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## **PRESIDENT'S MESSAGE**

Dear AFPC Members:

I hope that everyone had a smooth start to the 2015 fall term. It is always a tough balancing act when a new cohort of students arrive and classes begin for another year. This is my first message as AFPC President and I look forward to working with the other AFPC Board of Directors and Councillors over 2015-16.

The 2015 Annual Conference was an educational success. A significant number of AFPC faculty members attended the 2015 Annual Conference in Washington, DC (we estimate approximately 65 AFPC members were registered). The conference attracted over 2200 attendees to the fully integrated educational program. Canadian faculty members made 3 special presentations (90 minute versions) and presented over 40 posters. All presentations submitted were subject to peer acceptance. I believe that the significant number of Canadian presentations shows the pharmacy education and research is at least on par with the work done by our US colleagues. Keep up the great work.

In 2016, our Canadian Pharmacy Education and Research Conference (CPERC) will be held in Vancouver, BC from May 31-June 2, 2016. The conference will be held in partnership with CSPS. We are planning a robust educational and social program. Details about the program content and abstract submission information will be posted on the AFPC website in February 2016. Vancouver is a great place to visit at this time of year and we look forward to being your host for this conference.

Our two special projects, on Canadian experiential education and the Pharmacy educator peer leader network (PEPLN), are entering the final stretch. In the experiential education project best practices have been identified for experiential education learning outcomes / assessments, preceptoring models, and preceptor development. From the PEPLN project, we are reviewing the results from the 8 faculty projects completed on integrating informatics into pharmacy curriculum.

Our Executive Director's update in this newsletter provides you with more information about AFPC activities since the last newsletter. Check out the update on AFPC activities related to the Board, Councils, committees, projects and the AFPC office.

All the best in the fall academic term.

Michael Coughtrie  
AFPC President

## EXECUTIVE DIRECTOR'S CORNER

### HIGHLIGHTS

- Successful 2015 annual conference held in partnership with AACP in Washington, DC.
- Selection of 2015-16 AFPC Board and Council members confirmed at annual meeting.
- AFPC education committee initiates review of current version of educational outcomes.
- New action priority reports available for Canadian experiential education project.
- PEPLN leadership team commences compiling results from integration projects and writing final report.

### GOVERNANCE

Board of Directors – The Board of Directors held their annual meeting on July 11, 2015. The main agenda items were to nominate the 2015-16 executive and to review the status of CPhA organizational membership. The 2015-16 Board Executive members are Michael Coughtrie (President), Ann Thompson (Vice President), Jean Lefebvre (Treasurer) and Kerry Mansell (Past President). Other 2015-16 Board of Directors include: Kishor Wasan (Saskatchewan), Silvia Alessi-Severini (Manitoba), Dave Edwards (Waterloo), Jamie Kellar (Toronto), Gilles Leclerc (Montreal), Tannis Jurgens (Dalhousie), and Carlo Marra (Memorial). The next scheduled Board of Directors meeting is in November 2015.

### ADMINISTRATION

2016 AFPC operating budget – Work has begun on preparation of the 2016 AFPC operating budget. The operating budget will be reviewed at the November Board of Directors meeting.

### PROGRAMS / SERVICES / PROJECTS / COMMITTEES

Awards – The 2015/16 AFPC awards booklet has been posted on the website (<http://afpc.info/content/afpc-awards-booklet>). Also, website awards information has been updated. The first deadline for AFPC awards program submissions is January 15, 2016. This deadline applies to the following awards: CFP Pharmacy graduate student award for pharmacy practice research, Merck Graduate pharmacy fellowship, AFPC New investigator award, and Pfizer

Council of Faculties – The Council of Faculties voting members held their annual meeting on July 11, 2015. The agenda included reviews of committee annual reports, AFPC project reports and a discussion about pharmacy specialization. The 2015-16 Council of Faculties Executive members are Tannis Jurgens (Chair) and Ann Thompson (Vice Chair). Other 2015-16 Council of Faculties voting members include: Marion Pearson (British Columbia), Ed Krol (Saskatchewan), Silvia Alessi-Severini (Manitoba), Cynthia Richard (Waterloo), Jamie Kellar (Toronto), Julie Methot (Laval), Gilles Leclerc (Montreal) and Carla Dillon (Memorial). The next scheduled meeting (mid-year meeting) of the Council of Faculties voting members is in February 2016.

Council of Deans – The Council of Deans held their interim meeting on July 12, 2015. Agenda items included discussions about a pharmacy research foundation, and pharmacist specialization, and a status report on CPhA organizational membership. The 2015-16 Council of Deans Executive members are Kishor Wasan (Chair) and Heather Boon (Vice Chair). Other 2015-16 Council of Deans members include: Michael Coughtrie (British Columbia), James Kehrer (Alberta), Neal Davies (Manitoba), Dave Edwards (Waterloo), Lyne Lalonde (Montreal), Jean Lefebvre (Laval), Susan Mansour (Dalhousie), and Carlo Marra (Memorial). The next scheduled meeting (annual meeting) of the Council of Deans is in November 2015.

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Research career award. Please promote these awards to your colleagues.

Communications committee - The communications committee is reviewing the results from an on-line survey of AFPC faculty members (conducted in May-June). Based on the results of the survey, the committee will be conducting additional analysis of website use and developing recommendations to improve website communications. In addition, the committee is reviewing options for improving French translation for website content. Also, selected emails of interest will be sent directly to faculty members from the AFPC office. Ann Thompson is the chair of the communications committee (email – [aethomps@ualberta.ca](mailto:aethomps@ualberta.ca)).

Education committee – A review of our 2010 AFPC educational outcomes and levels of performance has commenced. The AFPC education committee is the focal point for this review. The committee will be meeting in October to review a list of potential interview/focus group questions for faculty curriculum chairs about the current version of AFPC educational outcomes and levels of performance. If you have comments or thoughts about the current AFPC educational outcomes and levels of performance please discuss with your curriculum lead or contact the Education Committee Chair - Jamie Kellar (email - [jamie.kellar@utoronto.ca](mailto:jamie.kellar@utoronto.ca)).

2015 AACP / AFPC Annual Conference – The 2015 conference was an educational success. Approximately 60-65 AFPC members attended the conference and attendees appeared satisfied with the content and format. Three Canadian special presentations (90 minutes) and more than 40 posters were accepted. The

following URL provides a summary of presentation and poster abstracts:  
<http://www.aacp.org/meetingsandevents/AM/2015/Pages/Abstracts.aspx>. Further discussions will be occurring with AACP regarding the conference income and expenses.

2016 Annual Conference (Canadian Pharmacy Education and Research Conference) – Preliminary planning for the 2016 annual conference is underway. The conference is confirmed for Vancouver, BC and will be held jointly with CSPS. An opening reception will be held on May 31 with the two education days being June 1 and 2. More detailed information (including deadlines for abstracts and proposals) will be posted on the AFPC website in early 2016. If you have suggestions for the conference please contact the program chair, Charles Park (email - [charles.park@ubc.ca](mailto:charles.park@ubc.ca)). The format will be a mix of general sessions, special sessions, SIG sessions, workshops, seminars, and roundtables.

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Pharmacy Educator Peer Leader Network (PEPLN) – The PEPLN workshop was successfully held in June 2015. Peer leaders presented the results from their faculty integration projects. There were 2700 users of the e-resource over the 1 year period. The following types of integrations were tested: pre-readings for lectures, pre-lab activities / assignments, in class activities, pre-experiential requirements, experiential learning rotation, contests / awards, conference / symposia, lunch and learns, and online self-directed activities. The project leadership team members (L. Bishop, M. Rocchi, V. Leung, D. Pipa, and H. Lopatka) are reviewing the final reports received from each of the faculty integration projects to evaluate the overall lessons learned and achievements. In addition, the leadership team is reviewing each e-resource domain with contributing authors and identifying revisions for version 2.0 of the e-resource. A more detailed project summary is available through the project newsletters (see [www.afpc.info/pepln-newsletters](http://www.afpc.info/pepln-newsletters)).

Canadian Experiential Education Project – K. Mulherin continues in her role as Project Manager. Her team of student assistants have completed their work on the project. A summary of the project activities is available in the most recent version of the project newsletter (see [www.afpc.info/content/canexed-newsletters](http://www.afpc.info/content/canexed-newsletters)). Four action priority reports are now completed in “draft for consultation” formats and posted on the AFPC website (see [www.afpc.info/content/canexed-reports](http://www.afpc.info/content/canexed-reports)). The following are the titles of the reports: i) National approach to learning outcomes and corresponding assessments at each stage of experiential education, ii) Integration of the full spectrum of preceptoring models in experiential education, iii) Best practices in preceptor development to establish/augment best qualities and abilities in preceptors (3 parts), and iv) Description and promotion of value learners add to host organizations and their mandate. The end of October 2015 is the target for the report completion of the next action priority “optimisation of preceptor recruitment and retention”. Presentations about the project occurred at the 2015 AACP / AFPC annual conference.

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## OTHER ACTIVITIES

Canadian Pharmacists Association (CPhA) – Monthly briefings continue to be held with CPhA and AFPC senior management. CPhA is focusing significant attention on advocacy activities related to the upcoming federal election (e.g., developed candidate contact tool, Pharmacare position paper). In addition, a work group has been established to study the issues related to physician assisted dying. John Hawboldt (Memorial) is representing AFPC. A monthly CPhA update is being sent from the AFPC office directly to AFPC pharmacist faculty members. CPhA is planning to provide a complimentary subscription to the Canadian Pharmacists Journal to all AFPC Members who are licensed pharmacists. Information about AFPC faculty member benefits relating to CPhA membership is posted on the AFPC website (see <http://afpc.info/content/cpha-organizational-membership-benefits>). For a summary of 2014 CPhA activities please see annual report (<http://www.pharmacists.ca/cpha-ca/assets/File/about-cpha/AnnualReport2014EN.pdf>).

National Patient Safety Consortium (NPSC) – H. Lopatka participated in another meeting of this group on September 18, 2015. NPSC has implemented a Canadian integrated patient safety action plan. There are four overarching themes: patients and family; providers, leaders and participants; measuring and learning to improve; and communicating. Within the integrated plan a patient safety education action plan has been developed. To obtain more information about the education action plan see <http://www.patientsafetyinstitute.ca/en/About/PatientSafetyForwardWith4/Pages/Patient-Safety-Education.aspx>. In addition, the Canadian Patient Safety Institute annual meeting was attended as AFPC is a voting member. To view a copy of the CSPSI 2014-15 Annual report see <http://www.patientsafetyinstitute.ca/en/About/Pages/Annual-Report.aspx>.

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## REPORTS FROM EXTERNAL ORGANIZATIONS

The following are some recent reports released by external organizations that have implications to pharmacy education and research.

Unleashing Innovation: Excellent Healthcare for Canada. Report of the Advisory Panel for Healthcare Innovation.

<http://www.healthycanadians.gc.ca/publications/health-system-systeme-sante/report-healthcare-innovation-rapport-soins/alt/report-healthcare-innovation-rapport-soins-eng.pdf>

Needs Assessment of Specialization in Pharmacy in Canada.

<http://blueprintforpharmacy.ca/news/news-story/2015/08/07/final-report-needs-assessment-of-specialization-in-pharmacy-in-canada>.

The Federal Role in the Scope of Practice of Canadian Healthcare Professionals. Report of Standing Committee on Health.

<http://www.parl.gc.ca/HousePublications/Publication.aspx?DocId=7977821&Language=E&Mode=1&Parl=41&Ses=2>.

CPhA Pharmacist's Expanded Scope of Practice in Canada – Chart Update.

<http://www.pharmacists.ca/index.cfm/pharmacy-in-canada/scope-of-practice-canada/>



AFPC Executive Director

## FACULTY SPOTLIGHT: Université de Montréal

### Highlights

Our Faculty is one of the largest faculties of pharmacy in Canada. In 2015, more than 1015 students were enrolled in undergraduate studies and 400 students were pursuing professional and scientific graduate studies. Located in the Jean Coutu pavilion on Mount Royal, the Faculty has access to modern facilities and beautiful surroundings.



The Faculty offers three undergraduate programs: an entry-level Pharm. D., a Baccalaureate in biopharmaceutical sciences and a bridging program for foreign pharmacists. The entry-level Pharm. D. program was the first to be implemented in Canada. The Baccalaureate in biopharmaceutical sciences focuses on the drug development process and prepares students to contribute to this field. The bridging program for foreign pharmacists is offered only to previously selected candidate by the Ordre des pharmaciens du Québec.

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### **Research-based Graduate Programs**

The Faculty also offers various graduate programs such as a clinical Master in advanced pharmacotherapy (residency program combined with a research project), a specialized degree in drug development and research-based graduate programs.

While our undergraduate programs and professional masters are designed for a French-speaking audience, research-based programs, especially the Ph. D., are more accessible to non-francophone applicants although a minimal knowledge of French is required. A student can be allowed to write and present his/her thesis in a language other than French.

The Faculty offers a 45 credits research-based master (M. Sc.) with 6 options: pharmaceutical analysis, medicinal chemistry, medications and population health, pharmacogenomics, pharmacology and pharmaceutical technology. Most of the credits are attributed to the completion of a research project.

A 90-credits research-based Ph. D. program is also offered. One of the five following options must be selected: pharmaceutical analysis, medicinal chemistry, medications and population health, pharmacology and pharmaceutical technology. Again most of the credits are attributed to an innovative research project.



## **Governance**

### **New Administrative Leadership team**

Members of the Executive Committee of the University de Montreal approved the appointment of the new team of faculty officers. Lyne Lalonde, new Dean of the Faculty of pharmacy, is proud of the new leadership team in place. She mentioned that the newly appointed faculty officers will begin their new term with skill, enthusiasm and energy needed to carry several large challenges.



Assistant-Dean Research and Graduate Studies:

[Céline Fiset](#)

The four priorities of the new leadership team:

- ☐ Make research a priority
- ☐ Support the development of community pharmacy practice
- ☐ Assess the efficiency of our academic programs
- ☐ Improve the organizational structure of the Faculty



Assistant-Dean Undergraduate Studies: [Ema Ferreira](#)



Dean: [Lyne Lalonde](#)



Secrétaire de faculté: [Lucie Blais](#)

## **Research Activities**

The Faculty of pharmacy at Université de Montréal is very active in research and is among the top faculties of Canada with respect to research funding. Research activities cover all aspects of drug development and drug use, offering tremendous training opportunities for the would-be researchers in this dynamic field.

### **Major Research Axis**

The research activities at the Faculty are now regrouped under four major axis of research: medication and population health, discovery and validation of therapeutic targets, pharmacometrics and pharmacotherapy, and drug formulation and analysis.

#### **1. Medication and population health**

Research projects in this axis look at medication use with approaches taken from pharmacoepidemiology, pharmacoeconomics, social sciences and public health. To know more about the specific expertise of our professors working in that field, please consult the axis [web page](#).

Director: Johanne Collin



## 2. Discovery and validation of therapeutic targets

Research projects in this axis aim at understanding the effects of medications at the molecular, cellular, animal or human level. It also includes studies in pharmacokinetics, pharmacogenomics and pharmacometrics. To know more about the specific expertise of our professors working in that field, please consult the axis [web page](#).

Director: Marc Servant



## 3. Pharmacometrics and pharmacotherapy

Pharmacometrics is a multidisciplinary science that sustains critical thinking and facilitates decision making in environments focused on new drug development, their regulatory aspects and their use. By taking into account all scientific data available, both on the illness and on the population under study, pharmacometrics describes in a quantitative and an integrative way the pharmacologic processes of a drug by identifying appropriate metrics in order to estimate, evaluate, understand and predict the effect of a drug. To know more about the specific expertise of our

professors working in that field, please consult the axis [web page](#).



Director: Fahima Nekka

## 4. Drug formulation and analysis

This axis of research includes 3 activities related to drug technology, physico-chemistry and pharmaceutical chemistry. Research in pharmaceutical technology looks at innovative drug targeting and drug delivery methods. To know more about the specific expertise of our professors working in that field, please consult the axis [web page](#).

Director: Jeanne Leblond Chain



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## Recent research grants and awards

### Mireille Schnitzer, CIHR Award Recipient

Last July, Mireille Schnitzer, assistant professor at our Faculty, was granted the New Investigator Salary Award from the Canadian Institutes of Health Research for her research program entitled *Development of advanced causal methodology for the evaluation of pharmaceutical safety and effectiveness using electronic medical databases*. Professor Schnitzer research program focuses on the development of efficient estimation methods to monitor the drug use in the population using electronic databases, such as the RAMQ. The value of the award is \$ 300,000 over 5 years.



Mireille Schnitzer's [web page](#)

### **Marc Servant, CIHR Grant Recipient**

Marc Servant, full professor and director of the discovery and validation of therapeutic targets research axis of our Faculty, was granted by the Canadian Institutes of Health Research, a 534 000 \$ over 5 year grant for his research project entitled *Characterization of novel effectors that contribute to the fine-tuning of the antiviral cellular response following virus infection*. This research program aims to understand the cellular antiviral response in order to provide new therapeutic targets for the treatment of viral infections and autoimmune diseases.

Marc Servant's [web page](#)

### **Fahima Nekka, Quebec Research Funds Grant Recipient**

Fahima Nekka, full professor and director of the pharmacometrics and pharmacotherapy research axis of our Faculty, in conjunction with Jun Li, assistant professor, received a 144 000 \$ over 3 year grant from the Quebec Research Funds for their team-based research project entitled "*Caractérisation et mesure de la variabilité médicamenteuse et son impact thérapeutique par une pharmacologie probabiliste pour une utilisation rationnelle du médicament*". Other collaborative team members for this research project are Michael Mackey from McGill University and Jacques Bélair.

Fahima Nekka's [web page](#)

Jun Li's [web page](#)

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### **Drug Use during pregnancy: the impact on mother and child**

Anick Bérard, full professor, epidemiologist, director of the research unit on Drugs and Pregnancy at the CHU Sainte-Justine Research Center and co-owner of the chair Famille Louis Boivin on drugs, pregnancy and breast feeding has launched a mega database entitled *La cohorte des grossesses du Québec*. This new database will provide useful information on drug use during pregnancy and their consequences for the mother and child.

In fact, the Cohorte des grossesses du Québec regroups four databases that contain information on pregnant women covered by the Quebec Provincial Drug

Insurance Plan since 1997. This represents 1/3 of the childbearing women of the province of Quebec. It is one of the few databases of its kind and the only one to contain specific information on gestational age. US Food and Drug Administration, foreign universities and pharmaceutical companies can be found amongst its users.



Anick Berard's [web page](#)

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### **Recent Awards**

#### **Women of Distinction Award for Cara Tennebaum**

Dr. Cara Tannenbaum is among the 13 recipients of the Women of Distinction Award 2015 in the category Health, awarded by the Women's Y of Montreal. These awards represent a celebration of women and their outstanding achievements and contributions to our society. Over time, these awards have become essential in the recognition of women's leadership. For 22 years, more than 240 women have received this honor; inspiring women who have, in their own way and in their fields, opened doorways for girls and women.

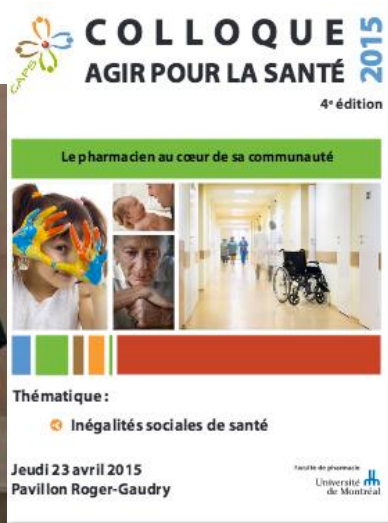


Cara Tannenbaum's [web page](#).



### **Chantal Pharand, Nancy Sheehan et Françoise Crevier : recipients of an innovation prize**

While she was Vice-Dean of Studies at our Faculty, Chantal Pharand coordinated the development of a brand new course with colleagues Françoise Crevier and Nancy Sheehan, respectively techno-educator and clinical professor at the Faculty. This service learning course was intended to foster and develop students' competencies through the development and implementation of a health promotion and disease prevention project in collaboration with social and community groups, during their Pharm. D. program. All projects are display yearly during the «Agir pour la santé» Symposium.



### **Recognition Award for Ema Ferreira and colleagues**

During the Gala Reconnaissance 2015 of the Ste-Justine University hospital Centre, the work of two teams involved in the pharmacy department were honored. One of those teams was directed by Ema Ferreira, Vice-Dean of Studies. The Centre IMAGE (Drug information during Pregnancy and breastfeeding) team of the Sainte-Justine University Hospital Centre received the Expertise and Competence 2015 award. Since its creation in 1997, the Centre IMAGE has answered more than 100,000 questions from health professionals.

Ema Ferreira's [web page](#).

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### **Faculty News**

#### **New appointment for Chantal Pharand**

Chantal Pharand, full professor, was appointed associate vice-president student affairs at the University of Montreal. Until Spring 2015, she was Associate Dean and acting Director between dean nominations.

#### **Nathalie Letarte, new Pharm. D. Director**

Nathalie Letarte, associate clinical professor and co-owner of the pharmaceutical Chair Jean-Guy Sabourin in women's health, becomes the new Entry-level Pharm. D. program director in replacement of Ema Ferreira. Specialised in oncology pharmacotherapy and in supportive care for cancer patients, Mme Letarte is also staff member of the CHUM University of Montreal Teaching Hospital.



Chantal Pharand's [web page](#)



Nathalie Letarte's [web page](#).

#### **2014-2015 Annual report**

If you want to know more about the last year at our Faculty, consult the annual report available on the homepage of our Web site at [www.pharm.umontreal.ca](http://www.pharm.umontreal.ca)

### **Largest enrolment recorded in the Master program in advanced pharmacotherapy (Residency program)**

Last August, more than 43 residents have begun the Master program in advanced pharmacotherapy. This is the largest enrolment ever recorded in the program. New residents were either a University of Montreal graduate, a University Laval graduate or coming directly from practice. The 16 month program allows the resident to acquire and apply knowledge of advanced pharmacotherapy and develop leadership and creativity. The program prepares the future graduate to provide complex pharmaceutical care in an interdisciplinary context, to improve drug use and to participate in a practice oriented research project within health facilities and ambulatory settings.

### **Pharm. D. Bridging Program for active pharmacists**

Both Quebec faculties of pharmacy have developed, in collaboration, a joint PharmD bridging program for active pharmacists. Offered since autumn 2014, this program allows Quebec licenced bachelor pharmacists to pursue a PharmD equivalent degree. This mostly online program, delivered as distance learning, allows enrolled pharmacists to develop their professional clinical skills while trying to reconcile work, family and studies. Regular online forums allow collaboration and discussions between enrolled pharmacists and with academic support.



#### ***Pharm.D. Bridging Program***

*Top picture: Nancy Sheehan, Grégoire Leclair, Chantal Pharand, François Pothier, Anne Dionne et Jean Lefebvre.  
Bottom picture: Chantal Pharand, Charles Milliard et Jean lefebvre*

### **White Coat Ceremony**

This year, 200 Pharm. D. and 32 foreign pharmacists enrolled in the bridging program participated in the white coat ceremony. Family members and friends attended in large numbers. The Dean, Lyne Lalonde, the President of the Ordre des pharmaciens du Québec, Bertrand Bolduc, and the president of the pharmacy student association, Michael Cardinal, addressed the participants and guests.



#### 4th Research Annual Meeting

The Faculty of pharmacy will be holding on Thursday December 3<sup>rd</sup> the 4th Research Annual Meeting. This event showcases the research activities of our professors and graduate students. Organized in collaboration with the Directors of Biopharmaceutical Science bachelor program and Master of Advanced pharmacotherapy, this event allows visitors to discover the research through poster presentations. Last year's meeting brought together over 300 people and more than 70 posters. The Graduate Pharmacy Student Association holds its annual scientific poster contest during this meeting.



1. Organizing committee  
2. Research annual meeting in action  
3. Pharmacy Residents with program director Marc Perreault

#### Philanthropy

##### Major gift from Madeleine Tremblay Servier and Servier Canada

On August 28th, our Faculty received Dr Madeleine Tremblay Servier as well as numerous dignitaries and guests to underline the \$750, 000 donation from this generous 1954 graduates and Group Servier. This donation was first announced on October 10th 2014 during the inauguration of the new Center of Clinical Development of Servier Canada in Laval. Lyne Lalonde, Dean of our Faculty, paid tribute to the exceptional career of this determined woman. Bertrand Bolduc, president of the Order of the Pharmacists of Quebec, whose first job after graduation was at Servier, was very laudatory of the numerous achievements of Dr Tremblay Servier and Group Servier.

This major donation will allow the creation of the *Fund of Dr Madeleine Tremblay Servier and Groupe Servier for drug development* that will support the excellence in teaching and research in drug development. Born in the province of Quebec, Dr Tremblay Servier is internationally recognized for her brilliant career in the industry. Pioneer in the international development of Servier, Dr Tremblay Servier established Servier

Canada in 1978 and chairs the *Collège international de recherche Servier*.



On the picture, from left to right : M. Bertrand Bolduc, président de l'Ordre des pharmaciens du Québec, Galenova Inc. / Gentès & Bolduc Pharmaciens et Président du Cabinet de campagne facultaire, M. Jean Coutu, Mme Marcelle Coutu, Dr Madeleine Tremblay Servier, fondateur de Servier Canada et Présidente du Collège International de Recherche Servier, diplômée de pharmacie de la promotion 1954, M. Frédéric Fasano, directeur général, Servier Canada, Mme Lyne Lalonde, doyenne, Faculté de pharmacie, et M. Guy Lefebvre, Vice-recteur aux Affaires internationales, Francophonie, philanthropie et relations avec les diplômés, Université de Montréal.



## FACULTY NEWS

### UNIVERSITY OF ALBERTA

#### New appointments

The Office of Experiential Education has a new administrative team! First, **Dallyce Bialowas** is our new Program Administrator. Dallyce holds a Bachelor of Secondary Education from the University of Alberta, and has worked at UofA since 2008. For the past 3 years, she has worked with the Faculty of Medicine and Dentistry, both undergraduate and graduate, in experiential education program administration (pediatrics). **Candace Ramjohn** has also joined us and is replacing Gaenor Botha as Program Assistant for Experiential Education. Candace brings with her a wealth of knowledge and experience, gained from positions both on and off campus. She has extensive working knowledge of university systems,

structure and processes, from her 10+ years' spent in central administration, admissions/records and exams/timetabling.

Congratulations to **Dr. Christine Hughes** who has been appointed to the position of Vice-Dean from Sept. 1, 2015 to December 31, 2016. Christine has been with the Faculty since 1997. She served as Chair of the Division of Pharmacy Practice for 7 years, as Chair of our Strategic planning committee in 2010, as Interim Associate Dean for Undergraduate Programs, and is currently Assistant Dean for the PharmD Curriculum Development.

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#### General Faculty News

##### Experiential Education – Preceptor Awards

We are committed to recognizing the important contributions preceptor faculty members make to student learning and development. Under our *Preceptor of the Year* and *Preceptor Recognition Award* programs, we aim to recognize preceptors who provide outstanding contributions to the educational development of future pharmacists. Nominees and recipients have demonstrated high standards of professionalism, ethics, and pharmacy practice, as well as exemplary preceptorship skills. For the BScPharm program, four deserving pharmacist preceptors were awarded *Preceptor of the Year* for 2015. In total, students nominated over thirty preceptors for these awards. The PharmD for Practicing Pharmacists program will award their *Preceptor of the Year* later this fall. Additionally, an incredible 73 pharmacist preceptors have been nominated to receive Preceptor Recognition Awards for 2015; this includes both the BScPharm and PharmD program preceptors. This student-nominated award program recognizes any preceptor nominated based on the annual theme. This year's theme was "Preceptors Building Student's Confidence in Practice". Congratulations to all our dedicated preceptors!

##### PharmD for Practicing Pharmacists

The PharmD for Practicing Pharmacists welcomed 21 new students for the Class of 2016. The program will be graduating 15 students as part of the class of 2015 this November.



*PharmD Class of 2016*

#### In the News

**Dr. Hoon Sunwoo** was featured on Global news talking about "cracking gluten intolerance". This features how egg yolks can be used to create a supplement that could improve lives of those with celiac disease. <https://uofa.ualberta.ca/news-and-events/newsarticles/2015/july/cracking-gluten-intolerance>

## Grants

The faculty would like to congratulate Dr. Khaled Barakat on his recent success in leading his team of 9 labs in obtaining a 5-year \$5.4M partnership grant from both the Alberta Cancer Foundation (\$2.4M) and the La Ka Shing Applied Virology Institute (\$3M). *Grant Title: "Developing Novel Cancer Immunotherapy Drugs: A Multidisciplinary Team"*. For more information, please see <http://pharm.ualberta.ca/news/2015/june/small-but-mighty-molecules>.

Additionally, Dr. Barakat has received 2 other grants for his research. The first is from the IC-IMPACTS Centres of Excellence, and is entitled *"Identification of high affinity ligands against Dengue virus NS1 for the development of an affordable point-of-care diagnostic kit"* and was submitted with Dr. Tom Hobman from Medicine. Funding is \$400,000 over 3 years. The second is an NSERC discovery grant for \$150 000 over 5 years for his project entitled *"Atomistic Computational Models To Evaluate Protein Ligand Off Target Interactions"*.

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## Awards

Congratulations to **Cheryl Cox** who was recently honoured with the CPhA International Leadership Award at the Canadian Pharmacists Conference in Ottawa. According to CPhA, "Innovation, strategic thinking and the ability to develop strong and lasting personal relationships have made Cheryl Cox a leader in international experiential education. Her dedication to advocating for international clinical placements has led to exchanges in Japan, the United States, Trinidad, Australia, Singapore, France, Sweden, Norway, Brazil, Mexico and Egypt. Cheryl has been an exemplary role model for her peers, her students and the international pharmacy community." You can read more about Cheryl's achievement at:

<http://pharm.ualberta.ca/news/2015/july/cheryl-cox-wins-cpha-international-leadership-award>

Congratulations to **Dr. Cheryl Sadowski** for receiving recognition for "Demonstrating collaboration across professions and disciplines" from Alberta Branch CSHP. The Recognition Program is designed to recognize the efforts of pharmacists in a given area of practice, and the



*"Dream team has been assembled to break the walls against cancer"*

The faculty would like to congratulate Dr. Michael Doschak on his recent success for his grant entitled *"Transdermal delivery of peptide hormones to treat tibial bone stress fractures"*, which was awarded a Mitacs Accelerate Program grant.

recognition is received if you are nominated by your peers for contributing to practice based on the annual theme.

Congratulations to **Terri Schindel**, who was recognized for Best Overall Conference Paper, Canadian Association for Information Sciences, June 2015. The paper was co-authored with Deborah Hicks (PhD Candidate, Educational Policy Studies, University of Alberta). The paper was entitled, *"Time Changes Things: Time as a Linguistic Resource for Professionals in Information-Intensive Fields"*.

Congratulations to **Dr. Michael Doschak** for receiving a 2015 "Innovation... Makes Sense" patent award from TEC Edmonton in October. He's being recognized for his achievements in commercialization of bone-targeting peptide hormone biologic drugs and diagnostic imaging tracers. Dr. Doschak was also recently elected to the Board of Scientific Advisors with the Controlled Release Society for a three-year term.



## UNIVERSITY OF BRITISH COLUMBIA

### UBC Faculty of Pharmaceutical Sciences #1 Canadian Pharmacy School in 2015 QS World University Rankings

The Faculty of Pharmaceutical Sciences at UBC ranked as the number one pharmacy school in Canada as part of the 2015 QS World University World Rankings (and number 29 overall). To learn more visit this link:

<http://www.topuniversities.com/university-rankings/university-subject-rankings/2015/pharmacy-pharmacology#sorting=rank+region=+country=+faculty=+stars=false+search=>

### New Entry-to-Practice PharmD Program Launched

This September, UBC Pharm Sci officially launched its new Entry-to-Practice Doctor of Pharmacy (Entry-to-Practice PharmD) program. This PharmD program represents a significant shift in pharmacy education for BC. As the first academic institution in Western Canada to offer this degree, we're excited to join other Canadian institutions currently offering the program such as the University of Toronto, University of Waterloo, Laval University and University of Montreal.

### Alumnus Creates Award to Foster Excellence in Research

UBC Pharm Sci alumnus Sarvajna Dwivedi, MSc'88, PhD'92, co-founder and chief scientific officer, Pearl

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### Faculty Member Dr. Mary De Vera Launches Study to Explore How Texting Between Pharmacists and Asthma Patients Can Improve Treatment Adherence

In May, Dr. Mary De Vera from the Faculty of Pharmaceutical Sciences launched the EmPhAsIS (Empowering Pharmacists in Asthma Management through Interactive SMS) study, in alignment with the World Health Organization's World Asthma Day, part of the Global Initiative for Asthma (GINA). The twelve-month trial study examines how automated text messages from pharmacists can help patients adhere to their asthma management plans and improve health outcomes. "Pharmacists are well-suited to educate and support their patients in this manner given their training, skills, and frequent patient contact," says Dr. De Vera. "Text messaging offers an accessible and convenient system for ongoing feedback between pharmacists and their patients." Visit <https://pharmsci.ubc.ca/news/can-texts-pharmacists-help-you-breathe-easier>.



Photo by Ivan Yastrebov

Therapeutics Inc., together with his wife, Seema Dwivedi, PhD, established a new endowed award to support outstanding pharmaceutical sciences graduate students. The endowment, which will provide one award of \$10,000, or two awards of \$5,000 each annually, was created in joint honour of Dr. Dwivedi's graduate supervisor at UBC, Dr. Alan G. Mitchell, professor emeritus of pharmaceutics, and of his father, Dr. Rewa Prasad Dwivedi, professor emeritus of Sanskrit, Banaras Hindu University, Varanasi, India. This year, the Mitchell-Dwivedi Award was presented to two PhD candidates, José Carlos De La Vega and Natalie McCormick. To read the full story visit <https://pharmsci.ubc.ca/news/alumnus-creates-award-foster-excellence-research>.



(L-R) Dr. Sarvajna Dwivedi; Natalie McCormick; José Carlos De La Vega; Dr. Alan G. Mitchell; Dr. Thomas Chang, associate dean research and graduate studies pro tem, UBC Faculty of Pharmaceutical Sciences; Dr. Michael Coughtrie, professor and dean, UBC Faculty of Pharmaceutical Sciences.

Photo by Ivan Yastrebov

### Faculty Member Dr. John McNeill Wins Lifetime Achievement Award

At a meeting in April sponsored by the International Academy of Cardiovascular Sciences in Winnipeg, Manitoba, Dr. John McNeill from the Faculty of Pharmaceutical Sciences at UBC was presented with a Lifetime Achievement Award by the president of the academy, Dr. Bohuslav Ostadal. Dr. McNeill received his bachelor's and master's degrees from the University of Alberta and his doctoral degree in pharmacology from the University of Michigan in 1967. He taught at Michigan State University before returning to Canada at the University of British Columbia in 1971. His current position is professor and dean emeritus. Dr. McNeill's work over the past 35 years has concentrated on the cardiovascular problems associated with diabetes and their treatment. Visit <https://pharmsci.ubc.ca/news/dr-john-mcneill-presented-lifetime-achievement-award-iacs>.



Photo by Martin Dee

## UBC Pharm Sci Introduces New People & Places Video Series

UBC Pharm Sci recently introduced a new video series designed to increase undergraduate student applications by bringing a sense of place to prospective applicants who may be unable to tour our facilities in person. To date, two videos have been created. The first one is

available for viewing by visiting [https://youtu.be/BM\\_hFi7YFDg](https://youtu.be/BM_hFi7YFDg).

## Recent Publications

To view our latest publications, visit <https://pharmsci.ubc.ca/research/research-publications>.

## DALHOUSIE UNIVERSITY

### Faculty News

**Drs. Andrea Murphy** and **David Gardner** recently returned from a 6 month sabbatical at the University of Sydney, Australia. While in Australia, Drs. Murphy and Gardner presented seminars to colleagues at The University of Sydney and also to pharmacy faculty and students at the University of Monash in Melbourne. Dr. Murphy attended and presented posters at the International Institute for Qualitative Methodology conference in Melbourne.

CTV Atlantic featured the Bloom Program on their Mental Health Minute on August 18, 2015 (<http://atlantic.ctvnews.ca/video?clipId=683066>) featuring **Dr David Gardner**, one of the PIs of the program.

**Dr Pollen Yeung** was profiled in the 2015 June issue of Clinical Pharmacology and Therapeutics (CPT).

Professor Rena Creedon, Lecturer at the University College Cork (UCC), Ireland visited the College of Pharmacy and the School of Nursing Dalhousie University, hosted by **Dr Ingrid Sketris**, M. MacDonald and R. Martin Misener for a four week period April-May 2015. Rena presented a seminar "A qualitative /

quantitative study to determine the prevalence of potentially inappropriate prescribed drugs for elderly patients by nurse prescribers in the Irish setting using the STOPP/START criteria". While at Dalhousie, she also presented to the Drug Evaluation Alliance of Nova Scotia, the College of Registered Nurses of Nova Scotia and Northwood.

### Awards

**Dr. Ingrid Sketris** received a Canadian Foundation for Pharmacy Wellspring Pharmacy Leadership Award (In memory of Barbara Wells) and used the award to participate in leadership modules taught by the American College of Clinical Pharmacy Leadership and Management Academy in Chicago April 10-11, 2015.

**Dr. Jennifer Isenor** was awarded the Dr. J.G. Duff Appreciation Award by the Canadian Society of Hospital Pharmacists (CSHP) Nova Scotia Branch to recognize significant contributions to the Nova Scotia Branch of CSHP by members who are not part of the Branch Council.

### Grants

**Dr. Emily Black** (PI) and **Dr. Ingrid Sketris** (co-investigator) were awarded a Development Innovative grant from the Nova Scotia Health Research Foundation (NSHRF) to evaluate antimicrobial utilization at acute care hospitals in Nova Scotia.

**Dr. Emily Black** was awarded a Canadian Institute of Health Research Travel Award to attend the International Conference on Pharmacoepidemiology from August 22-26, 2015 in Boston, USA to present the following poster: **Black E, Sketris I, Skedgel C, MacLean E, Hanly J.** "Adherence to Guidelines and the Screening Tool of Older Persons Potentially Inappropriate Prescriptions Criteria for Colchicine Dosing for Gout Treatment in

Beneficiaries of the Nova Scotia Seniors Pharmacare Program."

**Dr. Jennifer Isenor** was part of a team receiving a NSHRF Development Innovative Grant. For "An Appreciative Inquiry on collaboration and learning in a long term care setting: exploring the potential for organizational change".

**Dr Andrea Murphy** was co-Investigator on a grant received from NSHRF titled "Evidence informed practice-related knowledge, attitudes and practices (KAP): Describing nursing, pharmacy, occupational therapy, and medicine".

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**Dr Andrea Murphy** was a Co-Investigator on a NSHRF funded project “Patient trust in community pharmacy: An exploration of the influence of patient trust on willingness to use expanded scope of practice services”.

**Dr Andrea Murphy** was a Co-Investigator on a NSHRF funded project called “Laying the Foundation for the Fairness Dialogues”.

**Dr. David Jakeman** received a 5-year NSERC discovery grant and a 1-year grant from Glyconet. The Bloom Program Evaluation was funded by the Nova Scotia Department of Health and Wellness. Principal Investigators: **Andrea Murphy and David Gardner**.

### Presentations

David Henry, Colin Dormuth, Brandy Winquist, Shawn Bugden, Anick Berard, Robert Platt and CNODES, (**Dr Ingrid Sketris presented on behalf of CNODES**). Pregnancies and pregnancy outcomes with Isotretinoin treatment in four Canadian provinces. International

Conference on Pharmacoepidemiology and Therapeutic Risk Management, Boston, Aug 22-26, 2015.

Tara Gomes, J Michael Paterson, Mariam Mukati, David Henry and CNODES, (**Dr Ingrid Sketris presented on behalf of CNODES**). Dispensing of non tamper-deterrent oxycodone near the Canada/USA border. International Conference on Pharmacoepidemiology and Therapeutic Risk Management, Boston, Aug 22-26, 2015.

Gillian Caughey Katja Taxis Bjorn Wettermark, **Ingrid Sketris** Li-Chia Chen Lisa Pont, An International Working Collaborative To Examine Global Drug Utilisation: Opioid Use and Misuse. SYMPOSIUM/WORKSHOP International Society for Pharmacoepidemiology’s 2015 International Conference on Pharmacoepidemiology & Therapeutic Risk Management (ICPE). Aug 24, 2015.

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### Publications

1. Blueprint for Pharmacy. Needs Assessment of Specialization in Pharmacy in Canada. July 2015. Canadian Pharmacists Association. <http://199.103.61.199/docs/resource-items/needs-assessment-of-specialization-in-pharmacy-in-canada---final-report.pdf> (**Dr Anne Marie Whelan** was a member (representing PEBC) of the Specialization Project Advisory Group which provided insight and guidance for the study and refined the final report)
2. Kolathuru SS and **Yeung, PKF**. Therapeutic Potential of Adenosine Transport Modulators for Cardiovascular Protection (Editorial). *Cardiol Pharmacol* 2015, 4:3 (e127)
3. Martinez-Farina, C.F.; McCormick, N.; Robertson, A.W.; Clement, H.; Jee, A.; Ampaw, A.; Chan, N-L.; Syvitski, R.T.; **Jakeman, D.L.** Investigations into the binding of jadomycin DS to human topoisomerase II $\beta$  by WaterLOGSY NMR spectroscopy. *Org. Biomol. Chem.*, 2015, DOI: 10.1039/C5OB01508A.
4. Martinez-Farina, C.F.; **Jakeman, D.L.** Jadomycins, put a bigger ring in it: isolation of seven- to ten-membered ring analogues, *Chem. Commun.*, 2015, DOI: 10.1039/C5CC05571G.
5. Robertson, A.W.; Martinez-Farina, C.F.; **Jakeman, D.L.** Characterization of L-digitoxosyl-phenanthroviridin from *Streptomyces venezuelae* ISP5230, *J. Nat. Prod.*, 2015, <http://dx.doi.org/10.1021/acs.jnatprod.5b00277>.
6. Blackburn, G.M.; Hägele, G.; Hottgenroth, A.; Ivory, A.J.; **Jakeman, D.L.**; Spiske, R. Automated lineshape analysis of complex nmr spectra for a novel synthetic tetrafluorobisphosphonate, a potential ligand for phosphoglycerate kinase, Phosphorus, Sulfur, Silicon, 2015, accepted.
7. Wildberger, P., Aish, G., **Jakeman, D.**, Brecker, L., Nidetzky, B. Interplay of catalytic subsite residues in the positioning of  $\alpha$ -D-glucose 1-phosphate in sucrose phosphorylase, *Biochem. Biophys. Rep.* 2015, 2, 36-44.
8. Martinez-Farina, C.F.; Robertson, A.W.; Yin, H.; Monroe, S.; McFarland, S.A.; Syvitski, R.T.; **Jakeman, D.L.** Synthetic diversification of jadomycin 4-amino-L-phenylalanine. *Nat. Prod.*, 2015, 78, 1208-1214.
9. Robertson, A.W.; Martinez-Farina, C.F.; Smithen, D.A.; Yin, H.; Monroe, S.; Thompson, A.; McFarland, S.A.; Syvitski, R.T.; **Jakeman, D.L.** Eight-membered ring-containing jadomycins: implications for non-enzymatic natural products

- biosynthesis. *J. Am. Chem. Soc.* 2015, 137, 3271–3275.
10. Forget, S.M.; Smithen, D.A.; Jee, A.; **Jakeman, D.L.** Mechanistic evaluation of a nucleoside tetraphosphate with a thymidyltransferase, *Biochemistry*, 2015, 54, 1703–1707.
  11. McCormick, N.E., **Jakeman, D.L.** On the mechanism of phosphoenol pyruvate synthetase (PEPs) and its inhibition by sodium fluoride: potential magnesium and aluminum fluoride complexes of phosphoryl transfer, *Biochem Cell Biol.* 2015, 93, 236–240.
  12. Smithen, D.A., Forget, S.M., McCormick, N.E., Syvitski, R.T., **Jakeman, D.L.** Polyphosphate-containing bisubstrate analogues as inhibitors of a bacterial cell wall thymidyltransferase, *Org. Biomol. Chem.*, 2015, 13, 3347 - 3350.
  13. Forget, S.M., Jee, A., Smithen, D.A., Jagdhane, R., Anjum, S., Beaton, S.A., Syvitski, R.T., Palmer, D.R.J., **Jakeman, D.L.** Kinetic evaluation of glucose 1-phosphate analogues with a thymidyltransferase using a continuous coupled enzyme assay. *Org. Biomol. Chem.* 2015, 13, 866 – 875.
  14. Hall, S., Blundon, H., Ladda, M., Robertson, A.N., Martinez-Farina, C.F., **Jakeman, D.L.**, Goralski, K.B. Jadomycin breast cancer cytotoxicity is mediated by a copper-dependent, reactive-oxygen species-inducing mechanism, *Pharmacol. Res.* *Perspect.*, 2015, Mar;3(2):e00110. doi: 10.1002/prp2.110.
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  17. Pringsheim T, **Gardner D**, Patten SB. Adjunctive treatment with quetiapine for major depressive disorder: are the benefits of treatment worth the risks? *BMJ* 2015; 350:h569. doi: 10.1136/bmj.h569
  18. Pringsheim T, Hirsch L, **Gardner D**, Gorman DA. The pharmacological management of oppositional behaviour, conduct problems, and aggression in children and adolescents with attention-deficit hyperactivity disorder, oppositional defiant disorder, and conduct disorder: a systematic review and meta-analysis. Part 1: psychostimulants, alpha-2 Agonists, and atomoxetine. *Can J Psychiatry* 2015; 60(2): 42-51.
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19. Pringsheim T, Hirsch L, **Gardner D**, Gorman DA. The pharmacological management of oppositional behaviour, conduct problems, and aggression in children and adolescents with attention-deficit hyperactivity disorder, oppositional defiant disorder, and conduct disorder: a systematic review and meta-analysis. Part 2: antipsychotics and traditional mood stabilizers. *Can J Psychiatry* 2015; 60(2): 42-61.
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  21. **Murphy, A.L., Gardner, D.M.**, Martin-Misener, R., Naylor, T., & Kutcher, S.P. (in press) Partnering to enhance mental health care capacity in communities: a qualitative study of the More Than Meds program. *Canadian Pharmacists Journal*.
  22. Bishop, A.C., Boyle, T.A., Morrison, B., Barker, J.R., Zwicker, B. Mahaffey, T., & **Murphy, A.** (2015) Public perceptions of pharmacist expanded scope of practice services. *Canadian Pharmacists Journal*. DOI: 10.1177/1715163515596757.
  23. **Murphy, A.L., Gardner, D.M.**, Martin-Misener, R., & Kutcher, S.P. (2015) Pharmacists' performance in a telephone-based simulated patient study following a mental health capacity-building program. *International Journal of Clinical Pharmacy*. DOI: 10.1007/s11096-015-0171-7.

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## Student News

### Dalhousie University College of Pharmacy and Robert Gordon University (RGU) School of Pharmacy and Life Sciences Pharmacy Student Research Exchange

The Dalhousie College of Pharmacy hosted two (RGU) School of Pharmacy and Life Sciences MPharm students for two weeks in August 2015. Pharmacy Students Christopher Bland and Melissa Davidson completed research with **Dr. Andrea Murphy** and **Dr. David Gardner** as part of *The Bloom Program: The Mental Health and Addictions Community Pharmacy Partnership Program of Nova Scotia* <http://bloomprogram.ca/>.

The visiting Scottish students presented to stakeholders from the Nova Scotia pharmacy community on Methadone Prescribing by Pharmacists in Scotland.

Dalhousie Pharmacy Student Beth O'Reilly travelled to RGU in Aberdeen, Scotland and completed two weeks of research with Dr. Anita Weidmann and Dr. Antonella

Tonna on antibiotic stewardship in Scottish community pharmacies. Beth also presented to a RGU audience on Pharmacy Education in Canada.

This is the second year that RGU students have visited Dalhousie and the first year a student from Dalhousie has travelled to Scotland as part of this exchange program.

**Shyam Sundar Kolathuru** (Supervisor **Dr Pollen Yeung**) successfully defended his MSc. thesis entitled: *"Effect of Dipyridamole on ATP Metabolism in the Red Blood Cells and Cardiovascular Protection"*

**Heather L. Blundon** (Supervisor **Dr Kerry Gorlaski**) successfully defended her MSc. thesis entitled: *"Development of Vascular Smooth Muscle Cell Models for Investigating the Role of CMKLR1/Chemerin Signalling in Atherosclerosis"*.



# UNIVERSITÉ LAVAL

## Faculty News

### Laval University awards honorary doctorate to the pharmacist Linda Strand

The Rector of Laval University, Denis Brière, awarded an honorary doctorate to Madame Linda Strand at the Convocation ceremony for graduating students in June.

Linda Strand is an internationally recognized pharmacist for her work on the concept of pharmaceutical care. Her contribution to the development and implementation of this concept in the late 1970s had a significant influence on the evolution of pharmacy practice in several countries and provinces, including Canada and Quebec.

Professor Emeritus of the University of Minnesota, Ms. Strand has received numerous awards and honors all throughout her career. Through her teaching and research activities, Ms. Strand's contribution to the profession of pharmacy is exceptional and represents a source of inspiration.



*Monique Richer, Secretary General of Laval University, Dr. Linda Strand, Mr. Denis Brière, Rector of Laval University and Dr. Jean Lefebvre, Dean of the Faculty of Pharmacy (Photo taken by Marc Robitaille)*

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**The Faculty welcomes the first Pharm.D. graduates**  
Students, teachers, staff and partners celebrated the end of studies for the first graduates of the new Pharm.D. program. This particular moment highlighted the efforts of the students during their academic career but also all the work done by the Faculty over the past decade to put this program together. The Faculty wishes to thank Pharmascience (partner in business) and to congratulate all graduates!

### Graduates from Master's degree in Advanced Pharmacotherapy (hospital pharmacy)

Twenty-six residents completed their Master's degree in Advanced Pharmacotherapy in Mid-August while a new cohort of twenty-one residents began the same program on August 31<sup>st</sup>.

### Faculty of Pharmacy launches pharmacy management study program

This study program of 12 credits is for pharmacists working in community pharmacy who would be interested in acquiring such a business, or manage a business. The program aims to initiate and prepare the future owner pharmacist to the principles and techniques of the overall management of a community pharmacy, in

compliance with professional obligations, and ethical and legal liabilities.

## Events

### 2015 White Coat Ceremony

On September 22<sup>nd</sup>, the 196 newly admitted students to the Pharm.D. program and French students received their white coat, a symbol of their official entry in the Faculty of Pharmacy before 300 friends and relatives, teachers, lecturers, staff and guests of honor. In addition to receiving the white coat, the first year students recited the affirmation of the Dean and had the opportunity to sign the official book of that assertion. The ceremony also witnessed a dynamic presentation of the General Association of pharmacy students and two variety numbers. The evening ended with a cocktail reception where everyone could network. Special thanks to the Uniprix Group, partner of the event.

### 20th Annual Golf Tournament of the Faculty

On June 9<sup>th</sup> at the Lorette Golf Club, 120 golfers played the course and raised \$ 35,000 for the teaching and research fund at the Faculty of Pharmacy. On behalf of the grant holders, the Faculty wishes to thank all those present golfers and the event partners.

## Research News

- Dr Chantal Guillemette has been invited to give a presentation at the 45<sup>th</sup> Gordon Research Conference on Drug Metabolism, New Hampshire, entitled “Splice Variants – Novel Regulators of UGT Function”.
- Dr Chantal Guillemette was awarded an operating grant from the Lymphoma and Leukemia Society of Canada, to pursue the project entitled “*UGT2B17 in CLL: Functional consequences and therapeutic implications*”. This project will be conducted in collaboration with Dr Éric Lévesque.
- Dr Guillemette was also awarded a 5-year operating grant from the Canadian Institutes of Health Research to conduct the project entitled “*Modulation of cell metabolism: Role of UDP-glucuronosyltransferase (UGT1A) proteins*”.
- A Canadian Foundation for Innovation infrastructure grant was awarded to Dr Guillemette to acquire a mass spectrometer coupled to a liquid chromatography system (AB Sciex 6500 mass spectrometer) to conduct the analysis of small molecules (hormones and drugs) in a variety of biological material.
- Yannick Audet-Delage, Ph.D. student, Faculty of Pharmacy, in Guillemette lab, was awarded a 3-year studentship from the Fonds de recherche Santé Québec (FRQS).
- Dr Frédéric Calon and his team secured a 330,430\$ equipment grant from the Canada Foundation for Innovation (CFI) entitled “*Ciblage de la barrière-hématoencéphalique (BHE) pour traiter les maladies neurodégénératives.*”
- This summer was productive for Dr Frédéric Calon and his students with several papers accepted in internationally renowned journals, such as J Cereb Blood Flow Metab, FASEB J and Neurobiol Dis. The later report was showcased by Radio-Canada news : <http://ici.radio-canada.ca/regions/quebec/2015/08/21/005-chu-maladie-tremblement-essentiel.shtml?isAutoPlay=1>
- Philippe Bourassa, in Dr. Calon’s lab, was awarded a 3-year studentship from the Alzheimer Society Canada totalling 66,000\$.
- Katherine Coulombe and Marine Tournissac from Dr Frederic Calon's research group were awarded 1000\$ each from the *Réseau Québécois de recherche sur le vieillissement* to attend the Society for Neuroscience annual meeting in Chicago (Oct 17-21).

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### Dr. Thérèse Di Paolo wins Diamond Basic Research

In the second edition of the Soirée des Diamond Centre hospitalier universitaire de Québec, Dr. Thérèse Di Paolo, Professor, Director of 2nd and 3rd cycle programs and head of research at the Faculty of Pharmacy was awarded the prize in the category "Basic research" for her study on Parkinson's disease: neuroprotection treatment of levodopa-induced dyskinesias.

The work of Dr. Di Paolo generated important advances in the knowledge of various targets to treat Parkinson's. This research has highlighted the important role played by modulating estrogen in the brain regions affected by the disease. The motivation for this project is the fact that there is no cure for this disease and current treatments have significant side effects.

The theme of the research was therefore to improve and develop new treatments for Parkinson's disease with objectives to prevent, slow or stop the progression of the disease and improve treatment once the disease is diagnosed.



Dr Guy Poirier, Researcher axis of oncology, Dr. Thérèse Di Paolo and Mr. Jacquelin Paré, Technidata Executive Vice President. (Photo taken by Jessica Tremblay, Laval University of Quebec-CHU)

**Jessica Virgili was awarded the Merck Canada Ltd Postgraduate Pharmacy Fellowship Award by Association of Faculties of Pharmacy of Canada (AFPC)**

In June 2015, Jessica received a \$15000 Merck Canada award. This award is given annually to the student with the best academic record and research wishing to pursue research studies in the field of pharmacy beyond the first cycle. Having already realized four research trainings in the laboratory of Dr. Frédéric Calon, Jessica has recently started her Masters in Pharmaceutical Sciences - always under the supervision of Dr. Calon.

**Recent key publications from the Guillemette lab**

Belledant A, Hovington H, Garcia L, Caron P, Brisson H, Villeneuve L, Symonion D, Têtu B, Fradet Y, Lacombe L, Guillemette C, Lévesque E. "The UGT2B28 Sex-steroid inactivation pathway is a regulator of steroidogenesis and modifies the risk of Prostate Cancer progression". Eur Urol (in press).

Tourancheau A, Margaillan G, Rouleau M, Gilbert I, Villeneuve L, Lévesque E, Droit A and Guillemette C. Unravelling the transcriptomic landscape of the major phase II UDP-glucuronosyltransferase drug metabolizing pathway using targeted RNA sequencing. The Pharmacogenomics Journal 2015.

**Teachers News**

**Professor Marie-France Demers and colleagues at the Clinic Our Lady of Victories receive Hippocrates Award 2015**

The Patient journal honors this year the exemplary interdisciplinary practice of five psychiatrists and six pharmacists who work or have worked at Clinique Notre-Dame des Victoires, for the benefit of people with mental illness. For almost twenty years, nearly 1000 young people from 18 to 30 years with incipient psychosis and their families have benefited from the added value of the close cooperation that has developed between psychiatrists and pharmacists in this clinic. Steeped in the professional practice of the health care team at the opening of the clinic, interdisciplinarity has become a tangible strength of the services offered today by psychiatrists Sophie L'Heureux, Anne-Pierre Bouffard and Marc-André Roy as well as by pharmacists Guillaume Chalifour, Ann-Sophie Breault and Marie-France Demers; they continue the work of Xavier De Vriendt, Roch-Hugo Bouchard, psychiatrists, pharmacists and Isabelle Simoneau, Jacinthe Leblanc and Julie Villeneuve. "The contribution of these colleagues for the first time is inextricably linked to the current success of



*Julie Méthot, Assistant Professor in the Faculty of Pharmacy at Laval University and AFPC representative, Jessica Virgili, recipient and Mr. Louis Rhéaume, Associate Director, Health Policy and External Affairs, Québec Merck Canada inc.*

Margaillan G et al. Multiplex targeted quantitative proteomics predicts hepatic glucuronidation potential. Drug Metab Dispos. 2015 Sep; 43(9):1331-5 and Quantitative profiling of human renal UGTs and glucuronidation activity: a comparison of normal and tumoral kidney tissues. Drug Metab Dispos 2015(4):611-9.

Caron P, Turcotte V, Guillemette C. A chromatography/tandem mass spectrometry method for the simultaneous profiling of ten endogenous steroids, including progesterone, adrenal precursors, androgens and estrogens, using low serum volume. Steroids 2015.

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Clinique Notre Dame des Victoires and the prize that is awarded to all of us. We wanted to recognize their undeniable contribution, "said Marie-France Demers, on behalf of the eleven co-recipients of the 5th edition of Hippocrates Prize in 2015. Source: Press release of Integrated University Health Centre and Social Services (CIUSSS) Capitale-Nationale.



*L to R : Isabelle Simoneau, Jacinthe Leblanc, Guillaume Chalifour, Dr. Sophie L'Heureux, Dr. Marc-André Roy, Marie-France Demers, Ann-Sophie Breault and Julie Villeneuve. Winners Dr. Roch-Hugo Bouchard, and Dr. Xavier Devriendt Dr. Anne-Pierre Bouffard were absent at the awards ceremony.(Photo provided by revue Le Patient)*



## Student News

### Oral Presentation Day - Master Degree program in Advanced Pharmacotherapy

Annual oral research project presentations by the students of the Master degree in Advanced pharmacotherapy (cohort 2014-2015) took place on May 22 at the pavilion Gene-H.-Kruger. Spectators were treated to 22 outstanding presentations; which has not facilitated the work of the evaluators of the day (Julie Fortier, Joëlle Flamand-Villeneuve and Nicolas Bertrand).

Congratulations to the recipients:

First prize: Amélie St-Arnaud (CHUL), Use of seizures of lamotrigine treatment in newborns and infants. (Eric Proulx, Marie-Pierre Thibeault and Frédéric Calon-Eybalin).

Second prize: Lysanne Marcel (HDQ) Description of the management of patients receiving oral oncology and palliative care drugs that prolong the QT interval, with outpatient clinics of Oncology and Palliative Care Hôtel- Dieu de Québec. (Manon Arpin, Cynthia Grondin and Benoit Drolet)

Third prize - a tie: Isabelle Gagnon (HEJ), the clinical impact of doing pharmaceutical reconciliation of medication taken by the patient at preoperative clinic HEJ. (Maude Blanchet, Marilyn and Julie Hudon Méthot)

Jordane St-Hilaire Dupuis (Rimouski Regional Hospital) Impact assessment of the implementation of the use of antibiotics monitoring program at the Regional Hospital of the CSSS de Rimouski-Neigette. (Louis Bergeron and Marc Desgagné)

The Faculty wishes to thank the partner of the day Servier Canada and her representative, Nancy Ricard. Thanks to them, this event is growing year by year.



*Julie Méthot, Director of the Master Program Advanced in pharmacotherapy, Nancy Ricard Servier Canada. Mr. Jordane St-Hilaire Dupuis, Ms. Isabelle Gagnon, Ms. Lysanne Marcel, Ms. Amélie St-Arnaud and Jean Lefebvre, Dean of Faculty of Pharmacy. (Photo taken by Jean-François Rivard)*

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### Olivier Bernard aka "The Pharmachien" wins Innovation 2015 OPQ

Olivier Bernard, known as "The Pharmachien" and a graduate of the Faculty of Pharmacy was awarded the Innovation Award 2015 at the latest edition of the Rendez-vous of the Order. This award is given to a member of the Order who has distinguished himself in his mid-year by the development of pharmaceutical care delivery models characterized by their innovative aspects and their effect on the well-being of the population. His achievements include: the blog Pharmachien, a book published in 2014 entitled *The Pharmachien, differentiate fact from anything healthy!*, which has already sold over 26,000 copies in Quebec and elsewhere (France and Belgium), several lectures, interviews on radio and television regularly. Congratulations for this well-deserved recognition!



*Olivier Bernard and Bertrand Bolduc  
(Photo provided by  
Ordre des pharmaciens  
du Québec)*

### Raphael Gagnon-Paradis receives the Fessenden-Trott Scholarship

Raphael Gagnon-Paradis, who will begin his second year of doctoral studies in undergraduate pharmacy, will receive a scholarship for his next three years of study. The grant is used to fund full-time studies of a candidate who is undertaking the second year of a first undergraduate degree program. Candidates are evaluated based on their academic achievement, demonstrated leadership skills in community or volunteer involvement and / or extracurricular activities, and the quality and relevance of letters of recommendation.

Each year, scholarships Fessenden-Trott studies are offered in a different region of Canada. In 2015, the accepted applications came from institutions in the province of Quebec. The Fessenden-Trott Scholarship Program was established in memory of the late Reginald Aubrey Fessenden Professor and the late Helen May Fessenden (born Trott).

## UNIVERSITY OF MANITOBA

### Individual Faculty News

The University of Manitoba has bestowed **Dr. Keith Simons** with the title of Professor Emeritus, effective July 1, 2015.

### Faculty News and Events

On May 28<sup>th</sup> we held our Welcome to the Profession Ceremony that awarded Bachelor of Science (Pharmacy) degrees to 48 students. Students took the Oath of a Pharmacist for the first time. Our Preceptors of the Year, nominated by the graduating students, were announced at this ceremony.



*Graduating student Grace Badejo presenting the Community Preceptor of the year to Britt Kural along with Kelly Drummond, Experiential Coordinator at the Welcome to the Profession Ceremony.*

After a busy summer of working on the entry-to-practice PharmD program proposal, all College of Pharmacy faculty and staff participated in a one day retreat on September 1<sup>st</sup>. Dr. Robert-Falcon Ouellette, a federal Liberal candidate in the election in the riding of Winnipeg Centre where the Apotex Centre is located, opened the day with an inspirational message: "Change is the hardest thing I've ever had to do but change can lead to long-term benefits when you're willing to jettison the old way of doing things." **Dr. Neal Davies**, Dean of Pharmacy, presented the progress made to date on the 5 year Strategic Plan for the College. Several working groups presented their work thus far on curriculum development, pre-requisites and admissions processes and other topics.



*Dr. Neal Davies with Dr. Robert-Falcon Ouellette at the Pharm.D. Planning Retreat on September 1<sup>st</sup>.*

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### External Research Funding/Awards

**Dr. Emmanuel Ho**, Assistant Professor, has been given the 2015 AFPC New Investigator Research Award. Dr. Ho received his award at the CSPS Conference in Toronto on May 27th.

**Dr. Chris Louizos**, Instructor, received his Doctor of Pharmacy Degree *magna cum laude* from the University of Florida. Dr. Louizos was also the recipient of the Outstanding Capstone Paper Award at the 2015 University of Florida Convocation.

### Awards

**Dr. Neal Davies**, Dean, was selected as the 2015 recipient of the CSPS Award of Leadership in Canadian Pharmaceutical Sciences. This award was also presented at the 2015 CSPS Conference in Toronto.

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## MEMORIAL UNIVERSITY OF NEWFOUNDLAND

### Academic Appointments

Ms. Cathy Balsom was appointed Bridging Program Co-ordinator on a two-year contract.

Ms. Nadine James has accepted a one-year contractual position of Development Officer.

Ms. Colleen Mackenzie has been appointed on a two-year contractual position of Intermediate Clerk Stenographer.

Dr. Laurie Twells began her one-year sabbatical in August 2015.

### General Faculty News

Dr. Carlo Marra presented at the Pharmacists Association of Newfoundland and Labrador (PANL) Annual Conference Opening Reception on September 18, 2015, outlining the school's major initiatives over the past year and in the year ahead. The presentation will become a video version of the Annual Report, to be released online later this fall.

The school held a Preceptor Appreciation Wine and Cheese at the PANL conference in September, to honour pharmacist preceptors in the school's Structured Practice Experience (SPE) Program.

The School of Pharmacy website has been refreshed! Visit us at [www.mun.ca/pharmacy](http://www.mun.ca/pharmacy)

Faculty and staff met at a Strategic Planning Retreat on August 28, 2015, to review the goals set out in July 2014 for the 2014-17 Strategic Plan.

The sixth annual School of Pharmacy Golf Tournament took place on August 15, 2015

The Classes of 2010, '05, '00, '95 and '90 have a Reunion on October 17, 2015 at Quidi Vidi Brewery in St. John's. The very first graduating class will celebrate their time at the School of Pharmacy.

The school's Medication Therapy Services (MTS) Clinic will provide pharmacist-delivered, referral-based services and consultations to patients with complex medication-related questions. The clinic will launch later this fall. For more information, visit: [www.mtsclinic.ca](http://www.mtsclinic.ca)

The Entry-to-Practice level Doctor of Pharmacy (PharmD) program proposal has been distributed for university-wide consultation and feedback has been incorporated. The proposal went to the School of Pharmacy's Academic Council for the September 28 meeting. The program is still on target for a September 2017 start date.

The school offered an Injection Training Seminar on October 10 in St. John's. To date, the school has trained 51 pharmacists and 79 pharmacy students. For more information on Injections Training from the School of Pharmacy, please visit: <http://www.mun.ca/pharmacy/news.php?id=5264>.

Dr. Debbie Kelly and Dr. Jason Kielly are featured on page 23 in Memorial's Fall 2015 Research Matters: [http://www.mun.ca/research/explore/publications/Research\\_Matters\\_Fall2015.pdf.pdf](http://www.mun.ca/research/explore/publications/Research_Matters_Fall2015.pdf.pdf)

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### Grants

Dr. Lisa Bishop, Dr. Linda Hensman, Dr. Debbie Kelly and Dr. Carlo Marra received a \$5000 Cross-Campus Initiatives Funding grant for her project entitled, "*Aboriginal Medication Access and Management*".

Dr. Lisa Bishop received a \$12,000 CIHR Planning Grant for her project titled, "*Addressing Youth Mental Health and Addictions: Developing Community-Based Strategies*".

Dr. Lisa Bishop received a Memorial University Quick Start Public Engagement Fund grant of \$1000 for, "*Building Relationships for an Expanded Preceptor Model*".

Dr. Lisa Bishop received a Michaelle Jean Foundation and the CFPC Research and Education Foundation Power of the Arts in Family Medicine Fellowship for \$20,000 over one year for "*SMART Youth: Synergy of Medicine and the ARTS in Youth Wellbeing*".

Dr. Noriko Daneshtalab received a \$10,000 Seed, Bridge, Multidisciplinary grant from Memorial University.

Dr. Erin Davis and Dr. John Hawboldt received a CIHR Health Professional Student Research Award for *“Increasing quality of life and reducing pulmonary exacerbations in Chronic Obstructive Pulmonary Disease (COPD) by providing pharmaceutical-driven improvement in medication adherence: A pragmatic cluster randomized control trial”*.

Dr. Terri Genge and Dr. Beverly FitzPatrick received a \$37,019 Memorial University Teaching and Learning Framework project grant for *“Pharmacy students learn to critically self-reflect using e-Portfolios”*.

Dr. Rebecca Law received a Memorial University Quick Start Public Engagement Fund grant of \$1000 for *“Sharing dialogue while promoting health and wellness”*.

Dr. Carlo Marra received a \$119,672 Canadian Rheumatology Association grant for *“Pharmacist-led CVD Intervention for Inflammatory Arthritis Patients”*.

Dr. Leslie Phillips received a \$55,237 Memorial University Teaching and Learning Framework grant for *“Interprofessional Student-Run Smoking Cessation Program”*.

Dr. Laurie Twells received a \$20,000 Memorial University Medical Research Foundation grant for *“Poverty, Lactation, and Reproductive Health: Assessing Changes in Infant Feeding Attitudes from a Pre-Natal through the first Post-Partum Year in a Vulnerable Population in NL”*.

Dr. Laurie Twells received a Memorial University Seed, Bridge, Multidisciplinary grant of \$10,000.

Dr. John Weber has received an NSERC Discovery Grant entitled *“Chemical analyses and biological activities of Newfoundland and Labrador berries”*, amounting in \$120,000 over five years (initiated on April 1, 2015).

Dr. John Weber received an Operating Grant from the Wild Blueberry Association of North America entitled *“The effects of wild blueberry extracts on neuroinflammation”*. Total funding is \$21,405 for 1.5 years.

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## Student News

The Class of 2019 was welcomed to the School of Pharmacy at our Scholarships and Awards Ceremony on September 17, 2015.

Memorial University pharmacy students will host the 2015 Atlantic Pharmacy Advancement Conference (APAC) from November 5-7, 2015. Jasmine Elliott (Class of 2016) is the Conference Chair.

Maria Flynn (Class of 2017) is the first pharmacy student to receive a coveted ACEnet Undergraduate Research Fellowship Award for Advanced Research Computing (ARC), which involves computer clusters to solve scientific, engineering, business or data analysis problems that are too large or complex for any single

computer. Advanced computing is a rapidly-growing combination of hardware, software and skills that is advancing Canada's expertise and capabilities in science and technology. Maria received this undergraduate research fellowship to work on a proposed project from Dr. Laleh Alisaraie's advanced computational research lab for a cancer drug discovery project. Dr. Alisaraie's computational medicinal chemistry lab in the School of Pharmacy is multidisciplinary in nature and students from various departments, including Chemistry, Biochemistry, Biophysics and Computer Science study with her and learn from her drug discovery research. Read the full story here:

<http://www.mun.ca/pharmacy/news.php?id=5106>.

## UNIVERSITY OF SASKATCHEWAN

### Appointments, Promotions, Retirements

Dr. Yvonne Shevchuk has been reappointed for a second five year term as the Associate Dean Academic.

Dr. Jaris Swidrovich has joined the college for a 1 year term to fill a sabbatical leave faculty vacancy.

Courtney Quiring has been reappointed for a 1 year term as a Lecturer with the college.

### General College News

The 2015 Pharmacy Professional Enhancement Day keynote speaker was Clara Hughes. Clara is an Olympian, an award winner, and works to end the stigma of mental health issues. Saskatchewan Pharmacy and Nutrition Students' Society and the College partnered together to bring in this remarkable speaker as mental health is something not talked about enough in healthcare or education.

Clara's talk was open to the entire campus community and to the public. Our goal: create an event that's accessible to as many students and healthcare professionals as possible.

Progress continues to be made in the development of the new PharmD curriculum. Read the latest updates on our blog PharmD Update. [Read the blog.](#)

Our first Research Day and Retreat event will be held on November 10, 2015 in Saskatchewan Western Development Museum. The purpose of this event is to showcase and learn about the innovative research and scholarly activity going on in the College. This event will include: special seminar by industrial keynote speaker Dr. Lynn Kirkpatrick, several seminars by faculty members and graduate students and post-doctoral fellows, and a poster presentation session.

The 2015 Pharmacy White Coat Ceremony was held on Sunday, October 18 to welcome the Class of 2019 to the College.

Dr. Roy Dobson was recently selected to sit on the Editorial Board of the journal Research in Social and Administrative Pharmacy

Dr. Carol Henry has been appointed as the Assistant Dean, Division of Nutrition and Dietetics effective July 1, 2015 for a three year term.



### Individual Faculty News

Dr. Kishor Wasan has been elected as the new chair of the Council of Deans of Pharmacy of Canada (AFPC Council of Deans) for 2015/2016.



Dr. Jim Blackburn was recently elected as Vice-President of the University of Saskatchewan Alumni Association for 2015-16. Jim has served on the U of S Alumni Association Board of Directors since 2013.

Two of our faculty members are collaborating with Saskatchewan Health Quality Council on new projects:

- Dr. Charity Evans will test the hypothesis that patients who are diagnosed with multiple sclerosis will have increased health-care utilization patterns in the months leading up to the diagnosis.
- Dr. Susan Whiting will examine the effects of vitamin D supplementation on hip fractures in long-term care homes.

### Grants

The U of S was awarded \$37.2 million over seven years by the Canada First Research Excellence Fund for leading-edge research and technology that will transform crop breeding and provide innovative solutions to national and global food security. The College has several researchers collaborating in this endeavour, namely Drs. Carol Henry, Susan Whiting, and Gordon Zello from the division of Nutrition and Drs. Anas El-Aneed, Jane Alcorn, and Kishor Wasan from the division of Pharmacy.

Dr. Laura McBreairty has received a 2-year SHRF Postdoctoral Fellowship Award. Under the supervision of Dr. Gordon Zello, Dr. McBreairty is studying the effects of a pulse-based diet in women with polycystic ovary syndrome.

Dr. Jason Perepelkin was awarded a U of S President's SSHRC for his study entitled: *Association of Organizational Commitment to Market- and Entrepreneurial-Orientation on Pharmacy Performance*.

Muath Helal, a PhD student studying with Dr. Adil Nazarali, has been awarded a Saskatchewan Innovation and Opportunity Scholarship.

Kelly Buxton has been awarded a CIHR Canada Graduate Scholarship – Master's Program award. Kelly is undertaking her Master's research in Pharmacy with Dr. Dave Blackburn.

The following pharmacy researchers were successful recipients of NSERC Discovery grants:

- Dr. Hector Caruncho for *Reelin regulation of the crosstalk between the Immune and Nervous systems*,
- Dr. Ed Krol for *Toxicity and Biological Reactivity of Naturally Occurring Polyphenols*,
- Dr. Ildiko Badea for *Engineering functionalized diamond nanoparticles for intracellular delivery of nucleic acids*, and
- Dr. Anas El-Aneed for *Mass spectrometric approaches to assess the biodistribution and fate of cationic surfactants used as drug delivery nanoparticles*.

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### Student News

Our pharmacy students have always been motivated to get involved in their profession, but the incoming CAPSI Council is filled with U of S students. Congratulations to the following students on their appointments:

- CAPSI Saskatchewan Senior Representative: Kelsey Joorisity
- CAPSI Sask Jr. Rep: Kaitlyn Tress
- President-Elect: Caitlin McGrath
- Executive Secretary: Shelby Scherbey
- Finance Officer: Paraag Trivedi
- Canadian Society of Hospital Pharmacists Student Delegate: Samantha Cunningham

Five of our graduate students completed their degree requirements over the summer: Dr. Ziba Poorghorban (Pharmacy PhD with Drs. Ildiko Badea and Pawel Grochulski), Brennan Bonnet (Pharmacy MSc with Dr. Pawel Grochulski), Sams Sadat (Pharmacy MSc with Dr. Azita Haddadi), Nassaingay Logan (Pharmacy MSc

with Dr. Dave Blackburn), and Dennis Okello (Pharmacy MSc with Dr. Adil Nazarali).





## In The Media

Lecturer Courtney Quiring's article on ways in which educators and preceptors can help improve student preparedness was published in Pharmacy Practice+ magazine. [Read the article.](#) (Subscription required)

Dr. Carol Henry appeared on CTV's Farmgate to talk about her work in helping improve crop production in Africa. The segment starts at 0:56. [Watch the video.](#)

## Staff News

Erin Smith-Windsor has joined the College full time as our Graduate Programs Administrator. Erin was previously 0.5 FTE.

Poppy Lowe has returned as the Nutrition Professional Skills Coordinator on a permanent basis this year.

Donna Michasiw has begun in the professional practice lab as the Pharmacy Skills Coordinator, Years 1 and 2 (Pharmacist).

Kristine Zulak is the new Clerical Assistant (Undergraduate Admissions and Programs Secretary).

Jolene Johnson, Rhett Carbno, Amber Ly and Della Nykyforak are all off to pursue other interests and career paths. We wish them well in the future careers.

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## Recent Publications

Blackburn, D.F., Chow, J.Y., Smith, A.D. 2015. Statin Use and Incident Diabetes Explained by Bias Rather Than Biology, Canadian Journal of Cardiology, 31( 8 ):966 – 969.

Poorghorban, M.\*, Karoyo, A.H., Grochulski, P., Verrall, R.E., Wilson, L.D., Badea, I. 2015. A NMR Study of Host/Guest Supramolecular Complexes of a Curcumin Analogue with  $\beta$ -Cyclodextrin and a  $\beta$ -Cyclodextrin-Conjugated Gemini Surfactant, Molecular Pharmaceutics, 12( 8 ):2993 - 3006.

Botterill, J.J., Brymer, K.J., Caruncho, H.J., Kalynchuk, L.E. 2015. Aberrant hippocampal neurogenesis after limbic kindling: Relationship to BDNF and hippocampal-dependent memory. Epilepsy and Behavior, 47: 83 - 92.

Vasquez, M.A., Iniguez, E., Das, U., Beverley, S.M., Herrera, L.J., Dimmock, J.R., Maldonado, R.A. 2015. Evaluation of  $\alpha,\beta$ -unsaturated ketones as antileishmanial agents, Antimicrobial Agents and Chemotherapy, 59 ( 6 ) pp. 3598 - 3601 .

Izadifar, M., Kelly, M.E., Haddadi, A., Chen, X. 2015. Optimization of nanoparticles for cardiovascular tissue engineering. Nanotechnology, 26 ( 23 ), art. no. 235301.

Weidmann, A.E., Pammett, R.\*, Landry, E., Jorgenson, D. 2015. Interprofessional student-run primary health care clinics: Implications for pharmacy education in Scotland. Canadian Pharmacists Journal, 148 ( 3 ) pp. 156 - 159 .

Alzahrani, F., Taylor, J., Perepelkin, J., Mansell, K. 2015. A Qualitative Assessment of the Practice Experiences of Certified Diabetes Educator Pharmacists, Canadian Journal of Diabetes, 39( 4 ):254 - 258.

Mansell, K., Bootsman, N., Kuntz, A., Taylor, J. 2015. Evaluating pharmacist prescribing for minor ailments. International Journal of Pharmacy Practice, 23 ( 2 ) pp. 95 - 101.

Hackett, M.J.\*, Desouza, M., Caine, S.\*, Bewer, B., Nichol, H., Paterson, P.G., Colbourne, F. 2015. A new method to image heme-Fe, total Fe, and aggregated protein levels after intracerebral hemorrhage. ACS Chemical Neuroscience, 6 ( 5 ) pp. 761 - 770.

Boechler, L., Despina, R., Holmes, J., Northey, J., Sinclair, C., Walliser, M., Perepelkin, J. 2015. Advocacy in pharmacy: Changing “what is” into “what should be”. Canadian Pharmacists Journal, 148 ( 3 ) pp. 138- 141 .

Okinyo-Owiti, D.P., Dong, Q.\*, Ling, B., Jadhav, P.D., Bauer, R., Maley, J.M., Reaney, M.J.T., Yang, J., Sammynaiken, R. 2015. Evaluating the cytotoxicity of flaxseed orbitides for potential cancer treatment, Toxicology Reports, 2:1014 - 1018.

Gershkovich P, Wasan KM, Ribeyre C, Ibrahim F, McNeill JH. 2015. Effect of variations in treatment regimen and liver cirrhosis on exposure to benzodiazepines during treatment of alcohol withdrawal syndrome. Drugs in Context, 4: 212-287.



Gordon JA, Midha A, Szeitz A, Ghaffari M, Adomat HH, Guo Y, Klassen TL, Guns ES, Wasan KM, Cox ME. Oral simvastatin administration delays castration-resistant progression and reduces intratumoral steroidogenesis of LNCaP prostate cancer xenografts. Prostate Cancer Prostatic Dis. [Epub ahead of print]

Osei-Twum JA, Wasan KM. 2015. Does P-glycoprotein contribute to amphotericin B epithelial transport in Caco-2 cells? Drug Dev Ind Pharm. 41(7):1130-6.

JF Cawthray\*, DM Weekes, O Sivak, L Creagh, F Ibrahim, M Iafrate, C Haynes, KM Wasan, Chris Orvig. In vivo study and thermodynamic investigation of two lanthanum complexes, La(dpp)3 and La(XT), for the treatment of bone resorption disorders. Chemical Science. [Epub ahead of print]

P Benito-Gallo, M Marlow, V Zann, P Gershkovich, KM Wasan. 2015. Chapter: Lipid-Based Smart Drug Delivery Systems. Smart Pharmaceutical Nanocarriers, Edited by Vladimir Torchilin, chapter 9; Imperial College Press., ISBN: 978-1-78326-722-4.

## UNIVERSITY OF TORONTO

### Academic Appointments, Promotions, Retirements

Following a storied career that included positions in community practice, hospital practice, and academia, Associate Professor Leslie Lavack retired from the Faculty at the end of June.

To celebrate Lesley's career and accomplishments at the Faculty, and commemorate her impact on students and the pharmacy profession, the Faculty has established the Lesley Lavack Heart and Mind Award. This award will be given annually to one or more students in Year 4 of the PharmD program who best demonstrate the characteristics of empathy, consideration, caring, and kindness in both their personal and professional lives. For more information about this award, please visit:

[www.pharmacy.utoronto.ca/alumni/lesley-lavack](http://www.pharmacy.utoronto.ca/alumni/lesley-lavack).



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Associate Professor Stephane Angers was appointed Associate Dean, Research for a five-year term, effective July 1, 2015.

Professor Rob Macgregor was appointed Director, Graduate Department of Pharmaceutical Sciences for a five-year term, effective July 1, 2015.

Associate Professor Marie Rocchi was appointed Academic Director of the International Pharmacy Graduate program for a three-year term, effective July 15, 2015.

John Farrell was appointed Lecturer and the Executive Director of the Centre for Practice Excellence, effective June 1, 2015.



Stephane Angers

Rob Macgregor

Marie Rocchi

Dr. Alison Thompson was promoted to Associate Professor with tenure, effective July 1, 2015.

Dr. Jamie Kellar was appointed Lecturer at the Faculty, effective July 1, 2015.

Dr. Rob Bonin was appointed Assistant Professor, effective August 1, 2015.

Dr. Sara Guilcher was appointed Assistant Professor, effective August 1, 2015.

Dr. Elise Paradis was appointed Assistant Professor, effective August 1, 2015.



Rob Bonin

Sara Guilcher

Elise Paradis

## Faculty News

In June, the first class of students in the Faculty's new Doctor of Pharmacy program graduated with their PharmD degrees at a ceremony held in the University of Toronto's venerable Convocation Hall. The day's festivities also included the final graduates from the Faculty's Bachelor of Science in Pharmacy program, as the final students in the Combined Bachelor of Science in Pharmacy-Post-Baccalaureate Doctor of Pharmacy program received their degrees. This convocation ceremony also marked the last graduates from the Faculty's original post-baccalaureate Doctor of Pharmacy program. The first of its kind in Canada, this

program was established in 1992 to prepare students to become advanced pharmacy practitioners, immersing participants in a comprehensive and demanding curriculum punctuated by an intensive program of experiential rotations. Over the life of this program, it was at the leading-edge of pharmacy practice and innovation, offered flexible programming through part-time and distance education options, and was taught by leaders in the profession. Read more at <http://pharmacy.utoronto.ca/newsfeed/convocation-06-2015>.

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## Grants

The Centre for Pharmaceutical Oncology received a major grant from the Canada Foundation for Innovation. The Centre, in partnership with the Toronto Recombinant Antibody Centre led by Professor Sachdev Sidhu at the Donnelly Centre for Cellular and Biomolecular Research, received an Innovation Grant for large infrastructure funding for "Engineered Biologics - Targeted Diagnostics and Therapeutics." This funding, totaling almost \$3.3 million, is expected to be matched by the Ontario Research Fund and private sector contributions for a total value in excess of \$8.2 million. Approximately half of these infrastructure funds will be used to establish the core equipment required to discover and develop new diagnostics and therapeutics for cancer based on fully human monoclonal antibodies. The equipment includes new microPET and microSPECT molecular imaging systems, a mass spectrometry instrument, liquid chromatography analysis capabilities, flow cytometer, and other instruments essential for pharmaceutical sciences research. This equipment will be used by a multidisciplinary pool of Principal Investigators, Postdoctoral Fellows, and graduate students in the many laboratories at the Faculty that conduct groundbreaking oncology research. The Centre for Pharmaceutical

Oncology is one of the Faculty's new research centres of excellence and is dedicated to exploiting discoveries in cancer biology to develop new diagnostic tools and targeted therapeutics for the disease and advancing the most promising of these discoveries to early phase clinical trials in cancer patients at the Toronto Academic Health Sciences Network hospitals. Visit <http://pharmacy.utoronto.ca/cpo> to learn more.

Professor Jack Uetrecht is the recipient of a five-year CIHR grant to explore "Immune Responses to Drugs that Cause Idiosyncratic Liver Injury and Agranulocytosis." This project builds on earlier work by the Uetrecht laboratory, including the discovery that depleting CD8 T cells prevented liver injury, and the identification of an initial step in inducing an immune response by some reactive metabolites that results in inflammasome activation, which has potential to lead to a biomarker that would predict the risk that a new drug candidate may cause an unacceptable risk of an idiosyncratic drug reaction. Ultimately, this study aims to enhance the mechanistic understanding of adverse reactions that would make it possible to decrease the risk of adverse reactions and treat idiosyncratic drug-induced liver injury to prevent liver failure.

Associate Professor Lynda Balneaves is part of a team of North American researchers to receive a five-year grant to study the impact of Mindfulness-Based Cancer Recovery and Tai Chi/Qi Gong in alleviating distress, anxiety, depression, and symptoms such as fatigue, pain, and sleep disturbance in cancer patients. This project will evaluate these mind-body therapies against one another to determine what works for whom, when they are effective, and which symptoms they affect or alleviate. In Ontario, the study will be run through the Centre for Integrative Medicine, a partnership between the University of Toronto's Leslie Dan Faculty of Pharmacy and Faculty of Medicine and The Scarborough Hospital.

Dr. Lisa Burry, Associate Professor and Clinician Scientist/Clinical Pharmacy Specialist at Mount Sinai Hospital, is the recipient of a one-year Pilot Project grant from the Centre for Collaborative Drug Research, a multidisciplinary initiative composed of the University of Toronto's Faculty of Medicine, Leslie Dan Faculty of Pharmacy, and the Centre for Addiction and Mental Health. Dr. Burry will investigate the use of melatonin as a means of reducing delirium in ICU patients. Recent research has shown that giving melatonin to non-ICU patients results in less delirium, but no drug has been shown to prevent delirium in critically ill populations. This study will analyze how melatonin is metabolized by ICU patients, determine if it can prevent delirium in the critically ill, and, if so, identify which dosages might be most effective.

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### **Publications**

Professor Shana Kelley published in *Nature Chemistry* about a new technology employing chip-based technology and electrochemical clamp assay, capable of detecting the presence of mutations within 15 minutes using a collection of oligonucleotides. This novel technology was shown to be sensitive, specific, reliable, and accurate in detecting mutated sequences in a collection of lung cancer and melanoma samples, producing results comparable to current practices, but with a simpler workflow, smaller sample sizes, and rapid results (in as little as five minutes).

Professor Kelley also published a paper in *Science Advances* detailing the discovery of a technology to rapidly determine if a donor lung is suitable for transplant, using a microchip to measure biomarkers. Although donated lungs are carefully examined for a variety of defects, standard tests cannot always detect subtle signs of injury that can lead to devastating outcomes. Moreover, the window to decide whether or not to use a donor lung is only a couple of hours, and advanced testing requires over six hours to complete. Using fractal circuit sensors to conduct biomarker profiling, Dr. Kelley's innovation can identify the risk of primary graft dysfunction (the leading cause of post-operation death, affecting 10 to 25 percent of lung transplant recipients) within 20 minutes. As a proof-of-concept study, researchers tested the technology on 52 donor lungs used for transplants. Even though all the lungs were considered clinically suitable, 19 recipient patients developed primary graft dysfunction. In all of these cases, the fractal circuit sensors would have flagged the risk prior to surgery.

New guidelines developed by Professor Anna Taddio and colleagues published in the *Canadian Medical*

*Association Journal* reveal the importance of mitigating pain during immunizations, and echo recent recommendations made by the World Health Organization for global immunization practices. "Reducing pain during vaccine injections: clinical practice guideline" updates pain management guidelines first published in 2010, and have been expanded to include adults and reflect the increased research conducted in this area.

Professor Taddio was invited to the World Health Organization (WHO) Immunization Secretariat to present this work to aid in the development of a global pain management strategy for immunizations. These discussions resulted in the WHO, recognizing that mitigating pain is part of good immunization practice, adopting several of these guidelines that are both feasible and applicable in all settings for global implementation. The guidelines outline a number of procedural, physical, pharmacological, psychological, and process interventions that can be implemented to lessen this pain. [pharmacy.utoronto.ca/newsfeed/taddio-cmaj-08-15](http://pharmacy.utoronto.ca/newsfeed/taddio-cmaj-08-15) for details. Following the publication of the guidelines in *CMAJ*, the WHO published "Reducing pain at the time of vaccination: WHO position paper," the first policy paper on pain mitigation at the time of vaccination, designed to identify globally implementable pain interventions to increase vaccination rates and improve public health.



Left: Shana Kelley  
Right: Anna Taddio

Professor Shirley X.Y. Wu and team published “Design of Hybrid MnO<sub>2</sub>-Polymer-Lipid Nanoparticles with Tunable Oxygen Generation Rates and Tumor Accumulation for Cancer Treatment” in *Advanced Functional Materials*. By changing their hydrophobicity and nanostructure suitable for systemic administration, the new hybrid nanoparticles developed by Professor Wu and her team exhibit superior properties such as long circulation time, high tumor accumulation, tumor-selective reactivity, and safety *in vivo*. These hybrid nanoparticles are able to effectively decrease tumor hypoxia and hypoxia-inducible factors. The new formulations and findings encourage a broad use of hybrid manganese dioxide nanoparticles to regulate tumor microenvironment and improve cancer treatment.

Professor Ping Lee and PhD graduate Dajun Sun published “Probing the mechanisms of drug release from amorphous solid dispersions in medium-soluble and medium-insoluble carriers” in the *Journal of Controlled Release*. This study shows that the supersaturation profile of medium-insoluble carriers are distinctively different than those based on conventional medium-soluble carriers, as they lack the initiation surge of supersaturation and provide sustained supersaturation profiles without the use of crystallization inhibitors because the drug release is controlled by a matrix diffusion-regulated mechanism. Ultimately, this discovery should enable formulation scientists to adopt and utilize different release mechanisms from soluble and insoluble solid dispersion matrices when designing

appropriate supersaturating systems to achieve desired kinetic solubility profiles for poorly water-soluble drugs potentially leading to enhanced oral availability.

### Awards & Recognition

Professor Reina Bendayan was elected Fellow of the Canadian Society for Pharmaceutical Sciences at the 2015 Annual CSPS/CC-CRS Conference in Toronto this summer. Professor Bendayan was recognized by this prestigious organization for her record of excellence in pharmaceutical research and contributions to the advancement of science.

Professor David R. Hampson was presented with the AFPC Pfizer Research Career Award at the Canadian Society for Pharmaceutical Sciences Conference in Toronto this summer. During the nearly three decades he has spent researching the biochemical and molecular basis of neurological and psychiatric disorders and applying this knowledge to identify potential drug targets, Dr. Hampson has trained dozens of Post-Doctoral Fellows and graduate students in the fundamentals of research and medicinal therapy. His research has focused on investigating the mechanisms and roles of G-protein coupled receptors and their interactions with neurotransmitters or drugs. Recently, Professor Hampson has been working on recombinant gene delivery into the brain by developing a gene therapy approach for the genetic disorder Fragile X Syndrome, a component of the autism spectrum disorders.

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Dean Heather Boon was awarded the 2015 Dr. Rogers Prize for Excellence in Complementary and Alternative Medicine. The award is named after Dr. Roger Hayward Rogers, a pioneer in providing non-traditional therapies for cancer patients, and celebrates the achievements of researchers, practitioners, or others in the field of complementary and alternative healthcare. The recipient of this prestigious award is someone who embodies vision, leadership, and integrity – qualities exemplified by Dr. Rogers. Funded by the Lotte and John Hecht Memorial Foundation, it is awarded every two years.

Associate Professor Emily Musing received the Emerging Health System Leaders Award from the Society of Graduates at the University of Toronto's Institute of Health Policy, Management & Evaluation. This award recognizes individuals who demonstrate leadership in bringing about measurable positive change in the health system, a commitment to constant learning, a connection to knowledge creation and dissemination,

who have made an impact on a high burden common problem or an important problem within a specific community, and have earned the recognition of their peers.

Lecturer Jamie Kellar was awarded a Wellspring Pharmacy Leadership Award from the Canadian Foundation for Pharmacy at this summer's Canadian Pharmacists Conference in Ottawa. This award recognizes the demonstrated and potential leadership of members of Canada's pharmacy community, allowing recipients to develop their personal leadership through study, experiential learning, or mentorship. To continue her development, Dr. Kellar is pursuing a PhD at Maastricht University in the Netherlands, where she is one of only a handful of pharmacists to ever be admitted into one of the world's leading health professions education programs.



Students in the Faculty's undergraduate programs recognized the Professors of the Year at the Faculty's Convocation Reception and Graduating Student Awards Ceremony. Dr. Jamie Kellar was selected as the Professor of the Year for the PharmD Class of 1T6, while Dr. Norman Dewhurst was chosen as Professor of the Year for the PharmD Class of 1T7, and Dr. Carolyn Cummins was determined to be the Professor of the Year for the PharmD Class of 1T8. Students in the Post-Baccalaureate Doctor of Pharmacy program selected Dr. Jennifer Lake as their Professor of the Year.

PhD student Jason Li from Professor Shirley X.Y. Wu's Advanced Pharmaceutics and Drug Delivery Laboratory is the recipient of the AFPC Graduate Student Research Award. This award recognizes "A multifunctional polymeric nanotheranostic system delivers doxorubicin and imaging agents across the blood-brain barrier targeting brain metastases of breast cancer," authored by Jason (first author) and colleagues, and published in *ACS Nano*. These findings are significant as they show the first nanocarrier system to demonstrate the ability to deliver doxorubicin, an anti-cancer medication, to multiple lesions of brain metastases of breast cancer and inhibit tumor growth.

Jason is also the recipient of the Outstanding Pharmaceutical Best Paper Award at the Controlled Release Society Annual Meeting in Edinburgh this July. This award recognizes an exceptional extract in the field of delivery of bioactives that features significant original contribution and groundbreaking research of

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### Student News

Each summer, the Faculty participates in the University of Toronto's Summer Mentorship program. This four-week program provides high school students of Indigenous and African ancestry a chance to explore health sciences at U of T, experiencing health sciences fields like medicine, dentistry, nursing, pharmacy, and social work through hands-on experiments, lectures, and special projects. This year, the 46 individuals in this program participated in activities in the pharmaceutics lab (making sunblock, placebo tablets, a rainbow solution, and chromatography flowers) and the pharmacy practice lab (processing prescriptions, counseling patients on proper inhaler and EpiPen techniques, and looking up solutions to drug related problems) under the supervision of 33 student volunteers.

PharmD students Edric Paw Cho Sing and Michael Vinh, along with Associate Professor Annie Lee, presented their framework for student-led tutorials for

impeccable quality. Jason received this award as first author of "A New Structural Design of a Closed Loop Insulin Delivery Implant Extends the Duration of Insulin Efficacy in a Type 1 Diabetic Rat Model by Impeding Immune Cell Infiltration."

PhD student Mohammad Ali Amini, also from Professor Shirley X.Y. Wu's lab, is one of seven graduate students receiving Prostate Cancer Canada Personnel Awards. As the recipient of the George Mohasci Graduate Studentship, Mohammad will investigate the new bioactive nanoparticles – microscopic drug delivery systems that provide unique targeted approaches to cancer treatments – that were developed in the Wu lab to change the microenvironment of prostate tumor by *in situ* sustained production of oxygen. Lack of oxygen (hypoxia) is found in 30%-90% of prostate cancer, which results in resistance to radiation therapy. Mohammad will use the novel bioactive nanoparticles to oxygenate these oxygen-poor tumors, which should enhance the effectiveness of radiation therapy and improve treatment outcomes.

PhD student Michael Dunne (from the laboratory of Dr. Christine Allen) was recognized with a Young Investigator Award at the European Society for Hyperthermic Oncology's 30th Annual Meeting. Michael received this award for his presentation of "Heat-triggered release of cisplatin from thermosensitive liposomes improves drug efficacy in models of human triple negative breast cancer."

students entering their Advanced Pharmacy Practice Experience rotations at the Association of Faculties of Pharmacy of Canada/American Association of Colleges of Pharmacy annual meeting in Maryland this summer. As part of their experiential rotations, Edric and Michael worked with 4th year students and subject matter experts (Dr. Heather Kertland, Dr. Miranda So, Dr. Debra Sibbald, and Nardine Nakhla) to identify topics and develop presentations to share this knowledge with the class about to begin their full-year of experiential rotations. A series of three one-and-a-half hour sessions on cardiology, infectious disease, and self-care were presented by the students using cases, drug charts, and diagrams to engage participants. The content of these sessions focused on pathophysiology, clinical presentation, pharmacotherapy, and patient monitoring. In addition to serving as a good review for students heading into their year-long experiential rotations, they also functioned as a good refresher for the licensing exam.

This year's Graduate Research in Progress Symposium, a one-day symposium celebrating the research accomplishments of the Faculty's Master of Science and PhD students was held at Hart House in June. In addition to over 70 posters from graduate students across all programs, this graduate research focused day featured oral presentations from four students, faculty presentations from Professor Zubin Austin and Professor Shana Kelley, and a plenary address from Dr. Sunil Verma.

## UNIVERSITY OF WATERLOO

### CCAPP awards Full Accreditation for PharmD

The Canadian Council for Accreditation of Pharmacy Programs (CCAPP) recently awarded the University of Waterloo School of Pharmacy a status of Full Accreditation for our PharmD (Doctor of Pharmacy) program. This accreditation status is valid for a six year term, from 2015 to 2021.

In the letter from CCAPP to University of Waterloo President Feridun Hamdullahpur, evaluators noted that "there is a culture of excellence and continuous innovation. The faculty and staff are enthusiastic and committed to producing graduates who will ably meet the challenges within the profession and offer optimal patient-centered care."

### Waterloo Faculty, Staff and Students Receive Awards at the OPA- CPhA Conference

At the joint OPA/CPhA conference in Ottawa this past June, Waterloo faculty, staff, and students were recognized for their achievements. We congratulate:

**Donnie Edwards – OPA Lifetime Achievement Award.** Donnie co-owns Boggio & Edwards IDA, a specialty compounding pharmacy in Ridgeway, Ontario. He is also Regional Clinical Coordinator, Niagara; Adjunct Clinical Assistant Professor for the School of Pharmacy.

### New Appointments

**Andrew Tolmie** joined the School in August as Experiential Coordinator, Patient Care Rotations. Andrew was a Professional Practice Consultant with the Ontario College of Pharmacists where he worked as an expert resource to practicing pharmacists on advancing patient care and also liaised with pharmacy stakeholder groups on regulatory issues.

**Caitlin Carter** assumed her position as Liaison Librarian in August. Caitlin comes to the School from

Student excellence in the PharmD program is recognized each year through the presentation of awards at the Undergraduate Student Awards Reception. Held on October 1st, this year's ceremony saw the presentation of 74 entrance, first year, second year, third year, and general awards to a total of 85 high achieving students.

**Douglas Brown** – won the OPA Mentorship Award. Doug is a community pharmacist as well as one of our Regional Clinical Coordinators.

**Sherilyn Houle** – CPJ Best Paper of the Year. Sherilyn is an Assistant professor at the School of Pharmacy.

**Holly Meginnis, Rx 2015** – Student of Distinction Award

**Jennifer MacKenzie, Rx 2016** – CPhA Centennial Leadership Award



Waterloo award winners L to R: Douglas Brown, Sherilyn Houle, Holly Meginnis, Jennifer MacKenzie

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the Regina Qu'Appelle Health Region where she was a Client Services Librarian.

### Administrative Appointments

**David Edwards** has accepted a second term as Director of the School of Pharmacy commencing June 1, 2015 and running to May 31, 2018.

**Cynthia Richard** will be assuming the role of Teaching Fellow for the School of Pharmacy.

**Andrea Edginton** has been selected to participate in the Academic Leadership Fellows Program (ALFP) of the American Association of Colleges of Pharmacy (AACP) for the 2015-2016 year. Dr. Edginton is the first Canadian to be accepted in the programs' 12 year

history. Her Dean Mentor's include Dr. David Edwards of the School of Pharmacy, University of Waterloo and Dr. Anne Lin of the School of Pharmacy, Notre Dame of Maryland University.

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### **PharmD Bridging Program:**

The University of Waterloo School of Pharmacy is pleased to announce the September 14, 2015 launch of the clinical rotation sequence of its well-received PharmD Bridging Program. The first of these clinical rotation courses includes a unique recognition of prior learning process facilitating the assessment of each student's clinical competence.

The School welcomed the first group of alumni to this flexible and innovative distance education program in January 2015. We now have 140 students enrolled in this part-time program in which our BScPhm graduates can complete courses required to achieve a PharmD degree. For more information, refer to the PharmD Bridging section of the School's website at: <https://uwaterloo.ca/pharmacy/welcome-pharmacy-alumni/pharmd-bridging-program>.

### **Continuing Professional Development (CPD):**

Our CPD division continues to offer programs for pharmacists, pharmacy technicians and allied health professionals. Recent partnership programs launched include *Drug-Nutrient Interactions*, a collaborative online program developed with the Dietitians of Canada and *Orientation to Pharmacy in Long-term Care and Residential Care Facilities*, offered by the Ontario Pharmacists Association, developed with the participation and support of University of Waterloo School of Pharmacy. For more information, go to <https://uwaterloo.ca/pharmacy/degrees-and-professional-development/distance-education-continuing-professional-development>.

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### **Grants**

**Feng Chang** received \$720,330 in Health Canada funding for the project entitled "*Opioid Education Partnership: an Interdisciplinary Initiative to Reduce Prescription Opioid Misuse*". Chang will work with co-investigators Tejal Patel and Rosemary Killeen from the School of Pharmacy, and Dr. Agnes Kluz of Gateway Rural Health Institute. The project involves creating an interdisciplinary, interactive, online education program that will provide practicing physicians and pharmacists, as well as students and trainees, with evidence-based instruction from prescribing guidelines, best practices, abuse prevention strategies and more.

**Kelly Grindrod** and co-investigator, Catherine Burns were successful in the latest round of Strategy for Patient-Oriented Research (SPOR) grants from CIHR, receiving \$121,000 for their proposal: "*Playing Telephone: Medication reconciliation by pharmacists, physicians, and nurse practitioners*".

**Kelly Grindrod** received a \$30,000 grant from the Kitchener-Waterloo Community Foundation for the project: "*Bridging the Digital Health Divide: partnering students and seniors to improve health literacy and belonging*".

**Jamie Joseph** received a Natural Sciences and Engineering Research Council of Canada (NSERC), Discovery Grant for: "*The role of cytosolic malic enzyme and isocitrate dehydrogenase in the regulation of insulin exocytosis from pancreatic beta-cells*".

**Praveen P Nekkar Rao** received a Canada Foundation for Innovation (CFI) grant (\$23,600) and an Ontario Research Fund (ORF) grant (\$23,600) for his research: "*Pharmaceutical therapies for Alzheimer's disease*".

**Paul Spagnuolo** received a Natural Sciences and Engineering Research Council of Canada (NSERC), Discovery Grant for his project: "*The role of autophagy in myeloid cell differentiation and death*".

**Shawn Wettig** received \$104,000 from the Ride for Dad Foundation. The funds will help Wettig and collaborators fine-tune a treatment that utilizes irradiated gold nanoparticles to target prostate cancer. The goal is to shorten treatment duration and reduce side effects, by delivering a more targeted treatment at a lower dose.

### Invited presentations

**Michael Beazely** presented a talk titled: Heterologous Desensitization of GPCR-RTK Transactivation at the Discovery on Target Conference in Boston, MA, on Wed, Sept 23.

**Praveen P N. Rao.** Alzheimer's disease and amyloid cascade hypothesis. Manipal College of Pharmaceutical Sciences, Manipal University, Manipal, India, Aug 27, 2015.

**Praveen P N Rao.** Targeting beta amyloid using small and large molecules. Laurier Protein Science Symposium, Wilfrid Laurier University, Waterloo, Canada, May 29, 2015.

### Publications

Tin G, Mohamed T, Gondora N, Beazely M. A. Praveen P. N. Rao (2015). Tricyclic phenothiazine and phenoselenazine derivatives as potential multi-targeting agents to treat Alzheimer's disease. *Medicinal Chemistry Communication* doi: 10.1039/C5MD00274E

Liu H, Ojha B, Morris C, Jiang M, Wojcikiewicz E. P, Praveen P. N. Rao, Du D (2015). Positively charged chitosan and N-trimethylchitosan inhibit A $\beta$ 40 fibrillogenesis. *Biomacromolecules* 16, 2363-2373.

Xian-Le Bu, Praveen P. N. Rao, Yan-Jiang Wang (2015). Anti-amyloid aggregation activity of natural compounds: Implications for Alzheimer's drug discovery. *Molecular Biology* doi: 10.1007/s12035-015-9301-4

Vannini F, Chattopadhyay M, Kodela R, Praveen P. N. Rao, Khosrow, K (2015). Positional isomerism markedly affects the growth inhibition of colon cancer cells by NOSH-aspirin: COX inhibition and modeling. *Redox Biology* 6, 318-325.

Mostafa Y. A, Kralt B, Praveen P. N. Rao, Taylor S. D (2015). A-ring substituted 17 $\beta$ -arylsulfonamides of 17 $\beta$ -aminoestra-1,3,5(10)-trien-3-ol as highly potent reversible inhibitors of steroid sulfatase. *Bioorganic and Medicinal Chemistry* 23, 5681-5692.

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### Student News

**Alanna McEneny** received a 2015 University of Waterloo "Outstanding Achievement in Graduate Studies" honour. Alanna is one of three master's level students at the university to receive the honour. Earlier in the term, she successfully defended her MSc thesis. Her supervisors were: Andrea Edginton and Praveen P. Nekkar Rao.

**Nawaz Ahmed** (MSc candidate, Supervisor: Michael Beazely) successfully defended his Master's thesis on Sept 10. His thesis is titled: "Investigating the neuroprotective potential of short-term 5-HT7 receptor activation against neuronal excitotoxicity".

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## Canadian Pharmacists Association (CPhA) News

### Welcome to the Canadian Pharmacists Association

In June 2014, the Canadian Pharmacists Association (CPhA) approved a new governance and membership model to enhance advocacy efforts and facilitate collaboration between national and provincial pharmacy associations. AFPC is pleased to be a member of the new CPhA and contribute to a strong, united, pan-Canadian voice for pharmacy. All pharmacist members of AFPC are now CPhA Associates, entitled to a range of CPhA benefits. In addition to AFPC, all 10 provincial pharmacist advocacy associations and the Canadian Association of Pharmacy Students and Interns (CAPSI) belong to CPhA.

**Why change?** CPhA recognized the need to strengthen the voice of pharmacy in Canada and felt that a new model, where provincial and national pharmacist associations and faculties of pharmacy work together in the best interests of the profession as a whole, would be more effective and efficient. Collectively we will have a stronger voice and the ability to respond quickly to the changes affecting pharmacy and the health care system. AFPC brings another national voice to pharmacy discussions and we felt it was important to be a part of this new association to ensure our unique voice is heard.

**What does this mean for AFPC members?** As a pharmacist member of AFPC, you now have access to a range of benefits through CPhA, including weekly e-Therapeutics Highlights CE emails and other news and information, discounts on CPD programs, a print and online subscription to the *Canadian Pharmacists Journal* for only \$10 and networking opportunities. If you were a CPhA member on June 1, 2014, your status has automatically been updated. Visit [www.pharmacists.ca/register](http://www.pharmacists.ca/register) to register or check your CPhA status.

Learn more about AFPC benefits from CPhA [[http://afpc.info/system/files/member/AFPC-CPhABenefits-nc\\_EN.pdf](http://afpc.info/system/files/member/AFPC-CPhABenefits-nc_EN.pdf)]

Learn more about CPhA's new membership & governance model

[<http://www.pharmacists.ca/index.cfm/membership/>]



STRENGTHEN  
THE PROFESSION



ENHANCE  
PATIENT CARE



STRONGER  
ADVOCACY FOCUS



FACILITATE  
COLLABORATION



INCREASE  
ENGAGEMENT

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