



UNIVERSITY OF TORONTO
LESLIE DAN FACULTY OF PHARMACY

OFFICE OF THE DEAN

September 25, 2019

Professor Susan McCahan
Vice-Provost, Academic Programs
University of Toronto
Simcoe Hall
Toronto, ON M5S 1A1

Dear Professor McCahan,

Re: Administrative response to the external review report for the Leslie Dan Faculty of Pharmacy (LDFP)

Thank you for providing us with a summary of the external review report and for allowing us to respond to the findings. We appreciate this opportunity to reflect on our accomplishments, opportunities and future direction at the Faculty. The review provided some great insights into the programs within the Faculty, which confirmed our strengths and highlighted areas for improvement.

The response below addresses the following programs:

1. **PharmD-** The Doctor of Pharmacy (PharmD) program is the Faculty's entry to pharmacy practice educational program. The program consists of didactic, lab-based and experiential education. Students in this four-year program participate in 44 weeks of experiential learning, which develops clinical, research, communication, leadership and project management skills.
2. **PharmD for Pharmacists-** The PharmD for Pharmacists (PFP) program serves as a bridging program for pharmacists with a Bachelor of Science in Pharmacy (BScPhm) degree to meet the new PharmD outcomes and earn a PharmD degree. The PharmD for Pharmacists program is delivered online and is designed for practicing pharmacists to meet the changing needs of the profession and to prepare them for the future of healthcare practice. Flexible and customizable, this program combines online didactic courses and experiential learning to build on the knowledge and skills pharmacists obtained in their undergraduate degree.
3. **Graduate Programs-** The Graduate department offers research-intensive MSc and PhD degrees in a wide range of pharmaceutical science topics. Students work in one of two fields: Biomolecular Pharmaceutical Sciences (BMS) and Clinical, Social and Administrative Pharmacy (CSAP).
4. **Other Areas-** Other areas addressed in the response below are: Research, Leadership Growth and Communications, Faculty Complement and Financial Challenges.

Several steps have already been taken to address some of the areas of improvement highlighted in the review. Below is our administrative response to the recommendations and comments raised by the reviewers as outlined in your letter on July 9, 2019.

The following individuals contributed to the writing of the Leslie Dan Faculty of Pharmacy Administrative Response to the UTQAP external review report:

- Lisa Dolovich, Interim Dean
- Stephane Angers, Associate Dean - Research
- Sandra Bjelajac Mejia, Interim Director – Professional Programs
- Mike Folinas, Manager – Research Office
- Ryan Keay, Education Office Administrator
- Jamie Kellar, Acting Director – PharmD Program
- Rob Macgregor, Director – Graduate Department of Pharmaceutical Sciences
- Lachmi Singh, Director – Education Programs and Administrative Services
- Kathy Vu, Director – PharmD for Pharmacists Program

1. Responding to Changes in the Profession

The profession of pharmacy is undergoing substantial and rapid change in Ontario, other jurisdictions in Canada and worldwide. Recently, members of our Faculty together with other pharmacy leaders in Ontario authored a White Paper on the topic of Pharmacy in the 21st Century. The paper describes how current health care trends, evidence and policies are stimulating significant change in our health care system. There is also growing evidence of the health and cost benefits of pharmacist activities. Given that the Canadian population is aging and health related needs are increasingly more complex, pharmacists have an opportunity to encourage the use of existing and expanded scopes of pharmacy practice to positively impact the health of Canadians.

The reviewers noted that in North America there are conversations suggesting a surplus of pharmacists, thus fewer jobs for new graduates. It is not clear that such a surplus exists in Canada, however, there is a perception amongst the profession that this is the case and there is some evidence that this is true in the Greater Toronto Area (see Government of Canada Job Outlook – Pharmacist in Canada: <https://www.jobbank.gc.ca/marketreport/outlook-occupation/18196/ca>). That said, the data from the University of Toronto's Alumni Impact Survey in 2017 suggests that a large majority of LDFP alumni are finding employment. Of the 181 LDFP alumni in the active labour market surveyed 97.2% reported as being in either part-time or full-time employment. Areas of employment predominately included working in various professional capacities mostly in the health sector, followed by middle or senior management positions. Of note, currently there is a joint national collaborative led by the Association of Faculties of Pharmacy of Canada (AFPC) and the Canadian Pharmacists Association (CPhA) to review the pharmacy workforce in Canada and future workforce planning. The data from this project will be very valuable and once available will provide insight into our program design and recruitment strategies moving forward.

Recruitment and Admissions

The decline in the number of applicants to the PharmD program is consistent with what is occurring in many other Canadian Schools of Pharmacy. However, we are not aware of any robust Canadian data to explain the trend of decreasing applicants.

Despite fewer applicants, we continue to attract a high quality pool of applicants and our yield rate (those accepting an offer of admission) is high (86.4%). The percentage of the admitted pool with an 'A' average remains high and an increased number of the admitted pool have three or more years of university. This figure was 87% of the admitted pool in 2019. We have also been able to maintain high standards with our Multiple Mini Interviews (MMI) and Pharmacy College Admission Test (PCAT) scores. The PharmD program attracts applicants from across Canada. In 2019, 39.6% of applicants attended the University of Toronto while the remaining applicants attended other Canadian Universities.

We are aware that we must remain competitive, and in line with our academic plan, we plan to create a more robust recruitment strategy aimed to increase the number of high quality applicants.

Annually, our Admissions staff and faculty members attend recruitment events throughout key locations in Ontario; however, there is opportunity to selectively recruit in other provinces and perhaps internationally, in collaboration with other programs (e.g. graduate programs) offered by our Faculty. Of note, the current selection process for our PharmD program does not distinguish between domestic and international applicants. In 2019, the number of international applicants within the applicant pool increased significantly (i.e. 5.7% in 2019 relative to 2% in 2011) and resulted in a significant number of admitted international students (i.e. 11 out of 248). Given increased international interest in the PharmD Program, the admissions committee will need to consider an increase in the total numbers of students admitted annually. We will also work more closely with our Young Alumni to increase their engagement in our recruitment events.

One of the initiatives in place for the 2019–20 academic year is the introduction of the Dean's Admission Scholarship. The Leslie Dan Faculty of Pharmacy established these scholarships to be awarded to the ten candidates for admission to the PharmD program with the highest admission index scores. The scholarships will be renewed in Years 2, 3 and 4, provided the recipients maintain full-time status in the program, and an Annual Grade Point Average of at least 3.50 is achieved (with passing grades in all courses). Moving forward, Faculty leadership will continue to hone the best use of this funding to enhance our ability to attract high caliber students.

Our Communications team are key partners in our recruitment strategy moving forward specifically to develop a Leslie Dan Faculty of Pharmacy brand that profiles the depth and breadth of pharmacy and illustrates what makes the Leslie Dan Faculty of Pharmacy graduates unique. This will allow us to distinguish our programs from competitor programs and to create recruitment events to increase applicants with interests specific to our program. We have revised our PharmD lookbook for 2019/20 and have begun to use it at our recruitment events.

Our Admissions Office will continue to track yearly admissions data for the purposes of monitoring to assist the Admissions Subcommittee in their work.

Short Term Plan

- The Interim Dean will create a leadership position that will focus on recruitment and admissions for all programs at the Leslie Dan Faculty of Pharmacy.*

- The PharmD Program Directors will continue to work with the Communications team to review and update recruitment materials, events and practices to incorporate new branding. This includes leveraging our social media presence to profile the programs, students and alumni.
- The PharmD Program Director will work with the Registrar's Office (Admissions staff), the Communications team as well as the Admissions Committee to enhance our recruitment strategy in time for the next PharmD Program admissions cycle. This may include attending high school recruitment events to inform students about the diverse opportunities available in pharmacy careers.*
- The PharmD Program Director will work with the Faculty's leadership team regarding enrollment planning specifically to consider class sizes and the number of admitted domestic and international students.*
- The PharmD Program Director will work with the Registrar's Office, Awards Committee and the Advancement Office to explore opportunities to enhance diversity through recruitment practices and scholarships.*
- The Admissions team will determine what other information (e.g. applicant and admit data) we are able to collect that may help with enhancing our recruitment practices.

Medium Term Plan

- The Faculty's leadership team will continue to work with stakeholders (i.e. Association of Faculties of Pharmacy Canada, Canadian Pharmacists Association, Ontario Pharmacist Association, Ontario College of Pharmacists, and the Pharmacy Examining Board of Canada) to monitor trends in the pharmacy workforce and to ensure that we continue to prepare students in the professional programs to meet the needs of Canadians.
- The Professional Program Directors will work with our Advancement Office to create a survey related to employment to be circulated to our recent alumni (in the last 10 years) to gather data on the employment opportunities post-graduation.*
- The Professional Program Directors will complete an environmental scan of admissions requirements and practices in the other Schools of Pharmacy in Canada and select cognate health professional programs.
- The Professional Program Directors and the Admissions team will continue to monitor admissions data (applicant numbers, demographics, CGPA, acceptance rate, and reasons applicants decline an offer of admission) looking to identify trends towards quality improvement and enhancement.
- The Professional Program Directors will evaluate the impact of any changes in recruitment practices (e.g. applicant numbers, diversity of applicants and admitted students pool).

Long Term Plan

- The PharmD Program Director will evaluate the predictive validity of admission requirements to student performance in courses, graduation rates and the PEBC exam.

*Items identified with an asterisk may result in organizational/policy changes. These items will have financial resources implications such as new administrative hires and initiatives.

Career Planning

In our Academic Plan Forward Together 2016-2021, one of the Strategic Focus Areas (Priority 1) is to Advance Education Programs that Develop Leaders for Diverse and Emerging Careers. Our objectives and priorities include that by 2021, our core programs and multiple learning pathways will prepare our graduates for increasingly diverse career options and practice innovation. We have committed to create multiple individualized academic pathways that leverage the diversity and expertise of our faculty members and prepare students for a variety of emerging careers and practices. With the plan to map out multiple pathways within and across programs (e.g., majors and minors, certificates, joint degrees, logical progression from one program to another). At the same time, we will educate prospective and current students on alternate career paths, beyond community and hospital pharmacy, that are accessible to them with a PharmD degree. Incorporating the use of an individual student portfolio or learning plan will help students to navigate their learning path and to explore possible careers.

In preparation for the changing demands of the profession, the Professional Programs will strive to continue to meet the needs of the pharmacists of the future. Based on the Pharmacy Blueprint released by CPhA in 2017, there is strong interest in specialization in pharmacy. In the next five years, the PFP program plans to create educational pathways in several areas (e.g. oncology, cardiology, research, quality improvement) to support development of specialized knowledge so that graduates of the program are prepared to take on advanced practice roles in both traditional and non-traditional careers in pharmacy. The Professional Program Directors will work together to ensure that created educational pathways are adaptable and accessible to students in both PharmD degree programs.

We will continue to ensure that our PharmD and PharmD for Pharmacists students have an expansive choice of experiential opportunities. We will work to increase access to and promote the wide range of non-direct patient care rotations for those students interested in careers that may not be traditional patient-care facing roles.

Short Term Plan

- The Professional Program Directors will work with the Director of Office of Experiential Education, to facilitate and encourage students to leverage the career development workshops available to them through the Centre for Career Development and the Centre for International Experience.
- The Professional Program Directors will work with the Director of Experiential Education and Career Development Office to refresh/co-create new workshops offered by the Office of Experiential Education without duplicating what is offered centrally.*
- The Professional Program Directors will work with the Education Office to help inform the curriculum renewal work. This includes exploring ways to create individualized academic pathways for students that leverage the diversity and expertise of our faculty members and prepare students for a variety of emerging careers and practices.
- The PharmD for Pharmacists Program Director will explore the development of specialized educational pathways (e.g. transcript annotation or certification).
- The Office of Advancement, in partnership with the Professional Program Directors and Preceptor Engagement Coordinator will create an Alumni Career Series where Alumni present and dialogue with students regarding their career path.*

Medium Term Plan

- The Faculty advisor will continue to support the student led Pharmacists Mentorship Program.

- The Professional Program Directors will explore the need for a faculty led mentorship program for students and alumni of the professional programs.*
- The Professional Program Directors will work with the Director of the Office of Experiential Education to explore Centre for Career Development Office student services use data to inform the need for an in-house Centre for Career Development that serves all the academic programs.*
- The Professional Program Directors will work with the Education Office to help develop a system of individual student portfolios or learning plans.

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2. Improving the PharmD Program

PharmD Curriculum

Over the last 10 years, the pharmacy profession and our entry-to-practice Doctor of Pharmacy (PharmD) and Post-baccalaureate PharmD programs have experienced significant transformations. The transition to the new entry-to-practice Doctor of Pharmacy (PharmD) program included new admissions processes, and major curricular changes including new assessment practices and expanded experiential offerings. The transition to the new PharmD for Pharmacists (PFP) program included a major modification of the Post-baccalaureate PharmD Program to the current bridging program for graduates with a Bachelor of Science in Pharmacy. These changes resulted in students achieving the Doctor of Pharmacy Degree (PharmD) through the completion of one of the two current professional degree programs (PharmD or PharmD for Pharmacists program). We acknowledge the reviewers comments that some partners expressed concerns that our students are less prepared due to the length of our institutional rotations. However, data provided by the Ontario College of Pharmacists shows that our graduates outperform non-University of Toronto pharmacists practicing in Ontario on the jurisprudence exam, practice assessments and have fewer reported conduct related complaints. An analysis of the PEBC results for the past five cohorts reveals the following students pass rates on both Parts I (92.4-97.9%) and II (90.3-95.5%) of the examinations, and an overall PEBC certification rate of 85.8-93.8%.

Although, continuous quality improvement is at the heart of how we continue to transform the professional programs, we are at the initial stages of a substantial effort focusing on program visioning and curriculum renewal to inform our next 5-10 years. This is a very exciting time and opportunity in our Faculty to revise and align our professional programs, including graduate program opportunities, to prepare graduates to meet the changing health care needs of our society.

In the professional programs, it is anticipated that the creation of specialized pathways will complement the PharmD degree and help students be better prepared for hospital practice where specialization is more common.

The professional programs will endeavor to create better alignment between the two curricula. For example, the PharmD for Pharmacists program offers a course, Foundations of Advanced Pharmacy Practice, early in the curriculum to provide foundational knowledge and skills expected of pharmacy practice in Canada, and the PharmD Program offers a Preparation for Advanced Pharmacy Practice Experience (APPE) course. There is opportunity to better align these course offerings. Alignment efforts included the PFP Program conducting a needs assessment where students who had completed at least

one APPE rotation were invited to participate. Based on the results, it was determined that there is a need to better prepare PFP students pre-APPE rotations. The PharmD for Pharmacists program plans to develop resources and leverage the PharmD Program's Preparation for APPE (PHM330) course to better prepare students prior to experiential learning rotations. Similarly, the PharmD Program, based on student and faculty feedback, is considering the need for a Foundations to Pharmacy Practice course as is currently offered in the PFP program.

Short Term Plan

- The Professional Program Directors will work with the Leslie Dan Faculty of Pharmacy Education Office to help inform the curriculum renewal work. This includes preparation for a comprehensive review of the experiential curriculum.*
- The Professional Program Directors will work with the Director, Office of Experiential Education to finalize the preceptor engagement and site visit plans.*
- The Professional Program Directors will continue to work with the Director, Office of Experiential Education to review and respond to preceptor and site-specific student and faculty feedback.
- Interim Director Professional Programs, will continue to work with the Experiential Education Quality Assurance Committee and the Director of the Office of Experiential Education to review experiential course coordinator, preceptor and student feedback and inform the experiential course offerings.
- The Office of Experiential Education will continue to host "Spot light on Non-Direct Patient Care" events to encourage students to enroll in unique rotations that may contribute to diverse career opportunities.
- The Office of Experiential Education will continue to work with the Centre for International Experiences to create opportunities for international non-direct patient care rotations beyond the eight countries currently available to students.
- Led by the PharmD for Pharmacists Office, create a Peer-to-Peer Mentorship Program to enhance PharmD for Pharmacist student experience and help foster knowledge of the diverse areas of pharmacy practice that our students come from.*
- The Professional Program Directors and the Education Office will grow the PharmD for Pharmacists Program through the addition of courses to enhance the learning experience and to align courses in the PharmD and PharmD for Pharmacists Programs.*
- The Professional Program Directors and the Education Office will explore technology to enhance delivery of online learning in both the PharmD and PharmD for Pharmacists programs.*

Medium Term Plan

- Led by the Interim Director Professional Programs, the Experiential Education Quality Assurance Committee, working with the Office of Experiential Education, will leverage internal preceptor and site-specific data and Ontario College of Pharmacists Site and Pharmacist Practice Assessment data to ensure that all PharmD students have experiential rotations in exemplary community practice sites.
- The Professional Program Directors will work with the Education Office to implement two to three curricular paths that help interested students develop in specific career opportunities.*

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3. Graduate Programs

Curriculum Review

The Graduate Department is presently developing courses to provide a common experience for all students in the Graduate program. The courses will provide students in the Biomolecular Pharmaceutical Sciences (BMS) and Clinical, Social & Administrative Pharmaceutical Sciences (CSAP) fields the opportunity to explore and gain valuable insight into the major areas of Pharmaceutical Sciences during the students' first year in the program. One of the common courses currently under development is 'Fundamentals in Pharmaceutical Sciences' which will be mandatory for students enrolled in both the BMS and CSAP fields, whose first registration takes place in the Fall 2020 semester.

The Graduate Department will also establish a Graduate Curriculum subcommittee for 2019-2020 academic year. The mandate of the Graduate Curriculum subcommittee will be to review the entire curriculum, including courses, exams, seminar requirements, and all other graduation requirements. The Graduate Curriculum subcommittee will make recommendations to the Graduate Education Committee, in consideration of the needs of the students, for the development of a more comprehensive list of courses and requirements for the fields in our department. This will be the first formal curriculum renewal process undertaken by the Graduate Department. If a major renewal of the curriculum is the outcome of this process, it will likely take three or four years to fully implement. The budget and personnel implications anticipated are workload implications for faculty to develop and teach additional courses and to participate in the Graduate Curriculum subcommittee.

Short Term Plan

- Graduate Education Committee and Faculty wide Curriculum and Assessment Committee to approve courses currently under development that are aimed at providing a common experience for all students in the Graduate Program.

Medium Term Plan

- Graduate Department to offer courses aimed at providing a common experience for all students whose first registration is in the Fall 2020 semester.*
- Establish Graduate Curriculum subcommittee to review all graduate courses and curriculum with the aim to increase the breadth and quantity of courses available to graduate students.

Long Term Plan

- Graduate Curriculum subcommittee to make recommendations to Graduate Education Committee for a more comprehensive list of courses.
- Graduate Curriculum subcommittee to develop and recommend requirements for the graduate fields.
- Graduate Department to implement changes to courses and requirements recommended by Graduate Curriculum subcommittee and approved by the Graduate Education Committee and Faculty Council.*

*Items identified with an asterisk may result in organizational/policy changes. These items will have financial resources implications such as new administrative hires and initiatives.

Time to Degree Completion

The Graduate Department time to degree completion statistics, indicate that on average students at the LDFP are completing the requirements of the programs within the recommended timelines set by the School of Graduate Studies (SGS) and in line with other life science divisions at the University of Toronto. The Graduate Department will continue to work to improve the degree completion times by using the SGS Improving Doctoral Time to Completion: Best Practices for Doctoral Students to drive accountability related to time to degree completion and sending out periodic reminders to the student and supervising professors of the expected graduation times. In line with the requirements of SGS, the Graduate Department requires every student to have at least one meeting with the thesis committee every academic year. This helps the student and professor move the project along; however, other measures will be implemented to shorten the median time to graduation. The Graduate Department plans to implement reminders at strategic junctures in the students' progress through the program. For example, adding a statement on the Advisory Committee form that reminds the student and the committee of the expected graduation times, a statement about the expected graduation date, and to ask the committee and student to provide a clear rationale if the target will not be met. The Graduate Department will implement this system of reminders immediately and monitor the results and feedback as part of the Faculty's continuous quality improvement process.

If it appears that the change is not effective, we will need to find another approach. An example of the next level of monitoring the students' progress would be to implement an Academic Standing Committee similar to the one in the undergraduate Pharmacy program. This committee is mandated to monitor the progress of the students in the program. A similar structure could be implemented for the Graduate Program and is being explored but had not yet been discussed by the Graduate Education Committee. Clearly, balancing the supervisor-student privilege and the authority of any such committee will have to be carefully considered. Personnel implications anticipated are workload implications for an Academic Standing Committee.

Short Term Plan

- Utilizing SGS Improving Doctoral Time to Completion: Best Practices for Doctoral Students to drive accountability related to time to degree completion.
- Implement periodic reminders to students and supervising professors of the expected graduation time.

Medium Term Plan

- Graduate Program to monitor time to degree completion data as well as student and faculty feedback on an on-going basis, but especially over the next two-three years as part of the continuous quality improvement process.

Long Term Plan

- Graduate Education Committee to evaluate results on time to degree completion for students and consider alternative strategies if necessary, such as an Academic Standing Committee.*

*Items identified with an asterisk may result in organizational/policy changes. These items will have financial resources implications such as new administrative hires and initiatives.

Professional Skills Development

Professional skills development activities are offered by the two student organizations in the Department, the Pharmaceutical Science Graduate Students Union (PSGSU) and the University of Toronto Student Chapter of the American Association of Pharmaceutical Science (AAPS). These groups receive financial assistance for their efforts from the Graduate Department. In consultation with SGS it was also recognized that Graduate Professional Skills (GPS) courses are also offered centrally by the University. The Graduate Department will continue to discuss the specifics of what we can offer without duplicating the offerings available elsewhere in the University. We will discuss this with the students and faculty, and then discuss at the Graduate Education Committee. Based on those discussions we may implement more offerings for professional skills development including presentations from alumni and strengthening our links with the Research office to help students with publishing their work. The budget and personnel implications will depend on the outcome of these discussions. Implementing an Individual Development Plan for each student may make it easier for the department to monitor the extent to which the students participate in these activities and to make recommendations for students to participate in specific courses.

Short Term Plan

- Discuss professional skills program offerings with students and faculty and gather recommendations.

Medium Term Plan

- Graduate Education Committee to discuss recommendations made by students and faculty regarding professional skills programs.
- Graduate Department to implement any recommendations (potential programs, additional supports, etc.) made by the Graduate Education Committee.*

*Items identified with an asterisk may result in organizational/policy changes. These items will have financial resources implications such as new administrative hires and initiatives.

Student Funding

Issues related to student funding are part of a larger problem concerning the financial wellbeing of graduate students in Toronto. Starting in the next academic year (2020 – 2021), to facilitate the financial planning of the students, the Faculty will no longer include the tuition amount in the stipend paid to the students. Instead, when possible, the tuition amount that is currently included in the stipend will be paid by the Faculty directly to the University. This will not be possible for all students as some students receive awards in lump sums at times that are not in synchronization with the university payment schedule. We will work with the Financial Office at the LDFP to find a way to make the money allocations to these students more regular throughout the year.

Short Term Plan

- The Faculty will no longer include the tuition amount in the stipend paid to students, rather the tuition amount will be paid directly to the university.
- The Graduate Department will begin discussions with LDFP Financial Office to evaluate methods to make monthly money allocations to students more uniform throughout the year.

Medium Term Plan

- LDFP Financial Office to implement changes that ensure students have more frequent access to money allocations.*

Long Term Plan

- The Faculty to discuss possibility with SGS and Planning and Budget Office about an extension to the University's deadline to pay tuition from end of April to end of May.*
- Graduate Department to pursue larger cultural shift where students are given more opportunity to pursue other income streams including teaching assistantships. This may be one of the items included on the Individual Development Plan.

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4. Research

Establish Research Office

The Faculty recognized the need to support our faculty with their research programs and approved the creation of a new role, in 2018, to be under the supervision of the Associate Dean, Research. In January 2019, we hired a Manager, Research Administration to lead the Research Office and all research-related activities within the Faculty of Pharmacy. The key responsibilities were to provide oversight and management for research operations, develop key priorities, goals and strategic planning. In addition, the Research Office would support to the faculty for pursuing research funding opportunities, grant review support, develop outreach programs and develop metrics to evaluate the research impact.

In the first six months of recruiting the Manager, Research Administration, the Research Office has conducted a needs analysis which involved one-on-one meetings with all tenure-track faculty. The results of the analysis have resulted in the development of a mandate for the office with long and short-term priorities to achieve the goals. The mandate focuses on assisting researchers to conduct excellent research, develop strategies to respond to emerging areas of research, attract high-quality trainees, grow our research impact and to recognize researchers for excellence in their fields of research. In addition, the Research Office has developed six internal funding programs (seed funding) and is currently in the process of developing a Faculty Strategic Research Plan.

In order to achieve the mandate set out by the Research Office, we work closely with the Communications and Advancement Offices to celebrate success stories and promote the research excellence of our talented faculty members. This is achieved by preparing articles on major news, including publications, successful grants, and awards, and advertising these successes on our website, social media and through our internal communication media (e.g. PharmSci Research update, Pharmacopoeia, RXcellence,

etc.). The Advancement Office also conveys these successes to our alumni and donors through various communications and campaigns.

A preliminary plan to address these key areas of concern:

Short Term Plan

- Recruit Manager, Research Administration position and establish a formal Research Office
- Research Office to identify, promote, and facilitate research funding opportunities*
- Research Office to work to improve grant and program development (administrative reviews, budget reviews, etc.) *
- The Research Office, in collaboration with the Finance Office, will improve business processes for increased efficiency and compliance (templates, process documents, etc.)*
- Research, Advancement and Communications Offices will work to improve communication and celebrate research successes.
- Communications Office to develop workshops on increasing presence in social media.
- Research Office to define our research impact to academia and society.

Medium Term Plan

- Research Office to increase research funding at the LDFP (through personalized funding opportunities, grant workshops).
- Research Office to develop strategies that enable researchers to apply for more opportunities.*
- Research Office, Innovations and Partnerships Office and MaRS Innovation to increase commercialization activity in research.*
- Research Office, Communications Office, Educational Office, Faculty, trainees and Dean to develop strategies to collect and communicate our research impact in publication material.*

Long Term Plan

- Research Office to encourage collaborations and partnerships with academia, industry and foundations.
- Research Office and Advancement Office to increase alignment of research with fundraising opportunities.
- Research Office to liaise with Initial Public Offering commercialization team and MaRS Innovation to facilitate regulatory processes.
- Research Office and Faculty to catalyze and steward research partnerships (teams and networks).*
- Research Office to build a supportive research environment and identity.
- Research, Communications, Advancement Offices and Central Communications to connect our research locally, nationally and internationally.*

*Items identified with an asterisk may result in organizational/policy changes. These items will have financial resources implications such as new administrative hires and initiatives.

Improved Facilities and Space Management

The Faculty has recently recruited a Director, Facilities Management who is responsible for space/facilities management. In conjunction with the Facilities Office, a space management plan will be developed by using guiding principles and terms of reference to address space governance in all research space. The Faculty will use the Council of Ontario Universities (COU) space guidelines to address the research space

issue and is currently in the process of completing a space inventory with Campus and Facilities Planning. The new space management plan will enable us to conduct reviews of space allocation in a timely manner and allocate space based on the COU formula. This will ensure researchers are not restricted and can expand their research enterprises. The space management plan will also take into account how to improve student spaces in our building including a plan to redevelop our lobby/atrium area.

Short Term Plan:

- Recruit Director, Facilities Management.
- Facilities Management, Research Office, CAO, Dean and Educational Office to develop principles for space allocation.
- Facilities Management, Research Office, CAO, Dean and Educational Office to develop Terms of Reference for space requirements for administrative, research and education.
- Facilities Management, Research Office, CAO, Dean and Education Office to develop committee for meeting timelines, including ad hoc meetings.

Medium Term Plan:

- Facilities Management, Research Office, CAO and Education Office to implement principles and recruit committee for space management.
- Facilities Management and CAO to create a plan to improve student spaces in our building including a plan to redevelop our lobby/atrium area.
- Facilities Management, Research Office, CAO and Education Office to review process annually and adjust as required.

Equipment Inventory

The Research Office has also undertaken an equipment inventory project to identify equipment available within the Faculty, as well as its location, age and potential for sharing. In addition, a number of successful Canadian Foundation for Innovation (CFI) grants have been attained by the Associate Dean, Research to help increase the core facilities within the Faculty. The review committee has identified the shared equipment model that the Centre for Pharmaceutical Oncology has implemented as a strength. Extending this model, we are working on developing core equipment facilities that would benefit researchers within the Faculty as a whole. These facilities would be maintained by our in-house Laboratory Technician and repairs/service contracts would be managed by the Research Office. The Research Office also offers researchers the opportunity to apply for funding (up to \$5,000 per quarter) for small equipment purchases, upgrades, and repairs under the Small Equipment Grant. By developing a suite of core facilities, we can ensure equipment is utilized to its full potential and reduce the burden of large scale individual equipment on individual researchers.

Short Term Plan:

- Research Office to take an equipment inventory.
- Research Office, Facility Management, Dean to identify core equipment and develop core facility locations.*
- Facilities Management, Research Office, CAO, Dean and Faculty to develop Terms of Reference for use, maintenance and service contracts.*

Medium Term Plan:

- Facilities Management, Research Office, CAO and Faculty review equipment and processes annually and adjust as necessary.*

- Facilities Management, Research Office, CAO and Faculty discuss need for new equipment.*

*Items identified with an asterisk may result in organizational/policy changes. These items will have financial resources implications such as new administrative hires and initiatives.

Ethical Research Training

The responsible conduct of research (RCR) is an integral part for all researchers and trainees within the Leslie Dan Faculty of Pharmacy. The LDFP does not take this matter lightly and expects the Faculty to adhere to the highest ethical standards in research, per the University of Toronto Policy on Ethical Conduct in Research. All Faculty and staff who are directly involved in research are required to take the basic training courses at the onset of being hired. These courses include Workplace Hazardous Materials Information System (WHMIS), Fire Safety, Autoclave (Biomolecular Sciences only), Cryogenics Awareness (Biomolecular Sciences only) and BioSafety Awareness. In addition, the Research Oversight and Compliance Office (ROCO) and the Environmental Health and Safety Office (EHS) may mandate additional courses or refresher courses. Faculty and staff are also actively involved with the LDFP Joint Health and Safety Committee (JHSC). The JHSC meets quarterly and provides updates on any changes to processes and training, which is communicated to each lab. Finally, faculty within the LDFP must submit research ethics applications for current and ongoing projects. These applications are reviewed and approved by the University of Toronto Research Ethics Board and are scrutinized to ensure both Provincial and Federal requirements, including best practices, are adhered to. This ensures faculty are up to date on RCR requirements. Faculty training is currently tracked by the EHS and ROCO offices, while the Research Office tracks training for postdoctoral researchers and student training is tracked by their respective faculty supervisors. The Research Office will be reviewing the tracking process and work to ensure it is more effective and streamlined.

Short Term Plan

- Research Office to review the current list of required safety courses (EHS and ROCO delivered).
- Research Office, University of Toronto Research Office and Compliance Office and the Environmental Health and Safety Office to identify core courses that require refreshers.
- Research Office, University of Toronto Research Office and Compliance Office, Environmental Health and Safety Office, CAO and Faculty mandate requirement for core course refreshers every 5 years by all faculty and staff.*
- Research Office to review process for faculty/staff reporting on core courses/certificates needed to conduct research with appropriate stakeholders.

Medium Term Plan

- Research Office, University of Toronto Research Office and Compliance Office and the Environmental Health and Safety Office to coordinate with EHS and ROCO to develop a suite of research training courses for faculty that include core courses/certificates required to conduct research.

*Items identified with an asterisk may result in organizational/policy changes. These items will have financial resources implications such as new administrative hires and initiatives.

The addition of key roles within the Faculty has expanded our ability to provide additional support to our researchers. The Facilities Management Office will guide the establishment of a space committee to maximize the use of our research space. The Research Office will help to identify funding opportunities,

to provide support with pre- and post-award administration, work with the necessary central offices to reduce the burden and increase efficiencies for our researchers. These key additions are an important step in providing the support required by our faculty members and to ensure they can continue to excel with their research endeavors.

5. Leadership, Growth and Communication

Workplace Culture

We recognize that morale at the Faculty is low but are pleased that the reviewers noted that morale is improving. There are a number of initiatives underway to foster leadership, revise personnel and management processes, manage and encourage positive growth and improve communication.

An outside consultancy firm was retained in November 2018 to conduct a Workplace Culture and Needs Assessment. The planning and execution of this work took place during late 2018 and early 2019 and included the input of a broad cross section of Faculty constituencies. The Assessment had a mandate to examine a variety of aspects of the workplace that impact staff morale and the extent to which the working environment is respectful and inclusive. The questions covered a range of topics, including resources, IT, facilities and workspace; LDFFP processes and workflows; and how to ensure a collaborative and supportive work environment.

The Interim Dean received a draft report in July 2019 and is expecting to receive a final report in October 2019. The report provides specific guidance and recommendations in the areas identified for improvement. A committee will be struck in the Fall of 2019 to address how to move forward with implementing recommendations in the report.

The Dean's office will continue to use channels of communication to clarify and reinforce staff and faculty roles. The annual Faculty and Staff Meeting scheduled to take place in Fall 2019 will provide an ideal forum to encourage open discussion.

The reviewers noted the need for faculty oversight of experiential learning. In the current organizational structure the Interim Director of Professional Programs provides academic leadership of the Office of Experiential Education, the Associate Dean, Academic will provide oversight when appointed. Additionally, each type of experiential rotation is assigned a faculty member as course coordinator. Further, the Experiential Education Quality Assurance Committee will continue to work with the Director of the Office of Experiential Education to review course coordinator, preceptor and student feedback and inform the experiential course offerings.

With regard to communication of workload policies, the Faculty is undertaking a review of the current workload policy and has commissioned a committee to review the current policy and make recommendations. The goal of this review will be to ensure that the policy promotes fair and equitable distribution of workload, increases transparency around workload allocation, and improves guidance and communication with respect to annual progression through the ranks assessment processes and results.

Short Term Plan

- The Interim Dean will implement a plan to address the Workplace Culture and Needs report including the creation of a small working group of leaders at the Faculty to review the report.*
- The Interim Dean and committee will review the current workload policy and make recommendations. The invitation to participate on this committee reviewing the workload policy will include a circulation of the policy to all faculty and so will serve as an opportunity to communicate the policy to everyone.*
- Annual Faculty and Staff Meeting to have open dialogue.

Medium Term Plan

- The group of leaders (as referenced above) will develop a more detailed implementation plan to improve morale at the Faculty.*

*Items identified with an asterisk may result in organizational/policy changes. These items will have financial resources implications such as new administrative hires and initiatives.

Increasing the Sense of Community at the Faculty

There are a number of strategies in place to help increase the sense of community among faculty. Increased communication was identified as one way to improve the sense of community. In addition, one reason identified for a lack of community among faculty has been the dissolution of the three Divisions (Biomolecular Pharmaceutical Sciences, Clinical, Social and Administrative Pharmacy and Pharmacy Practice) previously in place.

Short Term Plan

- Communications Office to launch Faculty brand identity in September 2019. This new identity is aimed at building cohesion among all members of the faculty including faculty, staff and students.*
- The Communications Office will launch a new website in December 2019. This will also provide a landing place for our Faculty personnel who can better be aware and relate to others in the Faculty.*
- The current Graduate Field Coordinator role for our two Fields (Biomolecular Pharmaceutical Sciences and Clinical, Social and Administrative Pharmaceutical Sciences) has been expanded from a narrow focus on our graduate program to include a broader focus on general researcher coordination. This role is an academic role designed to improve communication and collaboration among faculty within our two fields with the aim of contributing to building community among our faculty.*

*Items identified with an asterisk may result in organizational/policy changes. These items will have financial resources implications such as new administrative hires and initiatives.

6. Support for the Faculty Complement

The Faculty had an Interim Dean in place during 2018-19 and so hiring decisions were put on hold pending the expected arrival of a permanent Dean on July 1, 2019. However, the person expected to take up this

position withdrew just prior to arrival and so the Faculty will continue with an Interim Dean for the 2019-20 academic year. However, in recognition of the shortage of faculty members, lack of formal mentoring for faculty and other aspects of delivery of our educational programs the Provost approved the hiring of an Associate Dean, Academic in August 2019.

Short Term Plan

- The Dean's Office will lead the search for the Associate Dean, Academic during Fall/Winter 2019-20. This position will be designated as a teaching stream position so we have a teaching stream leadership position, add to our teaching stream complement and provide consolidated leadership for our educational programs.*
- The Education Office will lead the Professional Programs curriculum renewal and will make the Faculty better able to identify our needs for our faculty complement, as we redevelop our curriculum over the academic year.*

*Items identified with an asterisk may result in organizational/policy changes. These items will have financial resources implications such as new administrative hires and initiatives.

7. Addressing Financial Challenges

We appreciate the reviewer's positive feedback regarding our financial transparency and healthy operating reserve. The Interim Dean plans to continue to improve processes to provide financial transparency at the Faculty. We have been assessing the ramifications of the deficit in tuition revenue and will model out the ramifications of this in our revised Annual Budget Report in Fall 2019. We are planning for a number of one-time costs in the near term that will be covered through use of our operating reserve funds. These funds will be used for much needed building repairs, enhancing our physical spaces and other identified priorities. We expect to still have a healthy operating reserve even taking into account some one-time expenses noted by the reviewers.

Considering current population demographics and health care trends, our admissions yield rate (those accepting offer of admission), and historical and current student enrollment numbers, we do not expect a reduction in enrollment in the next 5-10 years.

Thank you for the opportunity to provide a response to the external review report. We look forward to all our faculty and staff being involved in shaping our future direction at the Faculty.

Sincerely,



Lisa Dolovich, BScPhm, PharmD, MSc
Professor and Interim Dean

cc.

Daniella Mallinick, Director, Academic Programs, Planning and Quality Assurance
David Lock, Coordinator, Academic Planning and Reviews