

## **Biological Systems: Open Access**



Editorial

## Musings of a New Editor: Looking Forward

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I am honored to have been selected to serve as editor-in-chief, and excited by the proposition of promoting a new journal. At the same time, I have a sense of anxiety. How does a new journal acquire quality submissions and readership in this age of *impact factor*? A new journal has no *impact factor*, and unfortunately, *impact factor* is the latest quick-and-dirty calculation of a researcher's reputation and potential for promotion. It is also a tool used by administrators to assess the collective status of an institution.

Evaluating researchers has always been a conundrum. Do we just count the number of publications or tally the amount of grant money? Is a brief communication equivalent to a long paper? How do we consider a one-page clinical case study? Should the page per author be considered? Are only the first and last authors important? For better or worse, these kinds of considerations influence the strategic calculations of researchers -in terms of manuscript preparation, authorship, and journal submission. In addition, however, there is external scrutiny for the significance of the work. The number of citations an article receives by other publications is an indicator of the article's impact on the field, and by extension, the influence of the author. Because journals aren't all equivalent, those that are perceived as having higher standards tend to rise in reputation.

Researcher impact is approximated by the *h-index*, which attempts to measure both productivity and impact of peer reviewed publications. The *h-index* indicates that the author has published *h* papers each of which has been cited at least *h* times. Journal impact has a different formulation. *Impact factor* is calculated by taking the total number of citations during a year and dividing that number by the total number of articles published during the prior two years [1]. This factor is a rough approximation of journal readership. The number of researchers in a particular field is therefore instrumental in determining *impact factor* of a journal. One or two highly cited articles can also boost a journal's *impact factor*. Some journals have reverted to soliciting review articles and/or special topic issues because they foster additional citations [2]. As a result, *impact factor* is not an accurate means to assess the quality of any particular article or author.

It seems to me that the purpose of journal publications is to share scientific findings, advance the field, and assist others in utilizing data to facilitate their own research and/or to translate the findings into a medical treatment or marketable product. Good publications demonstrate that a researcher is active, worthy of grants, and meritorious for promotion. In an ideal world, good work will be recognized irrespective of the journal, and will be cited by peers who conduct related research. A collateral benefit is to have the people you respect read and appreciate your work. The internet has facilitated access to articles regardless of the publisher. The only valid way to evaluate the quality of published research is to actually read and analyze the article. Ultimately, the value of a publication is whether the observations "stand the test of time".

With the push to find quick metrics for evaluating work, whether for grants or for promotion, glamour journals with high *impact factors* become the gold standard. The result is that research with popular appeal is more likely to be published in these prestigious journals. In order to achieve appeal, the research problem has to be dramatized, data must be over-simplified to prevent confusion, and the discussion is "spun" to highlight the purported impact of the observation. Perhaps this kind of pressure leads to exaggeration that can morph into fabrication. Can the pressure to have "impact" account for why the number of article retractions is correlated to journal *impact factor* [3]?

An example of this kind of embellishment is apparent in a recent *Nature* publication on stem cells and restoration of hearing loss. The publication touts *auditory neuropathy* as a significant problem and responsible for a "substantial proportion of patients with hearing impairment" [4]. In fact, *auditory neuropathy* represents less than 8% of newly diagnosed cases of hearing loss, and its diagnosis is complex and controversial with wide ranging risk factors and accompanying symptoms [5-7]. The Chen publication may be a promising study of stem cells but it is a flawed and incomplete study involving auditory neuroscience.

In todays' world of open access journals, it probably doesn't matter where one publishes if the primary goal is to disseminate information. If an article is good, it will be found, read, and cited. The dilemma arises from the inflated consideration of *impact factor*. Regardless of how *impact factor* is used, a journal is only as good as its contents. As a result, we at JOB must distinguish ourselves through the recruitment of outstanding articles and by providing thoughtful and constructive reviews for submissions, rapid turn-around time to publication, and high quality illustrations. It will be through the work of our board members and our readership that we establish a reputation that allows us to compete at all levels. I look forward to this challenge.

## References

- 1. McKerahan TL, Carmichael SW (2012) What is the impact factor, anyway? Clin Anat 25: 283.
- Hendee W, Bernstein MA, Levine D (2011) Scientific journals and impact factors. Med Phys 38: i-ii.
- Morrison RP (2011) Retracted science and the retraction index. Infect Immun 79: 3855-3859.
- Chen W, Jongkamonwiwat N, Abbas L, Eshtan SJ, Johnson SL, et al. (2012) Restoration of auditory evoked responses by human ES-cell-derived otic progenitors. Nature 490: 278-282.
- Bielecki I, Horbulewicz A, Wolan T (2012) Prevalence and risk factors for Auditory Neuropathy Spectrum Disorder in a screened newborn population at risk for hearing loss. Int J Pediatr Otorhinolaryngol 76: 1668-1670.
- Uhler K, Heringer A, Thompson N, Yoshinaga-Itano C (2012) A tutorial on auditory neuropathy/dyssynchrony for the speech-language pathologist and audiologist. Semin Speech Lang 33: 354-366.
- Vlastarakos PV, Nikolopoulos TP, Tavoulari E, Papacharalambous G, Korres S (2008) Auditory neuropathy: endocochlear lesion or temporal processing impairment? Implications for diagnosis and management. Int J Pediatr Otorhinolaryngol 72: 1135-1150.

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