

# INTRODUCTION

## ISSUE 28

## dear reader,

Welcome to Issue 28! Over the past thirteen years, the Meducator has strived to capture health sciences research in a series of pieces crafted by undergraduate students from across Ontario. The pieces we received have always been diverse in topic and perspective, reflecting the breadth and depth of the field. Health sciences research encompasses a continuous spectrum from basic science to knowledge translation. Evidence collected via systematic observations are translated into outcomes usable by society in the form of policies, therapies, and diagnostic tools. Within this issue, we aim to highlight recent advances in primary research and their applications.

This past decade, we have made considerable gains in understanding the pathology of complex neurological diseases towards the development of possible treatments. We begin our journey with a new article type, the Research Review, which describes an evidence-based study design. In this issue, Maxwell Ng, Krish Bilimoria, Karanbir Brar, and Nikesh Pandey outline a series of experiments testing the use of a gene editing tool in treating epilepsy. Our editors, Ishan Aditya and Arshia Javidan, in collaboration with graphics artist Caberry Yu, walk you through the process of neurogenesis from stem cells to neurons and discuss its relevance to our understanding of cancer progression. Takhliq Amir and Feroze Noordin synthesize benchwork and clinical evidence to investigate the effects of vitamin D and melatonin on multiple sclerosis and their therapeutic potential. In her Opinion column, Fizza Manzoor examines the literature to present polarized explanations for the upwards trend in autism diagnosis.

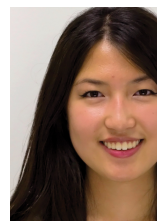
In our latest Forumspace, Emily Fong, Alexandra Kilian, Sara Halawa, and Annie Zhu explore policies and programs necessary to support the health of Syrian refugees in Canada and abroad. From a more evaluative standpoint, David Bobrowski approaches the challenge of identifying policy needs arising from failures in the Canadian health system in his piece, "Is the Doctor in?". Bringing a more personal viewpoint, Jasneet Kaur questions the performance and implementation of rapid diagnostic tools for malaria based on her experiences in Ghana in her Global Perspective piece.

We wrap up Issue 28 with an Interview Spotlight featuring Dr. Qiyin Fang, an associate professor in the Department of Engineering Physics and Canada Research Chair in biophotonics. He describes his work with optics in the lab and shares his thoughts on how his research can influence medicine in the future.

At this point, we would like to thank our authors and incredibly talented staff for bringing our 28th issue to life. None of this would have been possible without their hard work and dedication. A special thank you is much overdue to our two Managing Editors, Avri Lynn Ding and Arlinda Deng, our Creative Director, Eliya Zhao, and Managing Video Editor, Sebastian Swic for their unwavering leadership and tireless efforts. Last but not least, we would also like to thank you, the reader, for your continuous support and interest in our publication. We hope that as you browse through the pages, you will find something that piqued your curiosity, inspired you, or drove you to lengths to find your own answer. Never stop questioning. Never stop searching. Until then!



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