Top Pharmacy School in Canada

The Leslie Dan Faculty of Pharmacy at the University of Toronto was recently recognized as the top Pharmacy school in Canada and the 11th best in the world in the recent 2012 QS World University Ranking for Pharmacy and Pharmacology.

Several factors were considered in determining these rankings, including academic reputation, student-faculty ratio, employer reputation, faculty citations, and research influence.

This recognition from QS is significant and reinforces the importance of what we are as Faculty and what we aspire to be. As Canada’s largest Faculty of Pharmacy, we constantly strive to offer the most comprehensive and most diverse academic programming. To this end, the Faculty’s new Bachelor of Science in Pharmacy curriculum will prepare graduates for all of the new roles anticipated for pharmacists in the future, while the Combined Bachelor of Pharmacy-Doctor of Pharmacy program provides students with the knowledge, skills and experience to become advanced practitioners and leaders within the pharmacy field.

At the same time, this ranking reflects the Faculty’s commitment to research, including the incredible discoveries and developments made by researchers and graduate students at the Faculty. The Faculty is home to many of the world’s leading researchers in a variety of disciplines, and our thriving graduate programs are populated by some of the top graduate students from across the globe. This ranking affirms the quality of this research and our dedication to producing the next great generation of pharmaceutical sciences researchers.

The Leslie Dan Faculty of Pharmacy is proud and honoured to be named the best Faculty of Pharmacy in Canada and one of the leading pharmacy schools in the world.

Faculty News

New Director of Global Affairs

Dr. Jillian Köhler has been appointed Director, Global Affairs as a shared position between the Leslie Dan Faculty of Pharmacy and the Munk School of Global Affairs.

This appointment follows the enhanced international focus of the University of Toronto, and Dr. Köhler’s informal role in this capacity over the past year.

In this position, Dr. Köhler will be responsible for developing new research and educational opportunities for students at the Faculty and the Munk School. To accomplish this, Dr. Köhler will work to create new strategic networks in global health with universities, global institutions, the private sector, and global civil society organizations. Through the establishment of these networks and new partnerships, students will be able to develop “real world” experience through global health internships and participation in global health seminars, among other activities. At the same time, the formalization of this position
New Director of Student Experience and Academic Progress

This summer, the Leslie Dan Faculty of Pharmacy announced the appointment of Senior Lecturer Doris Kalamut as the Director of Student Experience and Academic Progress.

Ms. Kalamut has taught at the Faculty since 1981, where she has instructed in Professional Practice laboratories, Professional Practice courses, and the International Pharmacy Graduate program, among others. She brings a wealth of experience and a passion for the pharmacy profession to this position.

As Director, Student Experience and Academic Progress, she will represent the Faculty with students, employers, preceptors, practitioners, and university administrators on matters relating to student experience and progress.

Reporting to the Associate Dean, Academic, Ms. Kalamut will also work closely with the Associate Dean, Professional Programs, and the Faculty Registrar. In this position, she will be responsible for developing, implementing, delivering and leading initiatives like the Faculty Advisor and Mentorship program, the House program, and remediation programs. She will also represent the Faculty at the Council on Student Experience, in addition to any other activities or events related to student experience.

In addition to assuming this new responsibility as Director, Student Experience and Academic Progress, Ms. Kalamut will continue in her role as a Coordinator in the Year 2 Medication Therapy Management course, ensuring that students gain valuable pharmacy experience in a simulated practice setting.

Congratulations, Ms. Kalamut, on this important position.

Promotions

This summer, the Provost of the University of Toronto promoted Dr. Heather Boon to Full Professor status at the University.

A graduate of the Faculty’s Bachelor of Science in Pharmacy and Doctor of Philosophy programs, Dr. Boon is one of North America’s foremost experts in the field of Complementary and Alternative Medicine. Dr. Boon is one of the Co-Founders and Principal Investigators of the Canadian Interdisciplinary Network for Complementary and Alternative Medicines (IN-CAM), and is the current Chair of Health Canada’s Expert Advisory Committee for Natural Health Products.

Dr. Boon’s primary research interests are patients’ use of complementary/alternative medicine, the safety and efficacy of natural health products, and complementary/alternative medicine regulation and policy issues. A prolific researcher, Dr. Boon has published over 100 peer-reviewed articles and book chapters, and is the co-author of *A Complete Natural Medicine Guide to the 55 Most Common Herbs (2nd Edition)*.

In addition to her thriving research program, Dr. Boon is an active instructor in both the undergraduate and graduate teaching streams, and the Associate Dean, Graduate Education at the Faculty.

Also this summer, University of Toronto President David Naylor confirmed Dr. Stephane Angers’ promotion to Associate Professor with tenure.

Dr. Angers is the Canada Research Chair in Functional Architecture of Signal Transduction Complexes at the Faculty. Combining integrative biochemistry, molecular biology and cellular biology approaches with new tools in mass spectrometry and proteomics, Dr. Angers’ research program seeks to characterize the function of novel proteins within signal transduction complexes.

Congratulations, Dr. Köhler, on this key strategic appointment.
His research group is principally interested into two main areas of research: the study of signal transduction initiated by the Wnt and Hedgehog families of growth factors, and the study of the Cullin families of E3 ubiquitin ligases. Understanding how these proteins and molecular machineries that are implicit in cell division operate is important as they have been linked to several human cancers.

Dr. Angers is also an award-winning instructor, having recently been named Professor of the Year by students in the first year of the Faculty’s Bachelor of Science in Pharmacy program. Dr. Muhammad Mamdani has also been promoted to Full Professor, Status Only.

In addition to lecturing at the Faculty, as well as other Faculties at the University of Toronto, Dr. Mamdani is the Director of the Applied Health Research Centre at the Li Ka Shing Knowledge Institute of St. Michael’s Hospital. This academic research organization houses scientific and operational expertise to design and conduct clinical research, including observational research and multicentre clinical trials. Dr. Mamdani is an internationally recognized leader in the fields of pharmacoepidemiology and pharmacoeconomics.

Dr. Mamdani’s research focuses on drug safety, effectiveness, and policy. His work for the Ontario Drug Policy Research Network is focused on providing research findings relevant to decision-makers in a rapid manner and brings together leading drug research experts at five medical schools across Ontario and key decision-makers at the provincial government level. His work with the Canadian Drug Safety and Effectiveness Research Network brings together researchers from four different provinces and regulators from Health Canada to conduct and interpret pharmacoepidemiological research.

Dr. Beth Sproule has been promoted to Associate Professor, Status Only.

In addition to being the Director of the Faculty’s Division of Pharmacy Practice, Dr. Sproule is also a Pharmacy Clinician Scientist/Advanced Practice Pharmacist at the Centre for Addiction & Mental Health. A graduate of the Bachelor of Science in Pharmacy program, Dr. Sproule has taught for many years at the Faculty within the graduate, undergraduate and Doctor of Pharmacy programs.

Dr. Sproule’s primary focus is clinical research in the area of prescription drug abuse. The goal of her clinical and pharmacy practice-based research program is to optimize the use of psychopharmacological agents in clinical practice. These investigations relate to both enhancing therapeutic efficacy while minimizing harms related to psychotropic medication use. A major focus of this research program is the problem of prescription drug abuse (e.g., abuse and addiction to prescription opioids or benzodiazepines).

Congratulations, Dr. Boon, Dr. Angers, Dr. Mamdani and Dr. Sproule on your promotions.

At the end of August, Associate Professor Christine Allen stepped down as Associate Dean, Academic at the Faculty. After serving in this position in 2011 (as Interim Associate Dean) and 2012 (as Associate Dean), Dr. Allen leaves to focus on her burgeoning research program.

During her time in this role, Dr. Allen helped define the responsibilities of the position and worked as a strong advocate for students. Her insight, hard work, and thoughtful counsel as Associate Dean, Academic will be greatly missed by the Faculty.

A Special Advisory Committee has been struck to find a new Associate Dean, Academic. The Dean is hopeful that a new Associate Dean, Academic will be selected and installed shortly.

Effective May 1, 2013, Dr. Brian Shoichet will be joining the Leslie Dan Faculty of Pharmacy as a tenured Professor. Over the next eight months, Dr. Shoichet will transition his laboratory from the Department of Pharmaceutical Chemistry at the University of California, San Francisco, and establish a new laboratory and research group on the 8th
floor of the Leslie L. Dan Pharmacy Building.

Dr. Shoichet is an internationally recognized leader in combining computational simulation and experimental techniques to develop new ligands that complement protein structures. Using these techniques, he is also able to develop new targets for existing chemical compounds and new ligands for accessible protein targets. He has a particular focus on the discovery of novel chemical entities to modulate G-Protein Coupled Receptors, which may be templates for new drugs and are also a focus for several other researchers within our Faculty. He is highly productive in terms of publications, grants, and patents. In addition to being a highly sought after lecturer, Dr. Shoichet is very active in mentoring both graduate and professional students.

Please welcome Dr. Shoichet to the Faculty.

Welcome New Pharmacy Instructors

The Faculty welcomes four new instructors for the 2012-2013 academic year.

Dr. Norman Dewhurst has been appointed the new Co-Coordinator (with Dr. Gary Wong) for PHM203 - Pharmacotherapy 4: Infectious Diseases. In this role, Dr. Dewhurst will leverage his experience as an Infectious Disease Pharmacist within the Infectious Diseases and Positive Care Clinic and ID/HIV Service at St. Michael’s Hospital.

Dr. Henry Halapy will be Co-Coordinator (with Dr. Marisa Battistella) for PHM202 - Pharmacotherapy 3: Endocrine, Nephrology and Urology. In this role, Dr. Halapy will leverage his experience as a Clinical Pharmacy Specialist at St. Michael’s Hospital, where he specializes in the development of the pharmacist’s role in diabetes management.

Dr. Andrea Narducci will be the new Pharmacotherapy Co-Coordinator (with Dr. Debra Sibbald) for PHM201 - Pharmacotherapy 2: Dermatology and EENT. Dr. Narducci brings experience to this role as a Clinical Pharmacist in the Cardiovascular Surgery department at St. Michael’s Hospital and as a Community Pharmacist in Woodbridge, and is a graduate of both the Faculty’s Bachelor of Science in Pharmacy and Doctor of Pharmacy programs.

Dr. Cindy Truong Natsheh will be Co-Coordinator (with Doris Kalamut) for PHM205 - Medication Therapy Management 2. Since 1999, Dr. Natsheh has been an Education Coordinator and Residency Coordinator with the Department of Pharmacy Services at the University Health Network which should serve her well in this new role with the Faculty.

Please welcome these new instructors to the Faculty.

New President of the Society For Medical Decision Making

Professor Murray Krahn was recently elected President of the Society for Medical Decision Making.

The Society for Medical Decision Making is an international organization dedicated to improving health outcomes through the advancement of proactive systematic approaches to clinical decision making and policy-formation in healthcare by providing a scholarly forum that connects and educates researchers, providers, policy-makers, and the public. Members work in hospitals, universities, corporations, foundations, and government agencies across the globe.

Ultimately, the Society for Medical Decision Making seeks to improve the health and clinical care of individuals and assist health policy formation by developing and promoting the use of systematic methods to deal with the uncertainties of healthcare decisions.

Congratulations, Dr. Krahn, on being elected to this noteworthy position.
New Role – Reina Bendayan, Vice-Chair, AAPS

Professor Reina Bendayan was recently elected Vice-Chair of the Pharmacokinetics, Pharmacodynamic and Drug Metabolism Section of the American Association of Pharmaceutical Sciences (AAPS). Dr. Bendayan will hold this position for one year, after which she will hold positions as Chair-elect, Chair, and Past Chair.

The American Association of Pharmaceutical Scientists is a professional, scientific association of approximately 12,000 members employed in industry, academia, government, and other research institutes worldwide. Founded in 1986, it provides a dynamic international forum for the exchange of knowledge among scientists to enhance their contributions to public health. Recognizing that modern science is conducted in an integrated fashion comprising many disciplines, AAPS seeks to foster the integration of those sciences related to discovery, design, analysis, development, production, quality control, safety, clinical evaluation, regulation, distribution, and utilization of drugs and drug delivery systems.

Congratulations, Dr. Bendayan, on being elected to this key post.

Dr. Anna Taddio Appointed Senior Associate Scientist

Associate Professor Anna Taddio was recently appointed Senior Associate Scientist at the Research Institute at the Hospital for Sick Children.

As Canada’s largest, hospital-based child health research institute, the Institute is committed to improving the health of children in Canada and in the global community. Its twin missions are to advance child health through global leadership and innovation, research and discovery, and to translate research knowledge to benefit children and families everywhere. As a result, the Research Institute upholds an exceptional standard of scientific research and discovery with its aim to prevent disease, find cures, and transform children’s health.

Dr. Taddio’s appointment as a Senior Associate Scientist at the Research Institute recognizes the significant contribution that her research in paediatric pain management has made to the institution and to children’s health in general.

Congratulations, Dr. Taddio, on this significant achievement.

Funding News

CIHR Grant for Medication Reconciliation in Ambulatory Settings

Many adverse events related to medication discrepancies or errors are preventable. Medication Reconciliation – a process where health providers, patients and families work together to ensure accurate and comprehensive communication of medication information across transitions of care – and similar strategies can have tremendous impacts on patient safety and outcomes. This problem is even more prevalent in ambulatory care settings.

The Canadian Institutes of Health Research have awarded Dr. Lisa McCarthy a CIHR Knowledge Synthesis Grant for her project “A Scoping Review of Medication Reconciliation Initiatives in Ambulatory Care.” This one-year project, which also involves faculty members Dr. Tom Brown and Dr. Natalie Crown, will include a scoping review of studies of medication reconciliation strategies in ambulatory care settings to identify the patient populations that benefit from medication reconciliation, and synthesize the interventions and outcomes that have been studied to date.

Once completed, the study findings will be communicated to researchers, clinicians, and policy makers, and will directly inform clinical practice, policy, and research in Canada and abroad.
Ministry of Health Invests in Internationally Educated Health Professional Research

The Ontario Ministry of Health and Long-Term Care recently invested in the research of Associate Professor and Ontario College of Pharmacists Research Professor in Pharmacy Practice, Dr. Zubin Austin.

“How do practice site interventions support integration of internationally educated health professionals (IEHPs) in the Canadian workplace?” seeks to address the issues experienced by policy makers, regulators, educators, and employers surrounding the integration of foreign-trained health professionals into the Canadian workforce. Accordingly, this project will include a systematic and rigorous examination of the underlying principles which determine and define how and why interventions work or do not work.

This four-year multi-disciplinary study will track and analyze the experiences of IEHPs, their co-workers, their practice sites, and their employers as they access a variety of practice-site interventions designed to support integration.

Divided into three phases, the impact, value and outcomes of these interventions will be studied on both the practice experiences and professional development of IEHPs involved in the study. Upon the completion of this project, this study will be used by various stakeholders to inform future policy, regulatory and curricular planning decisions, and will provide IEHPs with useful information for program and career planning.

Canadian Association for AIDS Research Grant

The Canadian Association for AIDS Research (CANFAR), Canada’s only independent charitable foundation dedicated to eliminating HIV and AIDS through research, recently renewed funding for Dr. Reina Bendayan’s research.

“Role of Drug Transporters in Antiretroviral Drug Absorption and Drug-Drug Interactions in Intestinal Tissue” is a two-year project designed to investigate the role of membrane drug transporters at the intestinal barrier in antiretroviral drug permeability and drug-drug interactions for clinically recommended anti-HIV drug regimens.

Understanding the mechanisms involved in antiretroviral drug transport will not only help identify interactions of therapeutic or toxic importance, but will also provide useful guidelines on optimal drug combinations for people living with HIV.

CIHR Grant for Cancer Research

During development, Wnt proteins control cell proliferation, cell differentiation, cell migration and stem cell renewal. Unsurprisingly, then, mutations or deregulation leading to aberrant Wnt signalling causes human diseases including cancers. In the laboratory of Dr. Stephane Angers, researchers have identified several new proteins important to these processes during development and in cancer cells.

Recognizing the potential of these discoveries, the Canadian Institutes of Health Research have provided Dr. Angers with a five-year grant for his project “Wnt signalling circuitries in development and cancer.”

This project has three primary aims - define the molecular basis underlying Wnt-PCP signalling in basal-like breast cancer cells, determine the role of autocrine Wnt-PCP signalling in maintaining mesenchymal/stem cell properties following EMT, and determine the requirement of the Wnt-PCP pathway for basal-like breast cancer in vivo.

This grant allows Dr. Angers and his lab to continue their efforts to understand the intracellular signalling pathways controlled by Wnt proteins and test the efficiency of synthetic antibodies as potential treatment for metastatic breast cancer. By identifying and better understanding the regulators to various signalling pathways, Dr. Angers hopes to determine whether inhibition of Wnt-PCP cascade represents a viable therapeutic opportunity to treat breast cancer.
There are several treatment options for many types of bladder cancer, most of which have similar benefits and a variety of side effects. As a result, the choice of treatments often depends on patients’ preferences for treatment-related outcomes.

The Canadian Institutes of Health Research recently awarded a grant to Dr. Murray Krahn, Professor and F. Norman Hughes Chair in Pharmacoeconomics at the Faculty, to develop a disease-specific utility instrument for bladder cancer health-related quality of life. To date, no such tool exists.

Using methodology established in the earlier development of a utility instrument for prostate cancer (the Patient Oriented Prostate Utility Scale), Dr. Krahn and his colleagues propose to develop a health state classification system for bladder cancer – the Bladder Utility Symptom Scale (or BUSS) – and test its properties as a psychometric instrument. This 3-year CIHR Operating Grant will allow them to develop a tool that will help bladder cancer patients identify the best course of treatment for them as individuals based on a deeper understanding of the side effects caused by the various treatment options.

To accomplish this, Dr. Krahn and his team will perform a literature review and conduct focus groups with bladder cancer patients and experts. From there, the team will begin to develop the utility tool by selecting items based on patient ratings and experiences and developing the appropriate levels for each item. After pilot-testing the instrument, the team will conduct reliability and validity testing against existing quality of life instruments.

Providing a means to assess the quality of life in bladder cancer patients, both before and after different treatments, and in various cancer stages, the BUSS represents the first step towards the development of a bladder cancer-specific indirect utility instrument. Ultimately, the BUSS will be invaluable in clinical practice, patient studies, and clinical outcome studies, and will be used in decision models and cost-effectiveness analyses to help inform health policy decisions concerning bladder cancer treatments.

Many patients, especially those in poor populations living in developing nations, are unable to access the medicines that they need. In fact, approximately 2 billion people, or about one-third of the global population, lack regular access to medicines. The World Health Organization estimates that by improving access to existing essential medicines (and vaccines), about 10 million lives could be saved each year.

Associate Professor Jillian Köhler was recently awarded a Canadian Institutes of Health Research (CIHR) Operating Grant for “Evaluating Governance, Accountability and Transparency in Brazil’s Pharmaceutical System.” This three-year project will see Dr. Köhler identify the laws, regulations and policies present in Brazil to improve access to essential medicines, study how they were implemented, and determine if they have helped to promote good governance, accountability and transparency.

As part of this project, Dr. Köhler and colleagues from the University of Sao Paulo, Boston University and the University of Toronto will examine the good governance characteristics of the pharmaceutical supply chain, identify the factors that facilitate and impede the presence of good governance in the pharmaceutical system, compare good governance between states and among different levels of government, and determine the interventions that best support policy change to strengthen good governance.

Through these explorations, Dr. Köhler, who has been working on pharmaceutical governance issues – including participating as a member on the World Health Organization’s Good Governance for Medicines Advisory Group – for well over a decade, hopes to craft policy recommendations to maximize good governance and reduce the risk of corruption in the pharmaceutical system.
Metabolic diseases, including diabetes and obesity, are reaching epidemic levels in the Western world. Assistant Professor Carolyn Cummins recently received a New Investigator Salary Award from the Canadian Institutes of Health Research (CIHR) to support early career research in the field of anti-inflammatory drugs and diabetes.

This award will allow Dr. Cummins to continue her investigation into the role of the liver X receptor beta as a step toward developing safer anti-inflammatory drugs for the future.

Diabetes is characterized by elevated blood glucose levels caused by the body’s inability to properly secrete insulin or respond to increasing insulin levels. Glucocorticoid drugs such as hydrocortisone are widely prescribed for diseases like rheumatoid arthritis, asthma, certain types of cancers and organ transplants in which their potent anti-inflammatory and immunosuppressive actions are desired. However, the long-term use of these drugs is limited by undesirable side effects including obesity and type 2 diabetes.

As a result, there is extensive interest in generating new and improved “dissociated” glucocorticoid drugs that retain their anti-inflammatory and immunosuppressive effects without the undesirable side effects that can lead to obesity and type 2 diabetes.

Dr. Cummins’ lab has identified a nuclear hormone receptor – the liver X receptor beta (LXRbeta) – that is responsive to cholesterol metabolites and important in selectively modulating the hyperglycemic and not the immunosuppressive effects of glucocorticoid signalling. By identifying new determinants of glucocorticoid specificity, Dr. Cummins hopes that new drugs can be developed that will provide the anti-inflammatory benefits of glucocorticoid drugs without their undesirable side effects.

This CIHR New Researcher Award recognizes both the promise shown by Dr. Cummins early in her career and the significance of her research program.

**Natural Sciences and Engineering Research Council invests in Pharmacy Research**

The Natural Sciences and Engineering Research Council (NSERC) recently invested in a number of research programs at the Leslie Dan Faculty of Pharmacy, awarding Discovery Grants to Dr. Tigran Chalikian, Dr. David Hampson, and Dr. Jeffrey Henderson.

The Discovery Grants program is NSERC’s largest program and a key element of Canada’s support for excellence in science and engineering research and training at Canadian universities. With its goals of promoting and maintaining high-quality research at Canadian universities, fostering research excellence, and providing a stimulating environment for research training, the Discovery Grants program gives researchers the freedom and flexibility to pursue the most promising research directions as they arise, encouraging creative and cutting-edge approaches and international collaborations.

Dr. Tigran Chalikian received a five-year Discovery Grant for “Protein Interactions and Solvation in Binary Solvents.” Through this project, Dr. Chalikian will study the effect of solvation on the conformational preferences and interactions of proteins through volumetric and spectroscopic experiments as well as molecular dynamics simulations. Understanding the hydration energetics of proteins at the molecular level will facilitate the development of new drugs specifically targeted to selected sites of biopolymers and help in the design of modified proteins with predictably altered structures.

Dr. David Hampson is the recipient of a five-year Discovery Grant for “The calcium-sensing receptor and integrins.” The calcium-sensing receptor (CaSR) is a G-protein coupled receptor (CPCR) that is activated by cations, particularly calcium, assists in the regulation of calcium levels in the body, and has recently been shown to be required for the growth of neuronal processes in the central nervous system. Recent discoveries have shown a link between the CaSR is associated with a class of proteins called integrins in thyroid carcinoma cells. Finding that the activation of the CaSR promotes integrin mediated cell adhesion and migration towards a fibronectin matrix
could be an important step in understanding cancer cell metastasis because thyroid carcinoma cells, like breast cancer cells, metastasize to the bone. Bone tissue contains high calcium which likely fully activates the CaSR to promote cell adhesion and retention of the circulating cancer cells. The next phase of Dr. Hampson’s research will focus on determining whether these findings in thyroid cells extend to neurons and glial cells in the brain, which should shed light on how increased extracellular calcium levels and the stimulation of the CaSR regulate cell growth, adhesion, and migration in the central nervous system.

Dr. Jeffrey Henderson received a five-year Discovery Grant for “Analysis of FADD-dependent regulation of programmed cell death.” One of the fundamental properties of all multicellular organisms is the ability of cognate cells to commit suicide. This response, termed programmed cell death (PCD) or apoptosis, is initiated as a consequence of both normal development and pathologic events such as infection, injury, poisoning and DNA damage. In humans, this system is thought to function as one of our fundamental protections against the spread of viral infections and development of cancer. In contrast, pathologic activation of PCD plays a major role in regulating the cell death seen following spinal cord injury and stroke. Understanding how this process is controlled within cells is therefore a key element in modifying the morbidity and mortality seen in a number of important clinical syndromes. Through this grant, Dr. Henderson will investigate the detailed biomechanical mechanism of these processes in cells in vitro and how necroptotic and apoptotic PCD pathways may work in concert to serve as master regulators of cell survival in specific forms of cellular injury. These studies should elucidate the nature of these interactions and advance our understanding of a fundamental aspect of cellular behaviour.

These NSERC Discovery Grants are an endorsement of the important research being conducted by Dr. Chalikian, Dr. Hampson, and Dr. Henderson, and an investment in the graduate students and learning opportunities that exist in these labs.

Heart and Stroke Foundation Grant

The Heart and Stroke Foundation of Canada is a volunteer-based health charity that is focused on eliminating heart disease and stroke and reducing their impact through advocacy, the promotion of healthy living, and the advancement of research and its application.

Each year, the Heart and Stroke Foundation works with over 2,000 national and international research experts in a peer-review process to determine which research projects will receive funding. This year, Dr. Jeffrey Henderson was selected to be one of 100 investigators to receive funding for a three-year Grant-in-Aid project entitled “Regulatory interaction of apoptotic/necroptotic PCD pathways in vivo and their functional effect on animal stroke models.”

This project focuses on the in vivo consequences of two prominent forms of autonomous cell death (apoptotic and necroptotic signaling) under conditions of stroke, and how inhibition of these pathways using transgenic methods and several small molecule inhibitors identified in Dr. Henderson’s laboratory may act to significantly reduce levels of neural injury following stroke.

Clinician Scientist Receives Grant from Kidney Foundation of Canada

Pharmacy Clinician Scientist and Assistant Professor Dr. Marisa Battistella has received an Allied Health Research Grant from the Kidney Foundation of Canada.

The Kidney Foundation of Canada is the largest non-government funding organization solely focused on kidney research in Canada. The Foundation invests in research covering risk factors, detection of populations at risk, transplantation, dialysis, the psychological aspects of kidney disease, genetics, urology, and kidney cancer, using basic science and clinical trial methodologies.

Dr. Battistella's project, “Optimized Dosing of Cefazolin in Patients on Nocturnal Home Hemodialysis,” is a one-year project that focuses on ensuring the efficacy of antibiotic drugs commonly prescribed to hemodialysis patients to fight infection is not compromised by newer dialysis modalities such as nocturnal home hemodialysis.
The antibiotic cefazolin is commonly used to treat infections in hemodialysis patients as the majority of these infections are caused by Gram positive organisms and best treated by these drugs. In conventional hemodialysis, patients are treated three times weekly in order to remove waste materials from the blood in individuals whose kidneys are no longer able to carry out this function. Due to the benefits observed from additional treatment, many patients are beginning to incorporate nocturnal home hemodialysis into their treatment plans. However, the removal of antibiotics is not well studied with these newer modalities of dialysis.

Dr. Battistella believes that increasing the hemodialysis treatments will remove more drug from patients’ systems. If the drug is removed from the system during treatment, this subtherapeutic dosing can lead to treatment failures, as well as resistance to organisms typically treated by Cefazolin.

Through this study, Dr. Battistella intends to evaluate the pharmacokinetics of cefazolin in patients on nocturnal home hemodialysis and determine the proper dosing regimens of the drug to ensure that patients receive optimal care and treatment for their infections.

**Summer Research Program**

Each year, a number of students in the Bachelor of Science in Pharmacy program participate in the Faculty’s Summer Research Program. In this program, they spend the summer months performing research tasks in laboratories alongside graduate students, research associates, and professors. At the end of the summer, these students present their research to fellow students and faculty members as part of the Undergraduate Summer Research Poster Session.

This year, Kaiyu Yang received the Undergraduate Summer Research Program Poster Award. Supervised by Dr. Raymond Reilly, Kaiyu won for his poster entitled “111In Labeled Gold Nanoparticles Conjugated to Trastuzumab (111In-Au-T) Selectively Target HER-2 Overexpressed Breast Cancer Cells and Cause DNA Double Strand Breaks.”

As a result, Kaiyu is invited to present this poster at the annual meeting of the Canadian Society of Pharmaceutical Sciences next year. If he is unable to attend, the first runner-up will be invited to attend.

The first runner-up is Jonathan Shloush, supervised by Dr. Jean Gariépy, for his poster, “Polymeric nanoparticles as a self-regulated drug delivery system to target chemotherapeutic agents to human cancer – preparation and characterization.”

As well, the following students received honorable mentions for their presentations:

- **Suki Hon** (supervisor: Dr. Sandy Pang)
- **Wei-Chun Serena Hsu** (supervisor: Dr. Gang Zheng)
- **YongKyu Luke Kwon** (supervisor: Dr. Raymond Reilly)
- **Xueqing Rose Liao** (supervisor: Dr. Linda MacKeigan)
- **Yelena Vol** (supervisor: Dr. Winnie Seto)
- **Cheryl Young** (supervisor: Dr. Carolyn Cummins)

Congratulations to all of the presenters and participants in the Undergraduate Summer Research Program for a very successful summer.

**New Publication: Access to Medicines as a Human Right**

The University of Toronto Press recently published *Access to Medicines as a Human Right: Implications for Pharmaceutical Industry Responsibility*. Co-edited by Associate Professor Jillian Köhler and former Pharmacy graduate student Dr. Lisa Forman, this interdisciplinary collection grapples with corporate responsibility for the provision of medicines in low- and middle-income countries.

According to the World Health Organization, one-third of the global population lacks access to essential medicines. The eight articles contained in this book, including an article co-authored by Dr. Köhler and Pharmacy graduate Matthew Lee, question the role that pharmaceutical companies and others should play in providing affordable medicines for these people.
Every summer, students in the Bachelor of Science in Pharmacy program have an opportunity to participate in international internships. These experiences help students broaden their horizons and place their learning in a global context.

**Amber-lee Carrière** and **Erin Ready** spent the summer working in Windhoek, Namibia at the Katutura Health Centre. In this placement, Amber-lee and Erin worked at the antiretroviral (ARV) clinic pharmacy delivering specialized treatment for HIV-positive patients, where they dispensed ARVs, antibiotics, medications for the prophylaxis of opportunistic infections, and medications to treat some of the side effects associated with ARVs. In addition to their dispensing duties, they also counseled patients on their medications in English, Oshiwambo and Afrikaans, completed a placement at the Windhoek Central Hospital, and traveled to three outreach clinics where they dispensed ARVs and counseled patients in these remote and underserviced areas. Amber-lee and Erin also helped the pharmacy run smoothly by pre-packaging medications, stocking shelves, and assisting with inventory management.

Over the course of the summer, Amber-lee and Erin also conducted research on patient wait times and appointment nonadherence, using the information collected to develop several projects aimed at improving patient care at the clinic.

Asked if they would encourage other students to participate in this kind of summer internship program, Amber-lee and Erin responded, “Absolutely. In fact, we think that the program should be expanded to accommodate additional pharmacy students and more placement sites. We have had the most incredible learning experience in Namibia and think that any student would grow both professionally and personally from this experience.”

**Nancy Guo** spent the summer working at an internship with UNITAID’s Market Dynamics team at the World Health Organization headquarters in Geneva, Switzerland. Market Dynamics is an essential component of UNITAID, and is responsible for writing the landscape reports for the three disciplines (diagnostics, medicines, and preventatives) across the three diseases (HIV/AIDS, malaria, and tuberculosis) that UNITAID focuses on. Most of Nancy’s work focused on HIV/AIDS, and her primary responsibility for the summer was to write an HIV/AIDS preventatives landscape manuscript.

This project required Nancy to research and write about public health and commodity access issues, current and pipeline products of HIV/AIDS preventatives, supply and demand issues, market shortcomings, and short- and long-term market efficiencies. Over the course of the summer, Nancy was able to work on the project from its beginning and saw it progress toward an end product with a global impact.

In addition to this work, Nancy also researched and compiled a list of experts for HIV/AIDS prevention commodities, and conducted patent and intellectual property research.
Arbor Awards

The Arbor Awards were established to recognize volunteers for their outstanding personal service to the University of Toronto. Alumni and friends whose loyalty, dedication and generosity have added immeasurably to the quality of the University of Toronto experience for students, faculty, staff and alumni are recognized at a ceremony held at the President’s official residence in September.

This year, five individuals whose volunteer efforts have made a significant impact to the Leslie Dan Faculty of Pharmacy were recognized with Arbor Awards:

A graduate of the Leslie Dan Faculty of Pharmacy, Virginia Cirocco has been an active supporter of the Faculty for a number of years. Most notably, Virginia has been a member of the Dean’s Advancement Committee at the Faculty since its inception in 2008, and is a member of the Faculty’s Campaign Cabinet, where she will play a prominent role in the Faculty’s upcoming fundraising campaign.

Since graduating from the Faculty’s Doctor of Pharmacy program in 1998, Dr. Olavo Fernandes has been one of the Faculty’s most dedicated and committed volunteers. Dr. Fernandes has been a key member of a number of important committees, especially in the area of curriculum development, has served as a preceptor and mentor for countless students, and continues to play a strong role in the lives of Pharmacy students by coordinating residency programs and lecturing in a variety of courses.

In her over ten years of dedicated service to the Leslie Dan Faculty of Pharmacy, graduate Dr. Heather Kertland has personified the notion of alumni giving back to their alma mater. In addition to sitting on numerous committees and lecturing in a variety of courses, Dr. Kertland has also played a pivotal role in strategic planning and curriculum development for the Faculty’s Bachelor of Science in Pharmacy and Doctor of Pharmacy programs. Dr. Kertland has also served as a preceptor and mentor to over 50 students from the Faculty, providing pharmacists-in-training with valuable guidance and hands-on experience.

For the past four years, Dana Peoples has served as a member of the Faculty’s Golf Committee. In this capacity, Dana has played a key role in securing corporate sponsorship, raffle and golfer prizes, and the overall planning and execution of the event. During his tenure on the Committee, the Golf Classic has raised close to $200,000 for student awards, activities, and development at the Faculty.

A graduate of the Leslie Dan Faculty of Pharmacy, David Windross has been giving back to his alma mater for decades. As Vice-President of External Affairs at Teva Canada, David is a frequent speaker at a number of student and Faculty events each year. David also conducts numerous tours of Teva Canada’s facilities for a variety of students and faculty each year, and in 2011, he was appointed to the Alumni College of Electors as the Leslie Dan Faculty of Pharmacy’s representative.

Thank you to Virginia, Olavo, Heather, Dana and David for their countless contributions and tireless work to enhance the U of T experience for students, faculty, staff and other alumni at the Leslie Dan Faculty of Pharmacy.
Summer Mentorship Program

This summer, the Faculty hosted a group of high school students on campus to learn more about healthcare professions.

The Summer Mentorship Program in Health Sciences enables high school students from black and aboriginal backgrounds that have typically been underrepresented in the post-secondary educational system to experience university life and learn more about careers in the health sciences. Since 1994, close to 600 students have participated in this annual program.

This year, 26 participants were joined by 18 pharmacy student mentors to gain exposure to programs and research at the Faculty. After a brief introduction to the Faculty and the various career options available to pharmacy graduates, students were divided into two groups and sent to the labs to gain some hands-on experience about what it means to be a pharmacist.

In the Patheon Pharmaceutics Lab, Dr. Dave Dubins had participants create suppositories and press their own placebo tablets.

In the Herbert R. Binder/Shoppers Drug Mart Professional Practice Lab, Doris Kalamut led students through a number of pharmacist related activities including a role-playing exercise where students and mentors walked through a patient counseling session.

The Summer Mentorship Program students really enjoyed their fun-filled and informative afternoon at the Faculty, as did the volunteer mentors, presenters and organizers who gave their time to showcase the Faculty and the pharmacy profession.

SOAPE

With the goal of effecting positive change for the pharmacy profession, the student-run organization SOAPE (Students for Optimizing and Advocating Pharmacy Endeavours) had a very busy and productive 2011-2012 academic year.

‘Safe Meds for Seniors’ provided students with an opportunity to conduct medication safety seminars for seniors in the community. Funded by the Ontario Ministry of Health and Long-Term Care and the Ontario Pharmacists’ Association, this project allowed students help seniors better understand medication risks and side effects, storage and disposal tips, over-the-counter medications and compliance aids through a series of seminars delivered in community pharmacies.

During the Spring, SOAPE students also participated in a public awareness campaign to inform the public about the profession of pharmacy. As part of Pharmacy Awareness Week, students set up information booths on campus and in local hospitals to speak with members of the community about the importance of pharmacists and their changing role in the healthcare system.

Throughout the school year, SOAPE also hosted advocacy and educational events for undergraduate students that featured speakers from the political world, the pharmacy profession, and pharmacy regulatory bodies.

Through these activities, SOAPE is helping to create an environment where pharmacy students are able to lead activities that promote awareness of the ability of pharmacists to enhance public health and improve the healthcare system. Together, these efforts helped engage and empower students in advocating for their future profession.

SOAPE has many more events planned for the coming school year. Please visit the SOAPE website to learn more.
Bridging Programs That Work

This summer, MPP Charles Sousa, Ontario Minister of Citizenship and Immigration, visited the University of Toronto to announce $57 million in new and ongoing funding for bridge training programs across the province. In “Helping newcomers put their skills to work,” the article published on the U of T website noted the important role that bridging programs play in helping skilled newcomers put their talents to work in Ontario. In the article, U of T President David Naylor notes the importance of U of T’s bridge training plans, referencing Pharmacy’s International Pharmacy Graduate program.

Media Spotlight

Professor Heather Boon was recently featured in Health Horizon, a newsletter from the Planning, Research and Analysis Branch, Health System Strategy and Policy Division, at the Ontario Ministry of Health and Long-Term Care.

In “Focus on Complementary and Alternative Medicine,” the newsletter reviews what complementary and alternative medicine is, if it is safe, and if it is effective. The Canadian Interdisciplinary Network for Complementary & Alternative Medicine Research (IN-CAM), co-founded by Dr. Boon, and CAMLine, the evidence-based website directed by Dr. Boon, are both cited throughout the two-page story.

Dr. Boon also appeared on a recent episode of White Coat Black Art. In the “Complementary Alternative Medicine” episode of this popular CBC Radio program, Dr. Boon discussed the use of the terms “complementary” and “alternative” medicines, as well as the integration of complementary and alternative medicine providers into conventional medication practices.

In an episode of the CBC program Steven and Chris that aired over the summer, the research of Dr. Paul Grootendorst was referenced. Earlier this year, Dr. Grootendorst and a colleague from the University of Calgary published a paper outlining the potential cost to Ontario that would occur as a result of a proposed Canada-European Union trade agreement. Under this agreement, the pair of researchers suggested that it would cost Ontario up to $1.2 billion annually because of extensions to drug patents.

Dr. Grootendorst’s research was also cited in “Strong majority of Canadians oppose drug patent extension in Canada-EU trade deal: poll,” reported at rabble.ca. This article referred to Dr. Grootendorst’s research paper as support for the results of an Ipsos Reid poll that showed that 69 per cent of Canadians oppose the Canada-EU trade deal that would lengthen patent protections for brand name drugs and increase the cost of public and private drug plans in Canada by at least $2.8 billion.

AAPS Career Night

In August, the University of Toronto Chapter of the American Association of Pharmaceutical Sciences (AAPS) held a Career Night. Graduate students from Pharmacy and Pharmacology were invited to hear individuals from the pharmaceutical industry, government, and the worlds of consultancy, patent litigation and biotechnology speak about exciting careers in these fields and the journeys that brought them to their current positions.

Designed to help graduate students explore the breadth of careers available to them, this event also helped students gain a greater understanding of what they will need to do and focus on in order to secure careers in these industries.

This year’s event was a tremendous success, attracting a large group of graduate students to network with and hear from former graduate students like themselves now working in positions as diverse as Medical Liaison, Scientific Advisor, Regulatory Operations, and Professor.

Thank you to the American Association of Pharmaceutical Sciences Student Chapter at the University of Toronto for organizing this important annual event.
What’s the last book you read?
The Book Thief by Markus Zusak.

How many emails are in your inbox right now?
None. I usually delete or respond to my emails shortly after I receive them.

What was your last daydream about?
I often think of the next experiments to do in the lab.

What’s your favourite movie?
Slapshot, the french version.

What did/do you want to be when you grow up?
I remember very young wanting to be a chemist. Good thing I smartened up and became a biochemist.

What’s your secret talent?
I can play hockey (not sure if this is still a secret).

What is your academic background?
I graduated with a B.Sc in Biochemistry from McGill University and a Ph.D in Biochemistry from Université de Montréal. I then spent four years as a post-doctoral fellow at the University of Washington in Seattle.

What is your current research focus?
Understanding the communication between cells during development and diseases such as cancer.

Why did you get involved in your current research focus?
I like challenges. Beating cancer is likely the best of all.

When you’re feeling blue, what do you think of/do to cheer yourself up?
My kids. They help put everything in perspective. Bad reviews from a paper, grant rejection, bad day at work ... nothing matters when they are around me.
Awards

Multiple Awards for Dr. Carolyn Cummins

Stress is an important contributor to many chronic human diseases. In response to stress, the human body releases the hormone cortisol, which acts through the glucocorticoid receptor in almost every tissue to coordinate the appropriate cellular response to stress. Many disorders of the central nervous system – including schizophrenia, major depression, epilepsy and Alzheimer’s disease – have been linked to elevated cortisol levels.

Dr. Carolyn Cummins recently received two research awards – the Connaught New Researcher Award and the Bickell Foundation Medical Research Award – to further the work her laboratory is doing to better understand this response to stress, and to follow up on their discovery of a new protein that may influence disease progression.

The Connaught Fund New Researcher Award is a program administered by the University of Toronto to foster excellence among professors within the first five years of their appointment at the university, helping them establish a strong research program.

The J.P. Bickell Foundation provides biomedical scientists – particularly new researchers and researchers pursuing innovative projects – from Ontario universities, hospitals and scientific institutions with funding to pursue medically-focused research.

Discovered in Dr. Cummins’ lab, the novel protein arginine and glutamate rich-1 (ARGLU1) strongly potentiates the ability of glucocorticoids to increase gene expression through the glucocorticoid receptor (GR). Dr. Cummins hypothesizes that this new protein represents a novel coactivator of GR and a novel splicing protein for GR target genes. Dr. Cummins believes that studying glucocorticoid signaling will help to uncover novel proteins influencing disease progression and identify novel drug targets to combat the debilitating psychological and neurodegenerative diseases associated with chronic stress.

Understanding the mechanisms that direct and amplify glucocorticoid responses is critically important, and will help to elucidate new molecular pathways to influence glucocorticoid receptor activity and potentially lead to the development of new therapeutic agents. In characterizing the importance of ARGLU1 in glucocorticoid receptor signaling within the central nervous system, Dr. Cummins hopes to determine whether it has important implications for diseases significantly impacted by stress such as schizophrenia and depression.

These two awards from the University of Toronto and the J.P. Bickell Foundation provide Dr. Cummins and her research program with the means to carry out this important research.

Award-winning Paediatric Research

Associate Professor Anna Taddio is the recent recipient of two awards recognizing her research in paediatric pain management.

In May, the Canadian Pain Society (CPS) and the Canadian Pain Coalition presented Dr. Taddio with the Pain Awareness Award for the Best Awareness Project for Pain at the CPS annual conference.

This award was created to raise awareness about the problem of inadequately treated pain in Canada. Dr. Taddio received this award for her work on the HELPinKIDS (Help ELiminate Pain in KIDS) website and video concerning pain management during childhood vaccination.

In June, Dr. Taddio was honoured by the Canadian Paediatric Society with the Noni MacDonald Award. This award recognizes a published article that positively affected paediatric medicine.

“Pain management during vaccination: Recommendations from a Canadian clinical practice guideline,” written in collaboration with Dr. Moshe Ipp, was published in Paediatrics & Child Health. This paper describes how reducing pain associated with vaccine injections is not only humane, but also a scientifically and medically important preventative health measure, and offers evidence-based options that are easily implemented in any clinical setting.

Congratulations, Dr. Taddio, for this tremendous recognition of your important work.
Department of Family and Community Medicine Award

Dr. Vinita Arora was recently recognized by the University of Toronto’s Department of Family and Community Medicine with the “Excellence in Course/Program Development and Coordination Award” as part of the Physician Assistant Program Team. Dr. Arora is Senior Lecturer/Coordinator in Pharmacy Practice at the Faculty, a post she has held since 1998.

Since the inception of the Bachelor of Science Physician Assistant program, Dr. Arora has been instrumental in developing and delivering PAP127H – Pharmacology. This primarily online course utilizes a case-based approach to pharmacotherapy combined with elements in pharmacology and pharmacokinetics. As part of the department’s distance program, this 78-hour course employs interactive online activities and assessments. For the first two years of this program, Dr. Arora served as the Course Director and Co-Instructor for this course.

The “Excellence in Course/Program Development and Coordination” award recognizes Dr. Arora and the Physician Assistant Program Team’s outstanding contributions to the Department of Family and Community Medicine. In addition to her role in developing the course for the Physician Assistant program, Dr. Arora was also part of the Accreditation team that saw the program successfully accredited by the Canadian Medical Association last fall.

Congratulations, Dr. Arora, on this important recognition.

Association of Faculties of Pharmacy of Canada Recognition

At the Canadian Pharmacy Education and Research Conference/69th AFPC Annual General Meeting in Quebec City this summer, the accomplishments of many of the Faculty’s professors and students were celebrated. With its theme “Education and Research: Challenges and Successes,” the Conference provided an opportunity to recognize current and future research leaders through the presentation of national awards.

Professor Micheline Piquette-Miller was the recipient of the AFPC-Pfizer Career Research Award. Designed to recognize research excellence and stimulate the development of research programs in all areas of Pharmacy, this award acknowledges Dr. Piquette-Miller’s body of work in the molecular regulation of drug transport proteins. Throughout her career, Dr. Piquette-Miller has influenced pharmaceutical research on national and international levels, and this award recognizes the impact she has had within the research community and upon researchers in her field of study.

Assistant Professor Suzanne Cadarette received the Association of Faculties of Pharmacy of Canada New Investigator Award at the Conference. Created to recognize the outstanding research achievements and contributions of the junior academic members, this award is an endorsement of her research in pharmacoepidemiology and an acknowledgement of the success Dr. Cadarette has already enjoyed.

Dr. Lalitha Raman-Wilms was honoured with the AFPC Bristol-Myers Squibb National Award for Excellence in Education. This award recognizes instructors who take leadership roles in the development of University teaching and learning, and who demonstrate excellence in teaching as recognized by peers and students. As a result, it is fitting that Dr. Raman-Wilms, the Faculty’s Associate Dean, Professional Programs, was recognized for her teaching and role in the implementation of the Faculty’s new undergraduate curriculum.

Graduate student Mary Elias received the Canadian Foundation for Pharmacy-AFPC Graduate Student Award for Pharmacy Practice Research. This award is presented to the best research paper that was accepted for publication in a peer-reviewed journal the year prior to the conference. Mary won for her publication, “The impact of pharmacist interventions on osteoporosis management: a systematic review,” published in Osteoporosis International. The article, which examined the impact of pharmacist interventions in improving osteoporosis management through a literature review, revealed that pharmacist interventions may
improve bone mineral density testing and calcium intake for patients at high risk for osteoporosis.

Graduate student Nilasha Banerjee received the AFPC-Rx&D Pharmacy Student Research Poster Award and Best National Poster Award. Her poster, “Organic Anion Transporting Polypeptides (OATPs): A new molecular target for hormone dependent breast cancers,” was selected from 36 posters presented at the Conference, including poster winners from each of Canada’s Pharmacy Faculties. Nilasha’s poster documents her doctoral thesis work investigating a novel transporter mediated approach for targeting breast cancers.

Congratulations to all of these deserving award recipients.

Award for Outstanding Paper

Each year, the Controlled Release Society (CRS), the premier international, multidisciplinary society for delivery science and technology, recognizes excellence in the field of controlled release and delivery through the presentation of their annual awards. This year, Associate Professor Christine Allen was part of a team recognized with the CRS Jorge Heller Journal of Controlled Release Outstanding Paper award.

Written with Dr. David Jaffray, Michael Dunne, Joshua Rosenblat and Jinzi Zheng, “APN/CD13-targeting as a strategy to alter the tumor accumulation of liposomes” published in the Journal of Controlled Release documented the first application of computed tomography for molecular imaging. Historically, most imaging in this field has utilized magnetic resonance and radionuclide imaging technologies.

Recent studies have shown Micro-CT to be an ideal modality for performing quantitative, volumetric and longitudinal assessments of pharmacokinetics, biodistribution, and intratumoral distribution of liposomes. The successful targeting of imaging and therapeutic agents to endothelial cells involved in angiogenesis is of importance for the characterization and treatment of cancer.

This study demonstrated the viability of CT-based imaging and the benefit of integrating imaging in the drug development process to provide valuable information that is central to gaining a better understanding of drug delivery and improving therapeutic outcomes.

Congratulations to Dr. Allen and her research team on this important recognition.

Lori Vanessa Greenbaum

In August, former Faculty receptionist Lori Vanessa Greenbaum passed away after a bravely fought four-year battle with cancer.

An inspiration to those students, faculty and staff who met her, Lori was an important member of our Faculty family and the motivation for our annual “Lace up For Lori” team in the CIBC Run For the Cure. At the end of August, Lori’s friends and colleagues gathered in the Music Room at Hart House to celebrate her life.

Once again, the University of Toronto campus will play host to the CIBC Run for the Cure this Sunday, September 30th. Pharmacopoeia encourages everyone to walk, run, or donate to this important cause in memory of our friend Lori.
Admission Interviews
As part of the application process, students applying to the Bachelor of Science in Pharmacy program must participate in an interview process each Spring.

Applicants who have met minimum academic requirements and who meet the required thresholds in the Pharmacy College Admission Test will be invited to the Faculty to participate in the interview process. Interviews provide an assessment of non-academic qualities that will enable candidates to effectively undertake the professional curriculum and to go on to become effective, front-line healthcare professionals.

Interview sessions for 2013 Admission to the Bachelor of Science in Pharmacy program are scheduled for the following dates:

- Saturday, March 23, 2013
- Sunday, March 24, 2013
- Saturday, May 11, 2013

Sign up for interviewers will take place in November. If you would like to have your name added to the list of potential interviewees, please email Adm.int@phm.utoronto.ca with the subject line: “MMI volunteer.”

Upcoming Events

Undergraduate Student Awards Ceremony
Wednesday, October 3, 2012
5:30 pm
Faculty Club

Recognizing outstanding student achievement in the Faculty’s Bachelor of Science in Pharmacy program.

Thanksgiving
Monday, October 8, 2012

The Faculty is closed for Thanksgiving.

Graduate Student Awards Ceremony
November 15, 2012
5:00 pm
Faculty Club

Recognizing outstanding achievement in the Faculty’s Master of Science in Pharmacy and Doctor of Philosophy programs. RSVP to Carla Serpe at phm.grad@utoronto.ca by November 1, 2012 to confirm attendance.

Final Words from the Dean
After reading this edition of Pharmacopoeia the word that comes to my mind is AWSOME! It is so wonderful to see the great contributions and accomplishments of our students, faculty and staff and to have this platform to recognize them. It is the sustained contributions and striving to excel that results in our success as an exceptional institution for education and research.

That the QS World University Ranking for Pharmacy and Pharmacology rated us the top Pharmacy Faculty in Canada, and the 11th best in the world, is very gratifying. There are lots of caveats that come with this type of rating and I certainly recognize that rankings are far
from a hard science. I often articulate the striving to excel at our Faculty as a goal to be recognized as one of the best Pharmacy Faculties in the world. While we have much more to do in this regard, it is very motivating to have received some recognition, however imprecise, from other academic institutions. Throughout the 2012-2013 academic term, I am certain you will see us continue to enhance our educational and research programs, improve the student experience, and strive to fortify our standing.

This issue of *Pharmacopoeia* showcases some of the very best things about our Faculty - the talented instructors who are driving the role of the pharmacist in the healthcare system forward, the incredible students who are changing lives in Canada and across the globe, the researchers who are pursuing solutions to many of today’s most pressing health concerns, and the volunteers who have given so much to enhance the student experience at the Faculty.

I would like to congratulate everyone who is now enjoying new roles with the Faculty - Drs. Köhler, Shoichet, Dewhurst, Halapy, Narducci, Natsheh and Director Kalamut - and those who have assumed new roles in addition to their work at the Faculty - Drs. Krahn, Bendayan and Taddio. I also congratulate Drs. Boon, Angers, Mamdani and Sproule on their recent promotions.

Finally, I would like to welcome those students joining us for the first year of your studies at the Faculty, as well as those students who are returning to continue your education here. I hope this year will challenge you, motivate you, and provide you with all of the opportunities and tools you need to excel in all of your endeavours.

As always, I look forward to seeing all of the great things we will accomplish together this year.