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table of contents

table of **CONTENTS**

DECEMBER 2021 | ISSUE 40

01 INTRODUCTION
02 MEDPULSE
04 MEDBULLETINS
06 PATHOPROFILE
08 NEUROABSTRACTS
10 MEDUSTORY
12 VIEWPOINTS

CRITICAL REVIEW
14 SPINAL SURGERY
18 MACHINE LEARNING
22 GLOBAL PERSPECTIVE
INTERVIEW SPOTLIGHT
25 DR. DAVID LYSECKI
28 LETTER FROM STACEY
29 CONTRIBUTORS



INTRODUCTION ISSUE 40

dear reader,

Welcome to Issue 40 of *The Meducator*!

Entering the 20th year of *The Meducator*, we are thrilled by all the incredible feats this journal has achieved. Starting small as a black and white publication containing a few article types and printed annually, to now bi-annually showcasing the incredible talents of our editors, graphic designers, and videographers, we have grown as a publication. This year, we have launched a new video initiative, MeduCares, and a new podcast, MeduCurrent, dedicated to featuring healthcare experts and student researchers, respectively, within the McMaster community. This new era of our publication is conveyed in Madeline Chan and Andy Zhu's inventive photo cover art collaboration featuring our Managing Editor, Yiming Zhang, as a model. The bold colours and use of new creative media help demonstrate how innovation and pushing boundaries make scientific research so inspiring in this day and age.

Editors Matthew Ahn and Hannah Silverman start Issue 40 off by exploring novel health-related developments across the globe in MedPulse, highlighting the vast body of research that has persisted through the limitations of the COVID-19 pandemic. Anya Kylas and Rida Tauqir then dive deep into the pathogenesis of tuberculous meningitis, the most lethal form of one of the world's most devastating infectious diseases. Next, editors Gurleen Bhogal and Aaron Wen highlight the MeduStory of Dr. Sarah Gilbert, a vaccine researcher who developed the Oxford COVID-19 vaccine. Further, in Viewpoints, Allison Fang and Aisling Zeng debate the issue of financial compensation for living organ donors.

In Issue 40, *The Meducator* continues its collaboration with the annual NeuroXChange Conference. This issue's Neuroabstracts examine depressive symptoms and inflammatory markers post-acute myocardial infarction, the connection between social withdrawal, substance use, and mental illness during the pandemic, and, finally, the structure of resilience and adverse childhood experiences in borderline personality disorder. We are also excited to feature two Critical Reviews and one Global Perspective. In a critical review on the use of robotics in spinal surgery, Justin Phung highlights the current role, benefits, and risks of using robotics in the provision of healthcare. Meanwhile, Yifan Wang examines the novel use of neuroimaging data and machine learning in the prediction of responses to depression treatments. Transitioning to a more global perspective, Abdul Nafea Zuberi and colleagues highlight the need for the development of more cost-effective and accessible transradial prosthesis prototypes.

We round off this issue with an Interview Spotlight featuring Dr. David Lysecki, a palliative care specialist, and a special note from Dr. Stacey Ritz, the McMaster Bachelor of Health Sciences program's Assistant Dean, in honour of our 20th anniversary of *The Meducator* this year.

Issue 40 is the product of close collaboration between all members of our talented and passionate staff. We cannot express enough gratitude towards our hardworking team, the supportive McMaster community, and you, our engaged readers. We would also like to give special thanks to our executive team, Aisling, Andy, Carolyn, Catherine, Daniel, David, Eric, Jeffrey, Karishma, Madeline, Shanzey, and Yiming, for their incredible student leadership.

From the both of us, thank you, and we cannot wait to see what the next twenty years of *The Meducator* will bring.

All the best,



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