



Editor's welcome

Logan Z.J. Williams
Editor-in-Chief

Gisela A. Kristono
Deputy Editor

Welcome to issue 28 of the New Zealand Medical Student Journal (NZMSJ)! We have collated a fascinating range of articles that highlight the calibre of work conducted by medical students and academics in New Zealand. This issue focuses on the intersection of artificial intelligence (AI) and the health care sector. As always, we are very privileged to have a number of expert academics covering several pertinent subthemes within the AI-health-care dynamic. Among our invited articles, Professor Tim Dare details some of the ethical dilemmas that have arisen with the introduction of AI techniques and big data approaches into health care. Dr. Mariam Parwaiz, a public health medicine registrar, explores how the rise of AI will impact medical education, and hints at how the role of a doctor might change in a digitised health care sector. Following this, Professor Jim Warren discusses how AI will impact the delivery of health care and the doctor-patient dynamic. Professor Cris Print then outlines the synergy between AI and health care using the example of genomics and other 'omics, such as transcriptomics, in a passionate yet balanced manner. Finally, an interview with Associate Professor Angela Ballantyne summarises the benefits, limitations, and ethical concerns surrounding electronic health records.

We are thrilled to see that a number of the academic articles we have received have a technological flavour to them. This issue features two outstanding reviews, which have won awards in their respective fields. Elizaveta Rakhmanova and Nikita Quinn, winners of the Wilson-Allison Memorial essay competition, answer the question 'will machines replace dermatologists in the diagnosis of skin disease?'. One field that has been quick to adopt the use of machines is urology. Lauren Smith provides the reader with a retrospective analysis comparing robotic assisted with open partial nephrectomy. Virtual reality is rapidly expanding into many facets of modern society, and is quickly gaining traction as one method to improve medical education. One domain of interest is the use of virtual reality in simulation-based training. Shakeel Mohammed assesses the acceptability and feasibility of an interactive, 360 degree video-based virtual reality simulation of an acutely stressful clinical event.

Looking beyond the influence of technology, Michaela Rektorysova sheds light on the complexity between oestrogen and cardiovascular health, highlighting some fundamental limitations as well as the importance of future research.

The features and media reviews in this issue serve as reminders of the challenges that future and junior health professionals face when navigating the health care system. Kaustubha Ghate reviews *This Is Going*

to Hurt: The Secret Diaries of a Junior Doctor by Dr Adam Kay, where the reader is taken on Dr Kay's journey through his obstetric training. He uses a juxtaposition of humour and heartbreak to bring home the impact that medicine can have on the personal lives of trainees.

One student-led initiative that has stood the test of time is HealthX, a conference for student researchers at the Faculty of Medical and Health Sciences, The University of Auckland. Joseph Chen reflects on the growth and successes of HealthX since its inception 12 years ago. Not to be outdone, Dr Megan de Lambert outlines her journey in developing student-led mental health support for clinical students at Auckland Medical School, after realising the impact of the clinical environment on students' well-being.

Often as students we get caught up in the minutiae of medical school and lose sight of the numerous opportunities available to us as medical students. Gisela Kristono and Evelyn Lesiawan reflect on their time at the Cardiac Society of Australia and New Zealand Annual Scientific Meeting and Australia and New Zealand Endovascular Therapies Meeting in 2018, and urge students to make the most of similar opportunities. Logan Williams' review of *Deep Medicine* by Eric Topol concludes that a digitised health-care system, and further research into the benefits and limitations of AI in health care may allow us to redirect our focus back on providing humanistic patient care.

Last but not least, as part of our ongoing Creative Arts Competition in partnership with the New Zealand Medical Students' Association, we would like to congratulate Dr Jared Vautier, Libby Whittaker, and Jon Anderson for winning this issue's competition round. We are always impressed with the calibre of submissions and proud of the creative talents that our medical student whānau possess.

The Editorial Board would like to thank the University of Otago and the University of Auckland for their ongoing support towards the journal. Without their financial and academic support, publishing this journal would not be possible. We would also like to thank the Medical Assurance Society for their funding. Finally, we would like to acknowledge the New Zealand Medical Journal and our Advisory Board members for their guidance and support. We hope issue 28 will provide NZMSJ readers with a variety of engaging articles. We would like to congratulate all of the authors who have contributed towards it and encourage all readers to submit their work to NZMSJ in the future!