Peter Zhang, PharmD, MBA

Healthcare Strategy & Artificial Intelligence Hospital Pharmacist Board Director e. petercm.zhang@mail.utoronto.ca ln. peterczhang w. peterczhang.com

Education

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2023 – Present | Doctor of Philosophy
Leslie Dan Faculty of Pharmacy, University of Toronto
2020 – 2022 | Master of Business Administration
Rotman School of Management, University of Toronto
2017 – 2021 | Doctor of Pharmacy with Honours
Leslie Dan Faculty of Pharmacy, University of Toronto
2013 – 2017 | Honours Bachelor of Science with High Distinction
Faculty of Arts & Science, University of Toronto
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Professional Experience

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2023 – Present | Business Acceleration Partner
ODAIA Intelligence

2023 – 2023 | Marketing Manager | Cardiovascular & Metabolism
2023 – 2023 | Marketing Associate | Cardiovascular & Metabolism
2022 – 2023 | Marketing Associate | Neuroscience
2021 – 2021 | Marketing Associate Intern | Dermatology
Johnson & Johnson Innovative Medicine

2021 – Present | Clinical Pharmacist
2018 – 2018 | System Technician Intern
Southlake Regional Health Centre

2020 – 2020 | Co-Founder
3DPPE GTHA
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Publications

- Zhang, P. C., Matinnia, C., & Austin, Z. (2024). To maximise impact, hospital pharmacists need to increase visibility. European Journal of Hospital Pharmacy, 31(3), 185-186. https://doi.org/10.1136/ejhpharm-2024-004137
- 2. Ng, K.K.Y., **Zhang, P.C.** (2023). Advancing medical affair capabilities and insight generation through machine learning techniques. Journal of Pharmaceutical Policy and Practice, 165(16). https://doi.org/10.1186/s40545-023-00670-w

- 3. **Zhang, P.C.**, Austin, Z. (2023). To succeed as health care innovators, pharmacists need to cultivate an entrepreneurial mindset. Canadian Pharmacists Journal / Revue Des Pharmaciens Du Canada, 156(3), 100-111. doi:10.1177/17151635231164622
- 4. Ho, C., **Zhang, P.C.** (2022). Patient Safety from a Pharmacy Perspective. In: Encyclopedia of Evidence in Pharmaceutical Public Health and Health Services Research in Pharmacy. Springer, Cham. https://doi.org/10.1007/978-3-030-50247-8_72-1
- 5. Daud, A., Hussein, I. M., **Zhang, P. C.**, Ahmed, Y., Trac, J., Vujovic, N., Rizvi, S. F., & Kuzyk, P. R. (2021). 3D-Printed personal protective face shields during the covid-19 pandemic: A survey of Canadian frontline workers. Cureus. https://doi.org/10.7759/cureus.18141
- 6. **Zhang, P. C.** (2021). The future of pharmacy is intertwined with digital health innovation. Canadian Pharmacists Journal / Revue Des Pharmaciens Du Canada. https://doi.org/10.1177/17151635211044474
- 7. Bellatin, A., Hyder, A., Rao, S., **Zhang, P. C.**, & McGahan, A. M. (2021). Overcoming vaccine deployment challenges among the hardest to reach: Lessons from polio elimination in India. BMJ Global Health, 6(4), e005125. https://doi.org/10.1136/bmjgh-2021-005125
- 8. **Zhang, P.C.,** Ahmed, Y., Hussein, I.M. et al (2020). Optimization of community-led 3D printing for the production of protective face shields. 3D Print Med 6, 35. https://doi.org/10.1186/s41205-020-00089-y

Teaching & Mentorship

Guest Lectures

2023 - Present University of Toronto PHM327 "Entrepreneurship"
2023 - Present University of Toronto PHM310 "Change Management"
2022 - Present University of Toronto PHM215 "Introduction to Financial Literacy"
2021 - Present University of Toronto HMB312 "Microbiology in the Clinical Setting"
2018 - 2023 University of Toronto NEW116 "Antimicrobial Stewardship"
2017 - 2023 University of Toronto NEW106 "Vaccinations and Autism"

Speaking

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2024 | Speaker, COVID-19 Vaccine Update | British Columbia Pharmacy Association 2024 | Sessional Speaker, Professional Development Week | CAPSI 2024 | Youth Assembly Speaker | AFS Intercultural Programs
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Mentorship

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2022 – 2023 | PharmaSEE Mentorship Program
2022 – 2023 | Reach Alumni Mentorship Program
2022 – 2023 | Hart House Mentorship Program
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Experience

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2021 – 2022 | Clinical Instructor
2018 – 2021 | Pharmacy Lab Teaching Assistant
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Leslie Dan Faculty of Pharmacy

2021 – 2021 | Scholar | Managing Consumer Value

Rotman School of Management

2020 – 2020 | Lead Residence Don

2017 - 2020 | Residence Don

New College, University of Toronto

2020 – 2020 | Scholarship of Teaching and Learning Research Assistant

Leslie Dan Faculty of Pharmacy

2016 – 2017 | Senior Peer Mentor

2014 – 2016 | Peer Mentor

First Year Learning Communities, University of Toronto

2016 – 2016 | General Planning Executive

2015 – 2015 | Director of Training & Scheduling

2014 – 2014 | Orientation Leader

New College Orientation, University of Toronto

2012 – 2017 | Program Instructor

City of Markham

Research Experience

2018 –2020 | **The Reach Alliance** | Researcher

Conducted a qualitative study in India on polio elimination in Uttar Pradesh and Bihar to understand the strategies deployed to overcome vaccine hesitancy.

2019 – 2020 | Leslie Dan Faculty of Pharmacy | Project Researcher

2018 – 2019 | Leslie Dan Faculty of Pharmacy | Lab Assistant

Investigated the role of JMJD6, RBM39 in alternative splicing pathways mediated by the glucocorticoid receptor and the ARGLU1 protein.

2017 – 2017 | **University of York** | Project Researcher

Conducted laboratory techniques such as cell staining, flow cytometry, and RNA extraction to investigate monocyte activation in the context of leishmaniasis.

2016 – 2017 | **Temerty Faculty of Medicine** | Undergraduate Researcher

Conducted laboratory techniques including qPCR, genotyping, ELISA, bone marrow harvesting, and RNA extraction to investigate dendritic cell differentiation in the context of Crohn's disease.

2014 – 2015 | Ontario Institute for Studies in Education | Undergraduate Researcher

Administrated psychometric tests to elementary school students to investigate language acquisition differences between bilingual and multilingual learners.

Media

1. Tian, J.L.H., Shafaqat, A., Yaseen, S. & Zhang, P. "5 Ways to Propel Inclusive Climate Action". **Mastercard**. Published September 17, 2024.

- 2. Seladurai, M & Zhang, P. "Cybersecurity attacks highlight the need for patients to keep their medication records accessible". **Healthy Debate**. Published September 15, 2024.
- 3. Tian, J.L.H., Shafaqat, A., Yaseen, S. & Zhang, P. "Climate Resilience at the Margins: Five Key Lessons from Last Mile Populations". **Global Policy Journal**. Published July 29, 2024.
- 4. Sivanthan, L., Pitkis, A. & Zhang, P. "British Columbia found the key to attracting more family doctors, Ontario should do the same". **Toronto Star**. Published May 5, 2024.
- Ng, K.K.Y. & Zhang, P. "AI Disruption is Coming. Are Healthcare Professionals Ready?". MedCity News. Published April 1, 2024.
- 6. Peters, C. & Zhang, P. "Governments should pay the high price of gene therapy". **Healthy Debate**. Published February 26, 2024.
- 7. Zhang, P. "Canadian pharmacists have an important role this RSV season". **Canadian Healthcare Network**. Published December 19, 2023.
- 8. Battey, J. & Zhang, P. "Prescribing community for mental health lessons from Australia". **Healthy Debate**. Published December 3, 2023
- 9. Shafaqat, A., Tan, D., & Zhang, P. "Canada must invest in global leadership programs within higher education institutions". **The Hill Times**. Published November 6, 2023
- 10. Verhage, S., Tian, J., & Zhang, P. "Untapped potential: Young leaders have the tools to help address health-care challenges". **Healthy Debate**. Published October 23, 2023
- 11. Younis, M., & Zhang, P. "Pharmacist prescribers fill important gaps in the Canadian healthcare system". **Healthy Debate**. Published September 24, 2023
- 12. Ahmed, A., Yang, D. & Zhang, P. "Naloxone kits in TTC stations a necessary tool to address overdoses". **Toronto Star**. Published August 5, 2023.
- 13. Philbert, N. & Zhang, P. "Free menstrual hygiene products are on the way, if you work at a bank, an airline or the public service". **Toronto Star**. Published June 4, 2023.
- 14. Mathew, L. & Zhang, P. "Preventative health care: Why privately funded programs are reluctant to fund it". **Toronto Star**. Published May 6, 2023.
- 15. Zhang, P. "Synthetic data may revolutionize clinical trials and save lives". **Healthy Debate**. Published April 3, 2023.
- 16. Zhang, P. & Daud, A. "Modernized home care can help stabilize health costs". **Globe and Mail**. Published March 22, 2023.
- 17. Pitkis A. & Zhang, P. "The benefits of giving include tax credits". **Toronto Star**. Published March 20, 2023.
- 18. Pandey, A. & Zhang, P. "Overcoming language barriers key to providing health-care". **Toronto Star**. Published March 5, 2023.

- 19. Zhang, P. "Ask a pharmacist before you split tablets for your children". **Toronto Star**. Published November 21, 2022.
- 20. Yang, J., Ahmed, A. & Zhang, P. "Internet-based mental health care deserves a boost". **Ottawa Citizen**. Published November 21, 2022.
- 21. Yang, J., Ahmed, A. & Zhang, P. "Vaccine hesitancy is reviving long dead diseases". **Healthy Debate & National Post**. Published September 12, 2022.
- 22. Zhang, P. & Tadrous, M. "How pharmacist prescribing can alleviate health-care system pressures". **Policy Options**. Published May 31, 2022.
- 23. Daud, A. & Zhang, P. "Elon Musk, social media giants, must prioritize mental health and well-being". **Toronto Star**. Published May 2, 2022.
- 24. Zhang, P. "Bleeding disorders in women need more attention". **The Hamilton Spectator**. Published February 8, 2022.
- 25. Zhang, P. "Despite a place on pharmacy shelves, homeopathy has no role in patient care". **Toronto Star**. Published December 31, 2021.
- 26. Ahmed, A. & Zhang, P. "The dangers of antimicrobial drug resistance must not be ignored". **Healthy Debate & National Post**. Published November 15, 2021.
- 27. Ahmed, A. & Zhang, P. "As election day looms, voters have the chance to be heard on the federal funding of health care". **Toronto Star**. Published September 10, 2021.
- 28. Garland, M., Ahmed, A. & Zhang, P. "Communication must become an essential component of the science education curriculum". **Healthy Debate**. Published August 18, 2021.
- 29. Ahmed, A. & Zhang, P. "To move beyond the pandemic, Canada needs to look globally". **The Hill Times**. Published July 29, 2021.
- 30. Yao, A., Zhang, P. & Ho, C. "When COVID-19 meets allergy season". **Hospital News**. Published May 27, 2021
- 31. Zhang, P. & Daud, A. "Rigorous scrutiny of COVID-19 vaccines should bolster, nor erode, confidence in immunization safety". **Toronto Star**. Published May 3, 2021
- 32. Tang, J. & Zhang, P. "Should more of our foods be fortified with vitamin D". **The Hamilton Spectator**. Published April 19, 2021.
- 33. Ahmed, Y., Daud, A. & Zhang, P. "COVID-19 and insomnia: Pills are not the answer". **Healthy Debate**. Published April 16, 2021.
- 34. Zhang, P. "Prioritize one-shot COVID-19 vaccines for the hard to reach". **Toronto Star**. Published April 7, 2021.
- 35. Zhang, P. & Hu, M. "Mobilizing pharmacists is key to immunization success". **The Hamilton Spectator**. Published March 5, 2021.

- 36. Zhang, P. & Ahmed, Y. "Cyberchondria: An unexpected side effect of digitizing medical information". **Toronto Star**. Published February 16, 2021.
- 37. Bala, S. & Zhang, P. "To win against COVID-19, we must put vaccine hesitancy behind us". **Ottawa Citizen**. Published January 4, 2021.
- 38. Daud, A. & Zhang, P. "Although alarming, mutated strains of COVID-19 are not a cause for panic". **Toronto Star**. Published January 3, 2021.
- 39. Zhang, P., Chan, C. & Ho, C. "Antimicrobial Stewardship in the face of COVID-19". **Hospital News**. Published October 28, 2020.
- 40. Zhang, P. "Naloxone needs to be in hands of as many people as possible". **The Windsor Star**. Published October 4, 2020.
- 41. Zhang, P. & Daud, A. "As pandemic forces change, it's a good time for Canadians to quit smoking". **Toronto Star**. Published September 9, 2020.
- 42. Zhang, P. "It's time to normalize suicide prevention training at the workplace". **Toronto Star**. Published August 27, 2020.
- 43. Zhang, P., Teo, V. & Khosravani, H. "When COVID-19 meets flu season". **Toronto Star**. Published July 14, 2020.

Awards & Recognition

Scholarships

- 2021 | Rotman Scholar Award | Rotman School of Management
- 2021 | Student Engagement Award | University of Toronto
- 2021 | Joan E. Foley Quality of Student Experience Award | University of Toronto
- 2020 | Guy Genest Passion for Pharmacy Award | CAPSI
- 2020 | Future of Pharmacy Excellence Award | CAPSI
- 2020 | Frank Kwiecien Memorial Scholarship | Leslie Dan Faculty of Pharmacy
- 2020 | James D. Fleck Entrance Award | Rotman School of Management
- 2020 | COVID-19 Student Engagement Award | University of Toronto
- 2020 | CSHP External Affairs Student Writing Award | Undergraduate Pharmacy Society
- 2017 | New College Student Council Leadership Award | New College
- 2017 | Health Plus Pharmacy Award | Mackenzie Health Volunteer Association
- 2017 | Terry Buckland Memorial Award | University of Toronto
- 2017 | Gordon Cressy Student Leadership Award | University of Toronto
- 2017 | Queen Elizabeth II Diamond Jubilee Scholarship | Trinity College
- 2016 | New College Council In-Course Scholarship | New College
- 2016 | Ruth Reiffenstein Memorial Scholarship | New College
- 2016 | New College 50th Anniversary Award | New College

Recognition

- 2023 | Youth Assembly Delegate | AFS Intercultural Programs
- 2022 | 100 Best & Brightest MBAs: Class of 2022 | Poets & Quants
- 2020 | 3DPPE GTHA Printing Milestone of 20,000 Face Shields | Ontario Minister of Health

Community & Service

2022 – Present | Board of Directors

2021 – 2022 | Board Fellow **Hemophilia Ontario**

2021 – 2022 | Columnist

Poets & Quants

2019 – 2020 | Membership Committee

2018 – 2019 | Communications Committee

Canadian Society of Hospital Pharmacists

2018 – 2019 | Webmaster

Undergraduate Pharmacy Society

2015 – 2016 | Board of Directors

University of Toronto Students' Union

2017 – 2018 | Speaker

2016 – 2017 | Graduating Year Representative

2015 – 2016 | Social Director

New College Student Council

2010 – 2017 | Information Desk Volunteer Supervisor

2015 – 2015 | Emergency Department Volunteer

Mackenzie Health Richmond Hill Hospital