## EDITORIAL

## From the Editor's Desk: Frontiers in medicine: the McGill Journal of Medicine celebrates ten years, and insights into interventional medicine

This issue of the McGill Journal of Medicine marks something of an anniversary for the Journal, and before commenting on the articles in this issue, we thought this a fitting time for reflection on the state of the MJM. Though we chart our recent history through a period of beginning, ending, and beginning and ending again, we have embarked with conviction on the course which was once set for the Journal. The involvement of students from around the world during the past ten years - we estimate the participation of over five hundred students in the MJM since its re-establishment in the 1990s - has made this international effort possible. The MJM provides exposure for young aspiring clinicians and scientists to medical science something that we feel is insufficiently invited by many medical school curricula. The experience is valuable to both our staff of over 120 current editors from around the world, and to those reading and submitting articles to the Journal. Additionally, though, we believe that the Journal empowers people in traditionally underrepresented areas. We are proud to feature, for example, in this issue an article from students in North Carolina, U.S., on dentition in Costa Rica. Garcia and Guzzo provide excellent insight into the strengths and weaknesses of the oral hygiene programs in selected communities throughout Costa Rica, as influenced by allocation of dentists and the construction on the Inter-American Highway. Their work represents proficient medical research, with important implications for public health in developing countries. The staff at the MJM hope that we will open a dialogue between young people interested in bettering health in countries that have traditionally not had the representation in medical science and public health literature that North America, Europe, and parts of Asia have enjoyed. The Journal in this respect is a forum for young, ambitious people to meet, to brainstorm medical challenges by discoursing and sharing insights, and to solve problems throughout the world.

Impetus for this perspective is exemplified by a recent research project of one of the Editors-in-Chief of this issue, who had the opportunity to work with a group studying leishmaniasis in Peru. Leishmaniasis is a parasitic infection that manifests as either cutaneous, muco-cutaneous (which can develop as a sequelae to the cutaneous form), or visceral disease. The parasite is transmitted by the sandfly, which feeds on humans or dogs (the reservoir for the disease), in a manner reminiscent to malaria. The disease is common among people living in endemic regions of Peru, Brazil, Bolivia, and much of Africa and the Middle East. Presently, medical treatment consists of a 20-day course of pentavalent antimoy injections, which is not always successful, and often results in deforming scars (particularly when the disease is contracted on the face, where more farmers work without protection). Nonmedical treatment, employed by the local people, consists of drinking a tintiucre referred to locally as "sangre del arbol" – a tree extract – and additionally by applying battery acid to the superficial lesion.

Our group has been working on developing a topical approach to disease management. We are testing a topical cream, imiquimod, which has been approved by the American F.D.A. for use in treating HPV cutaneous warts. Imiquimod is a toll-like receptor (TLR) agonist, activating fixed tissue macrophages which engulfed the parasite in the tissue as part of the innate host defense process. Once activated in this site-specific manner, the macrophages fuse the phagosome (the intracellular compartment containing the parasite) with lysosomes (the macrophage's acidic compartments that digest debris and foreign particles). We hope that these studies will become part of a cadre of evidence from this lab that supports a shift away from the archaic antimony treatment to a more topical, and less offending treatment of this infection. The premise of the work is, simply put, empowering people in the countries with need. The problem originated in Peru, but the tools used to address it (used, furthermore, by the team of local doctors helping in the study), comes from our end. We hope to recapitulate collaborations like these among young people in expanding the McGill Journal of Medicine.

In addition to the Costa Rica study herein, we are pleased to feature a Focus on "interventional medicine." The future of medical science rests heavily on the decisions of the rising generation. As such, we have expanded the Focus section in recent years, inviting reviews from experts in developing fields of medicine, and hopefully inviting discussion among readers about these new topics. In this issue, we feature four expert reviews on interventional medicine, which uses minimally invasive procedures to effect medical outcomes. These articles are eloquently written, and are an excellent amalgam of insights into the diverse applications of interventional medicine. Additionally, we have also chosen an article from a group at the University of Manitoba that studied "door-to-balloon" times at the authors' hospital in Winnipeg. Primary percutaneous coronary intervention is preferable for patients in whom the first medical contact (the "doorto-balloon" interval) has occurred within 90 minutes. Additionally, it is preferred to conventional fibrinolysis in certain patients even if the interval between the first medical contact and the procedure exceeds 90 minutes (namely, patients with fibrinolysis contraindications, patients over 75, and patients in cardiogenic shock). As such, establishing the efficiency of putting patients' vessels in the hands of an intervntionalist become of the utmost importance. Only with analysis like the Manatoba study herein will efficiency be improved and lives saved.

Finally, this issue of the MJM also features a special Abstract Section wherein abstracts presented at the 2nd Annual Conference of the Canadian Society for Life Science Research (CSLSR) are published. The CSLSR is a non-profit organization created by life science students that is dedicated to bringing together young Canadian researchers at all university levels to share their knowledge, research, and discoveries. This year's CSLSR conference was held at McGill University and brought together students from across the country. The MJM is a proud supporter of this wonderful student initiative. The CSLSR and MJM will continue to support young researchers in their endeavors. It is our hope that students in life science from Canada and across the world will continue to involve themselves in such student forums in order to further their knowledge and encourage each other's work in research.

We hope you enjoy these abstracts as well as the other articles herein. We invite you to consider becoming a part of the MJM team: as a contributor, editor, or reader. Our door is always open.

## PRL, WM, PW

## REFERENCES

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**Patrick Lawler**, M.D.C.M. (2009) and **Wenya Miao**, M.D.C.M. (2009) are the eleventh Editors-in-Chief of the MJM. Patrick completed his B.Sc.at Washington and Lee University. His prior research interests began in cancer biology and angiogenesis, but have shifted to atherosclerosis and ischemic heart disease. He has spent time researching the latter with groups in Boston, Stockholm, and Montreal. Wenya's research interests are in neurology, specifically in the field of neuron regeneration.

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