

Open Access

Traditional scientific peer-reviewed journals serve 4 roles in maintaining scholarly communities: registering the ideas of the authors to build a collective knowledge base, date-stamping the articles and providing appropriate credit for discoveries, validating the quality of research through peer review, and disseminating the research results among scholars. For over 50 years, *JNM* has fulfilled these 4 roles while steering through the changing environment and embracing new technologic opportunities.

Over the last decade, we have seen rapid progression toward an increase in open access to scholarly publications, with the aims of wider and earlier dissemination, but most such publications are proprietary and available only through paid subscriptions. A number of subscription-based scholarly journals make specific types of articles freely available with every issue; others provide open access after a certain period of time.

In early 2000, public access to the Internet facilitated the open access movement. Open access publications are digital, online, free of charge, and free of most copyright and licensing restrictions, with no technical barriers other than access to the Internet. There are 2 primary types of vehicle for delivering open access research articles: open access journals (“gold OA”) and open access repositories (“green OA”). Gold OA journals provide immediate access to all articles on the publisher’s website but typically need mechanisms to cover editorial, copyediting, layout, and hosting costs. Green OA journals self-archive non-open access articles in institutional repositories or a central repository such as PubMed Central.

There are also several modifications of open access journals, such as hybrid and delayed open access journals. In hybrid journals, authors can choose whether to submit for open access publication or for traditional publication. Delayed open access journals are traditional subscription-based journals that provide open access after an embargo period following the initial publication date.

Because there are no subscription fees to support open access journals, they typically derive financial support from sponsorships or publication fees. Approximately 50% are sponsored by an academic institution, professional organization, or government; 50% are financed by high publication fees charged to the authors and generally budgeted in research grants.

The pioneering publishers of open access journals in 2000 included BioMed Central, a for-profit publisher, and the Public Library of Sciences, with PLoS Biology, PLoS Medicine, and PLoS ONE. Since that time, the annual volume of open access articles has increased more than 15 times—from 20,700 in 2000 to 340,000 in 2011—accounting for approximately 17% of all articles published. However, 80%–90% of journals are still subscription-based publications, including virtually all of the top journals.

The challenge for organizations such as SNMMI, which publishes *JNM*, is to balance the values of a subscription model, where the members receive the journal as a benefit of membership, and open access, where the authors benefit from immediate access to their article for a wider audience, while ensuring that the roles of the journal are

met. A survey published in the *Journal of the Royal Society of Medicine* in 2006 (1) explored authors’ knowledge and perceptions about open access publishing and author-pays business models and concluded that open access policies had little impact on the decision of most authors on where to submit articles. The 2 most important factors influencing their decision were the reputation and quality of the journal.

Currently, *JNM* articles are available online to SNMMI members and *JNM* subscribers after copyediting and author review (approximately 4 mo after acceptance). *JNM* articles are published in the printed journal 6–7 mo after acceptance. All *JNM* articles are open access after a 6-mo embargo following print publication. In 2009, *JNM* began allowing open access to continuing education review articles as soon as they are available online. Recently, *JNM* added the “Focus on Molecular Imaging” review articles to its open access content.

For more than a decade, *JNM* has participated in several outreach programs, including a HighWire-based program offering access to countries appearing in the World Bank’s list of low-income economies, plus Angola, Armenia, Azerbaijan, Djibouti, Georgia, Indonesia, Turkmenistan, and Ukraine. Additionally, a program initiated in 2005 by Professor Mathew Thakur, the SNMMI president at that time, and sponsored by the Education and Research Foundation (ERF), provides complimentary subscriptions of *JNM* to institutions in developing countries.

More recently, we accepted an invitation from Dr. Eric Stern to participate in Global Outreach Radiology (GO RAD) (www.isradiology.org/gorad), a program of the International Society of Radiology. Its purpose is to reach out to the global radiology community and advance radiology education by aggregating current, practical radiology literature with content that is targeted and dedicated to developing nations and underserved populations. Through agreements with these cooperating journals, the GO RAD platform provides immediate open access to a limited amount of content that otherwise has restricted access, providing an electronic link back to the original online article at the time of first publication.

In an effort to disseminate research results sooner, the *JNM* editors have decided that all research articles will be published online at the time they are originally accepted, well in advance of the print issue. After they are prepared for publication and have appeared in the print issue, the ahead-of-print version will be replaced by the final version.

We hope that these changes will improve early access to all articles published in *JNM*.

REFERENCES

1. Schroter S, Tite L. Open access publishing and author-pays business models: a survey of authors’ knowledge and perceptions. *J R Soc Med*. 2006;99:141–148.



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