



DEPARTMENT OF
PHARMACOLOGY
CHAIR'S SEMINAR SERIES

State of the Department

Dr. Ross Tsuyuki
February 9, 2023.

Vision

To be international leaders and a key community resource in pharmacology research, education and training.

Mission

To be leaders in pharmacology research, from basic studies of drug targets and actions through to translation into clinical use. To develop and apply innovative approaches to the education and training of the next generation of pharmacologists. To be an authoritative source of information on pharmacology research, education and drug action for professionals, policy makers, and the broader community.

What we've been through...



Colleagues,

I hope you are all taking care and staying warm this week.

The university is currently planning to [resume in-person courses](#) on February 28. While all instructors and students with approved in-person courses will be returning to campus, February 28 **will not** be a full return to campus for employees. Only employees who are required in-person to ensure successful operational delivery are expected to return. Employees required to be in-person for operational delivery should have been notified previously by their supervisors that they are expected to return January 23, and then notified of the delay to February 28.

Please advise managers and supervisors on your teams to remind affected employees of their expected return on February 28. Supervisors can access a message template [here](#). If there are employees on your teams who are required in-person on February 28 and have not yet received notice, managers can use [this template](#) to inform them. Supervisors can reach out to their HR Partner any time for support.

An updated timeline for a phased return to campus for all other employees will be shared soon. When it comes time to do so, I encourage you to give employees 30 days notice where possible, and to manage individual cases with compassion and understanding.

Regards,

Todd Gilchrist

Vice-President (University Services and Finance)

January 27, 2022

Budget Cutbacks, Restructuring

- Major decreases in Campus Alberta funding
- Restructuring:
 - College of Health Sciences
 - SET: centralization of services
 - Agreement to share administration between Physiology, Pharmacology, Cell Biology and Medical Genetics

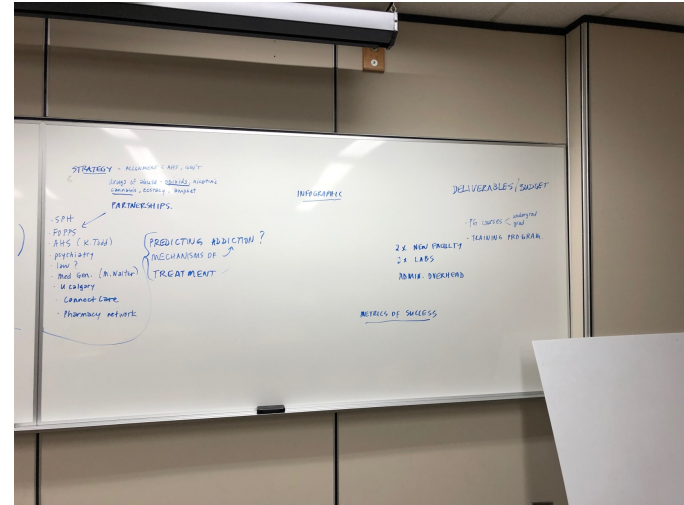
Strategic Plan

Update on Strategic Plan

1. Propose a new Pharmacogenomics Hub
2. Reinvigorate our Educational Offerings
3. Improving our Department's Visibility

1. Propose a New Pharmacogenomics Hub

- Working group meetings (Nov/Dec 2019)
- Initial proposal delivered January/February 2020 (ignored)
- Cohort hire approved, November, 2022
- Position posting this week(!)



'Cohort' Hire



The Faculty of Medicine and Dentistry at the University of Alberta is looking for

an Assistant Professor (tenure-track) with a focus on the impact of genetic variation on, and the application of pharmacogenomics to, the treatment of neurological disorders

Department of Pharmacology

Competition No. - XXXXXXXX

Closing Date - **Will remain open until filled.**

Working for the University of Alberta

The University of Alberta acknowledges that we are located on Treaty 6 territory, and respects the histories, languages and cultures of First Nations, Métis, Inuit and all First Peoples of Canada, whose presence continues to enrich our vibrant community.

The University of Alberta is teeming with change makers, community builders, and world shapers who lead with purpose each and every day. We are home to more than 40,000 students in 200+ undergraduate and 500+ graduate programs, over 13,000 faculty and staff, 260,000 alumni worldwide and have been recognized as one of Canada's Greenest Employers for over a decade.

Your work will have a meaningful influence on a fascinating cross section of people—from our students and stakeholders, to our renowned researchers and innovators who are quite literally curing diseases, making discoveries and generating solutions that make the world healthier, safer, stronger, and more just.

Department summary

The [Department of Pharmacology](#) is a research-intensive department focused on drug-receptor interactions and their downstream signalling effects, and the application of this knowledge to individuals and populations. Our primary strengths are in the areas of cancer drug transporters, neurosciences, diabetes, and cardiovascular diseases. We are also committed to excellence and innovation in pharmacology education and have strong, and growing, undergraduate and graduate programs.

The [FoMD](#) is comprised of 21 departments, 7 Research Institutes, and 6 Core facilities. Core facilities provide state-of-the-art research infrastructure and expertise, including world-class Flow Cytometry and Cell Imaging Cores (<https://www.ualberta.ca/medicine/research/corefacilities/index.html>). The department is the home of proteomic infrastructure and expertise (<https://apm.biochem.ualberta.ca/Contact.html>) with an ongoing history of excellence in structural biology.

2. Reinvigorate Our Educational Offerings

- Increasing interest in pharmacology
- Provost Review 2022

Provost Review, March 7-8, 2022



Undergraduate and Graduate Program Quality Assurance (QA) Review: 2021-2022

Faculties of Medicine and Dentistry and Science

Excerpted Report

Undergraduate Program Review

Programs: Department of Pharmacology:
BSc in Pharmacology
BSc in Pharmacology- Specialization
BSc in Pharmacology - Honors

Review Date: March 7 - 8, 2022

Reviewers: Terry Hébert (Chair, Undergraduate), McGill University; [Jerine Pegg](#) (Internal Member), University of Alberta; Mark Simpson (FGSR Member), University of Alberta

Overview:

Based on the information in the self-study report we found that in general the fundamentals of the program are strong. The program has both a Specialization and an [Honours](#) component which are designed to provide both breadth (interdisciplinary) and depth of training in the core concepts of Pharmacology, and in-depth instruction in current pharmacological knowledge in discrete specialty areas students can choose. The program is solid as constructed with relevant courses across the spectrum of modern pharmacology as an academic discipline. Learning outcomes are well described for each course and are mapped throughout the program. The Department compares well to other pharmacology departments both in terms of program size and teaching commitments.

The teaching strengths of the Department are evident, and the established courses, student tracking procedures, student evaluation and overall program structure are solid. The program has a talented and effective faculty and based on student interest, is in fact poised to grow. The self-study makes clear that faculty enjoy a strong reputation among undergraduate students. Students see program design and progression along with the diversity of [upper level](#) courses available as strengths.

The site visit made obvious that the administrative team who support all aspects of program delivery are tireless in their dedication and commitment to the students they serve.

Provost Review, March 7-8, 2022



Graduate Program Review

Programs: Department of Pharmacology:
MSc in Pharmacology
PhD in Pharmacology
PhD in Pharmacology - Pharmacological and Biomedical Sciences

Review Date: March 7 - 8, 2022

Reviewers: Terry Hébert (Chair, Undergraduate), McGill University; Jerine Pegg (Internal Member), University of Alberta; Mark Simpson (FGSR Member), University of Alberta

Overview:

The students and faculty members of this department are its core strengths. Faculty members in Pharmacology demonstrate research excellence in a diversity of areas, including cardiovascular and diabetes, molecular pharmacology, and neuroscience. They are highly productive, with strong records of publication, and they excel in securing awards for scholarship, mentorship, and teaching. They are generally well-funded and manage to provide venues and opportunities for students to publish in solid journals. Together, all such achievements clearly enhance teaching and learning in the graduate programs. In addition, graduate students compete successfully for scholarships, present at local, national, and international conferences and receive awards. According to the self-study document, satisfaction with the program is high for both mentors and students. Student retention and graduation rates along with time to completion are all strong. As noted in the self-study, students express great satisfaction with numerous aspects of the programs, including its flexibility, versatility of research topics, options, and collaborative opportunities. The students we interviewed felt that the Department helps facilitate inter-lab collaborations, which they viewed as a strength. They also felt that the professional development credits required by FGSR are helpful to their development and career planning. Students expressed very high levels of satisfaction with respect to continuing learning opportunities (e.g., journal clubs, UofA seminars). The program has clearly defined milestones and is managed by dedicated staff. This is critical in the generation of a supportive community for both trainees and Faculty members. The expertise and commitment of support staff constitute real strengths in Pharmacology.

New Courses

- 306: Drug Disposition and Metabolism (Dr. F. Mraiche)
- 404/408: Clinical Pharmacology (Dr. Y. Al Hamarneh)
- 406: Molecular Mechanisms of Drug Action (TBA)
- 410: Pharmacogenomics (new hire)

- Biostatistics for fundamental sciences short course (Ben Vandermeer)

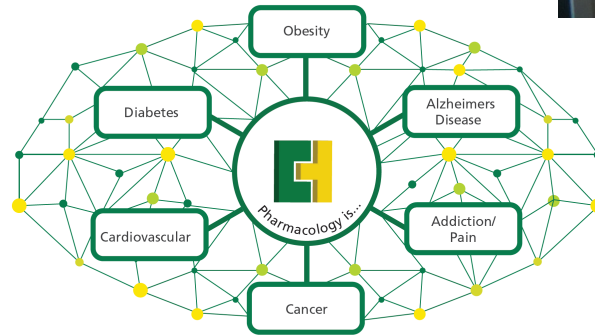
- Changes to 301/302, 305, 401/402, 497/499
- Changes to FOS degree programs

PMCOL 404/408 Proof of Life...



3. Improving Our Department's Visibility

- Limited by COVID-19 pandemic
- Festival of Health
- Public lecture series - on hold
- Glossy Annual Report - not done



Pharmacology is the scientific study of the effects of drugs and chemicals on living organisms, where a drug can be broadly defined as any chemical substance, natural or synthetic, which affects a biological system. Pharmacology is a fundamental discipline that touches all medical specialities and society. Research within the department of Pharmacology investigates drug actions, targets, and their application to human health and disease.

Departmental Stats: 2022/2023



- Research Grants:
 - New \$3,946,900 +
 - Ongoing \$19,322,400 +
- Awards: 24
- Student Awards: 15 students, 20 new awards (\$232,400) plus 12 students with 12 previous awards (\$225,000)
 - Andrew Woodman: Governor General Award
- Publications: 63
- Teaching (total # hours): >6500

Departmental Stats 2022/2023

- Undergraduate students: 220 (54 Honours; 166 Spec) (up 11% last 2y; 37% increase since 2018/19)
- Graduate students: 30+1 (18+1 MSc; 12 PhD) (up 36%)
- Postdoctoral fellows: 4+3
- Faculty: 17 (up 4)
- Adjuncts: 12 (up 50%)
- Staff: 9.5 (3.5 Operating, 6 Trust)

People

Staffing Changes

- Dr. Basil Hubbard
- Dancy Bogdanovic

Welcome, Dr. Fatima Mraiche



Welcome, Monica Martin







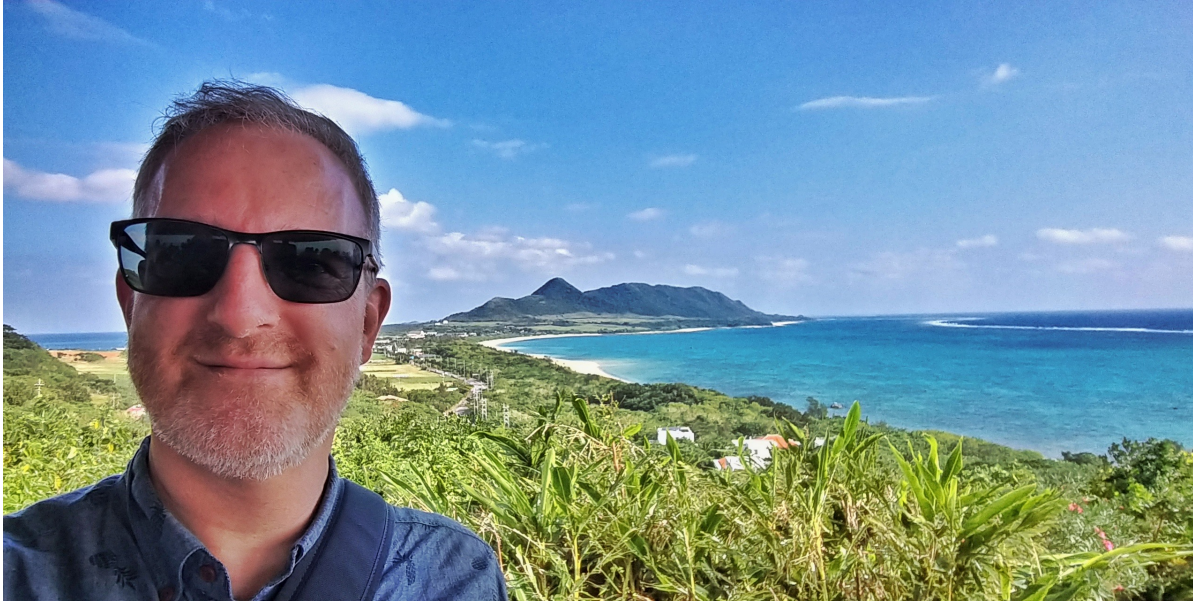
Welcome, Dr. Yazid Al Hamarneh



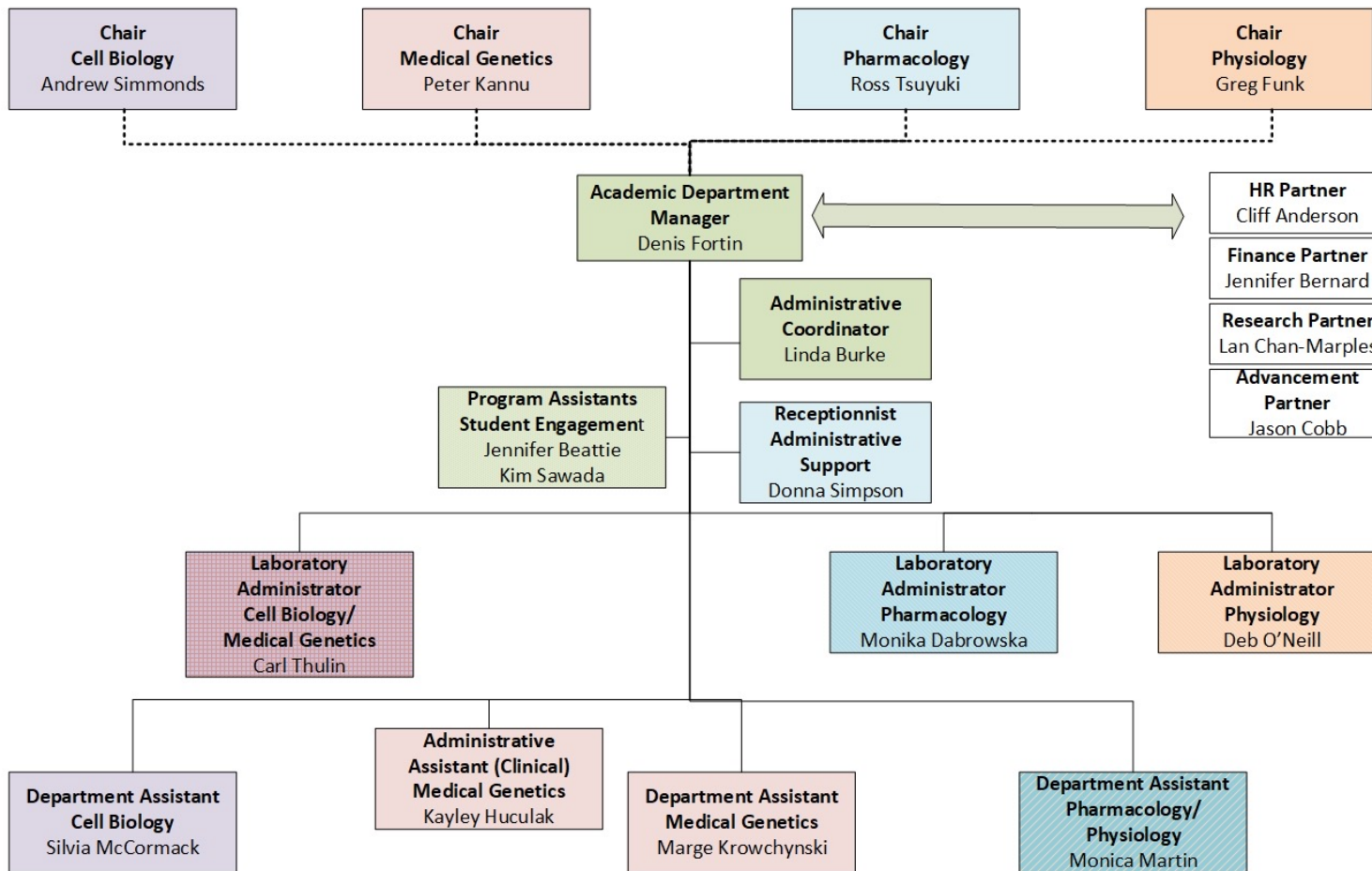
Promotions

- Dr. Anna Taylor to Associate Professor with Tenure
- Dr. Harley Kurata to Professor

New Departmental Administration



Administrative Structure Departments of Cell Biology, Medical Genetics, Pharmacology, Physiology



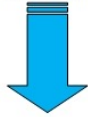
RESEARCH
Pre-award grant preparation support and advice
HR
I have a conflict/performance issue/discipline issue with one of my staff member

I need to hire a student
I need support with Beartracks
Student Support and Questions

I need to meet the Chair
I want to hire/layoff staff,
I have a question about my financial statement
I need to process a financial/HR transaction/travel claim
I have space/internet issue
I need a key or an access
I need a phone line

I need technical assistance in my lab
I need purchasing assistance

FINANCE
I have a question about how I can use my funds
ADVANCEMENT
Fundraising opportunities and soliciting



pharmacology@ualberta.ca

For any confidential, sensitive or personal message:
adm.pharmacology@ualberta.ca

**Department Assistant
Monica Martin**
Request for transactions and administrative support
Department Coordination
Appointment with the Chair



**Program Assistant
Student Support
Jennifer Beattie**

**Departmental
Administrative Coordinator
Linda Burke**
Problem solving on administrative issues
Workflow Planning

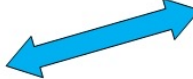
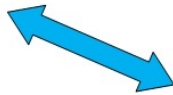
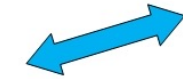
**Lab Administrator
Technical Assistant
Monika Dabrowska**

Research Partner
Lan Chan-Marples

Finance Partner
Jennifer Bernard

HR Partner
Cliff Anderson

Advancement Partner
Jason Cobb



**Academic Department Manager
Denis Fortin**
Strategic and administrative planning support
Guidance on administrative matters and issues
Staff and Resources Management
Assistance with departmental affairs and academic development

**Chair
Ross Tsuyuki**

Partners

- Finance: Jennifer Bernard



- HR: Cliff Anderson



Partners

- Advancement: Jason Cobb
- Research: Lan Chan-Marples



Events

Research Day May 27, 2022

FRIDAY MAY 27, 2022 | 11 AM
VIRTUALLY VIA ZOOM

PHARMACOLOGY RESEARCH DAY

Keynote speaker

DR. ROBERT LAPRAIRIE

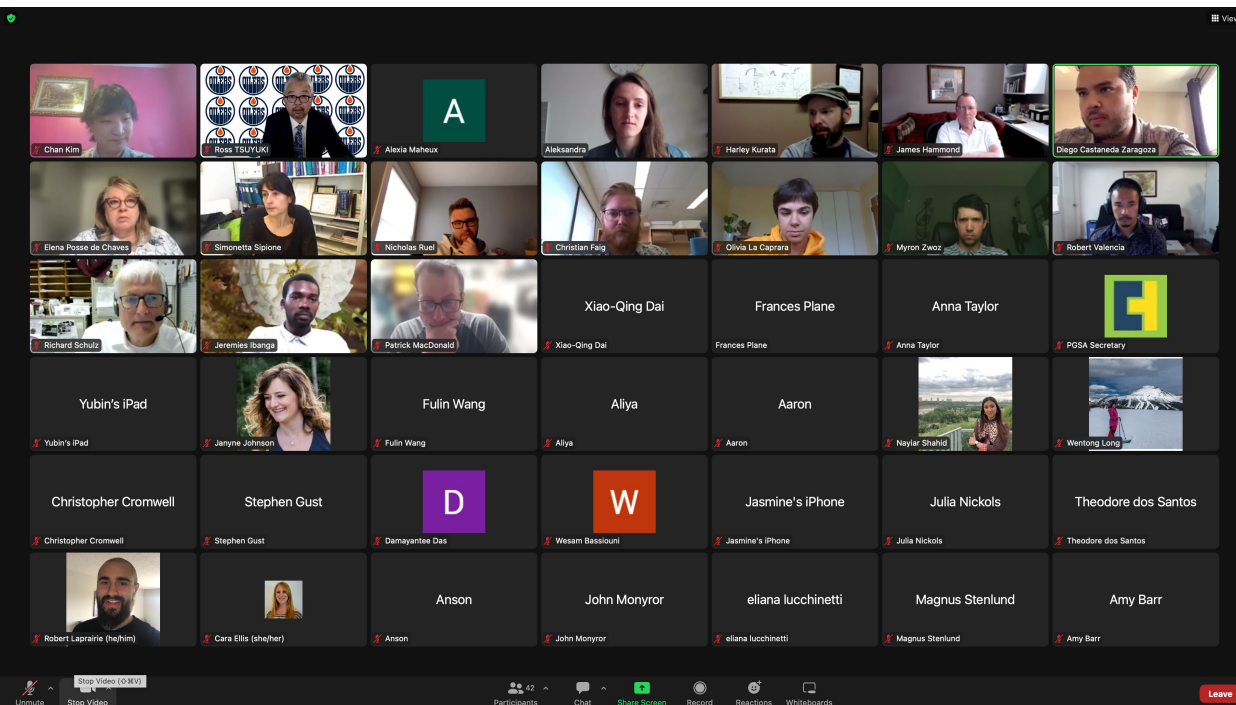
Associate Professor
College of Pharmacy and Nutrition, University of Saskatchewan
GlaxoSmithKline-CIHR Research Chair in Drug Discovery and
Development

**COMPLEX PHARMACOLOGY OF NATURAL AND
SYNTHETIC CANNABINOIDS
AT THE CANNABINOID RECEPTORS**

Please email pmcolgradstudents@gmail.com with any questions



This visit has been funded in part by the Walter Mackenzie
Visiting Speaker Fund, Faculty of Medicine & Dentistry

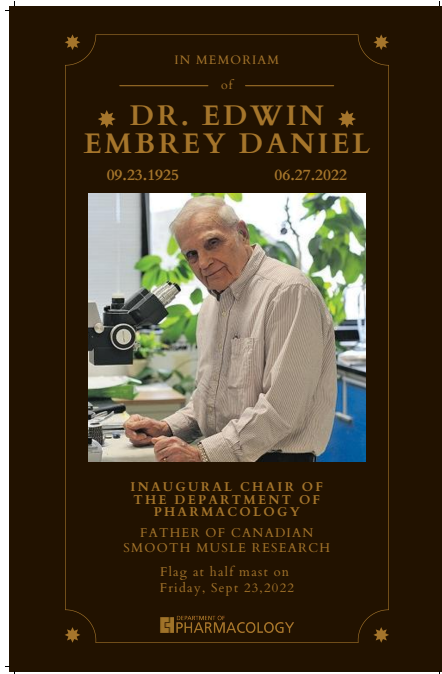


The screenshot shows a Zoom meeting grid with 42 participants. The participants are arranged in a grid, with some having their video off. The bottom toolbar includes controls for Mute, Stop Video, Participants, Chat, Share Screen, Record, Reactions, Whiteboards, and Leave.

This visit has been funded in part by the Walter Mackenzie
Visiting Speaker Fund, Faculty of Medicine & Dentistry



Edwin Daniel Tribute



September 23, 2022.



PGA
BBQ


DEPARTMENT OF
PHARMACOLOGY



September 16, 2022.

Recognition



September 9, 2022.

The Future

Department of Pharmacology MYP Statement 2023-2028



Our Goals :

- Faculty renewal and consolidation to maintain critical teaching capacity beyond actual and upcoming retirements;
- Add strategic expertise in the pharmacology of addiction, enabling the department to synergize the expertise from Drs Taylor, Kurata and Light and the wider FoMD faculty (Anesthesia and Pain Medicine, Biochemistry);

Successes to build on:

- Continued increasing interest in our undergraduate program, enrollment now up to 210 undergraduate students and one course has 385 students in it
- Graduate students: 27+1
- Postdoctoral fellows: 4+2
- Grant success of \$3,739,842 (+\$535,575), of which \$2,625,326 (+\$248,375) is from CIHR
- A reorganized, streamlined Departmental Office that combines administrative tasks of 4 departments, while maintaining the academic integrity and independence of each unit;
- World-class researchers with impressive grant support, our 9 PIs are currently supported by 17 active grants from CIHR, 9 NSERC, 1 Kidney Found'n, 3 CFIs and 3 CRCs.

CURRENT CHALLENGES

- Four retirements and 2 more pending (within the next 2 years), one sabbatical and one secondment will impact our research and teaching capacity;
- Funding of critical initiatives and maintenance remain uncertain;
- Administrative instabilities persist that need to be remediated to ensure long-term consistency and support (some of the administrative support is still shared with Physiology, but need exists for at least one dedicated position.)

OUR NEEDS

- At least one more faculty position (in addition to the cohort hire), including startup support, to replace retirees and rebuild capacity; a structural imaging scientist in addiction could synergize existing ongoing research and bring the department in a highly visible societal area of concerns;
- We need to stabilize our only teaching position (ATS, Dr. Myron Zwodzdesky, who is only on single year terms) by changing it to an FSO position. Dr. Zwodzdesky is interested in a small research allotment to focus on educational scholarship;
- Confirmed faculty funding to maintain departmental core equipment;
- Pharmacogenomics is critical for the effective use of drugs and is a core element of Precision Health. The department has defined pharmacogenomics as a key area for development in its recent strategic plan and we have established expertise in neurosciences (Taylor, Colmer, Sipione, Posse de Chaves) psychiatry (Alchison), and clinical/translational research (Tsuyuki), access to clinical populations (Tsuyuki, Alchison), and scattered expertise in pharmacogenomics (Alchison, Bhavsar, Zaugg, Light, Hammond).

Executive Team:

Ross Tsuyuki, Chair
James Hammond, Director of Graduate Studies
Elena Posse de Chaves, Director of Undergraduate Studies
Denis Fortin, Academic Department Manager

College of Health Sciences



UNIVERSITY
OF ALBERTA

I am pleased to announce the appointment of Dr. Brenda Hemmelgarn as Dean and Vice-Provost of the College of Health Sciences (CHS) for a five-year term effective July 1, 2023. Dr. Hemmelgarn will also retain her role as Dean of the Faculty of Medicine & Dentistry.

College of Health Sciences (what does this mean?)

Roles and responsibilities across the four levels of the university

Function	University	College	Faculty	Department
Overall role	Institutional strategy and policy, institutional performance, budget and space allocation, central admin and student services delivery, quality assurance and consistency, institutional brand and marketing, external and	College strategy, collaboration within and across colleges and coordination of all college resources (such as budget, space, strategic hiring, research and education program planning, and enrolment planning), accountability	Implement strategy within broader college and university strategy, research and education program development and innovation, academic talent management, faculty and	Program development and delivery, research, academic talent management

Proposed New Hire

OUR NEEDS

- At least one more faculty position (in addition to the cohort hire), including startup support, to replace retirees and rebuild capacity; a structural imaging scientist in addiction could synergizes existing ongoing research and bring the department in a highly visible societal area of concerns;

- **We have survived**
- **And thrived**
- **The future looks bright for PMCOL**

Questions, Comments, and Discussion

Our Mission

- To be leaders in pharmacology research, from basic studies of drug targets and actions through to translation into clinical use.
- To develop and apply innovative approaches to the education and training of the next generation of pharmacologists.
- To be an authoritative source of information on pharmacology research, education and drug action for professionals, policymakers, and the broader community.