AFPC 2020 Undergraduate/Graduate Student Award

AFPC / COUNCIL FOR CONTINUING PHARMACEUTICAL EDUCATION STUDENT RESEARCH POSTER AWARDS

Mr. Thomas Bogdanowicz

University of Toronto

Thomas Bogdanowicz studied neuroscience and chemistry (BSc program) at Carleton University prior to starting the Doctor of Pharmacy program at the University of Toronto (Class of 2021). Thomas began pursuing research in his second year at Carleton where he co-authored a systematic review assessing the safety of transcranial direct current stimulation in psychiatric conditions. With an emerging passion in chemical neuroscience and drug development, Thomas worked for Professor Derek Pratt as an organic chemist to synthesize antioxidants and examine their potential in neurodegenerative diseases. This work was conducted at the department of chemistry in the University of Ottawa via the Undergraduate Student Research Award from the Natural Sciences and Engineering Council of Canada. Inspired to leverage in-silico modelling algorithms to improve drug design of small molecules, Thomas began working as a Research Appointee for Dr. Donald Weaver's drug design team at the Krembil Research Institute, collaborating alongside Treventis Corp. Working with a team of computational chemists, Thomas has been analyzing drug penetration across the blood-brain-barrier, employing machine-learning techniques to build predictive models of small molecule brain exposure.

As well as avidly pursuing pharmaceutical research, Thomas is an aspiring entrepreneur, currently part of two health-based startup ventures, and winner of the 2019 Leslie Dan Faculty of Pharmacy Business Plan Competition. As the Vice-President of the Undergraduate Pharmacy Society's Pharmaceutical Technology and Entrepreneurship Club, Thomas helps organize networking events aiming to raise awareness and inspire the student community.

Award winning poster:**Determining blood-brain-barrier penetration of small molecule drugs using machine-learningmodelling algorithms:** Poster & Abstract