

Impact factor and its role in academic promotion

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The International Respiratory Journal Editors Roundtable thank Jerome Dempsey, PhD, Editor of the *Journal of Applied Physiology*, for preparing the original draft of this statement, which was reviewed, altered, and edited by the following Roundtable members:

Alan R Leff, (Chair), *Proceedings of the American Thoracic Society*; Edward Abraham, *American Journal of Respiratory and Critical Care Medicine*; Kenneth B Adler, *American Journal of Respiratory Cell and Molecular Biology*; Vito Brusasco, *European Respiratory Journal*; Peter Calverley, *Thorax*; Anh Tuan Dinh-Xuan, *European Respiratory Journal*; Robb W Glenny, *Journal of Applied Physiology*; Mark Levy, *Primary Care Respiratory Journal*; Reynold Panettieri, Jr., *Respiratory Research*; Helen K Reddel, *Respirology*; Dave Singh, *International Journal of COPD*; J Christian Virchow, *Respiratory Medicine*.

This statement was adopted unanimously at the May 17, 2009 meeting of the International Respiratory Journal Editors Roundtable.

In our collective experience as editors of international peer-reviewed journals, we propose that the impact factor calculated for individual journals should not be used as a basis for evaluating the significance of an individual scientist's past performance or scientific potential. There are several reasons not to equate the impact factor of a journal in which the scientist publishes with the quality of the scientist's research. For example, as revealed by several recently published analyses of the impact factor:¹⁻⁶

- A journal's impact factor is determined by a decided minority of its published manuscripts. Thus the impact factor correlates poorly with the citations of an individual manuscript.
- The impact factor does not consider the number of scientists actively producing research in a given specialty field. Indeed, some journals feel the need to serve constituencies with relatively small numbers of participants who continue to address important questions even though the number of scientists available for citations is limited.
- Citations of many articles may not peak until after the second year of publication, ie, beyond the brief period of time considered by the impact factor.
- A journal's impact factor can be inflated by certain journal practices such as publication of many review articles, self-citation.
- The impact factor measures only the frequency of citations which cannot be assumed to always equate with quality.

There are alternatives and we believe more valid measures of the quality and impact of an individual scientist's published contributions. First, a citation record for the individual candidate is readily available via several types of Internet search engines. Second, the time-honored practice of soliciting evaluations concerning the significance of a candidate's work from scientific peers who are carefully selected to be both highly qualified as well as clearly "arm's-length" from the candidate should be rigorously applied.

References

1. Chew M, Villanueva EV, Van Der Weyden MB. Life and times of the impact factor: Retrospective analysis of trends for seven medical journals (1994–2005) and their Editors' views. *J Roy Soc Med*. 2007;100:142–150.
2. Ketcham CM, Crawford JM. The impact of review articles. *Lab Invest*. 2007;87:1174–1185.

3. Ogden TL, Bartley DL. The ups and downs of journal impact factors. *Ann Occup Hyg*. 2008;52:73–82.
4. Smith R. Beware the tyranny of impact factors. *J Bone Joint Surg (Br)*. 2008;90-B:125–126.
5. Szklo M. Impact factor: Good reasons for concern. *Epidemiol*. 2008;19:369.
6. Wilcox AJ. Rise and fall of the Thomson impact factor. *Epidemiol*. 2008;19:373.

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