EDITORIAL

SCIENCE, MEDICINE AND THE STUDENT

Since its beginning some five years ago, the *MJM* has served as an international forum for the advancement of medical science by students, and our crest boldly proclaims the motto "Ad vitam per scientiam". But why have we been such advocates of science? As the students we cater to will certainly confirm, they are already inundated with scientific information from all angles. Fortunately, what the *MJM* offers students is somewhat less defined than the content of *Robbins Pathologic Basis of Disease*. We give students the opportunity to discover a lesson that should contribute to a career-long attitude of learning and questioning.

For those involved in study and practice of medicine at the end of the twentieth century, an emphasis on science is unlikely to seem strange. Our educators have impressed upon us the importance of science in medicine, and every student has spent hours with textbooks full of the scientific fruits of his or her teachers. But as much as the knowledge of one's predecessors is invaluable, it is equally important not to become too comfortable with their conclusions, their assumptions, and particularly their edicts.

Countless advances in medical care have been made by individuals who have done the seemingly simple task of declaring things as they have seen them; these are the individuals who have taken an observant, critical and creative attitude with them to the bench and to the bedside, or most profitably, between them. Celebrated innovators such as Vesalius, Harvey, Laennec, Semmelwies, and Lister, to name a few, have been been on the crest of amazing improvements in the treatment of patients and understanding of disease. If these individuals had not recognized that contemporary knowledge was incomplete and imperfect, there would have been no progress. Things are no different today, and I am sure there are many great steps left to be taken by medicine with science as a partner.

With this in mind, I would like to justify my conviction that the *MJM* is not just another source of scientific information, which would inevitably render it of only incidental interest to the student. One of our most important objectives is to help students become involved in the process of discovery. In this sense, the *Journal* promotes more than just its scientific content, but also an attitude of inquiry. The *MJM* is a forum where students can seize the opportunity to report their own observations and state their own opinions and conclusions. Unlike mainstream journals, the *MJM* considers education and author development to be major objectives. When students finish their terms as editors,

or when they have their first papers published as authors, they will have entered the domain of discovery and discourse, of science and medicine.

This latest issue of the MJM is a fine example of students making real contributions to medical science. Behind the scene, these authors (as well their editors) have learned from the process, and hopefully will continue to question and discover throughout their careers. For example, in terms of original research, Nikolay Korovin from the Institute of Cardiology (Tomsk, Russia) offers an analysis of the spectral characteristics of atherosclerotic and healthy aorta. His studies demonstrate the important role experimental work can play in medicine. Further, they should contribute to planning future studies that will eventually improve laser angioplasty techniques that could benefit a large number of patients. In addition to this issue's student contributions, our Special Focus presents particularly important medical advances that have resulted from scientific inquiry. For example, Dr. Gervais Dionne traces the development of the antiviral drug 3TC, a key component of the very successful drug combinations used to inhibit HIV replication. With such a fine example of a positive contribution made by science to medicine in mind, I am sure that the MJM is pursuing the correct course of action when it encourages students to actively engage themselves in science, rather than to simply learn the science of others.

Ultimately, of course, medicine is much more than science, regardless of the great advances science has produced for medicine. With a caring hand, the physician delivers rational treatments to relieve the ultimate irrationalities of sickness and suffering; no act in medicine can be more important, and scientific inquiry should always serve only to help this.

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Daniel S. Auld is the fourth Editor-in-Chief of the *McGill Journal of Medicine* and has served as an editor since 1996. He received his B.A. degree *With Merit* from York University (Toronto, Ontario, Canada) in 1994, where he studied psychology. He is currently working towards his Ph.D. degree in Neurological Sciences from the Department of Neurology and Neurosurgery, McGill University (Montreal, Quebec, Canada), where his thesis work concerns interactions between basal forebrain cholinergic neurons and the neurotrophins. He has held a Doctoral Studentship from the Alzheimer Society of Canada and currently holds a Doctoral Award from the Medical Research Council of Canada. He is looking forward to studying clinical medicine in the near future.