In Ontario, patients with complex needs account for more than 60 per cent of healthcare spending. Majority of these patients see six or more physicians and are on an average of 13 different medications. These patients, who often have one or more chronic condition like diabetes, congestive heart failure, and chronic obstructive pulmonary disease, would likely benefit from increased pharmacist involvement in the coordination of care. Current practice does not proactively include pharmacists, particularly those working in the community, as part of patient care teams that manage transitions between areas of healthcare.

“We haven’t really leveraged pharmacists enough,” says Sara Guilcher, assistant professor at the Leslie Dan Faculty of Pharmacy who is looking at ways to better integrate pharmacists to enhance patient care. “Medication management is at the core of a pharmacist’s clinical practice and contribution to patient care, so there is an opportunity here for pharmacists, especially those working in the community, to play an important role in providing care to patients with complex health and social needs.”

To lead this work, Guilcher is collaborating with Health Quality
Ontario (HQO) as an embedded clinician researcher, supported by a salary award from the Canadian Institutes for Health Research (CIHR). HQO’s focus on improving health of patients with complex needs through coordinated care and timely, relevant research provides Guilcher with the platform and connections she needs to co-develop research questions and deliver analyses that can help achieve a higher quality of care.

“We know that transitions from one sector of the healthcare system to another are the most vulnerable periods for patients,” says Lee Fairclough, vice president, quality improvement at HQO. “If these transitions aren’t well managed, the result could be a worsening of patient conditions and hospitalizations that might have been avoided.”

As an embedded clinician researcher, Guilcher can also offer emerging scientists under her academic supervision the opportunity to participate in this kind of applied research. Guilcher explains that the thinking behind the embedded researcher role came out of a “growing recognition that we train students in the peer model often without making important links to the end user. We need to develop research questions in collaboration with the people who rely on the research to make policy or system-level decisions, and this is a great way to do it.”

Faraz Razzagh, PharmD 1T8, received the 2018 Student of Distinction Award from the Ontario Pharmacists Association (OPA). “Faraz’s leadership skills and passion for patient care have set an outstanding example, for both his peers and for practising pharmacists, of what a pharmacist-in-training can accomplish,” says Mike Cavanagh, chair, Board of Directors, OPA.

“To be recognized among the ranks of many other award winners who have contributed so much to the profession of pharmacy, I am truly grateful to share this honour,” says Faraz Razzagh. “For me, this award is a symbol of everything I have to look forward to in my career as a pharmacist. I hope winning this award will further enable me to increase the pharmacist’s valuable role in healthcare.”

ONTARIO STUDENT OF DISTINCTION

2021: FORWARD TOGETHER

Our Academic Plan priorities

- **Advance** education programs that develop leaders for diverse and emerging careers
- **Lead** innovations in Pharmacy and Pharmaceutical Science education and learner engagement
- **Grow** our scientific impact
- **Build** a distinct organizational identity
- **Improve** health through knowledge translation and influence on policy
Christine Peragine is a third year PhD student at the Leslie Dan Faculty of Pharmacy and a clinical pharmacy research fellow at Sunnybrook Health Sciences Centre in Toronto. Thanks to the donor supported Shaping Student Life and Learning Fund, Christine attended the Canadian Association for Clinical Microbiology and Infectious Diseases conference and won the student oral presentation award for her work studying antimicrobial stewardship in a major hospital.

**Explain the focus of your research**

Antimicrobial resistance (AMR) presents a serious threat to global public health. Since antibiotic misuse is one of the strongest drivers of resistance, hospitals across Canada have implemented Antimicrobial Stewardship Programs (ASPs) in an effort to curtail misuse and contain the resistance problem.

My PhD thesis evaluates the impact of Sunnybrook’s multidisciplinary Antimicrobial Stewardship Program (ASP) and aims to provide a comprehensive assessment of the temporal relationship between antimicrobial uses of over 15 antibiotic agents/classes on the susceptibility patterns of over 15 bacterial pathogens.

**What is your most exciting finding so far?**

We are most excited to see that the implementation of our program was associated with significant and sustained reductions in the prevalence of hospital-acquired antibiotic-resistant organisms (ARO) and multi-drug resistant organisms (MDRO). We compared this to rates of resistance in community-acquired isolates and we found that rates of community-acquired ARO and MDRO increased significantly over the same time period.

These findings are significant because studies have demonstrated a positive impact of antimicrobial stewardship on prescribing behaviors, but there is a shortage of high-quality data describing the impact of these interventions on resistance itself.

**How has donor support helped you in your academic journey?**

Without donor support, I would not have been able to attend the conference in Vancouver to share the results of my research with key decision makers like doctors, pharmacists, and hospital administrators.

Winning an award at such a renowned national conference was such an honour! It tells me that I am making an important contribution to research in infectious disease and public health, and that my research has the potential to drive policies, reduce AMR and ultimately improve the care of Canadians and patients all over the world.
BY THE NUMBERS 2017-18
The Leslie Dan Faculty of Pharmacy is Canada’s top faculty of pharmacy and a hub for discovery in pharmaceutical science.
We prepare leaders who create innovative healthcare solutions.

FACULTY & STAFF

50
Faculty members

40
Staff

+120
Community and hospital and affiliated faculty

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952
PharmD
129
Graduate (MSc, PhD)
163
PharmD for Pharmacists
81
Pharmaceutical Chemistry

Graduated:
229
PharmD
29
Graduate (MSc, PhD)
23
PharmD for Pharmacists
22
Pharmaceutical Chemistry

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A TOP HONOUR
Each year, U of T recognizes remarkable scholarly achievement and pre-eminence in a particular field of knowledge through the official designation of University Professor. This year Shana Kelley, professor and scientist at the Leslie Dan Faculty of Pharmacy, was recognized with this prestigious honour. Professor Kelley has invented, investigated, and translated into practice nanotechnologies that reveal disease biology and thereby produce better patient outcomes.
@KelleyLabUofT

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