

Introductory Editorial

Douglas MacPherson

Migration Health Consultants Inc; Associate Professor, Faculty of Health Sciences, McMaster University, Hamilton, Ontario, Canada.

“*Nature abhors a vacuum*”, a familiar quote is attributed to François Rabelais (French monk; 1494–1553) who during his lifetime could not have appreciated the significance of this statement in evolutionary or infectious diseases-microbiological terms. Neither of these concepts had begun to enter the consciousness of mankind in the 16th century. The great scourges affecting humans; such as plague, smallpox, cholera, yellow fever, and many other infectious diseases that were endemic or epidemic in occurrence, were considered to be due to miasmas or the ill will of the gods, but certainly beyond the influence or control of mere human beings.

More than four centuries later, in 1969 William H. Stewart, then Surgeon General of the U.S. Public Health Service, declared that it was “time to close the book on infectious diseases.” Better laboratory diagnosis of microbial diseases, advances in antimicrobial management of individual infectious diseases, and regional public health achievements in disease control made this statement seem reasonable. Western nations turned their attention to other ills of society affecting health care and health care systems: smoking-related disease, eating and metabolic disorders, drug and alcohol abuse and the impacts on health care systems access and service quality and sustainability became the new plagues to be addressed.

Nature rapidly filled that void. New emerging or re-emerging diseases; such as acquired immune deficiency syndrome, multiple drug antimicrobial resistant organisms like methicillin-resistant *Staphylococcus aureus* (MRSA) in institutions, and imported diseases such as tuberculosis, and others served as a reality check that we are not alone on this planet and that for every influence that we exert, nature will find a balance. Nature continues to fill that void with the discovery of new microbial agents and disease syndromes affecting plants and animals of direct and in-direct significance to humans. Diseases of the honeybee that decrease pollination success rates have the potential to affect one-third of the food supply used by humans. Poultry animal husbandry practices in Asia and concerns of avian influenza shifting to a human pandemic affect western public health preparedness planning. Voluntary and non-voluntary population movements from high to low disease prevalence zones are bridging epidemiological gaps in disease detection globally. Climate change and extreme weather events are predicted to have a major, if not cataclysmic, impact on human health and the occurrence of all diseases, but particularly infectious diseases.

Physical and temporal barriers to our ability to communicate has been virtually eliminated by advances in telecommunication technologies over the last 50 years, and especially so in the last decade by access and use of the Internet. Our need to communicate in near real time, to analyze, interpret and respond to emerging events globally is filling that opportunity.

I am pleased to announce the launch of *Infectious Diseases: Research and Treatment*—a new peer reviewed open access journal published by Libertas Academica. *Infectious Diseases: Research and Treatment* is an international, open access, peer reviewed journal which considers manuscripts on all aspects of infectious and sexually transmitted diseases in humans. It covers research, prevention, immunization, diagnosis, management, and treatment. Bacterial, viral and fungal infections are of interest. Relevant pathophysiology, genetics and epidemiology are also included. *Infectious Diseases: Research and Treatment* integrates research from various areas of biology and its applications in health.

Correspondence: Douglas MacPherson, Migration Health Consultants Inc; Associate Professor, Faculty of Health Sciences, McMaster University, Hamilton, Ontario, Canada.



Copyright in this article, its metadata, and any supplementary data is held by its author or authors. It is published under the Creative Commons Attribution By licence. For further information go to: <http://creativecommons.org/licenses/by/3.0/>.

The journal will be competing head-on with a number of existing subscription-based journals. However, there is clearly a niche for this new journal. Editorial policy will be to encourage a diversity of voices in the scientific and public discourse of infectious diseases; including all aspects of infectious disease surveillance, detection, diagnosis, management, social policy, population and public health. Submitted articles will undergo a rigorous, fair, and prompt editorial and peer-review process leading to rapid e-publication of accepted manuscripts. While respecting the standards of this process, the goal will be to reduce significant delays in the submission-editorial process, and to rapidly facilitate access and promote knowledge transfer by using the Internet. To achieve this last goal, all journal articles will be available without any access boundaries to all Internet users throughout the world. New postings are updated on the front page of the site, and RSS feeds are also available to keep readers informed up to the minute. The journal will work towards gaining a high international standing through increasing readership and citations, and later indexing and impact factors.

Infectious Diseases: Research and Treatment is published exclusively online. Articles will follow a consistent format so that the visual impact will be high and equal to that of the best hard-copy publications. In contrast to paper-based journals, however, the electronic format allows the full use of digital technologies and permits the inclusion of large data sets, from field and laboratory studies, links to other web pages, animations, slide shows, video clips and unlimited colour, all at no additional charge. Open access means that all articles are freely available to all, worldwide, and at no cost to the reader. Authors retain copyright of their work and can grant anyone the right to reproduce and disseminate it, provided that it is correctly cited and no errors are introduced, under the Creative Commons “CC-BY” licence (<http://creativecommons.org/>).

For most hard-copy journals, the costs of publication are met by user fees in the form of society memberships or reader purchases, or through significant subsidies by advertisers or sponsoring agencies or industry. In *Infectious Diseases: Research and Treatment*, as in other open access journals, the production costs are borne by the author in the form of a publication-processing fee (PPF). Many grant-awarding bodies recognise the value of open access publishing by allowing their funds to be used for PPFs. Fee waivers and discounts are available on a case-by-case basis. We shall make every effort to ensure that lack of funds does not impede the overall objective of publishing the best science, irrespective of authorship or country of origin.

Open access, online journals are at least complementary to the traditional print format in scientific communication. Over time, I am certain that the benefits of online publication and open-access with the extra opportunities that digital technologies give to authors, will be increasingly recognised as a viable and desirable means of addressing the “vacuum” in knowledge access and transfer in an increasingly global demand to communicate in infectious diseases. Open access is of huge benefit to the researchers working in institutions around the world where institutional libraries may be unable to afford subscription fees for a full range of journals.

I expect that *Infectious Diseases: Research and Treatment* will attract manuscripts of the highest quality, which will be of the greatest possible benefit to readers. For further information on what we hope will be an exciting and highly useful new journal, please click on the links in the “About This Journal” section of the journal’s web page.