students	11	6	14
BPSc* Students	189	85	245
GDPL Students	N/A	N/A	7

45

MSc students

50

PhD students

865

Practice educators

in **541** sites

16K+

Enrollments

in **52** CPPD activities; **60** students in **3** CP3 offerings



### **AT A GLANCE**

IRESEARCH

\$13.7M

Research income

Up **\$3.1M** (29%)

Michael Smith Health Research BC Scholar and Health Professional Investigator (HP-I) Awards

Jacquelyn Cragg, Annalijn Conklin, Ly Vu, Anil Maharaj, Simon Wisnovsky, Ricky Turgeon, Kate Johnson, Tom Velenosi, Erica Wang

5 Canada Research Chairs

Jacquelyn Cragg, Mary De Vera, Karla Williams, Ly Vu, Corey Nislow



### **AT A GLANCE**

**I**PRACTICE

2,057

Patient encounters

Jan 1, 2024-Dec 31, 2024

27,656 Patient encounters

Cumulative total through 134 months of operation

Student learners\*

Jan 1, 2024-Dec 31, 2024

1,196 Student learners\*

Cumulative total through 134 months of operation

\*Rotation students, student volunteers, work learn, directed studies



### **AT A GLANCE**

IPEOPLE & PLACE

84 Total faculty

716 Clinical faculty
14 Honourary faculty

99 Tota staff

22 Postdocs4 Research associates149 Student workers

\$3.6M

Raised

178 Gifts

160 Donors

7,737 Total alumni

7,240 Total living alumni

263 Total new alumni

(268 total new grads; 5 received an additional degree from Pharm Sci)



#### **IEDUCATION**

#### First BPSc Cohort Graduates

The Faculty proudly celebrated the <u>graduation of the inaugural cohort</u> of its Bachelor of Pharmaceutical Sciences (BPSc) program. Launched in 2020, this four-year program—one of only two in Canada—provides specialized training in drug discovery and development. Graduates are equipped for technical roles across government, academia, and industries including pharmaceuticals, life sciences, biotechnology, and natural products.

### Advancing Planetary Health in Pharmacy

On Earth Day, UBC's Faculty of Pharmaceutical Sciences joined national efforts to address the environmental impact of pharmaceuticals. Leading this initiative, associate professors (partners) Robert Pammett and Dr. Karen Dahri are integrating planetary health into pharmacy education and clinical practice. Pammett incorporates sustainability topics into his courses and leads a national special interest group through the Association of Faculties of Pharmacy of Canada. Dr. Dahri promotes environmental awareness in the curriculum, emphasizing the link between pharmaceuticals, health, and climate change. Their efforts align with broader initiatives, including Pammett's work with the Canadian Association of Pharmacy for the Environment (CAPhE), fostering nationwide collaboration on sustainable healthcare practices.

### One Year of Pharmacist Prescribing in BC: A Milestone in Healthcare Access

June marked one year since BC pharmacists gained prescribing authority for minor ailments and contraception, significantly enhancing healthcare access and easing pressure on primary care. Since June 1, 2023, over 380,000 services have been provided to more than 280,000 patients, with 91% of community pharmacies participating. UBC Continuing Pharmacy Professional Development (CPPD) played a key role in training over 4,000 pharmacists through accredited education programs. Looking ahead, UBC CPPD plans to expand training with hands-on workshops, ensuring pharmacists continue to deliver timely and effective care.



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#### Canada's First Graduate Diploma in Pharmacy Leadership Launched

In September, the Faculty proudly <u>inaugurated the Graduate Diploma in Pharmacy Leadership (GDPL)</u>, the first program of its kind in Canada and UBC's first graduate diploma credential. Designed to equip pharmacists with essential leadership skills, the GDPL addresses the growing demand for professionals who can navigate an evolving healthcare landscape. This innovative program prepares pharmacists for leadership roles in administration, corporate, public health, primary care, academia, regulation, and government, accelerating their readiness to meet the profession's workforce and leadership needs.

### Expanding Experiential Learning: Strengthening Pharmacy Education through Innovation and Partnerships

The Faculty remained committed to enhancing experiential learning in 2024:

CELEBRATE EVENT (NOVEMBER)

Experiential partners supporting pharmacy students were recognized at this annual event with awards presented for excellence in education and speeches from Dean Raman-Wilms and Dr. Jarvis-Selinger. A total of 165 attendees celebrated mentorship and student experiences.

OFFICE OF EXPERIENTIAL EDUCATION ROADSHOW

The Faculty conducted site visits and workshops across BC, fostering partnerships and ensuring quality experiential learning. Locations included Vernon, Kelowna, Penticton, Victoria, and more.

REGIONAL PRACTICUM MODEL (RPM) Launched in 2024–2025, RPM placed seven students in rural/remote communities for immersive experiences.

RURAL PHARMACY PRACTICE ELECTIVE

A new year-two summer course was created with online modules and community-engaged learning to address rural healthcare needs.

COMMUNITY PARTNER TRAINING

Standardized self-paced online module developed to onboard community partners and support student mentorship.

EQUITY IN PHARMACY EDUCATION

A workshop in May was held on integrating SOGIE principles into pharmacist training, reinforcing inclusivity and support for 2SLGBTQ+ learners.

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#### Expanding Engagement with Underrepresented Communities

In Fall 2024, the UBC Faculty of Pharmaceutical Sciences expanded outreach efforts to connect with prospective students from underrepresented communities across British Columbia. Faculty advisors visited seven cities, including Prince George, Smithers, Terrace, Kelowna, Castlegar, Prince Rupert, and Courtenay, engaging with students to introduce the Entry-to-Practice PharmD program.

These visits provided an opportunity to foster awareness and interest in pharmaceutical sciences among students in the Interior, Northern BC, and Vancouver Island. By extending beyond the initially planned locations, the faculty strengthened its commitment to accessibility and inclusivity in pharmacy education.

#### **IRESEARCH**

### Oral Insulin Drops Developed for Diabetes Patients

Led by UBC Pharm Sci's <u>Dr. Shyh-Dar Li</u>, the Li Lab created a unique cell-penetrating peptide (CPP) that enables insulin to be absorbed efficiently under the tongue. Unlike traditional insulin pills that break down in the stomach, this method allows rapid entry into the bloodstream, improving convenience and adherence. Preclinical studies show promising results, and the team is working to license the technology for commercialization. This breakthrough could enhance diabetes management by providing a pain-free, easy-to-use alternative to injections.



#### Research Study on BC's Free Contraception Policy

In December, <u>Dr. Laura Schummers</u>, a reproductive epidemiologist and assistant professor at the Faculty, and Dr. Michael Law from UBC's Faculty of Medicine, shared the findings of a research study on the impact of British Columbia's free contraception policy, introduced in April 2023. The study found a significant increase in the use of long-acting reversible contraceptives, such as IUDs and implants, with 11,400 more women opting for these methods than projected under previous cost-sharing policies. The findings suggest that full public coverage of contraception not only improves access but also leads to cost savings for the healthcare system. These are valuable insights that could inform national pharmacare discussions and serve as a model for other provinces considering similar policies.



#### Faculty Study on High Prescription Costs Preventing One in 20 Canadians from Taking Medications

A UBC study published in the Canadian Medical Association Journal, featuring senior author Dr. Mary De Vera from the Faculty, reveals that five per cent of Canadians—more than one in 20—skip medications due to cost, exposing critical gaps in the healthcare system. Based on a survey of over 223,000 people, the research highlights disparities, with young adults, women, LGBTQ+ individuals, and racial minorities disproportionately affected. Geographic differences also play a role, with Quebec residents faring better due to robust drug coverage. As Canada moves toward national pharmacare, researchers urge policymakers to address affordability barriers to ensure universal access to essential medications.

#### Dr. Jacquelyn Cragg Honoured with 2024 YWCA Women of Distinction Award

<u>Dr. Jacquelyn Cragg</u>, Canada Research Chair and assistant professor at UBC's Faculty of Pharmaceutical Sciences, was recognized with the 2024 YWCA Women of Distinction Award for her groundbreaking contributions to pain management and addictions epidemiology. Her research has revolutionized acute pain treatment for spinal cord injury patients, leading to improved recovery and redefining cardiovascular risk in this population. She has also shed light on rising methamphetamine use in Canada, bringing critical awareness to the crisis.



#### **IPRACTICE**

#### Practice Innovation Portfolio: Advancing Pharmacy Practice and Education

The Practice Innovation Portfolio within the UBC Faculty of Pharmaceutical Sciences continues to push the boundaries of pharmacy practice, fostering meaningful integration between patient care and education. A key development in 2024 has been the formal inclusion of all Pharmacists Clinic practitioners in the Academic Portfolio, specifically as part of the Integrated Activities (IA) team. This alignment allows clinic pharmacists to leverage their real-world practice experiences to help develop, assess, and teach within the IA curriculum, enhancing the learning experience for students through firsthand clinical insights.

A major milestone in 2024 was the development of a virtual Medication Assessment and Care (MACs) service within the Pharmacists Clinic. This initiative broadens patient access to pharmacist-led care while serving as a practical training and research avenue that aligns with the Faculty's strategic goals.

In addition, faculty members secured \$150,000 in seed grant funding from the Ministry of Health through a combination of clinic and partner-led initiatives.

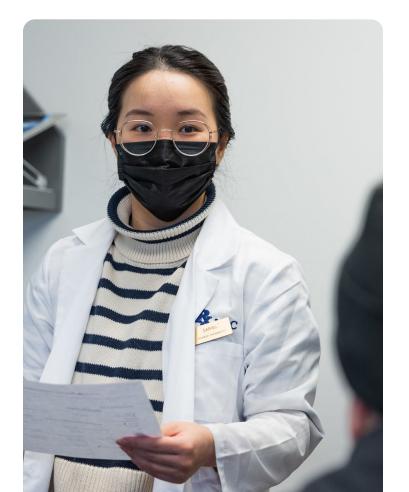
These efforts directly support pharmacist prescribing, a key action item in the Faculty's strategic plan to advance the scope of pharmacy practice in British Columbia.

Further strengthening the link between practice and academia, the team also received two Teaching and Learning Enhancement Fund (TLEF) grants focused on artificial intelligence (AI) and teaching. These projects reinforce the strategic priority of integrating the clinic's expertise across the Faculty's educational programs, ensuring that innovation in practice informs and enriches student learning.

Another significant advancement is the ongoing involvement in the Gateway Clinic operations planning. The Faculty has committed funding for one full-time equivalent (FTE) pharmacist position, who will be part of the Faculty while working full time in the clinic. This initiative highlights the Faculty's commitment to expanding pharmacist-led care while enhancing educational and practice-based opportunities.



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#### "A Prescription for Growth" Video Sees the Pharmacists Clinic Looking Ahead

In October, "A prescription for growth"—a video highlighting the critical role the UBC Pharmacists Clinic plays in addressing critical gaps in Canada's healthcare system—was created. Over the past decade, it has pioneered new models of pharmacy practice, influencing province-wide initiatives like the Primary Care Network (PCN) program. With family doctor shortages and long wait times persisting, the clinic offers extended consultations and coordinated care to support patients without primary healthcare providers. Looking ahead, it aims to expand services and enhance pharmacy education, ensuring future pharmacists are equipped to meet evolving healthcare needs.

#### **IPEOPLE & PLACE**

#### UBC Pharm Sci Alumni Recognized for Global Impact

On March 14, the UBC Faculty of Pharmaceutical Sciences celebrated the achievements of Suzanne Solven (BSc'87) and Dr. Sumreen Javed (PhD'22) as the 2024 Alumni Agent of Change and Alumni Future Agent of Change, respectively. With nearly three decades of leadership in BC's healthcare system, Suzanne currently serves as registrar and CEO of the College of Pharmacists of BC, championing health policy and equitable pharmacy care. Dr. Javed, a breast cancer researcher and advocate, has been recognized for her efforts in raising awareness and promoting early detection within immigrant and minority communities. The annual awards honour alumni who drive meaningful change in pharmaceutical sciences on local and global scales.

#### Showcasing Excellence at CPERC 2024

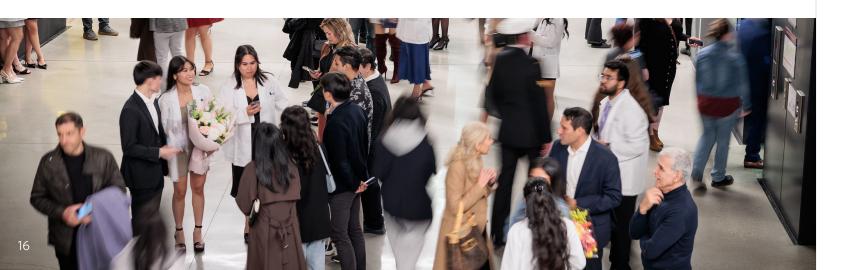
The UBC Faculty of Pharmaceutical Sciences proudly <u>presented its research and educational initiatives</u> at the Canadian Pharmacy Education and Research Conference (CPERC) 2024 in Quebec City. Held from June 11 to 14, the conference featured a diverse range of posters and presentations from UBC faculty, highlighting their contributions to advancing pharmacy education and research.

#### Catalyst for Change 2.0: Interim Progress Report

In September, the Faculty of Pharmaceutical Sciences shared the <u>interim progress report for Catalyst for Change 2.0</u>, its 2023–2026 Strategic Plan. Focused on four key areas—People and Place, Education, Research, and Practice—the plan has seen nearly all 38 outlined actions well underway, with significant achievements across the board. The Faculty also invested in key initiatives through the Strategic Plan Implementation Investment Fund (SPIIF), supporting advancements in AI technology, Indigenous student support, faculty mentoring, and SOGIE training.

#### Welcoming Dr. Lalitha Raman-Wilms as Dean

In October, <u>Dr. Lalitha Raman-Wilms joined the UBC Faculty of Pharmaceutical Sciences</u> as Dean, bringing extensive leadership experience from the University of Manitoba and the University of Toronto. A distinguished researcher in medication optimization for older adults, she has contributed significantly to pharmacy education, policy, and clinical practice. Dr. Raman-Wilms has twice served as President of the Association of Faculties of Pharmacy of Canada and is a strong advocate for equity, diversity, and inclusion. Her collaborative leadership approach will drive innovation and excellence in pharmacy education and research at UBC.





### Introducing *TRxending*: A New Podcast on Pharmacy and Pharmaceutical Sciences

In October, the Faculty launched <u>TRxending</u>, a podcast exploring emerging trends in pharmacy and pharmaceutical sciences, including research, practice, education, and community impact. The debut episode features Jon-Paul Marchand and Brie Weir from the Faculty's Office of Educational Technology and Learning Designs, discussing the role of generative AI in pharmacy education. <u>TRxending</u> aims to spark insightful conversations and keep listeners informed about the evolving landscape of pharmaceutical sciences.

#### Advancing Pharmaceutical Sciences through Generous Support

In 2024, the UBC Faculty of Pharmaceutical Sciences saw remarkable contributions that enhanced student support and groundbreaking research. The newly established Dorothy Margaret Covello Memorial Award became the first donor-funded award for students entering the Bachelor of Pharmaceutical Sciences program.

UBC Giving Day 2024 raised over \$14,000 for Faculty initiatives, with the Diane Hales Award for Indigenous Students and the Graduate Student Professional Development Award receiving the highest contributions.

Research funding also flourished, with Dr. Mohsen Sadatsafavi's lab securing  $\pounds$ 168,730 from the Respiratory Effectiveness Group for chronic respiratory disease research, and Dr. Ujendra Kumar's lab receiving \$450,000 USD from the Legacy Global Foundation for studies in somatostatin.

These contributions underscore the Faculty's commitment to student success and innovative pharmaceutical research.



## EQUITY, DIVERSITY, INCLUSION & INDIGENEITY

The Faculty of Pharmaceutical Sciences at UBC remains committed to fostering an inclusive, equitable, and culturally rich environment. In 2024, the Faculty took significant steps to advance its Indigenous Strategic Plan (ISP) and Equity, Diversity, and Inclusion (EDI) initiatives, reinforcing its dedication to meaningful and sustained change.



#### Strengthening Indigenous Initiatives

In alignment with the ISP, the Faculty prioritized fundraising efforts for Indigenous students, establishing the Indigenous Students Enhancement Fund, which will launch for UBC Giving Day in April 2025. Additionally, the Faculty's ISP <u>website</u> was expanded with new resources and materials to further support Indigenous students and initiatives.

A major milestone in 2024 was the approval of a dedicated Indigenous space within the Faculty's building. This forthcoming space will serve as a safe and welcoming environment for Indigenous students, fostering community, programming, and cultural celebration. This initiative is being led by the Indigenous Strategic Initiatives portfolio, the <a href="UPROOT">UPROOT</a> Team, and Operations and Facilities Management.

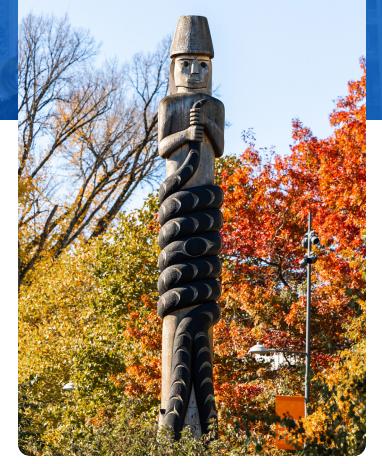
The Faculty also initiated the process for commissioning a mural by a Musqueam artist, further embedding Indigenous representation within the building. Strengthening external relationships, the Dean Lalitha Raman-Wilms has begun engagement with the Musqueam and Squamish Nations, as well as Indigenous leaders across campus, fostering dialogue and collaboration.

In a significant development, UBC Pharm Sci became a member of the Indigenous Pharmacy Professionals of Canada (IPPC) in November 2024, reinforcing its commitment to Indigenous representation in the pharmaceutical field. Additionally, in September 2024, the ISP manager and team members from the Office of Student Services traveled to Northern BC to build stronger partnerships with regional colleges and UBC Okanagan.

### Furthering Equity, Diversity, and Inclusion

In 2024, the Faculty introduced the EDI Learning Activity Checklist Tool, a resource designed to help integrate equity, diversity, and inclusion principles into learning activities. This tool was presented campus-wide at the UBC Centre for Teaching, Learning and Technology during the Spring of 2024, supporting educators in developing more inclusive curricula.

Capacity-building within the Faculty was also a focus, with an additional Equity, Diversity, and Inclusion Advisory Committee (EDIAC) member successfully completing Equity Advisory Training. This enables them to serve as equity advisors in faculty recruitment processes, ensuring fair and inclusive hiring practices.



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Responding to student needs, EDIAC prioritized efforts to enhance review processes for Clinical Faculty Appointment (CFA) students, addressing concerns and advocating for greater equity. Further embedding accountability, the Faculty submitted its 2024 EDI initiatives report to UBC's Equity & Inclusion Office, aligning efforts with the university's Strategic Equity and Anti-Racism (StEAR) Framework.

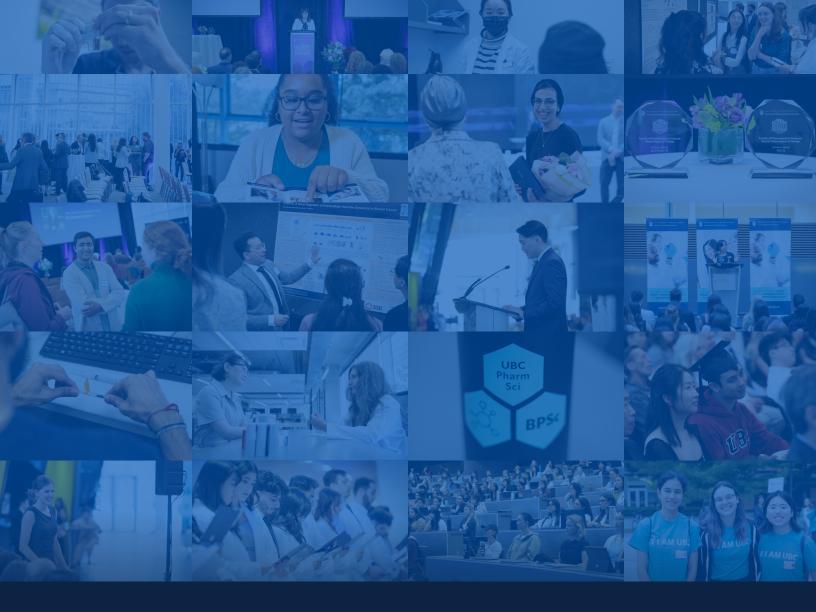
Additionally, the Faculty Member's Annual Report Form was updated to better reflect contributions to EDI and decolonization, encouraging faculty to engage meaningfully in these areas and recognize their impact.



#### Looking Ahead

UBC Pharm Sci remains steadfast in its commitment to advancing Indigenous initiatives and EDI principles. The progress made in 2024 lays a strong foundation for continued growth, ensuring a more inclusive and supportive environment for all students, faculty, and staff.

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