EDITORIAL

From the Editor's Desk: Medline and Beyond

The one constant in medicine is constant change. As students, we appreciate the evolving nature of our understanding of diseases, their pathophysiologies and manifestations, their treatment modalities, and the lives they affect. The crucial role which clinicians play in this evolution is often underestimated and poorly understood. The clinician-scientist is, ultimately, the investigator who poses the relevant questions acquired from clinical experience, and who links the theories of the abstract realm with solutions of the concrete and tangible world. Thus, translational research, as the cliché goes, from the bedside to the bench, and evidently back again, is of utmost importance and interest to clinicians and medical students alike (1).

THE CLINICIAN-SCIENTIST

While clinician-scientists have some characteristics that set them apart from other researchers, their task is inherently different. With one foot in a clinical setting, and the other in a research setting, the clinician-scientist occupies a unique niche which brings about advantages, yet limitations. On the one hand, clinicians have irreplaceable insight into the patient setting (2). Their motivations for research are often aimed at finding solutions to problems faced in everyday life (3). In this sense, they bridge the theories of basic science, and applications in the clinical settings. In addition, from their medical training and practice, they are used to collaborating, working in large teams, and have a wide network of contacts. On the other hand, clinicians face great challenges- they have less time for training, writing grants and team management (2, 4). Research translates into time, resources, and expertise taken away from patient care. Yet, what a career! In which other field can one derive this dual satisfaction, one that stems both from the warm and personal interactions of medicine, and the intellectual process of asking and solving a question?

INTERACTION OF CLINICAL PRACTICE AND SCIENCE: THE PLACEBO EFFECT

The placebo effect, the theme of this issue's Focus, is one example of a domain that has greatly benefited from collaborations between clinicians and scientists. For the first time in the history of the MJM, articles in this section were peer-reviewed by specialists in the field, through the organizing efforts of Dr. Amir Raz and Dr. Paul Clarke and our Focus Editor, Samuel Lapalme-Remis (McGill University). We are proud to feature articles by Dr. Kilhstrom (University of California Berkeley), Dr. Lichtenberg (Hadash Medical School, Israel), Dr. Loftus (University of Washington), Dr. Fries (Stanford University School of Medicine) and Dr. Kirsch (University of Hull, UK).

THE MJM: OVER 10 YEARS OF CONTRIBUTION

The MJM's core mission, beyond encouraging student research, is to foster a scientific career and approach within future clinicians. The great advantage in exposing and inspiring students at an early stage is the training acquired. Students witness the mammoth efforts and, at times, the serendipity involved in achieving a single outcome. At the same time, students receive criticisms and realize where research was unsuccessful. We see where research results can be misleading; after trying to spin the results of our own research to their most marketable form, we learn how to take someone else's paper with a grain of salt. Although, realistically, research performed in medical school is often not groundbreaking, the lessons learned remain. Studies have shown that students undertaking research experience during medical school are more likely to pursue an academic career (5, 6). With their interests sparked and curiosity piqued, they desire to delve deeper and inquire.

MEDLINE AND BEYOND

As the MJM moves forward in the early 21st century, it retains its central mission and mandate of promoting student research internationally and encouraging and inspiring students to pursue a career in research. The MJM is most proud to announce that we are now indexed in both PubMed/Medline and EMBASE, both invaluable resources for researchers and clinicianscientists internationally, and the perfect medium to showcase the efforts and successes of students. Currently, volumes 9 through 11 are indexed in PubMed/Medline and we endeavor to work in a retrograde fashion until the very first volume of the MJM. Indexing in Medline is a giant step for our student-based initiative. We are thrilled and excited to be acknowledged by the National Library of Medicine and hope that we continue to impress and publish solid research by students. The MJM is proud of its student contributors and is thankful for the support it has received from researchers globally.

With indexing in the PubMed/Medline database, the MJM enters a new phase. We would like express our gratitude to Dr. Phil Gold, a clinician-scientist recognized for leadership in the field of Oncology and Immunology, for his help and advice. He is our Faculty Advisor and a supporter of the MJM since the earliest

years.

We dedicate this issue to all the previous MJM editorial teams whose efforts contributed to today's publication, and to all medical students around the world, who are burgeoning in their field of research. We hope that you will be inspired to continue broadening your academic horizons.

Regards,

AYZ, AS, YG

REFERENCES

- 1. Atala, A. The clinician-scientist and medical advances. Journal of Urology. 2008; 180(2): 431-432.
- Ley TJ, Rosenberg LE. JAMA. The physician-scientist career pipeline in 2005: build it, and they will come. 2005;294(11):1343-51.
- 3. Armstrong PW. A time for transformative leadership in academic health sciences. Clin Invest Med. 2007;30(3).
- Harris JP, Ariessohn ML. Economic, family, and length-oftraining issues that influence the selection of a clinician-scientist career path in otolaryngology. Otolaryngol Head Neck Surg. 2008;139(1):100-4.
- Neacy K, Stern SA, Kim HM, Dronen SC. Resident perception of academic skills training and impact on academic career choice. Acad Emerg Med. 2000;7(12):1408-15.
- Solomon SS, Tom SC, Pichert J, Wasserman D, Powers AC. Impact of medical student research in the development of physician-scientists. J Investig Med. 2003;51(3):149-56.
- Fang D, Meyer RE. Effect of two Howard Hughes Medical Institute research training programs for medical students on the likelihood of pursuing research careers. Acad Med. 2003;78(12):1271-80.



Ada Stefanescu, M.D., C.M. (2010), and Alice Yang Zhang, M.D., C.M. (2010), are the twelfth Editors-in-Chief of the MJM. Ada's research interests include genetics, heart disease and atherosclerosis, areas in which she has participated in projects at Yale University and the Deutsches Herzzentrum Munich (Germany). She is currently working on a project on artificial hemoglobin substitutes in the Artificial Cells and Organs Research Center, McGill University. Ada's research interests include genetics, congenital heart disease and atherosclerosis. Alice's past research interests include exploring embryological mechanisms of placenta formation in the murine model. Her current research examines the significance of D-dimer levels in the diagnosis of pulmonary embolism and deep vein thrombosis. Alice is also a national laureate of the Millennium Excellence Award.

Yin Ge, M.D.C.M. (2010), is the Executive Senior Editor of the MJM. His research interests mainly involve the field of cardiovascular medicine. His current research focuses on the use of bone-marrow derived stem cell to regenerate the damaged ischemic heart. For his work, he has received awards from both McGill's Faculty of Medicine and the American Association for Thoracic Surgery (AATS).