Neurophotonics Visibility, Indexing, and Impact

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The launch of Neurophotonics has been a tremendous success. The first issue was published with 18 papers contributed by authors from around the world. As of December 1, 2014, the papers had already been viewed an average of 603 times each. This provides a clear indication of the community’s broad awareness of and interest in Neurophotonics. It is also a reflection of the rapid advancements in novel optical imaging methods, the impact they are having in the neurosciences, and the considerable need for our specialty journal to foster greater interactions amongst the photonics, neuroscience, and clinical communities, which are driving and utilizing these advances.

While the need for and interest in Neurophotonics is clearly present, the launch of a new journal is still a challenging task. This task has been made easier by the tremendous support from SPIE in promoting the journal, in providing the published papers free of charge through 2015 with a strong subscription base and the option of open access after that, and in producing a high-quality publication. Still, prospective contributors consistently ask one question of the editorial board, and that is: When will the journal be indexed and when will it have an impact factor?

Indexing of published articles by the National Library of Medicine through PubMed and Medline, and by Thomson Reuters through Science Citation Index Expanded and Web of Science, is critical to the success of a scientific journal as these are the most commonly used searchable databases for the scientific community. Authors want their articles to be indexed to ensure that their work reaches the largest possible audience. New journals need to be evaluated, though, to determine whether they meet quality metrics related to timeliness of the publications, the editorial and peer-review process, international diversity, and the quality of the publication. This evaluation period takes time. For Neurophotonics, we expect to be indexed by the end of 2015, retrospectively back to the first issue. (Google Scholar, another prominent database of published articles, already contains all of the papers published in Neurophotonics.)

The evaluation process by the National Library of Medicine (NLM) and Thomson Reuters (TR) is documented on the web at http://www.nlm.nih.gov/pubs/factsheets/j_sel_faq.html and http://wokinfo.com/essays/journal-selection-process/, respectively. SPIE is in correspondence with PubMed and TR, who both confirm that they are currently reviewing Neurophotonics. SPIE and the editorial board are already ensuring that we meet high publication standards, of course; so the only remaining review criteria relate to the papers published in the journal and how often they are cited. With 18 papers in the first issue and 10 papers in this second issue, we already have an appropriate quantity of papers compared to other journals recently indexed in Medline. Our queue of papers in the review process indicates that we will sustain a steady stream of publications. And the average number of views per paper published suggests that we have the high visibility needed to generate citations. Indeed, according to Google Scholar, several papers published in the first issue have already received citations. All in all, our prospective contributors should be confident that their articles will appear in these databases. In the meantime, authors should take certain steps to help spread the word about their new publications in Neurophotonics. They should always proactively email their colleagues to alert them of their new publications. Also, SPIE makes it easy to share the online articles through social media links accessed through the table of contents. Finally, authors funded by the National Institutes of Health should submit their published articles to PubMed Central as this will result in the paper being promptly indexed in PubMed even before Neurophotonics is officially indexed.

Prospective contributors also ask about the journal impact factor. The impact factor is given by the number of citations in a given year to articles published in the previous two years divided by the total number of articles published in the previous two years. Thus, the earliest Neurophotonics can expect an impact factor is in 2016, based on the papers published in 2014 and 2015. As the fields of research at the intersection of photonics and neuroscience are experiencing explosive growth, and neuroscience papers generally receive a high number of citations, we expect that Neurophotonics will have a respectable impact factor. That said, as is extensively discussed in the blogosphere, the importance of the impact factor is diminishing. Before online searching of databases was possible, scientists commonly found new journal articles by browsing hard copies of their favorite journals, and the impact factor provided a guide as to which journals were publishing the most impactful articles. Today, however, the need for this guide is diminished as online access to articles and searchable databases to find the articles of most interest has given scientists near-instant access to all published articles. The journal impact factor still remains a guide for determining which articles are likely to be more important. However, given how easy it is to determine the number of times individual articles are cited, it is likely that the article citation index will soon play a more important role for determining the actual impact of an article, rather than the journal impact factor.

One tool that editorial boards use to solicit the most impactful papers for a journal is to organize special sections on a focused and timely topic. Neurophotonics currently has calls for three special sections: “Causal Control of Biological Systems with Light,” “Light Microscopy of Connectivity,” and...
“Pioneers in Neurophotonics: Special Section Honoring Professor Lawrence B. Cohen.” Details for these special sections can be found at http://spie.org/x103852.xml. Watch for announcements of additional special sections that are being planned. And, as always, please contact me if you have ideas for special sections, reviews or tutorials, or any other ideas for helping Neurophotonics to better serve the needs of our community.

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