

Editorial

Evolutionary Change and *The American Journal of Pathology*

Evolutionary theory has formed the underpinnings of modern biology and since the last century has allowed us to explore first prokaryotic¹ and subsequently, eukaryotic cellular pathophysiology.² As recently as June of this year, an international group of investigators used “molecular clocks” to measure rates of mutation among bilaterian fossils back to approximately 600 million years ago.³ *In vitro* selective pressure techniques which evolved out of these early studies have allowed us to begin applying gene therapy strategies to metabolic, genetic, and neoplastic diseases.^{4–6}

In common parlance, evolutionary change has been used as a synonym for dramatic revolutionary change, but truer to its original meaning the term represents a slow but inevitable alteration and progression, albeit not always in a direction with “staying power.” In the world of scientific publishing, this is an exciting time as we are truly in the throes of evolutionary change, both physically and philosophically. Just as the practice of science is no longer defined simply by looking into a microscope and making notes onto a tablet, scientific publishing is no longer simply the exchange of hand-written correspondence between colleagues. As the discipline of biology itself is defined by “evolutionary theory,” so too has scientific publishing evolved in its role as a reflection and record of that science. Increasing development of online resources has enabled a huge proliferation in the means by which research is accessed worldwide. Similar technological advancements have allowed the Journal to develop new strategies for optimizing the peer review and publication process, from the 1998 launch of *AJP*'s online journal site to the most recent adoption of online manuscript submission and review. The so-called “open access debate” throws open yet another channel of possibility for the world of scientific publishing. The *AJP* has met this challenge by signing on to the DC Principles and affirming its commitment to “innovative and independent publishing practices” in “promoting the wide dissemination of information.”⁷ We have also joined with other non-profit publishers to make the newest science available to developing countries through free online access to the Journal. These developments simply represent the by-products of our primary mission: to advance scientific research through responsible assessment, reporting, and dissemination.

AJP Yesterday

We cannot move forward without first looking back. Just as physical evolution depends on the building blocks of its forebears, so must we acknowledge the changes (both incremental and radical) that have brought us to this point. In the *AJP*'s “centennial” issue (October 2001), the previous Editor-in-Chief, James Madara, catalogued the number of changes in the history of the Journal, from its nascence to its current maturity as the leader in experimental pathology reporting.⁸

It has been approximately one year since *The American Journal of Pathology* put in place a new editorial team and with it has come its own evolutionary change. When Dr. Madara bid farewell in June of last year,⁹ he listed as the highlights of his tenure “progression and uniformity of quality” of manuscripts, the requisite need to “handle papers with respect,” the publication of leading edge manuscripts, and the appointments of international Associate Editors outside of North America. These are concepts we have embraced and sustained. In September of last year, I addressed the readership.¹⁰ In that treatise, I talked about the progression of experimental pathology from descriptive studies to molecular pathogenesis over the last century. I tried to be all-inclusive of the evolving areas of disease pathogenesis while welcoming the new Associate Editors and saying good-bye to an outstanding group of outgoing Associate Editors. At that time I solicited suggestions and many of you responded. In May of this year, I acknowledged with gratitude the long service of retiring editorial board members, some of whom had served for more than two decades.

AJP Today

With this issue a number of additional changes have been put in place. Most obvious is the division of the table of contents into topic categories for easy use by the readership. The “Power-of-Ten,” a synopsis of the 10 most-read articles during the last month, has hopefully become a commonly accessed feature and review articles and commentaries are more abundant. Other changes, although equally important, are more subtle. The Instructions to Authors has been extensively rewritten, the Associate Editors and Editorial Board have been

expanded, a new Managing Editor and exuberant group of Assistant Editors and Editorial Assistants have made the now electronic submission and review of manuscripts easier, resulting in reduced turn-around times from submission to publication.

Readers will also note a small but significant change in the Journal's mission statement on the masthead page. This reflects a decision to publish only complete, full-length research articles. Short communications, simple reports of model systems, and purely technical advances will no longer be accepted. Clinical articles that do not explore underlying disease mechanisms will typically not receive a high enough priority score to result in publication. This is not to say the Journal is not interested in receiving manuscripts that use novel technologies, new animal models, or bioinformatics. Rather it is the requirement to have these serve as a tool for exploration of pathophysiologic mechanisms of disease rather than being the focus of the paper itself. To truly evolve the field of experimental pathology, we must use these techniques and models to answer the fundamental questions of science itself.

AJP Tomorrow

Other plans are in the works for *AJP* and will be in evidence shortly. Next year, we will be making website pre-publication of accepted articles a reality. Additionally, we are currently finalizing the process of hiring a Scientific Editor to help with uniformity of abstracts and other key operations. Finally, we are hoping to bring *AJP*'s vast archive of published science to today's audience, by exploring options for online archiving and access.

In all, much has happened over the last year and much is on the horizon. It remains my goal to maintain *AJP* at the forefront of experimental pathology investigation. With large numbers of highest quality manuscript submissions (now numbering more than 2000 per year) and an engaged readership, I have little doubt this will be accom-

plished and we will continue to develop in a way that will create a new evolutionary branch.

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