European Science Editing 1 February 2012; 38(1)

Publications Committee 2009–2012

Chief editor
Armen Yuri Gasparyan
a.gasparyan@gmail.com
Deputy editor
Stuart Handysides
stuart_handysides@hotmail.com
Production editor
Lynne Rowland
lynne@alrservices.co.uk
Secretary
Mary Hodgson
secretary@ease.org.uk

European Science Editing

Original articles Stuart Handysides stuart_handysides@hotmail.com

Essays
Armen Yuri Gasparyan
a.gasparyan@gmail.com
Viewpoints, Correspondence
Armen Yuri Gasparyan
a.gasparyan@gmail.com
Book reviews
Moira Johnson

moiraajohnson@gmail.com *Reports of meetings* To be confirmed

EASE-Forum digest
Elise Langdon-Neuner
langdoe@baxter.com
This site I like
Silvia Maina
silma79@hotmail.com
News notes
John Hilton
hilton.john@gmail.com
Editor's bookshelf
Anna Maria Rossi
annamaria.rossi@iss.it

Books (Science Editors' Handbook)
Petter Oscarson oikostech@ekol.lu.se
Website

Silvia Maina silma79@hotmail.com

EASE Council

Joan Marsh (ex officio)

Contributions should be sent to the Chief Editor or the appropriate section editor. See the Instructions to Authors on EASE's website (www.ease.org.uk). The journal is published in February, May, August and November, free to paid-up members of EASE and available on annual subscription of £65 to libraries and other non-members. Disclaimer: The views expressed

Disclaimer: The views expressed by contributors are their own. The Association does not necessarily endorse the claims of advertisers.

ISSN 0258-3127

Printed by Qwerty Ltd, The Markham Centre, Theale RG7 4PE ©EASE 2011

From the Editors' Desks

As ESE goes to press, we are on the point of releasing our new EASE website, so I hope that by the time you read this, you will have had an opportunity to browse. The new site should be 'cleaner' and easier to navigate. We have automated several features so that it is easier to keep up to date. The website receives a steady stream of visits, with the Author Guidelines and the journal being two of the most popular features.

The website displays the latest information regarding our conference in Tallinn: two workshops and a parallel session have been added since the final circular was distributed in November, so please visit to check details. You can also register directly through the website: make sure you do so before the early bird discount expires.

We conducted a survey amongst the ESE readership to see what you thought of the journal. No major surprises, which was encouraging. You would like more original articles: we already endeavour to commission these and will continue to do so. If you know of anyone conducting research relevant to editing or publishing, please encourage them to submit to ESE or send details to the editor.

Publications Committee

We regret that Sharon Davies has resigned, after many years service on the Committee. This has created a vacancy, preferably for someone interested in commissioning and editing meeting reports. The Committee meets once per year in person and once by teleconference: if you would like to join, please contact Joan Marsh or Armen Gasparyan.

Copy date

We have changed the submission date to the 1st of the month, two months before the issue is published. This will allow editing and proof-reading to proceed more smoothly. For the May issue, contributions should be sent to the relevant section editor by 1st March.

We thank the following peer reviewers for donating their valuable time and contributing to the quality of items submitted for publication in European Science Editing in 2011

Mohammad Abdollahi, Tehran, Iran Lutz Bornmann, Munich, Germany George P. Chrousos, London, UK Armen Yuri Gasparyan, Yerevan, Armenia Reza Habibi, Tehran, Iran

Reza Habibi, Tenran, Iran
Roya Kelishadi, Isfahan, Iran
Valentina Markusova, Moscow, Russia
Ana Marusic, Split, Croatia
Werner Marx, Stuttgart, Germany
Miguel Roig, New York, US
Sylwia Ufnalska, Poznań, Poland
Murat Ugurlucan, Istanbul, Turkey

EASE Council 2009-2012

President: Joan Marsh, Wiley-Blackwell, International House, 7 High Street, Ealing Broadway, London W5 5DB, UK; jmarsh@wiley.com

Vice-Presidents: Alison Clayson, France; Reme Melero, Spain

Members: Eva Baranyiová, Czech Republic; Mare-Anne Laane, Estonia; Ana Marušić, Croatia; Petter Oscarson, Sweden; Edward Towpik, Poland; Sylwia Ufnalska, Poland; Armen Yuri Gasparayan, UK (*ex officio*)

Past-President: Arjan K S Polderman, The Netherlands **Treasurer and Company Secretary**: Roderick Hunt, UK

Secretary: Mary Hodgson; West Trethellan, Trethellan Water, Lanner, Redruth, Cornwall, TR16 6BP; +44 (0)1209 860450; secretary@ease.org.uk

EASE website: www.ease.org.uk

To advertise in this journal, or on the EASE website, please contact Diana Epstein (+44 (0)141 644 3900; fax +44 (0)141 244 0125; www.di-ep.com)

Editorial

Women in science - what's the world missing?

When I was first invited to the Gender Summit in Brussels. I was rather sceptical. Surely, science is open and everyone competes on merit? Science editing and publishing seem to be dominated by women (at least numerically). Where was the problem? Perhaps a little more flexibility on career breaks might help but does today's generation of female students need positive discrimination? In preparing for the Summit, mainly through discussion with Shirin Heidari, I learned otherwise. The theme of the Summit was how the European Union is missing an opportunity by not tapping to the full the brains of female scientists and engineers. Not just as individuals: some of the more interesting research cited was how mixed teams are more creative than single-sex teams. One outcome of the Summit was the presentation of the Manifesto for Integrated Action on the Gender Dimension in Research and Innovation to Máire Geoghegan-Quinn, Commissioner for Research, Innovation & Science in Brussels on the 16th December.

The session in which I participated addressed the role of women in publishing (see the report on page 13). An immediate and gratifying outcome was an Editorial on the topic in *The Lancet*, with a quote on the cover. We identified two immediate courses for action: we need guidance for medical journals on the reporting and analysis of results by gender and we should encourage all those involved in the management of journals, in all disciplines, to ensure that women are properly represented on Editorial Boards and amongst the peer review community.

Guidance is being provided via the Gendered Innovations website (see page 19), which includes a list of methodologies for performing gender analysis. This should be done at the start of a research project: this makes it more a matter for funding agencies to monitor than journal editors but it's worth many editors at least browsing the website and bearing such issues in mind when evaluating papers – or, preferably, helping to draft grant applications. The website also describes some interesting case studies and more will be added in due course.

The second matter pertains to us as editors more directly and is something that many of us should be able to influence: representation of women on Editorial Boards of all sorts and amongst peer reviewers. Conducting peer review can be seen as a chore but it also represents an opportunity to help shape the scientific literature, an ideal way to hone your critical skills and to gain access to pre-published material. Perhaps most appositely of all, it makes you read the whole paper, in detail, rather than skimming key points (always meaning 'to come back later...'). Identifying efficient peer reviewers is difficult and is constantly cited as a problem by managing editors: are we, as a community, making full use of female scientists as reviewers? Reviewing for a journal is one route to the Editorial Board: if women are not invited to be reviewers, they have less chance of being considered when vacancies arise on the Board. Anecdotally, when I

worked at the Ciba Foundation in the early 1990s, many of the symposium proposals we received featured lists of proposed speakers that were predominantly or exclusively male. When we asked the proposers whether there were any women in the field who would be worthy of inclusion in the programme, several names were generally forthcoming. But we had to prompt. So now, as journal editors, you may still need to prompt yourselves and your colleagues to consider all candidates.

Is there scope for EASE to contribute to this debate? Should we generate some simple guidelines? Suggestions welcome. We may organize an informal discussion group at the EASE Conference in Tallinn (a quick check of the programme reveals one woman among four plenary speakers and a roughly equal representation of men and women as session organizers).

The Lancet acts to include more data on women in clinical reports

Since the Gender Summit *The Lancet* has taken a more proactive stance and now includes the following text in the information for authors for all four *Lancet* titles:

"We encourage researchers to enrol women and ethnic groups into clinical trials of all phases, and to plan to analyse data by sex and by race."

This was announced on the cover of the 26 November issue, with an accompanying editorial (doi:10.1016/S0140-6736(11)61795-9).

Joan Marsh EASE President



Essays

The Journal Impact Factor as a performance indicator

Frank-Thorsten Krell

Denver Museum of Nature & Science, 2001 Colorado Boulevard, Denver, Colorado 80205, U.S.A.; frank.krell@dmns.org

Abstract

The Journal Impact Factor is the most commonly applied metric for evaluation of scientific output. It is a journalfocused indicator that shows the attention a journal attracts. It does not necessarily indicate quality, but high impact factors indicate a probability of high quality. As an arithmetic mean of data originating from all authors of a journal with a high variance, it is inapplicable to evaluate individual scientists. For quantifying the performance of authors, author-focused citation metrics are to be used, such as the h index, but self-citations should be excluded ("honest h index" h_b). All citation metrics suffer from the incompleteness of the databases they source their data from. This incompleteness is unequally distributed between disciplines, countries and language-groups. The Journal Impact Factor has its limitations, but if those limitations are taken into consideration, it is still an appropriate indicator for journal performance.

Keywords Journal Impact Factor; the honest *h* index; citation databases; attention; quality; bibliometrics

The "impact factor" is the most commonly used metrical indicator for quality, performance and impact in science, often applied without critical assessment of what it is actually indicating. The impact factor has extensively penetrated academia and academic publishing, which has provoked change in publishing strategies by academic publishers and editors^{1,2} and in authors' publishing behaviour.^{3,4} Editors and publishers strive to increase their journals' Impact Factors. Authors, often under perceived or real pressure from their administration,5,6 choose publication venues according to the values of the Journal Impact Factor. "Massaging" impact factors up by means beyond scholarly quality, such as increased self-citation by authors and journals, creating a higher number of mutually referenced papers from the same body of evidence, timing publications to have maximum exposure for accruing citations, and increasing the number of citation-attracting review papers, has become a common practice; as has the misapplication of the Journal Impact Factor for evaluating research performance of single researchers, institutes or other entities. The body of literature dealing with this phenomenon and imminent problems is substantial and growing. Here, I refrain from attempting a comprehensive review of all problems, manipulation techniques and misapplications of the Journal Impact Factor, but will point to a few crucial aspects and misunderstandings of this pervasive metric.

Journal Impact Factor: definition and coverage

What is commonly called "the impact factor" is short

for the latest two year Journal Impact Factor calculated annually in the *Journal Citation Reports*™ by Thomson Reuters. It is defined as the number of citations within a given year to items published by a journal in the preceding two years divided by the number of citable items published by the journal in these two years.⁷ It is the average number of citations a paper of a journal attracts in the two years following its publication.

The database from which these numbers are sourced is Thomson Reuter's Web of Science which currently covers almost 12,000 active journals and over 3,000 proceedings volumes⁷. This is up from 8,684 titles in 2000,8 but it is still only a third of the scientific serials listed in *Ulrichsweb*™ which is incomplete itself. For disciplines in which Bradford's law or Garfield's law of concentration9 apply and most citations refer to a limited number of core journals, this coverage might be exhaustive. Such fields are, eg molecular biology and biochemistry, biological sciences related to humans, chemistry, and clinical medicine. 10 For other disciplines with more equally distributed relevance of journals or higher relevance of book publications, the Web of Science's coverage is rather insufficient (eg for natural history,11 regionally focused science,12 taxonomy,13 mathematics, economics, humanities & arts10). In general, the Journal Impact Factor considers how often journals are cited in a selective number of journals. By definition, it does not cover the complete impact of a journal.

The portion it misses depends on the discipline of the journal. On pages 126-130 of his book *Citation Analysis in Research Evaluation*, Henk Moed¹⁰ compiled lists of coverage by disciplines and countries. Coverage can be as low as 64% in ecology, 55% in geology, 45% in nursing, 33% in information & library sciences, and 9% in history. Although Moed gives a coverage of 67% for my own research field, zoology, in 2009 *Web of Science* captured only 25.7% of citations of my own papers.¹¹ Thomas Nisonger, a library and information scientist, found in 2004 that 42.4% of his print citations were retrieved by *Web of Science*¹⁴. With the expansion of the coverage of *Web of Science*,⁸ these percentages will go up, but as long as coverage is selective, some disciplines will be disadvantaged.

What performance does the Journal Impact Factor indicate?

The Journal Impact Factor was created by Irving H. Sher and Eugene Garfield in the 1960s "to help select journals for the *Science Citation Index*". It is a simple index, easy to understand and to calculate, that allows comparing journals of any size in terms of citations they attract. By proxy of citations, it indicates the use of journals in scientific research or, in other words, the attention a journal

receives. Since the purpose of journals is to be read and used in scientific research, the Journal Impact Factor is an apt indicator for journal performance. It is only the short-term performance that the Journal Impact Factor reflects though. Since the second year after publication is the year attracting most citations of any year, if the whole database is considered, this short term performance is indicative for the overall performance of many journals. However, the majority of journals reach their citation peak *after* the window that the Journal Impact Factor considers with most journals attracting 70-90% of all citations after the second year. In some disciplines, papers one or two years old are rarely cited, for example, in my own subfield, taxonomy.

Since 2007, Thomson Reuters has been providing a five-year Journal Impact Factor which slightly mitigates the underestimate of the two years citation window by increasing the impact factor for the majority of disciplines¹⁸ and journals¹⁹ taking into account their peak citedness. Nonetheless, use of the 'classical' two-year Journal Impact Factor continues to dominate evaluation and marketing of journals.

As an arithmetic mean for the whole journal, the Journal Impact Factor cannot predict the performance of single papers. In fact, the variation in number of citations to articles of the same journal can be several magnitudes. Articles of the 1998 volume of The Lancet were cited from zero to 2,799 times.²⁰ The majority of *Nature* papers from the years 2002 and 2003 received under 20 citations in 2004; 2.7% of the papers received over 100 citations with a record holder with 522 citations.²¹ In 2009, a single paper attracting 5,624 citations pushed the impact factor of Acta Crystallographica A up from under 3 to 49.93, with all other papers of the journal having attracted three or less citations.²² Such variation renders attempts to use Journal Impact Factors for evaluation of single papers or authors absurd. The Journal Impact Factor reflects performance of a scholarly journal and nothing else. Can we consider this performance as a proxy for quality of the journal?

Quality? Relevance? Attention!

To answer this question, we need to explore what reasons and motives stand behind citations. Citation motives and behaviour have been studied since the 1970s.^{2,23-26} Good quality of a paper is never the sole reason for a citation whereas bad quality can be a good reason not to cite a paper or to cite it as a bad example, or to propose corrections of published errors. The primary reason for citing a paper is or should be that it underpins or at least relates in some useful way to the facts one is writing down. If there are only a few sub-standard studies preceding one's own study, they need to be cited. If there are five bad and two good studies available to cite, then the good ones will be chosen. If the authors of one of the good studies are personal competitors or enemies, one might cite the other study. Collaborating teams tend to cite each other, because of early awareness of the others' results, but also because they want to support each other or because they thank each other with citations. Scientists are humans who act socially (or sometimes antisocially), whether they do so subconsciously

or deliberately. Increasing competitiveness in the research environment fosters selfish behavior. While authors in the pre-impact factor times cited their own publications to embed their studies in their broader research program, to draw attention to their own work, or out of self-adulation, now they become increasingly aware that self-citation helps all sorts of citation metrics. Self-citations, at the journal level, became a strategy to improve the Journal Impact Factor of the journal one publishes in (or one edits).² At the author level, it improves the standing of the author by increasing author-focused metrics, as long as self-citations are included in the citation analysis (which they should not be¹¹).

Even if the choice of references to cite is far from an objective, quality-oriented process, the few studies comparing peer judgment with citation metrics often found positive correlations, ²⁷⁻²⁹ particularly at the level of research groups and single papers. One has to be cautious though. Baird and Oppenheim²⁵ aptly stated: "So, does this mean that if an author writes an article, and it is highly cited, then it is important? No it does not. Rather, what it means is the chances are the paper is important. [...] In other words, high citation counts mean a statistical likelihood of high quality research." It is unknown and hardly possible to quantify how high the likelihood is. At the journal level, citations are a quality indicator only in a very crude sense, in distinguishing (with a certain, but unknown probability) established, reputable journals from minor quality outlets of the same discipline. A journal with an impact factor of 5 is likely to have attracted and to continue to attract higher quality papers than a lesser used journal in the same discipline with an impact factor of 0.7. A slight difference of impact factors, eg 1.6 and 1.9 are unlikely to have any meaning beyond variability.

To whatever extent quality can be derived from citation counts, it is undeniable that the citation rate gives evidence for the attention a journal attracts. A high attention shows that a journal is useful and predicts that others will want to consult this journal. The purpose of the Journal Impact Factor, to determine which journals will be of interest to most, is fulfilled. By which motives this attention is achieved is primarily irrelevant.

Evaluating single authors

For the evaluation of single authors author-focused indices are to be used, which are calculated on the basis of citations of only the author to be evaluated. It seems that the prerequisite for wide acceptance of such an index is its simplicity, not necessarily its sophistication. For almost every letter of the alphabet, a citation based index has been proposed. Of those a-, b-, c-, d-, e-, f-, g-, h-, j-, k-, L-, m-, n-, p-, q-, r-, t-, u-, v-, w-, x-, y-, and z-indices, some of them admittedly very new, only the h-index^{30,31} has gained widespread use. It is probably the most simple, author-focused index, defined as the number of papers of an author with citation number $\geq h$. It has its disadvantages, particularly for younger scientists with lower publication numbers, but it is at least based on the author's publications. Since it can easily be manipulated by strategic self-citations,³² I suggested, as has Schreiber³³ before, to exclude self-citations from its calculations and use

what I called "the honest h index (h_h) ". This is the sort of metrics that should be applied for evaluation of individuals' research performance, not a journal-focused indicator.

Attention fully covered by citations?

The value of those author-focused indices likewise depends on the database from which citations are extracted. The h index of the same scientist can easily be three times higher if another database is used.^{11,34} Currently, we have only incomplete, but growing databases¹¹ available: *Web of Science, SciVerse* Scopus, Google Scholar.* As long as a scientist does not compile his own comprehensive list of citations¹¹ from which citation metrics are calculated, we have to keep in mind that any citation metrics derive from incomplete data sets with an unknown extent of incompleteness. The extent of incompleteness can differ largely depending on, amongst others, discipline, location and language of the scientist.^{10,35}

Besides database incompleteness, we also need to keep in mind that citations represent only a part of the attention a publication attracts. Particularly publications targeted at endusers, such as clinical papers for medical practitioners, ^{25,35} or identification keys for animals or plants, are likely to be frequently used, but not necessarily cited. No correlation was found between the citation count and photocopy requests in certain social work journals. ²⁵ MacRoberts and MacRoberts ³⁶ found that biogeography source papers from which data are derived remain extensively non-cited. Purely citation-based evaluation would lead to a skewed picture of the overall relevance of such papers or whole journals. ^{35,36} However, other studies ³⁷ show a strong positive correlation between downloads and later citations.

Conclusion

The Journal Impact Factor is an appropriate means to evaluate journal performance since it indicates the attention a journal attracts, with the provision that some types of works are used without getting cited. The Journal Impact Factor, if high, indicates a chance that the journal published high quality papers. For the evaluation of individual researchers, journal-focused metrics are inapplicable. Author-focused metrics, such as the h index, are to be used. For any citation-based evaluation, we need to consider the extent of incompleteness of the data source and the circumstances of the entity to be evaluated, namely discipline, location, language-group which influence the number of citations that papers attract.

Competing interests None declared.

Note

Despite the author's intent to refer to current papers, only 10 of the following 38 references would count for the two-year Journal Impact Factor were *European Science Editing* considered as a source journal by *Web of Science*. For the five-year Journal Impact Factor, it would be 21 references. Since *European Science Editing* currently is not considered by *Web of Science*³⁸, none of these references count for the Journal Impact Factor of the cited journals.

References

- 1 Brown H. How impact factors changed medical publishing–and science. British Medical Journal 2007;334:561-563. doi: 10.1136/bmj.39142.454086.AD
- 2 Krell F-T. Should editors influence journal impact factors? Learned Publishing 2009;23(1):59-62. doi: 10.1087/20100110
- 3 Steele C, Butler L, Kingsley D. The publishing imperative: the pervasive influence of publication metrics. *Learned Publishing* 2006;19:277-290. doi: 10.1087/095315106778690751
- 4 Lawrence PA. The mismeasurement of science. Current Biology 2007;17(15):R583-R585. doi: 10.1016/j.cub.2007.06.014
- 5 Adam D. The counting house. *Nature* 2002;415:726-729. doi:10.1038/415726a
- 6 Abbott A, Cyranowski D, Jones N, Maher B, Schiermeier Q, Van Noorden R. Do metrics matter? *Nature* 2010;465:860-862. doi:10.1038/465860a
- 7 Hubbard SC, McVeigh ME. Casting a wide net: the Journal Impact Factor numerator. *Learned Publishing* 2011;24:133-137. doi: 10.1087/20110208
- 8 ThomsonReuters. Web of Science coverage expansion. http://community.thomsonreuters.com/t5/Citation-Impact-Center/Web-of-Science-Coverage-Expansion/ba-p/10663; posted 27 April 2010 [accessed 2011 December 28].
- 9 Garfield E. Bradford's law and related statistical patterns. In: Garfield, E. Essays of an Information Scientist. Volume Four 1979–1980. Philadelphia, PA: ISI Press, 1981:476-483. http://www.garfield.library. upenn.edu/essays/v4p476y1979-80.pdf
- 10 Moed HF. Citation Analysis in Research Evaluation. Dordrecht: Springer, 2005.
- 11 Krell F-T. The poverty of citation databases: data mining is crucial for fair metrical evaluation of research performance. *BioScience* 2009;59(1):6-7. doi: 10.1525/bio.2009.59.1.2
- 12 Martín J, Gurrea P. La Entomología en España y las revistas incluidas en el Science Citation Index. *Boletín de la Asociación Española de Entomología* 2000;24(3-4):139-156. http://www.entomologica.es/index.php?d=publicaciones&num=54&w=1078&ft=1
- 13 Krell F-T. Why impact factors don't work for taxonomy. Its long-term relevance, few specialists and lack of core journals put it outside ISI criteria. *Nature* 2002;415:957. doi:10.1038/415957a
- 14 Nisonger TE. Citation autobiography: an investigation of ISI database coverage in determining author citedness. *College & Research Libraries* 2004;65:152-163. http://crl.acrl.org/content/65/2/152.full.pdf+html
- 15 Garfield E. Journal impact factor: a brief review. *Canadian Medical Association Journal* 1999;161(8):979-980. http://www.ecmaj.ca/content/161/8/979.full.pdf+html
- 16 Moed HF, Leeuwen TN van, Reedijk J. A new classification system to describe the ageing of scientific journals and their impact factors. *Journal of Documentation* 1998;54(4):387-419. doi: 10.1108/EUM000000007175
- 17 Moed HF, Burger, WJM, Frankfort JG, Raan, AFJ van. The application of bibliometric indicators: important field- and time-dependent factors to be considered. *Scientometrics* 1985;8(3-4):177-203. doi: 10.1007/BF02016935
- 18 Nierop E van. The introduction of the 5-year impact factor: does it benefit statistics journals? *Statistica Neerlandica* 2010;64(1):71-76. doi: 10.1111/j.1467-9574.2009.00448.x
- 19 Campanario JM. Empirical study of journal impact factors obtained using the classical two-year citation window versus a five-year citation window. *Scientometrics* 2011;87:189-204. doi: 10.1007/s11192-010-0334-1

continued on page 6

Fragments of academic publishing in Estonia

Mare-Anne Laane

Lecturer, Tallinn University of Technology, Estonia; mareanne.laane@ttu.ee

This fragmentary text introduces the venue of EASE Tallinn 2012 conference in the context of Estonian academic publishing.

Estonia's printing press came into being in 1631 at the secondary school of Tartu, the predecessor of the University of Tartu, which was founded on 30 June 1632 by the Foundation Decree of Academia Dorpatensis, signed by King Gustav II Adolf of Sweden.



Main building of the University of Tartu (Photographer: Andres Tennus)

The University of Tartu History Museum showcases the history of science and publishing as well as university education from the 17th century to the present day. The museum occupies the former university library, which was built in the choir of the ruins of a former dome cathedral.



University of Tartu History Museum (Photographer: Andres Tennus)

Tallinn University of Technology (founded in 1918), the venue for the 2012 EASE Conference, is the second largest

continued from page 5

- 20 Kostoff, RN. The difference between highly and poorly cited medical articles in the journal Lancet. *Scientometrics* 2007;72(3):513-520. doi: 10.1007/s11192-007-1573-7
- 21 Campbell P. Escape from the impact factor. *Ethics in Science and Environmental Politics* 2008;8:5-7. doi:10.3354/esep00078
- 22 Dimitrov JD, Kaveri SV, Bayry J. Metrics: journal's impact factor skewed by a single paper. *Nature* 2010;466:179. doi:10.1038/466179b
- 23 Bavelas JB. The social psychology of citations. *Canadian Psychological Review* 1978;19(2):158-163. doi: 10.1037/h0081472
- 24 Bonzi S. Characteristics of a literature as predictors of relatedness between cited and citing works. Journal of the American Society for Information Science 1982;33(4):208-216.
- 25 Baird LM, Oppenheim C. 1994. Do citations matter? *Journal of Information Science* 1994;20(1):2-15. doi: 10.1002/asi.4630330404
- 26 Bornmann L, Schier H, Marx W, Daniel, H-D. What factors determine citation counts of publications in chemistry besides their quality? *Journal of Infometrics* 2012[2011];6:11-18. doi:10.1016/j. joi.2011.08.004
- 27 Rinia EJ, Leeuwen TN van, Vuren HG van, Raan AFJ van.

 Comparative analysis of a set of bibliometric indicators and central peer review criteria; evaluation of condensed matter physics in the Netherlands. *Research Policy* 1998;27:95-107. doi:10.1016/S0048-7333(98)00026-2
- 28 Oppenheim C, Summers MAC. Citation counts and the Research Assessment Exercise, part VI: Unit of assessment 67 (music).

 Information Research 2008;13(2) paper 342. http://InformationR.net/ir/13-2/paper342.html [accessed 2011 December 31]
- 29 Patterson MS, Harris S. The relationship between reviewers' quality-

- scores and number of citations for papers published in the journal Physics in Medicine and Biology from 2003–2005. *Scientometrics* 2009;80(2):343-349. doi: 10.1007/s11192-008-2064-1
- 30 Hirsch JE. An index to quantify an individual's scientific research output. *Proceedings of the National Academy of Sciences of the USA* 2005;102(46):16569-16572. doi: 10.1073/pnas.0507655102
- 31 Bornmann L, Marx W. The h index as a research performance indicator. European Science Editing 2011;37(3):77-80.
- 32 Bartneck C, Kokkelmans S. Detecting h-index manipulation through self-citation analysis. *Scientometrics* 2011;87:85-98. doi: 10.1007/s11192-010-0306-5Open Access
- 33 Schreiber M. Self-citation corrections for the Hirsch index. *Europhysics Letters* 2007;78: paper 30002. doi:10.1209/0295-5075/78/30002
- 34 Bar-Ilan J. Which h-index? A comparison of WoS, Scopus and Google Scholar. *Scientometrics* 2008;74(2):257-271. doi: 10.1007/s11192-008-0216-v
- 35 Raan AFJ van, Leeuwen TN van, Visser MS. Severe language effect in university rankings: particularly Germany and France are wronged in citation-based rankings. *Scientometrics* 2011;88:495-498. doi: 10.1007/s11192-011-0382-1
- 36 MacRoberts MH, MacRoberts BR. Problems of citation analysis: a study of uncited and seldom-cited influences. *Journal of the American Society for Information Science and Technology* 2010;61(1):1-13. doi: 10.1002/asi.21228
- 37 Watson AB. Comparing citations and downloads for individual articles. *Journal of Vision* 2009;9(4):1-4. doi: 10.1167/9.4.i
- 38 Gasparyan AY. Get indexed and cited, or perish. *European Science Editing* 2011;37(3):66.

public university in Estonia. The university is the nation's leading academic institution in engineering, business, and public administration.



Façade of Tallinn University of Technology (Photographer: Viivi Ahonen)

Tallinn University of Technology Library is housed in a building unique in architecture and exterior material.



Interior of Tallinn University of Technology Library (Photographer: Viivi Ahonen)

In addition to recent publications, it also holds rarities.



Rare books in Tallinn University of Techology library, (Photographer: Viivi Ahonen)

Major scientific publications issued by the Estonian Academy Press in collaboaration with the universities have international editorial boards.



Estonian Academy of Sciences (Photographer: Viivi Ahonen)

All the journals published in English are peer reviewed and recognized by the Estonian Science Foundation and the Estonian Research Council, concordant with international science standards.

The publications of the Estonian Academy Publishers cover practically the entire range of contemporary science key areas. Examples are: Acta Historica Tallinnensia, Estonian Journal of Archeology, Estonian Journal of Earth Sciences, Estonian Journal of Ecology, Estonian Journal of Engineering, Liguistica Uralica, Oil Shale, and Proceedings of the Estonian Academy of Sciences: Chemistry, and Physics. Mathematics. All these journals, except for Acta Historica Tallinnensia and Estonian Journal of Archeology, are quarterly.



Journals of Estonian Academy Publishers (Photographer: Viivi Ahonen)

Copy editors and author's editors of most of the journals are English philologists and English teachers who have qualified for editing in certain areas. As the authors are not native speakers of English, major revisions are occasionally the case. Senior writers, who were writing in Russian for years to publish their articles, still need substantial help. According to my experience, the main drawbacks are to do with the differences in word order: in Estonian the order is free, but English sentences carry a fixed word order. Many other troublespots need attention when training and working with PhD students and young authors who are writing for publication. Experiences of copy editing in Estonia may be a topic for an essay.

Sources: www.ut.ee/en/university/general/history; www.ajaloomuuseum.ut.ee; www.kirj.ee

Reports of Meetings

2011 European Conference of the International Society of Managing and Technical Editors (ISMTE)

Oxford, 18 October 2011

The International Society of Managing and Technical Editors (ISMTE) is a dynamic organisation of editors founded in 2008 that is rapidly expanding in numbers. With its mission "to connect the community of professionals committed to improving peer review management", it provides networking among peers, education and training, research, and resources necessary for best practices and development of journal policy. A sister organization of EASE, it recently held one of its two annual conferences at St Hugh's College in Oxford, UK, attended by 60 participants from nine countries.

Michael Willis welcomed the President, Elizabeth Blalock from the US, who gave an overview of the society's activities and perspectives. The two plenary sessions had one main theme, "changing landscapes" in open access and in the peer review process.

Caroline Sutton of the Open Access Scholarly Publishers Association (founded 2008 to support and represent open access (OA) journal publishers) presented the rapidly changing thinking about OA and its acceptance in the scientific community in the US and Europe. OA essentially means free access and re-use of data, including for commercial purposes, with attribution. She discussed OA by self-archiving of peer-reviewed articles and the different policies of publishers on deposition of articles.

In the US, taxpayers require free access to information, which is not the case in Europe. Here, a great change in thinking occurred in 2010, when the European Commission began to talk about OA in terms of research, innovation, and behaviour of universities. OA is now viewed as a key to economic growth in Europe. Denmark has already made great innovations, and information should be spread to all member states.

Caroline analyzed several aspects of OA saying that "knowledge is no longer property but a node within a network". The value of an article will be measured by usage of its components: text, tables, and graphs.

Steven Hall from the Institute of Physics Publishing (IoPP) reported on OA policy initiatives in Europe such as pure OA journals, free online access for first 30 days, and hybrid OA in subscription journals, as well as on several projects and online surveys. He mentioned the costs and benefits of changes in scholarly publications and how to proceed, describing publishers' responses to these initiatives as equivalent to the "five stages of grief": denial, anger, bargaining, depression, and acceptance. Constructive engagement is the key to change: a clear and approach to repositories and gold open access and commitment to multiple business models. Engagement with funding agencies should ensure robust and sustainable funding mechanisms for publication fees, help the agencies

to track the research they sponsor, and enable the adoption of appropriate copyright policies.

Adrian Mulligan, Deputy Director, Elsevier, viewed the peer review process under a virtual microscope. In 2009, over 1.4 million research articles were published in peer-reviewed journals, or one every 22 seconds, although each peer review takes from 2 to 4 hours to prepare. However, a general erosion of the process results in holding back innovative research and in research articles not being improved. The system is not good at stopping plagiarism and fraud either.

The peer review system is not a panacea: there are deficits especially in improving the quality of papers, showing the originality of the results, determining the importance of findings, and ensuring that previous work is acknowledged. The burdens of peer review are shared unevenly. For example, the proportion of global reviews in the US is 12% greater than its proportion of global research, whereas China's contribution to peer review is 5% and its contribution to science 12%. Initiatives to improve the review process include cascading peer review, passing reviews on to another journal, forming consortia with agreement to accept reviews from other journals (as for 37 neuroscience journals, for example).

The conference heard how to improve reporting standards. Jason Roberts, Managing Editor, *Headache*, gave advice on how to help authors. Workshops considered reporting guidelines; managing and involving your editorial board; attracting authors; pre-screening and triage; strategies for managing accepted articles; and building up reviewer loyalty.

Discussions were lively on all themes and continued in the extended refreshment breaks, which also gave participants the chance to network. The conference showed how quickly the editorial scene is changing worldwide, highlighting some new challenges and the never-ending effort to make the presentation of science more efficient and accessible for all.

Eva Baranyiová

Scientific Editor, Agricultura Tropica et Subtropica Czech University of Life Sciences, Prague Kamýcká 129, 165 21 Prague, Czech Republic ebaranyi@seznam.cz

ISTME is organizing a session at the EASE conference in Tallinn - for further information go to www.ease.org.uk

Changing landscapes in Oxford

Fourth ISMTE European Conference

The damp, grey, blustery chill of autumn has yet to arrive in force in the UK but, as in previous years, the sun shone bright and clear upon St Hugh's College, Oxford, for this year's European conference. The September issue of *EON* reported that this year's North American conference was the largest conference yet, and it was particularly pleasing that the European conference was similarly full to capacity, with 60 registered delegates. Although the majority were from the UK, eight other European countries were represented.

Following a welcome by Michael Willis on behalf of the ISMTE and conference committee, Elizabeth Blalock initiated formal proceedings with a survey of the Society and its activities to date. The meeting then launched into the first of two morning plenary sessions with the theme 'Changing landscapes' – in open access (OA), then in peer review.

Open access

Caroline Sutton (Co-Action Publishing, OASPA) initiated the first session by repeating to a large extent her presentation from the North American conference, this time with a shifted focus towards the European position. Originating from the USA but living and working in Scandinavia, Caroline was well-qualified to examine issues from both sides of the 'pond'. She anticipated this to be her last-ever presentation of the case for open access given that, as she sees it, this is now something taken for granted within the industry. She explored how arguments for OA have shifted in recent years, particularly drawing attention to the often-overlooked point that OA is about free access to *and* free re-use of publications. She examined some of the philosophy underlying OA, for example that 'Knowledge is no longer property but a node within a network, and the argument that an article's usage will dictate its value. The role of the publisher within this changing landscape is to contribute to the infrastructure of knowledge rather than to the knowledge itself.

Steven Hall (Institute of Physics Publishing, IoPP) followed this by explaining how IoPP and other commercial publishers are facing up to the challenges of open access. Publishers have generally responded initially with denial, moving through stages of anger, bargaining and depression and concluding with some form of acceptance. Steven outlined the favoured approach now as being one of constructive engagement in the debate, starting with a clear and transparent communication of policies, tagging publications with rich metadata to enable funders to maximise the return on their funding, and offering a sustainable 'gold' OA model on all relevant journals. Bearing in mind the subsequent discussion of peer review, Steven also cautioned against bringing a discussion of peer review models into the OA debate; there is no necessary relationship between model of peer review and article funding.

Training and Resources

After refreshments Jason Roberts gave a brief synopsis of the role and remit of the Society's Training and Resource Committees, amply illustrated by reference to the materials already available on our website (http://www.ismte.org/Resource Central).

Peer review

By pure coincidence the UK Government's response to the Parliamentary Science and Technology Committee's report on scientific peer review was published 30 minutes before the second morning session, which thereby proved to be about as topical as we could have envisaged, and the speakers referred to both the report and the Government's response in their presentations.

In the context of the turbulent times through which scientific peer review appears to be passing, Adrian Mulligan (Elsevier) launched the session on peer review by presenting a broad survey of results from studies on perceptions of peer review, particularly among academics. It was well-illustrated with figures and case studies ranging from the staggering (one peer review undertaken on average every 22 seconds in 2009) to the bizarre (the case of the journal *Rejecta Mathematica*, which takes pride in publishing papers rejected from all other journals; significantly it has published 12 papers in two issues in the past three years). Perhaps despite the impression often given, studies undertaken by Elsevier of author and reviewer behaviour indicate that both groups overwhelmingly favour single-blind peer review above other models.

Crisis or no crisis in this area, an enlightening study of how the *British Medical Journal (BMJ)* has responded to the various challenges was given by Trish Groves (Editorin-Chief, *BMJ Open*), who described two trials conducted by the journal which showed that reviewers were generally more reluctant to participate in open peer review, although whether a paper proceeded through closed or open peer review (where the reviewers' comments would be published alongside the article) did not affect the quality of the peer review itself. Trish demonstrated that *BMJ Open* seeks to be as 'open' as it feasibly can, both as a gold OA journal and by publishing previous versions and all reviews (unedited, just as they are submitted) alongside all published articles.

A variety of post-lunch optional workshops enabled delegates to consider day-to-day difficulties in editorial offices. Jason Roberts discussed the increasing number of guidelines available to the scientific community for reporting on research; Diana Epstein looked at methods for increasing the involvement of editorial board members; and Andy Collings from PLoS talked through various strategies to attract authors (attracting the right kind of authors, the workshop concluded, was just as important as attracting more authors). More refreshments followed a brief time of feedback, after which a further set of workshops gave delegates the opportunity to consider mechanisms for prescreening or triaging submissions (led by Michaela Barton); strategies for managing poor or excessive copy flow (Michael Willis); or ways to build up the loyalty of reviewers (Sherryl Sundell). Feedback from those attending suggested that the workshops provided many useful ideas, the one oftenmentioned disadvantage being was that it wasn't possible to attend all of them.

Collaboration

A central objective of the ISMTE is to facilitate networking among those working in the field, an objective which was amply met in a number of ways. In previous years the European conference has hosted an 'Ask the Expert' session, but on this occasion we transmuted it into an 'Exchange Forum', along the lines of the North American conference. The presupposition is that, to a lesser or greater degree, the delegates are the experts and will benefit from each other's experience and advice. Extended refreshment breaks also contributed to the opportunities for networking, regaling each other with tales of editorial woe and success, and quizzing the speakers about issues raised in the main sessions.

Dinner

A new departure this year was a pre-conference dinner, essentially a substitute for a post-conference cheese and wine reception held in previous years, and available at no additional charge to all who wanted to sign up. Given that a significant proportion of delegates have to travel to the conference from some distance, staying overnight beforehand, the dinner permitted people to meet each other before the main proceedings and to make the most of the time available. The dinner, held at the Quod restaurant in central Oxford, was full to capacity and it was particularly welcome to have some of the conference speakers present. The highlight of the evening was a guest speaker from the Council of European Association of Science Editors (EASE), Professor Eva Baranyiová, who enlightened diners with her tales of the unexpected in 40 years of editing a journal through the era of Communism, the Velvet Revolution and recent years, each epoch presenting challenges all of its own. Given that there is some overlap in the interest of our members, ISMTE is exploring with EASE ways of providing reciprocal benefits to our members. If you are an EASE member and happen to be at next year's conference in Tallinn, look out for a parallel session run by ISMTE members on journal metrics and reporting.

The future

This year's European conference was successful in many ways. Our vision for next year - the Society's fifth birthday - is that we have more sessions (perhaps extending the conference length), more first-rate speakers, yet more highly relevant topics and, of course, more attendees. If you benefited from this year's meeting and would like to be involved in contributing to the next, do consider joining the committee. We would welcome your involvement and contribution most warmly.

Michael Willis

Chair, ISMTE European Conference Committee 2011 Member, ISMTE Board

First published in the International Society of Managing and Technical Editors' (ISMTE) newsletter, *Editorial Office News (EON)*, November 2011 issue. Available at www.ismte.org

Challenges and approaches to ethical publication in Iran

Joint first regional congress on ethical publishing, Shiraz, Iran, 24-25 November 2011

Science production is increasing globally, particularly in developing countries where universities and faculties are expanding and more researchers are training to become faculty members. In Iran, universities are accepting more students and recruiting more faculty members, and increasing numbers of research centres are being established. Many of the staff at these institutions strive for academic promotion through scientific publication, which has led to the founding of more and more journals in the region. Currently 212 medical journals are published in Iran alone.

Journals are sometimes forced to neglect some qualitative aspects of publication to compete with other journals and publish their issues on time, and their editors cannot be as selective as they used to be. Decision making is a real dilemma for regional editors because, despite the higher number of submissions, the number of high quality articles seems to be falling.

Researchers also face dilemmas. The demand for academic output and the need for promotion on top of daily professional duties leave them short of time. In such an environment, ethics may be the first thing to go, although unethical publishing damages journals, researchers, and the whole integrity of research with a direct impact on everyone.

Editors must raise the reputation of their journals through professionalism, knowledge, awareness of medical journalism issues, and ensuring that authors and reviewers act ethically.1 Ethical publishing has become increasingly important in recent years in most developed and developing countries. A study of 190 journals indexed in Medline found that, although the editors of the journals had sufficient knowledge about editorial work, they were poorly informed on topics such as authorship, conflict of interest, peer review, and plagiarism.² International bodies dealing directly with ethical issues, such as the Committee on Publication Ethics (COPE), have become more active and recognized in recent years. Flowcharts on ethical misconduct are currently available in several languages, including Persian, and have helped universities realize the importance of ethical issues and universities and journals the importance of formulating policies to deal with such issues.

Researchers, too, should become more aware of ethical publishing. Few of the ethical misconduct behaviours committed by researchers are intentional, but most of them arise from lack of appropriate knowledge. Universities deal with intentional misconduct seriously. However, solving researchers' and sometimes editors' lack of knowledge is harder to tackle and more time consuming.

A short-term approach is to organize national and regional congresses, seminars, and workshops specifically on ethical issues related to scientific publication for the whole research community. Therefore, the first regional congress specifically devoted to ethical publishing was held in November in Shiraz, Iran, by Shiraz University of Medical Sciences in association with COPE and the Iranian Society of Medical Editors.

Over 200 participants - regional editors and international editors from countries such as Norway, Croatia, Pakistan, Egypt, Bosnia, India, and the United Arab Emirates - took part in this two-day English congress. Twenty-six presentations from different countries targeted different aspects of publication ethics – for example, plagiarism, data fabrication, falsification, authorship disputes, and image manipulation. The congress included key lectures by two guest speakers (Professor Ana Marusic from Croatia, and Dr Charlotte Haug from Norway), two video conferences (by Professor Douglas Altman and Dr Trish Groves from London), post-conference workshops, and panel discussions. There were also exhibitions by most of the 212 medical journals currently published in Iran, as well as some journals from other regions.

Dr Altman mainly discussed the ethical imperative of good reporting in research and the impact of a research article, and the cost and consequences of bad reporting. He further mentioned some existing guidelines for good reporting and the actions that should be taken by authors and editors.

Other than congresses, workshops on various aspects of ethical publishing can enhance the awareness of researchers. More than 250 such workshops have been held over the past five years in different cities across Iran to raise the general knowledge of researchers.

Another method to increase the insight of regional editors about various aspects of medical publishing is to train editors who have to train other editors. The first such programme was started some years ago by the regional office of the World Health Organization in Cairo. The second was held just before the congress, from 14 to 17 November, also in Shiraz, Iran, by Pippa Smart for regional editors from some of the countries in the Eastern Mediterranean region.

A most effective way of compensating for the lack of knowledge on publication ethics is to establish academic courses on medical journalism. Shiraz University of Medical Sciences established a two-year masters course in medical journalism in 2009, the first in the Middle East. This course aims to train professional medical editors to improve the traditional method of medical publication in the region. Graduates of this course go on to become professional medical editors and are knowledgeable about all aspects of medical journalism and able to train journal staff and guide a medical journal effectively.

Another way is to train medical writers and establish professional medical writing institutions to help researchers in writing their articles, as well as provide professional consultation for researchers before, during, and after their studies.³ Since English is currently the dominant language of publication, and most foreign researchers shift towards ethical misconduct behaviours such as plagiarism and "patchworking" because of their lack of proficiency in English, such intuitions, if guided ethically, can greatly enhance the style and quality of written articles.⁴ Professional medical writers can enhance the quality of medical publications, but standard guidelines on ethical medical writing must be developed to avoid unethical actions⁵ in a region where cultural differences may lead to different interpretations of ethical issues such as ghost writing.⁶

Regional medical journalism fellowship programmes could also be organized in different regional countries to raise the general professional knowledge of regional editors.

Behrooz Astaneh

Vice President, Iranian Medical Journal Editors Society, and Deputy Editor, Iranian Journal of Medical Sciences, Shiraz University of Medical Sciences, Shiraz, Ira astanehb@yahoo.com

Sarah Masoumi

English Editor and Foreign Correspondent, Iranian Journal of Medical Sciences, Shiraz University of Medical Sciences, Shiraz, Iran

References

- 1 Peh WCG, Ng KH. Effective medical writing: pointers to getting your articles published. *Singapore Med J* 2008;49(6):443-4.
- 2 Wong VS, Callaham ML. Medical journal editors lacked familiarity with scientific publication issues despite training and regular exposure. *J Clin Epidemiol* (in press). doi: 10.1016/j.jclinepi.2011.08.003
- 3 Astaneh B, Masoumi S. Professional medical writing and ethical issues: a developing country's perspective. *European Science Editing* 2011;37(3):85.
- 4 Cameron C, Zhao H, McHugh MK. Publication ethics and the emerging scientific workforce: Understanding "plagiarism" in a global context. *Academic Medicine* 2012;87(1):1-4. doi: 10.1097/ ACM.0b013e31823aadc7
- 5 Wager L, Jacobs A, Carpenter J, Donnelly J, Klapproth JF, Gertel A, et al. The involvement of professional medical writers in medical publications: results of a Delphi study. *Curr Med Res Opin* 2005;21(2):311-6. doi: 10.1185/030079905X25569
- 6 Astaneh B. The culture of compliments. BMJ blog. http://blogs.bmj. com/bmj/2010/02/25/behrooz-astaneh-the-culture-of-compliments/

"It is sad to see so much enthusiasm and effort go into analyzing a dataset that is just not big enough."

Anonymous reviewer for Environmental Microbiology

Digital opens new possibilities for the book

The Future Perfect of the Book, University of London, 25 November 2011

"At a moment when the rise of e-readers foretells the end of the printed book, the founder of the Internet Archive, Brewster Kahle, launches an initiative for the preservation of the book. He is creating a storehouse for physical books in specially-adapted containers on the west coast of the United States in order to preserve them as 'backup copies' for posterity. His idea came about as a reaction against the notion that books can be put beyond use (or thrown away) as soon as they are digitized."

Thus read the introduction to the programme of the Book History Research Network's colloquium, which considered not just what "will be" but also "what would have been" – the future perfect of the book.

As science editors we are more concerned with the information contained in the book (or journal) than with the container itself – but how many of us now prefer to read for pleasure on our e-reader? Buying our books online, indeed finding information online about what to buy, do we feel part of a community of readers? Has our local bookshop, so useful for browsing, recently closed?

Destabilising the hierarchies of the printed page has a moral dimension, said Anouk Lang (University of Strathclyde): it threatens the established order. Amid anxieties about the unknown impact of new technologies, we are adopting hybrid practices, using old terms for new functions. Reading becomes interpenetrated with other spheres of life – for instance, online purchase of books makes us part of an interested community whose task is the activity of book consumption, and retailers are strategically creating this culture.

Digital is not the same everywhere: different users behave differently. Elena Pierazzo (King's College London) pointed out the sense of ownership of those who use tablets – they speak fondly of "my i-Pad". Are tablets too much fun to use (more ludic than haptic) – can they have a serious purpose? Astronomy apps, for example, are very popular. But when building new applications, it's important to address the assumptions of users and originators. Amid the growing number of scholarly apps, though, where are the editors? – They need to be visible.

Aleŝ Vaupotiĉ (Academy of Design, Ljubljana), speaking about the book on the internet, touched on its impact on copyright regulations – many are outdated in terms of the new possibilities of the new formats. This is something worth investigating further.

Mass digitization is all the rage, but there is little evidence about how its products are used, said Paul Gooding (University College London). Any new medium will have an impact on social processes. Meaning moves away from the text and into the word – hence the need for meta-data. The standard of un-proofread OCR (optical character recognition) is not good enough ("what kind of research can we do with garbage?") – we need to be aware of these limitations.

Is the day of the page numbered, then? The traditional book was always a very controlling technology, said Elaine Treharne (Florida State University), keeping us from moving beyond episodic and linear structures. In the digital age, the page can be more than a receiver of information. But the page is not the basic element of reading the text... what's on it is what matters.

Finally, good news about local bookshops from Caroline Hamilton (University of Melbourne). Using strategies that have more to do with community-building than bookselling, such as after-hours events, they are doing well. While shopping, we imagine the possession and use of the things we are shopping for. We like to imagine ourselves as readers, and cosy bookshops provide a place to fulfill that fantasy, especially if we take a tangible book home with us.

Other sessions looked at how the past envisioned the future of the book – after all, the printed book suddenly disrupted the foundation of manuscript culture and the transmission of the written, resulting in an initial wave of mistrust. One of the central questions of the day was "How much of the (old) culture of the book is retained in the new digital media" – I think the short answer is that much is retained, but in a (conscious or unconscious) way that creates new groupings and alliances of readers.

Margaret Cooter mcooter3@gmail.com

New EASE members: Korean Council of Science Editors

We are delighted to welcome the Korean Council of Science Editors, who have recently taken a Corporate membership of EASE. We were approached by Sun Huh, Prof. of Parasitology at Hallym University, who is also Chair of the Committee of Training at KCSE. Professor Huh was planning a workshop for early December 2011 and was looking for suitable reference material. Having heard of our Science Editors' Handbook, it was decided to order 45 copies to support delegates at the workshop.

Sun commented, "I read it and found that every chapter is essential to editors".

KCSE was launched in September 2011, and currently has just 51 members. However since there are more than 600 science journals in Korea, they are confident that numbers will increase year by year. Sun Huh is to attend the EASE meeting in Tallinn, to deliver an oral presentation and a poster. We wish KCSE every success and look forward to working in collaboration with this fledgling organization.

Gender issues in science publications

Gender Summit, Brussels, Belgium, 8-9 November 2011

In November the Gender and Ethics Unit of the European Union organized a Gender Summit to address quality research and innovation through equality. The thesis was that for the EU to remain competitive economically, it needs to ensure that its workforce, particularly at high levels in management and leadership, includes women as well as men. Studies have shown that teams of men and women are more creative and innovative than single-sex teams.

One session was dedicated to science publishing and was facilitated by Professor Simone Buitendijk, Vice-rector of the University of Leiden, who later summarized the key points at the final plenary session in front of the 400 registered delegates. The session was opened by Dr Shirin Heidari, Executive Editor of the Journal of the International AIDS Society. Shirin reminded us that women have been historically excluded from clinical trials, so most prescribing information is extrapolated from data predominantly obtained in men. In 1997 the US National Institutes of Health introduced its revitalization act, which requires the inclusion of women in NIH-funded trials. However, a review of clinical trials testing antiretroviral drugs between 1995 and 2010 shows that women remain underrepresented, making up less than 40% of trial participants. Gender is also neglected in published literature, where authors rarely include gender-based analysis, and is something that few peer reviewers and editors note. Shirin showed evidence that, with some variation between journals, the majority of published articles on trials of antiretroviral agents did not provide a gender-based analysis.

The International Committee of Medical Journal Editors has two sentences on gender issues in its uniform requirements (Vancouver guidelines):

"Because the relevance of such variables as age and sex to the object of research is not always clear, authors should explain their use when they are included in a study report—for example, authors should explain why only participants of certain ages were included or why women were excluded."

And, "Where scientifically appropriate, analyses of the data by such variables as age and sex should be included."

The *Journal of the International AIDS Society* has taken a first step to address this gap and introduced a gender editorial policy in 2010.

Dr Astrid James, Deputy Editor of *The Lancet*, confirmed that gender implications are often underreported in published articles, though she was pleased that *The Lancet* was the best of the journals mentioned in Shirin's presentation. She informed us that *The Lancet's* international advisory board has had equal representation of men and women for several years. She also pointed out that four of the top seven medical journals have female chief editors.

Dr Joan Marsh of Wiley-Blackwell and President of the European Association of Science Editors, thought that positive action could be helpful. When recruiting new members to editorial boards, people should question whether there are eligible women: anecdotal experience suggests that while men are usually listed initially, on prompting, many equally suitable female candidates become available. Such positive action (not positive discrimination) could be extended to peer review. Being invited to review papers is an important step in academic progression and becoming part of the decision-making elite within the academic community. As editors, we should check that women are being considered equally for these roles.

The social science perspective was addressed by Professor Ulla Carlsson, Director of the Nordicom Review, who emphasized that editors should be more proactive in promoting gender analyses and balance.

Dr Virginia Babour, Editor of *PLOS Medicine*, regrets that authors frequently write "Dear Sir" even when addressing female editors. She said that many women are prominently active in the open access movement, a disruptive environment in which their complementary talents may be more welcome, although traditional publishing has always been an industry in which women are well represented. Dr Magdalena Skipper, Senior Editor at *Nature*, confirmed that her in-house working environment has more women than men but the opposite applies when she goes to scientific meetings or institutions. *Nature* has a policy that all data referred to in publications must be publicly available and hence open to further analysis but it has no specific policy on gender. In her own discipline of genetics and genomics, sex is reported because it is a critical feature.

The panel presentations were followed by a lively discussion that ranged over several related issues, including bias against female authors (see Amber Budden's study in *Trends in Ecology and Evolution*, doi:10.1016/j. tree.2007.07.008) and thus the merits of various degrees of transparency in peer review, from double-blind to open.

Ginny Babour said that she does not allow peer reviewers to make private comments "for the editor's eyes only": a policy that Shirin determined to adopt immediately.

Joan Marsh thought that there were two "take-home" messages: we need guidance for medical journals on the reporting and analysis of results by gender and we should encourage all those involved in the management of journals, in all disciplines, to ensure that women are properly represented on editorial boards and among the peer review community. Simone Buitendijk added a call for the European Medicines Agency to license drugs only when the data fully cover the effects in women.

Shirin Heidari

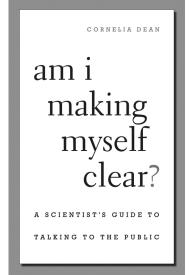
Executive Editor, Journal of the International AIDS Society shirin.heidari@iasociety.org

Joan Marsh

Associate Publishing Director, Wiley-Blackwell jmarsh@wiley.com

Book Reviews

am i making myself clear? Cornelia Dean, Cambridge Massachusetts, United States of America: Harvard University Press, 2009. ISBN 978-0-674-03635-2.



The title intrigued me. Was it a challenge of the sort that a teacher might make in the first class after lunch, when his students' eyes were drifting out of the window in erotic fantasy, like Debussy's faun? Or did it imply genuine concern, burden to communicate. a fear that important information might not be getting through? What sort of book would it be?

When it arrived I had further questions even before opening it. Why

had the publisher chosen to eschew capital letters for the title? Was this an attempt to attract readers of e e cummings? The author's name and the strapline 'a scientist's guide to talking to the public' were in capitals. It was a quaint little volume, with an orange dust cover, reminiscent of the Everyman and World's Classics imprints of the early twentieth century.

So far, so quirky. It is, of course, an important subject. Scientific method underpins our understanding of how living things and the world around us work, the nature of the universe, and the ways in which the technological tools and entertainments we take for granted are developed. Yet in word association the word 'scientist' is liable to be followed by 'mad', Albert Einstein is remembered as much for his unruly hair as for his theory of relativity, and Professor Frink from *The Simpsons* is gauche, incomprehensible, and afflicted with nervous tics.

The world of science has its work cut out to cut through prejudices that science is dull, hard, and irrelevant. It has also had its fingers burned at times by journalists more eager for a good story than for accurate communication of research findings.

Enter, Cornelia Dean, science writer and former editor at the *New York Times*, who teaches the communication of science at Harvard University. Hers is a serious book, which does indeed lay down a challenge to scientists – to engage with journalists, and to improve thereby the public's understanding of their work.

The book is in essence a "how to" guide, but written in continuous prose, broken up by a very occasional text table, and not an algorithm to be found. It is very much an American book, referring almost entirely to American journalism and the American public. A reader looking for something along the lines of Ben Goldacre's *Bad Science* would be disappointed – this book covers different territory and in a very different style. Laughs at the expense of inept

scientific communicators and scurrilous journalists will not be found.

It is a thoughtful book, and a scientist with a wish to communicate more widely than among his/her colleagues can learn from it. The author emphasises the problem of widespread ignorance of science among the general public, and illustrates how this, along with the very brief periods of time or small spaces in print media offered for scientific topics, make it hard to get accurate messages across. She also provides examples of the ways in which policy makers appropriate scientific ideas for reasons that have more to do with values than hypotheses and facts.

The book offers suggestions for working with journalists in different media – print, broadcast, and online. Considerable detail is given to the interaction between scientist and journalist, including tensions between scientists' tendencies to focus on limitations and subtlies when a journalist wants a clear, succinct take-home message.

A whole chapter is devoted to public relations departments, including the importance of accurate press releases, handling press conferences, and how to present bad news. The author also advises on strategies to use if asked to act as an expert witness in legal cases, and provides a salutory reminder that while in science it is unethical to conceal "uncomfortable data" the same does not apply in legal arguments. In a chapter entitled "Making policy" she warns of the frustration of being asked for advice by politicians only to find that scientific facts and opinions may count for little when decisions are made. Wisely, she advises scientists to be aware of whether they are offering personal or professional opinions or speaking as representatives of an institution.

She suggests potential vehicles for messages you may want to put across – blogs, comment pieces in newspapers, science cafés, books, public speaking – and offers sensible advice for keeping out of the trouble that results – for example, from careless drafting and failing to insist on having your quotes read back to you. In essence, however, the author challenges scientists to emerge from their laboratories and tell the world what they do, why it matters, and do so clearly.

Stuart Handysides Associate editor, ProMED-mail stuart_handysides@hotmail.com

"When *I* use a word," Humpty Dumpty said, in rather a scornful tone, "it means just what I choose it to mean—neither more nor less."

"The question is," said Alice, "whether you *can* make words mean so many different things."

"The question is," said Humpty Dumpty, "which is to be master-that's all."

Lewis Carroll, Through the Looking-Glass, 1871

EASE-Forum Digest: October to December 2011

You can join the forum by sending the oneline message "subscribe ease-forum" (without the quotation marks) to majordomo@helsinki. fi. Be sure to send messages in plain text format

Are eprints prior publication/self plagiarism?

Most scientific journals warn authors in their instructions that they will not consider manuscripts for publication if the paper or a substantial part of it has already been published elsewhere. Eprints (electronic preprints) are versions of articles that are circulated via the internet for open commentary before submission to a journal for publication. This practice is common in high energy physics. Nevertheless physics journals continue to flourish. Things are different in the biological sciences. Following the lead of arXiv, the most successful physics preprint server, Nature set up a similar server for sharing pre-publication papers called Nature Precedings. However, as Alan Hopkins noted, Nature found it necessary to recommend that authors should review the editorial policies of any journals to which they were thinking of submitting before uploading to the Precedings site. This is because some journals, eg NEJM, refuse to consider later versions of the circulated preprints for publication as they view the material as already published. Other journals, as Liz Wager pointed out, are more liberal. BioMed Central journals specifically state that they will consider reviewing manuscripts that have been posted on a preprint server, giving Nature Precedings as an example www.biomedcentral.com/info/about/ duplicatepublication. The BMJ will consider preprints but expect authors to send them copies of previous versions for them to access if the material is redundant www.bmj. com/about-bmj/resources-authors/article-submission/ what-we-mean-publication

Alan had raised the possibility of an accusation of self-plagiarism and suggested that any future journal papers might include in the Acknowledgements a statement such as "a pre-publication version of part of this paper was published on line on Nature Precedings (doi etc) and we thank colleagues who provided feedback on our interim findings".

Authors could benefit from reading reviewer guidelines if they could find them

John Taylor had two questions for the EASE forum relating to author guidelines. He noted that these varied in content and length but mainly gave instructions on manuscript format. Reviewers, whose comments are decisive for publication, assume that authors have complied with the specified format. Reviewer guidelines are less frequently published by journals. He thought reviewer guidelines on the *Human Kinetics* website were excellent (http://journals. humankinetics.com/reviewer-guidelines-for-ijsc). John argued that if authors familiarised themselves with such reviewer guidelines, which are more substantive than those

generally given to authors, they would be better equipped to secure a favourable outcome for their manuscripts. John's first question was "Does your journal issue specific reviewer guidelines available on the web to the author?" His second question related to a common reason for rejection [at least for rejection without review] "not suited to our readership". He asked whether any journal provided guidelines that specified a style for an ultra-specialist readership that would be familiar with the terminology or for a broader band of readers, including the layman, where a less formal style may be accepted [I would say would be essential].

Carol Norris applauded John for bringing up this topic because it highlighted a problem for the Finnish authors with whom she works. As guidance given to authors is mostly inadequate, she advises her authors to examine articles published in the target journal or search for editorials and announcements on style. Carol thought editors should read EASE's model guidelines compiled by Sylwia Ufnalska. They might then realise how brief or vague their own guidelines were and improve them. Sylwia said the guidelines emphasize that manuscripts should be complete, concise, and clear but obviously reviewers need to consider some additional qualities, like reliable and interest to readers. She thought however that as the guidelines had been translated into 18 languages they should help authors who were non-native speakers of English to avoid basic mistakes when preparing their manuscripts, which would save both their and the journal's time.

Liz Wager pointed to the BMJ guidelines for reviewers and the checklist the journal produces for authors — informally known in-house at the journal as the 'reject your own paper list' (www.bmj.com/about-bmj/resources-reviewers www.bmj.com/about-bmj/resources-authors/formspolicies-and-checklists/bmj-right-journal-my-researcharticle). She also mentioned that COPE is developing some generic reviewer guidelines focussing on ethical aspects such as confidentiality. These should be available sometime in 2012 (on www.publicationethics.org). The committee at COPE compiling these guidelines is headed by Irene Hames who invited forum participants to send good (or bad) examples of guidelines dealing with any ethical aspects of reviewing to her at irene.hames@gmail.com. She also mentioned that she had searched for advice to reviewers given by journals when she was researching material for her book which gives guidelines for good practice in peer review and manuscript management in scientific journals. She found many journals only communicated guidance, checklists etc to reviewers as part of the review process. She had reproduced some of the review forms and guidance in her book (pages 238-260) and included some advice on what constitutes a good review on pages 78-82 (for details of Irene's book: Peer Review and Manuscript Management in Scientific Journals: Guidelines for Good Practice, see http://eu.wiley.com/WileyCDA/WileyTitle/productCd-1405131594,descCd-reviews.html).

Tom Lang also mentioned Robert Neumar's book

"Introduction to Performing Peer Review of Biomedical Research," published by the American College of Emergency Physicians which is written from the reviewer's perspective. Alan Hopkins provided a useful list that he had compiled from questions he had asked journal editors when he had been ask to act as a reviewer (see box). Valerie Matarese suggested one of my favourite resources, which is an online version of a CD-ROM for reviewers at http://www3.us.elsevierhealth.com/extractor/graphics/em-acep/

As to how useful training reviewers might be, Liz referred to a randomized trial published in the *BMJ* which concluded that even though the reviewers enjoyed the training, it wasn't very effective (Schroter S, Black N, Evans S, Smith R, Carpenter J, Godlee F. Effects of training on quality of peer review: A randomised controlled trial. *BMJ* 2004; 328: 673-5).

Can the title of a scientific paper affect its destiny?

Andrew Davis was interested in which non-scientific factors affect the probability of a manuscript being 1) accepted for publication, 2) read after publication and 3) cited. He asked the forum if anyone knew of research on the effect titles might have on a paper's destiny. He was also keen to learn about personal views of what titles should be. Irene Hames felt titles should be concise, accurate, interesting and relevant. They should attract but not mislead readers. She liked Day and Gastel's definition of a good title, "the fewest possible words that adequately describe the contents of the paper" (p39 in "How to write and publish a scientific paper", 6th edition, published by Cambridge University Press). Irene also commented that titles are often a blind spot for everyone involved in the review and publishing process. Manuscripts can go through the peer-review process, end up as nice papers but have terrible, long or even incomprehensible titles. Editors should pay special attention to titles.

As for research on titles, Irene referred to a piece in the *Research Trends* newsletter which focussed on the influence of titles on citation, looking at length, punctuation and humour. Tom Lang was not so enamoured by this article but read it for yourself at http://www.researchtrends.com/issue24-september-2011/heading-for-success-or-how-not-to-title-your-paper/

Authors' comments in quotes

What a lot of nice helpful people contribute to the EASE Forum! I wanted to know how to distinguish an author's comment on a quote, from the text of the quote and gave the example "They felt they had a duty to remake (or civilize) the uncivilized world", where the words in brackets are the author's comments and not those of the person he quotes. The general consensus was that "[or civilize]" should be written in square brackets. Round parentheses inside the quotation would, as Rod Hunt pointed out, imply that the enclosed material is part of the quoted text. Chris Sterken suggested adding a footnote that the comment was added by the author as did Rod Hunt who advised stating something like the "present writer's interpretation" or "my emphasis". Angela Turner would write "The author considers 'remake'

to mean 'civilise'" in the footnote. Finally, Karen Shashok guided me to some work on using verbatim quotations in reporting qualitative social research by the Social Policy Research Unit at the University of York http://www.york.ac.uk/inst/spru/pubs/pdf/verbquotresearch.pdf

Ratio symbol

In the hope that no one would accuse me of taking advantage of my grand position of forum compiler, I ventured a second question. Authors seem to be using slashes willy-nilly for anything they fancy. My understanding is that a complex of two substances should be written A-B complex and a ratio should be denoted with a colon as A:B, but a recent trend is to use hyphens in both cases where I would interpret the hyphen as meaning 'or'. I work with a troublesome statistician, ie he does not unquestioningly agree with everything I say. The final hyphen straw came when said statistician referred to the volume of distribution as 'The ratio V/F'. On being told that it should be V:F, he maintained that '/' is mathematically the correct term for ratios and ':' is not used mathematically to express ratios. Who was right?

Mary Ellen Kerans' experience was that the slash commonly denotes ratios, probably, she thought, because they're usually reported as a number as a result of the implied division (but wait for Tom Lang's take on the below). She gave FEV1/FVC as an example and planted some screen shots into her email from a concordance of "ratio" derived from a variety of medical disciplines, supporting my statistician usage. She included extracts from British English text to counter suggestions that this was an American phenomenon.

Karen Shashok referred to the AMA Manual of Style, 10th edition, which states that where ratios are expressed as words to rather than a colon should be used (p. 343) but a colon should be used where ratios are presented as numbers or abbreviations (see 8.2.3., Colon). However, the Manual also states (section 8.4.5) that a forward slash may be used to express a ratio (eg, the male/female [M/F] ratio was 2/1). Tom Lang, a statistician himself, thought my statistician was wrong. His understanding was that a proportion (fraction) is a relation in which the numerator is included in the denominator: foetal deaths/all deaths. Whereas a ratio is a relation between two independent quantities: foetal deaths: live deaths. The numerator is not included in the denominator. This is what Wikipedia says too (http://en.wikipedia.org/wiki/Ratio). So I reckon I am right, ratios take a colon.

Elise Langdon-Neuner (compiler) langdoe@baxter.com

Discussion initiators

Alan Hopkins: environment.hopkins@virgin.net

John G. Taylor: jgtaylor@c2i.net

Andrew Davis: English.Experience@mayalex.u-net.com

Elise Langdon-Neuner: langdoe@baxter.com

Reviewer check-list*

The following are typical check-list points that a reviewer might be asked to respond to. Authors should also consider these points before finally submitting their paper and ask themselves the same questions.

- Is this an original work that to your knowledge has not been published previously?
- Is the subject matter appropriate to the scope of the journal? (If not, suggest journals that might be more appropriate.)
- Title. Does the title give a clear and accurate description of the subject of the paper?
- Abstract and key words. Have the authors provided a concise abstract or summary that provides sufficient information on the rationale, the procedures followed and the main outcomes and conclusions? Have the authors provided appropriate key words?
- Does the paper make a worthwhile contribution to the state of knowledge or does it merely repeat existing information? Does it have international relevance?
- Has the author provided an Introduction that describes the rationale for the work, indicates familiarity with the 'state of the art' of the subject, with clear objectives and/or hypotheses which are followed up in the sections that follow?
- If the paper reports on an experiment, was the experimental design appropriate?
- Methods. Are the methods and materials described adequately (ie at a level of detail that would enable an informed researcher to repeat the investigation, but without excessive details that an informed reader would be expected to know)?
- Do any of the methods involve regulated procedures or other ethical issues (eg the use of live animals) that require approval by an ethical review committee? If so, is there clear evidence that standards have been fully met?
- Is there an adequate description of the methods used for data analysis and are the data analysis procedures appropriate for the work reported?
- Are the results clearly set out and the key findings described accurately?
- Has the author interpreted non-significant findings as though they were significant?
- Is the order of presentation consistent with that given in the objectives and methods sections?
- Tables and Figures. Are the tables and figures (if applicable) clear, with appropriate statistical significances given?
- Are all the tables and figures (graphs etc) provided appropriate, and do they have precise headings that describe exactly what they are intended to show?
- Is there any evidence of excessive duplication in presenting results in tables and figures?
- Are figures provided at a resolution that will allow for adequate reproduction in the printed version?
- Discussion. Does the discussion follow a clear and focused structure? Does it address the objectives as set out in the Introduction and consider the findings in relation to appropriate literature? If the work has a public policy relevance, have the authors indicated their familiarity with policy objectives.
- Conclusions. Are the conclusions adequately supported by the results as given and the intellectual interpretation that the authors have applied to them?
- References. Have the authors made appropriate use of published literature and presented the references in a format that is compatible with the style required by the journal?
- Spelling, grammar and style. Is the paper written in clear English that requires only minor editorial corrections, or is there a need for more substantial revisions?

The origins of EASE

Maeve O'Connor

The European Association of Science Editors (EASE) is about to celebrate 30 years of existence — but a lot happened before 1982. EASE's ancestors were the European Association of Earth Science Editors (Editerra) and the European Association of Editors of Biological Periodicals (EAEBP). Both organizations started up at the end of the 1960s with examples from North America to follow. The Conference of Biological Editors (CBE) had been founded there in 1957 and in 1966 it gave birth to the Association of Earth Science Editors (AESE). Earlier, back in Europe, UNESCO was encouraged by the international unions IUGS and IUBS to promote similar organizations on this side of the Atlantic.

European earth scientists, sensibly, called their organization Editerra when it was constituted in Paris in

December 1968. The biologists, who had formed their organization in Amsterdam in April 1967, first lived with the initialism EAEBP. To everyone's relief they settled for the name European Life Science Editors (ELSE) at their first General Assembly at the Royal Society in London in 1970.

To start with, both organizations had various projects in mind. Editerra immediately produced a comprehensive list of subjects to be treated in a looseleaf handbook for editors. John Glen became editor of the handbook at Editerra's second General Assembly in Lämmi, Finland. Various working parties also came into being. Similarly, ELSE set up working parties on style manuals, refereeing, relations between primary and secondary journals, medical ethics and copyright.

From its very beginning, Editerra produced typed

^{*}Reproduced with kind permission from Alan Hopkins

reports and announcements of meetings etc likely to interest members. Known as Circular Letters, numbers M1 to M43 of these reports were sent to all members from 1969 to 1978. In addition, Circulars C1 to C4 went to Council members from 1969 to 1972. ELSE, too, produced typed newsletters, numbers 1-10 being sent to members between 1970 and 1976.

One of ELSE's projects was to produce a European version of CBE's *Style Manual* and at its 2nd General Assembly in Norway in 1973 Knut Fægri produced a plan for this that led to the publication in 1975 of *Writing Scientific Papers in English*, by F Peter Woodford and the present writer.

In 1975, although circular letters to members were still being sent out, Editerra published the first issue of a twice-yearly newsletter, Earth Science Editing, which was typewriter set and printed by Brown's Geological Information Service Ltd. ELSE soon became involved with this publication and the fourth issue (1977) changed its name to Earth & Life Science Editing. In 1981 the newsletter began to appear three times a year and it kept this name after the amalgamation of Editerra and EASE in 1982. In 1986, with issue 27, it became European Science Editing: Bulletin of the European Association of Science Editors. In 1997 it began to appear with volume numbers and continuous pagination, starting with vol. 23 no. 60. The bulletin was quietly transformed by its editor, Hervé Maisonneuve, into a journal with the first issue of 2002 (vol. 28 no. 1). Over the years the appearance of the publication has evolved too, and it acquired its present look in 2007.

The amalgamation of Editerra and ELSE

Editerra and ELSE had very early realised that their interests were very similar, as shown by their collaboration on the newsletter. Then Nancy Morris, who had long been Editerra's Secretary, became Secretary and later Secretary-Treasurer of ELSE, too. Nancy was a prime mover in the amalgamation of the two associations that came about immediately after General Assemblies of the two

associations in Pau in May 1982, at a meeting organised by Henri Oertli of Elf-Aquitaine. The event was recorded in the newsletter (E&LSE No. 17, September 1982) by a poem from Nancy, as follows:

Ponderings on Pau

The guardians of the printed page Must face the Electronic Age, As evidenced when experts came To play this automation game. With word processors — join the Club! Computers have become the hub, Yet databases' infiltration May harbour useless information. The editor's now vital role Is — keep the chaos in control And penetrate this modern fog To see the "tail won't wag the dog". The meeting ran of course on oil With thanks to Henri's endless toil And no arrangements left to chance By ELF (Easy Life in France). And, staying on the lighter side, Some merry meals they did provide, A trip to Highest Pyrenees With snow-capped mountains, bread and cheese*, And finally the Pays Basque What more could anybody ask? But one event we must record Which came about with great accord — The merging, after deep-laid plans, Of ELSE/Editerra clans And now we function under EASE So rally round, support us PLEASE!

*a gross understatement!



The Pau meeting at which amalgamation of ELSE and Editerra took place (Elf-Aquitaine research centre, Pau, France, 11-14 May 1982). This picture, annotated with names of many people, can also be viewed on our website

This Site I Like

Gendered innovations in science, health & medicine and engineering

(http://genderedinnovations.eu)

Why Gendered Innovations?

Thirty years of research have revealed that sex and gender bias can be socially harmful and expensive, making it important to identify gender bias and understand how it operates in science and technology. But analysis cannot stop there: focusing on bias is not productive. Analysing sex and gender prospectively provides an opportunity to stimulate new knowledge and technologies. From the start, sex and gender analyses act as controls providing critical rigor in science, medicine, and engineering research, policy and practice.

Rationale and background

Several funding agencies, such as the European Commission, the U.S. National Institutes of Health, and the Gates Foundation now require that requests for funding address "whether, and in what sense, sex and gender are relevant to the objectives and methodologies of the research proposed." The editorial policies of leading peerreviewed journals (eg *Nature*, *The Lancet* and *Circulation*) are encouraging researchers to plan to analyse data by sex. Few research scientists or engineers, however, know how to do sex and even more complex gender analysis. This is the problem the Gendered Innovations project seeks to solve. As recommended in the 2010 genSET *Consensus Report* and the 2011 United Nations resolutions passed in March 2011, methods of sex and gender analysis are being developed through robust international collaborations.

Publicly accessible website

The goal of the EU/US Gendered Innovations (GI) project is to provide scientists (physical and life scientists), biomedical and public health researchers, engineers, and technology designers with practical methods for sex and gender analysis. Researchers will want to consider such methods and think creatively about how these methods can enhance their own research.

To achieve these goals, the GI project launched a website (http://genderedinnovations.eu) on 1st November 2011. The site highlights three elements: 1) **Methods** of sex and gender analysis relevant to science, health & medicine and engineering; 2) **Terminology** defining key concepts used throughout the site; 3) **Case Studies** documenting specific gendered innovations and demonstrating how methods of sex and gender analysis are applied in specific examples.

Audience

The GI project is aimed at research scientists, engineers, gender experts and students. Gendered Innovations case studies may be used in university science, medicine and engineering courses. The current Gendered Innovations

project was initiated at Stanford University in July 2009. Gendered Innovations entered into collaboration with the European Union in January 2011. The FP7 Expert Group "Innovation through Gender" is directed by Londa Schiebinger, Hinds Professor of History of Science, Stanford University; Ineke Klinge, Associate Professor of Gender Medicine, Maastricht University, Caphri School for Public Health and Primary Care; and Martina Schraudner, Professor of Gender and Diversity in Organizations, Technical University, and Fraunhofer Institute, Berlin.

Gendered Innovations – fueled by sophisticated methods – stimulate the creation of gender-responsible science and technology, and by doing so enhance the lives of both men and women around the globe.

Some outcomes of gender analysis

- 1. The development of **pregnant crash test dummies** that can be used to enhance safety in automobile design.
- The inclusion of men in osteoporosis research has led to better diagnoses and treatments (in the past, osteoporosis was conceptualized as a disease of postmenopausal women).
- 3. New knowledge from animal research about how hormones influence the basic molecular pathways involved in immune system function.

Ineke Klinge

Associate Professor of Gender Medicine, Maastricht University, Caphri School for Public Health and Primary Care, Maastricht, The Netherlands i.klinge@maastrichtuniversity.nl

Londa Schiebinger

John L. Hinds Professor of History of Science, Stanford University, USA

Our Authors, Ourselves: Science Editing and Publishing in a Global Market

CSE 2012 Annual Meeting

18-21 May 2012; Sheraton Seattle Hotel

www. Council Science Editors. org

News Notes

News Notes are taken from the EASE Journal Blog (http://ese-bookshelf.blogspot.com). Please email items for inclusion to John Hilton (hilton.john@gmail.com) with "News Notes" as the subject.

TinyURLs may be given to save space and aid reading; full URLs (clickable links) can be found on the EASE Journal Blog.

Free access to UK research?

The UK Government has published a report that calls for all publicly funded research to be made freely available. The report says: "Government will work with partners, including the publishing industry, to achieve free access to publicly-funded research as soon as possible and will set an example itself." Research councils will be required to ensure compliance with existing mandates to "deposit published articles or conference proceedings in an open access repository at or around the time of publication" and will be investing £2 million (€2.4 million) to develop a 'Gateway to Research' website that could also include nonpublicly funded research.

New journal from FEBS

Another News Notes, another new open biology journal. The Federation of Biochemical Societies (FEBS) has launched a new 'open-access' journal called FEBS Open Bio (www. elsevier.com/locate/febsopenbio). The journal, published by Elsevier, is open for new submissions and also for direct transfer of articles rejected by other FEBS publications (FEBS Letters, FEBS Journal and Molecular Oncology). All articles will be freely available on Elsevier's SciVerse ScienceDirect platform (www.sciencedirect.com), although the usage rights are more limited than with other fully open-access journals.

Cell art

The Cell Picture Show (www.cell.com/

cell_picture_show) is a website run by the journal Cell, showcasing stunning images from cell biology. Each image is accompanied by an explanation of the science illustrated by the image, and submissions are welcome.

WK acquires Medknow

Medknow Publications (www. medknow.com), an open-access publisher based in Mumbai, India, has been acquired by Wolters Kluwer Health, the home of Lippincott, Williams & Wilkins, UpToDate and Ovid, and other brands. Medknow has built its reputation through alliances with professional societies, and Wolters Klower sees the acquisition as a way of increasing locally written content and incorporating open-access platforms into its business model.

European science advisor

Professor Anne Glover, a molecular and cell biologist, has been named as Europe's first chief scientific adviser. Nature News (15 December 2011) reported how the president of the European Commission, José Manuel Barroso, announced the appointment on 5 December, more than two years after pledging to create the post. Professor Glover has been chief scientific adviser to Scotland's government since 2006, and her new role will include policy advice, guidance on interpreting uncertainty and strategic planning for emergencies, and communicating science. Many view the appointment as a long overdue solution to an apparent lack of reliable, independent scientific advice in European policy-making.

Research integrity in the UK?

In a recent editorial in the BMJ (2012;344:d8357), the journal's editor in chief Fiona Godlee and Liz Wager, chair of the Committee on Publication Ethics (COPE), ask why the UK lags behind many other countries in establishing a body to oversee research integrity, noting insufficient support for the UK Research Integrity Office (www. ukrio.org) and the Research Integrity

Futures Working Group. Research misconduct is certainly flourishing and its definition could be expanded to include suppression of data and failure to publish research. A possible solution is for institutions to appoint research integrity officers, overseen by a statutory authority.

Hungarian science moves forward

The funding of science in Hungary has lagged behind European neighbours in recent years, with a corresponding drop in scientific output. Nature (2011;480:305) reports how a major restructuring of the Hungarian Academy of Sciences is designed to address this, following the model of The Max Planck Society and other Western European research organisations. József Pálinkás, the academy's president, is overseeing the creation of ten new multidisciplinary research centres with new management structures, supported by a 20% increase in government funding. Further information in an article on page 23.

Can OA help global science?

At the Berlin 9 Open Access conference (www.berlin9.org), held in Washington DC, USA in November 2011, there was discussion about the impact of open access on the dissemination of research and the uptake of research findings in developing countries. A related article on the SciDev.net website (tinyurl. com/ease-news6) noted a recurring theme that the traditional journal article model is not the best way to serve global scholarship, especially when methods of evaluating research quality and output tend to reflect developed countries' practices and agendas. The Global Open Access Portal (tinyurl.com/ease-news7), launched by UNESCO, is designed to engage policy-makers with openaccess approaches to dissemination and research evaluation.

Creative Commons V4

The Creative Commons (CC; creativecommons.org) organisation

has announced the beginning of an open discussion process to create version 4.0 of the CC licence suite. For the first time, the development process started before a new version had been drafted, giving stakeholders more chance to contribute. The new version is expected to be available in late 2012. You can read more on the CC wiki website (wiki.creativecommons. org/4.0).

PubMed Health expands

The US National Library of Medicine has announced an expansion of PubMed Health (www.ncbi.nlm. nih.gov/pubmedhealth) to include clinical databases from NLM's National Center for Biotechnology Information (NCBI), the UK Centre for Reviews and Dissemination (www.york.ac.uk/inst/crd), the Cochrane Collaboration (www. cochrane.org), the US Agency for Healthcare Research and Quality (www.ahrq.gov), and other agencies. PubMed Health organizes systematic reviews, summaries and guides for consumers and clinicians.

Data Dryad evolves

Dryad is an international repository of data underlying peer-reviewed bioscience articles. It is overseen by a consortium of journals and is developed by the US National Evolutionary Synthesis Center and the University of North Carolina Metadata Research Center. Towards the end of 2011 it celebrated its 1000th data package and its 100th journal. Some of the journals have also integrated their manuscript processing with Dryad, with BMJ Open being the first medical journal to join the ranks of mostly evolutionary biology and ecology journals. All data stored in Dryad uses a Creative Commons zero (CC0) designation, with which data depositors waive all rights to the data.

Peer review: who loses?

While there is never a shortage of debate on peer review in the blogosphere and Twitterverse, an interesting perspective was recently provided by Tim Vines, managing editor of Molecular Ecology and Molecular Ecology Resources,

on the Society for Scholarly
Publication's Scholarly Kitchen blog
(scholarlykitchen.sspnet.org; 8 Dec
2011). Vines discusses the relationship
between a journal's acceptance rate
and the role of peer review. Authors
often struggle to pick the right journals
for their paper (either too likely to be
rejected, or too likely to be accepted)
and may view the peer-review
process as a lottery. This places a extra
burden on reviewers as the papers are
reviewed multiple times until they find
their place in the journal hierarchy.

Preparing for publication

The role of publication in research communication may seem fundamental, but for some researchers preparing a research paper is not at all easy. Publishers for Development (PfD), a joint initiative of the Association of Commonwealth Universities and the International Network for the Availability of Scientific Publications (www.inasp. info), recently ran a workshop in Cameroon to help local researchers prepare their work for publication. The workshop was supported by Taylor and Francis/Routledge. The recent PfD Conference, held in London on 2 December, focused on east and southern Africa, and many of the presentations are available on the PdD website (http://www.pubs-fordev.info/2011-conference).

Publishing new species online

One interesting aspect of publishing in zoology or botany is the submission of a paper describing a new species. The International Commission of Zoological Nomenclature (ICZN) and the International Code of Botanical Nomenclature require that new species are published in a durable (ie paper) medium in addition to any electronic medium. But with the rise of online-only journals, this requirement looks increasingly problematic. An interesting post on the PLoS ONE blog (blogs.plos. org/everyone; 11 November 2011) describes how that journal arrived at a compromise with ICZN. The resulting agreement, whereby PLoS ONE agrees to make available a printed

and amended version of the relevant paper, has been published on the ICZN website (iczn.org) and within the PLoS ONE author guidelines.

Repository overhaul

JISC, the UK body that advises on digital technology for academia, is working with UK Research Councils to build a next-generation research repository infrastructure. The 'RIO Extension project' will gather requirements from universities, funders and researchers, and aims to provide the education and research sectors with robust repositories that they can use to assess output and impact. There is an 'InfoKit' available at www.jiscinfonet.ac.uk/infokits/repositories.

Post-acceptance queries

What is your journal's policy for post-acceptance queries? PLoS ONE, a journal that has no author proof stage, has described its process on its blog (blogs.plos.org/everyone; 13 December 2011).

Fixing science journalism

It's not difficult to find reports of science or health stories in newspapers that exaggerate or mislead. As science editors, we are well positioned to spot such errors, but how good are we at describing and publicising those errors? An enterprising blogger used an innovative online tool called Prezi (prezi.com) to elegantly illustrate the errors in a story in a UK regional newspaper. The resulting presentation was posted on the Neurobonkers blog (tinyurl.com/ease-news2). As well as acting as an excellent teaching aid, the presentation had an impact: the story was withdrawn from the newspaper's website. But not before it was picked up by two national newspapers, who amended their stories following complaints to the Press Complaints Commission.

FORCE11

Force11 (www.force11.org) is a "virtual community working to transform scholarly communications through advanced use of computers and the Web." The group has

published a manifesto (Improving Future Research Communication and e-Scholarship; available at www. force11.org/force-11-publications) and maintains databases of relevant blogs and publications.

From blog to article

Many blogging scientists use the WordPress platform, and now they can also use WordPress to write and publish scientific papers. Annotum (annotum.org), launched in November 2011, is an open-source, open-access WordPress theme that enables users to define a post as an article (as opposed to a blog post) that also has internal structure. Furthermore, it uses the National Library of Medicine's standard XML format. The theme also allows multiple authors and different contributor roles. Future versions may support revisions and collaborative writing.

Living reviews seek funds

The SciFund Challenge (scifund. wordpress.com) was an experiment in attracting science funding by crowdsourcing: using social media and tools to directly engage with (and obtain funds from) the public. It raised over \$75,000 during November 2011. One of the projects is a proposal to create 'living review' articles that would be updated directly with data obtained directly as research proceeds, without an intermediate publication stage. There is (much) more detail at tinyurl.com/ease-news8.

How to retract?

The Retraction Watch blog (retractionwatch.wordpress.com) has highlighted what it says could be a model retraction. The retracted paper ("The cellular source for APOBEC3G's incorporation into HIV-1") was published in January 2011 in the journal Retrovirology, published by BioMedCentral. The retraction notice appeared in December 2011 and relates to the inappropriate use of figures in the paper. Having been informed of the error by colleagues, the journal's editor raised the issue with the author, who confirmed the errors and apologised to all concerned.

While this may be a benign retraction informed by post-publication feedback, sometimes retractions can be spurred by a different sort of feedback. The same blog tells the story of a retraction from the American Journal of Obstetrics & Gynecology (AKA "the Gray Journal"). The retraction notice cited several reasons, including the author failing to "disclose a potential financial conflict of interest with a manufacturer of pregnancy tests", and a lack of "credible scientific reason given for conducting the study". The retraction followed a request from a lawyer representing another manufacturer of pregnancy tests. It's a long and complex story that reveals a far from model retraction, but it is well worth a read for any journal editors dealing with financial conflicts of interest.

Binary Battle winner

The Public Library of Science (PLoS; www.plos.org) and Mendeley (www. mendeley.com) have announced the winners of their Binary Battle (dev. mendeley.com/api-binary-battle): a challenge for developers to come up with innovative ideas for more open and collaborative research. The top prize went to openSNP (opensnp. org), with additional prizes for PaperCritic (papercritic.com) and rOpenSci (ropensci.org). Competitors were given access to the two companies' APIs, giving them access to social and demographic information about research. OpenSNP is a "communitydriven platform for publicly sharing genetic information". The aim is to allow crowdsourcing of associations between genetic traits and their physical manifestations. The Mendeley blog (www.mendeley.com/ blog) features an interview with the openSNP team.

Two new CONSORT extensions

The CONSORT statement (www. consort-statement.org) on improving the quality of reporting of randomised controlled trials (RCTs) was first published in 1995, with updates and extensions since then. Two new extensions were announced by the CONSORT Executive in December

2011. The first, which covers the reporting of health-related quality of life outcomes, is being co-developed with the International Society for Quality of Life Research, the MRC Midland Hub for Trials Methodology Research, and the MRC ConDuCT Hub for Trials Methodology Research in collaboration with journal editors, policy makers and patient representatives. A consensus meeting was held in London in January 2012. The second extension, for reporting RCTs of social interventions, is a collaboration with the Centre for Evidence Based Intervention at the University of Oxford and the Centre for Outcomes Research and Effectiveness at University College London.

Predatory publishers?

A list of 'predatory, open-access publishers' maintained by Jeffrey Beall, a librarian at the University of Colorado, USA, as a guide for researchers and those involved in research evaluation, provoked a lengthy debate on what distinguishes a predatory journal from a 'legitimate' journal. Beall's aim was to identify publishers that use mass mailing techniques, have poor or non-existent peer review, and unsustainable business models. Can you guess which publishers feature on the current list? You can read the list and the subsequent debate on Beall's blog (metadata.posterous.com/83235355). One publisher that has come under fire from Beall and others is OMICS Publishing Group (omicsonline. org). In a revealing interview by Richard Pounder (tinyurl.com/easenews3), the head of OMICS responds to complaints of mass mailing and accusations of 'borrowing' journal names from other publishers, as well as publishing an article that should never have passed peer review.

Scholarly societies and OA

'How many scholarly societies publish OA journals, and how many OA journals do they publish?' is the question addressed by an updated report from Caroline Sutton of the Open Access Scholarly Publishers Association (OASPA; www.oaspa.

org) and Peter Suber of the Scholarly Publishing and Academic Resources Coalition (SPARC; www.arl.org/ sparc). Sutton and Suber found 530 societies publishing 616 full OA journals, and have made their data available for anyone to add or edit (tinyurl.com/ease-news4).

ISBNs for digital books

If an ebook is republished in a different digital format then made available to a retailer to rent, would either step require a new ISBN to be assigned? This is just one of the issues addressed by a new policy statement from the Book Industry Study Group (BISG). The statement (Best Practices for Identifying Digital Products) is available on the BISG website (bisg. org) and is primarily for North America, with endorsements from the US National Information Standards Organisation and the Independent Book Publishers Association.

HTML5 and EPUB3

How much do you know about HTML5 and EPUB3? The first is a developing markup language with better support for multimedia and graphical content, and the second is the latest iteration of an ebook standard, but they are both central to the future development of digital publishing, with EPUB3 designating HTML5 as the language to be used for ebooks. You can read more (and download free ebooks) about both on the O'Reilly Radar blog (tinyurl.com/ease-news5).

DIY article metrics

Google Scholar Citations (scholar. google.com/citations) is a new way for authors to track their own citation metrics. Authors can identify their own articles by selecting from groups identified statistically from a Google Scholar search then calculate their h-index, i-10 index and total citations. The metrics can be automatically updated and reviewed manually, and you can make your profile public if you wish.

John Hilton Editor, The Cochrane Collaboration hilton.john@gmail.com

Renewing the Hungarian research network

The Hungarian Academy of Sciences is not only a traditional learned society, it also runs a network of research institutes employing about 15% of Hungarian researchers. This research network produces about one-third of all Hungarian scientific results, mainly in basic and partly in applied research. In spite of the network's relatively good performance at the national level, by 2011 it became evident that it was in need of a complete renewal, as it had not changed much since the 1970s (when it was established) other than gradual fragmentation and ageing.

In May 2011, re-elected President of the Hungarian Academy of Sciences József Pálinkás (a physicist and former Minister of Education) announced his strategic plan for the renewal of the Academy's research network. The first phase was realized over seven months: on 1 January 2012, the 38 research institutes and 2 research centres were replaced by 10 research centres and 5 research institutes. The forthcoming two years will see some more structural changes and a "disciplinary fine-tuning". During this second phase, the renewed institutes and centres will develop their own respective strategies while strengthening the overall infrastructure of the entire institute network. Research will be conducted in a more cost-effective, strategy-driven way in a bid to achieve excellence, sustainability and competitiveness.

What is happening nowadays at the Hungarian Academy of Sciences is considered a timely structural change, one worth emulating by other sectors of Hungarian society as well.

László Szarka

Head of Department of Research Institutes, Hungarian Academy of Sciences szarka.laszlo@office.mta.hu

EASE MEMBERSHIP NEWS

New individual members

Mr James Heywood, Croydon, UK james.heywood@live.co.uk

Ms Sharon Hirsch, Efrat, Isreal *mshrsch@gmail.com*

Dr Ronald Javitch, Quebec, Canada javitch.foundation@videotron.ca

Ms Marcia Triunfol, Ramat Ishay, Israel mtriunfol@gmail.com

Ms Dianne Dixon, Toronto, Canada dianned@uhnres.utoronto.ca

Mrs Sioux Cumming, Oxford, UK scumming@inasp.info

Curtis F Barrett, Oegstgeest, Netherlands c.barrett@englisheditingsolutions.com Mrs Petra Roberts, Bedford, UK petra.roberts@ntlworld.com

Ravishankar Murugesan, Oxford, UK rmurugesan@inasp.info

Alexandrine Cheronet, The Hague, Netherlands alexandrine@cheronet.com

Ms Marlies van den Hurk, Aldershot, UK marlies.vandenhurk@ntlworld.com

Dr Wojciech M Wysocki, Krakow, Poland z5wysock@cyf-kr.edu.pl

New corporate members

Korean Council of Science Editors, Seoul, Korea kcse@kcse.org (More information on page 12)

The Editor's Bookshelf

Please write to annamaria.rossi@ iss.it if you wish to send new items or become a member of the EASE journal blog (http://ese-bookshelf. blogspot.com) and see your postings published in the journal.

EDITORIAL PROCESS

Callaham M, McCulloch C. Longitudinal trends in the performance of scientific peer reviewers. Annals of Emergency Medicine 2011;57(2):141-148 Editors at the Annals of Emerging Medicine rated the quality of every review performed by journal's reviewers during a 14-year longitudinal study. Results demonstrated slow but steady deterioration of most peer reviewers' performance on validated quality scores for article assessment over the years. This performance is consistent with studies of performance over time in disciplines other than medicine.

Cobo E, Cortés J, Ribera IM et al. Effect of using reporting guidelines during peer review on quality of final manuscripts submitted to a biomedical journal: masked randomised trial. BMJ 2011;343:d6783

According to this study, additional reviews based on reporting guidelines (such as STROBE and CONSORT) result in a moderate improvement in manuscript quality. Nevertheless, authors in a mid-level medical journal have difficulties in adhering to high methodological standards at the latest research phases. To boost paper quality and impact, authors should be aware of future requirements of reporting guidelines at the very beginning of their study. doi: 10.1136/bmj.d6783

Leek JT, Taub MA, Pineda FJ. Cooperation between referees and authors increases peer review accuracy. *PLoS ONE* 2011;6(11):e26895 Researchers from John Hopkins Bloomberg School of Public Health published results of a peer review simulation game designed to test the effects of open vs. closed review on reviewer accuracy. Through both theoretical modeling and their game, played by a small community of scientists over cloud computing, they found that reviewers spend more time, are more collaborative and more accurate when review is open than when they work anonymously. doi:10.1371/journal.pone.0026895

Mertens S, Baethge C. The virtues of correct citation: careful referencing is important but is often neglected even in peer reviewed articles.

Deutsches Ärzteblatt International 2011;108(33):550-552 References in scientific publications often contain errors, such as their choice and placing. The following mistakes can appear: the source does not support the statement (quotation error); the reference citation is placed in such a way that it is not clear which statement it relates to; the bibliographic data are incomplete or wrong (citation errors). A small pilot study of references in Deutsches Ärtzeblatt indicated an error rate in references of around 20% (a conservative estimate). It would be helpful to describe how the authors selected the references they have used, if there were inclusion and exclusion criteria, which databases were searched and so on. doi:10.3238/arztebl.2011.0550

Mietchen D. Peer reviews: make them public. Nature 2011;473(452) A public-review policy would help editors and increase a journal's reputation, particularly if others in the field publicly shared their own relevant observations. Public reviews, including those of rejected manuscripts, would also provide an incentive for authors to submit their work only when it is ready, helping to lower rejection rates. doi:10.1038/473452b

ETHICAL ISSUES

Desai SS, Shortell CK. Conflicts of interest for medical publishers and editors: protecting the integrity of scientific scholarship. Journal of Vascular Surgery 2011;54(3):59S-63S This article discusses the potential conflicts of interest between editors, contributing authors, the publisher, and advertisers in the medical publication process. Editors and publishers should protect editorial independence, promote the use of a scientific arbitration board for serious disputes, promote transparency throughout all stages of publication, and take advantage of an effective legal framework.

doi: 10.1016/j.jvs.2011.05.111

Foo JYA, Wilson SJ. An analysis on the research ethics cases managed by the Committee on Publication Ethics (COPE) between 1997 and **2010**. Science and Engineering Ethics 2011, 29 April e-pub This article reviewed the outcomes of 408 cases that the Committee on Publication Ethics (COPE) had investigated between 1997 and 2010 with respect to 7 distinct criteria. The results showed that the number of ethical implications per case had not changed significantly since 1997, and that the number of ethical cases, including research misconduct, was not diminishing.

doi: 10.1007/s11948-011-9273-3

Lacasse JR, Leo J. Knowledge of ghostwriting anf financial conflictsof-interest reduces the perceived credibility of biomedical research. BMC Research Notes 2011;4:27 This study provides information on how practicing clinicians perceive research in which multiple conflicts of interest (COI) are disclosed. The authors developed two research vignettes presenting a fictional antidepressant medication study, one in which the authors had no COI and another in which there were multiple COI disclosed. Perceived credibility ratings were much lower in the COI

group that is, increased disclosure of COI resulted in lower credibility ratings.

doi: 10.1186/1756-0500-4-27

Macleod M. Why animal research needs to improve. Nature 2011;477:511

Scant attention is usually given by authors, reviewers and editors to the basic aspects related to the design of experiments that use animals to model human diseases. In the face of pressures to reduce the number of animals used, researchers often do studies that are too small to detect a significant effect, and also tend to publish only positive results. Rules need to be changed: the review process must do much more to assess bias. doi:10.1038/477511a

Petrini C. Pardon my asking: do we need eMinence-based bioethics? Annali dell'Istituto Superiore di Sanità

2011;47(3):243-244 What kind of ethics is useful for researchers? Nowadays the proliferation of bioethic experts and the success of practical guidelines are a fact from which the author of this editorial draws the following conclusions: people find bioethics and guidelines helpful; expertise in ethics is most of all a matter of correct or true judgment; and experts should be able to communicate.

doi: 10.4415/ANN 11 03 01

Shashok K. Authors, editors, and the signs, symptoms and causes of plagiarism. Saudi Journal of Anaesthesia 2011;5(3):303-307 This article discusses how plagiarism is defined and suggests some possible causes for its increase in scientific literature. Nowadays there is some awareness that re-use of words in research articles by no Englishmother tongue authors should be distinguished from intentional stealing other authors' ideas. Practical advice is given to researchers on how to improve their writing and citing skills and thus avoid accusations of plagiarism.

doi: 10.4103/1658-354X.84107

Steen RG. Retractions in the scientific literature: do authors deliberately commit research fraud? Journal of Medical Ethics 2011;37:113-

A study tested the "deliberate fraud" hypothesis that some authors deliberately commit research fraud. It is based on the presumption that authors producing fraudulent papers specifically target journals with a high impact factor, have other fraudulent publications, delay retracting the paper and collaborate with co-authors who also have other retractions for fraud. All 788 English language papers retracted from the PubMed database between 2000 and 2010 were evaluated. doi: 10.1136/ jme.2010.038125

Stern S, Lemmens T. Legal remedies for medical ghostwriting: imposing fraud liability on guest authors of ghostwritten articles. PLoS Med 2011;8(8):e1001070

The article focuses on ghostwriting and guest authorship in industrycontrolled research: several examples have revealed the use of ghostwriters to insert concealed marketing messages favourable to a company's product, and the recruitment of academics as "guest" authors despite not fulfilling authorship criteria. Medical journals, academic institutions, and professional disciplinary bodies have thus far failed to enforce effective sanctions. The authors suggest the imposition of legal liability on guest authorship as fraud. doi: 10.1371/journal.pmed.1001070

Varghese T. Misconducts in the publication of biomedical articles.

Calicut Medical Journal 2011;9(2):e1 Many articles appearing in biomedical journals are done and published solely for academic advancement. According to the author, the editor of the Calicut Medical Journal, medical journal editors face many types of misconduct, the most common of them is plagiarism. Nowadays most of journals use specialised softwares to detect plagiarism: they compare the submitted article with huge depositories of published literature to look for evidence of similarity.

Zigmond MJ. Making ethical guidelines matter. American Scientist 2011;99(4):296

Today more than 50 scientific societies have written guidelines on research ethics for their members. These societies are uniquely positioned to understand and develop effective codes of conduct for the specific segment of science that they represent. Research institutions can set standards only for the most basic and universal matters, such as plagiarism and fabrication of data. The example of guidelines issued by the American Society for Neuroscience (SfN) is provided illustrating how a professional society can go beyond guidelines alone to promote research integrity in other dynamic ways. doi: 10.1511/2011.91.296

Wager E. How journals can prevent, detect and respond to misconduct.

Notfall+Rettungsmedizin German *Interdisciplinary Journal of Emergency* Medicine 2011, 30 October:1-3 Editors of science journals are sometimes reluctant to retract articles. Reasons may include concerns about litigation or about effects a retraction might have on the reputation of a journal. Editors should work to prevent and detect potential misconduct by educating researchers and authors about good practices. Journals policies and guidelines should also inform peer reviewers and editors about their responsibilities for ensuring the integrity of the process and of what is reported.

doi: 10.1007/s10049-011-1543-8

INFORMATION RETRIEVAL

Gómez-Núñez AJ, Vargas-Quesada B, de Moya-Anegón F et al. Improving **SCImago Journal & Country Rank** (SJR) subject classification through reference analysis. Scientometrics 2011;89:741-758

This work introduces a proposal to improve the categorization of Scopus database journals included at the SCImago Journal & Country Rank (SJR) portal using reference analysis of citing journals. This method represents a consistent and congruent new

disciplinary structure, showing a solid performance in grouping journals at a higher level than categories - that is, aggregating journals into subject areas. It should be supplemented with additional techniques. doi: 10.1007/s11192-011-0485-8

Voronin Y, Myrzahmetov A, Bernstein A. Access to scientific publications: the scientist's perspective. PLoS One 2011;6(11):e27868 This study used the field of HIV vaccine research as a barometer to measure the degree to which scientists have access to published research. This area of research - of critical importance for the developing countries - saw recent growth in the popularity of open-access journals, but the exact impact of these changes is not yet clear. Institutional subscriptions continue to play an important role, however, subscriptions do not provide access to the full range of HIV vaccine research literature. A variety of other means to access literature are investigated, including emailing corresponding authors or joint affiliations. doi: 10.1371/journal.pone.0027868

LANGUAGE AND WRITING

Hartley J. Making the journal abstract more concrete. Journal of Scholarly Publishing 2011;43(1):110-115 Abstracts in social science journals have been criticized in the past for being imprecise. Readers need to know in which discipline a study has taken place, how many and what kinds of participants have been involved and what methodologies have been used. The author provides three examples of how abstracts could be improved and made more concrete.

doi: 10.3138/jsp.43.1.110

Lang TA. The illusion of certainty and the certainty of illusion: a caution when reading scientific articles. International Journal of Occupational and Environmental Medicine 2011;2(2):118-123
This article provides an example of the analyses needed to understand a single sentence in a scientific

journal. In so doing, it raises several interesting issues of meaning, measurement, statistical analyses, and the form in which results are presented and interpreted. According to the author, most authors have never been taught how to communicate technical information in writing, and most journals do not have the time to edit a paper thoroughly.

PUBLISHING

Davis P. Have journal editors become anachronisms? Scholarly Kitchen blog 2011, 19 September Are journal editors an anachronism? On the Guardian a recurring revolutionary theme has been recently reported: publishing must be taken back from editors and the institutions and returned to the people. In this blog post it is discussed why we still need editors and their journals, perhaps more than ever before. The information overload is a problem of quality-signalling between authors and readers, and the role of editors is enhanced - not diminished - in mediating these signals. Journals should be then considered as mediators of quality signals and not as a mechanism to control the distribution of scientific research.

Jubb M. Heading for the open road: costs and benefits of transitions in scholarly communications. Liber Quarterly 2011;21(1):102-104 This article reports on a study investigating the drivers, costs and benefits of potential ways to increase access to scholarly journals. A detailed and authorative analysis of how it could be achieved identifying five different scenarios over the next five years: gold and green open access, moves towards national licensing, publisher-led delayed open access, and transactional models. It then compares and evaluates benefits, costs, and risks for the UK. Policymakers should encourage the use of existing subject and institutional repositories (green infrastructure) and in parallel promote and facilitate a transition to gold open access.

Reilly S, Schallier W, Schrimpf S. *et al.* Report on integration of data and

publications. Alliance for Permanent Access. ODE Project 2011, 17 Oct. As part of the ODE (Opportunities for Data Exchange) project this report presents current opinions from numerous sources to reveal opportunities for supporting a more connected and integrated scholarly record. Four perspectives are considered, those of researchers, publishers, libraries and data entry. It examines how scholarly journals handle the increasing amount of data in the article by considering different publishing models (peer reviewed articles, supplementary files, etc).

RESEARCH EVALUATION

Abramo G., D'Angelo CA, Di Costa F. National research assessment exercises: a comparison of peer review and bibliometrics rankings. Scientometrics 2011;89:929-941 There is unanimous agreement that resources for science should be assigned according to rigorous evaluation criteria. Some governments have already introduced bibliometric methodology in support or substitution for more traditional peer review. The aim of this work was to compare ranking lists of Italian universities obtained through peer review for the period 2001-2003, with those obtained from bibliometric simulations. The comparison showed great differences between the two methodologies, raising strong doubts about the peer review reliability. doi: 10.1007/s11192-011-0459-x

Bornmann L, Schier H, Marz W et al. Does the h index for assessing single publications really work? A case study on papers published in chemistry. Scientometrics 2011;89:835-843 The results from a study on the peer review process of the Angewandte Chemie International Edition showed a correlation between peer assessments and single publication *h* index values: after publication, manuscripts with positive ratings by the journal's reviewers showed on average higher h index values than manuscripts with negative ratings by reviewers. doi: 10.1007/s11192-011-0472-0

Marshall E, Travis J. U.K. Scientific papers rank first in citations. Science 2011, October 28;334:443 The UK Department for Business, Innovation and Skills released a citation analysis that found that UK "attracts more citations per pound spent in overall research and development than any other country". A similar analysis for the period 1991 to 2010 by Thomson Reuters reported that UK produced 17% of the world's research papers with more than 500 citations and 20% of those with more than 1,000 citations. Today UK scientific papers have the greatest impact in the world and biological sciences are the strongest area of research.

Namazi MR, Fallahzadeh MK. n-index: A novel and easilycalculable parameter for comparison of researchers working in different scientific fields. Indian Journal of Dermatology, Venereology and Leprology 2010;76(3):229-230 A very simple and easily calculable index for comparison of researchers working in different fields is suggested. This is the n-index = researcher's *h* index divided by the highest h-index of the journals of his/her major field of study (n is the initial letter of Namazi, co-author of this article). This novel index can overcome the problem of unequal citations in different fields, as publications in certain disciplines are typically cited much more or much less than in others. doi:10.4103/0378-6323.62960

Solimini AG, Solimini R. Impact Factor and other metrics for evaluating science: essentials for public health practitioners. Italian Journal of Public Health 2011;8(1):96-103 This article reviews the most widely used metrics, highlighting the pros and cons of each of them. The rigid application of quantitative metrics to judge the quality of a journal, of a single publication or of a researcher suffers from many negative issues and is prone to many reasonable criticisms. A solution could be the use of a qualitative assessment by a panel review based on few but robust quantitative metrics.

Winker K. In scientific publishing at the article level, effort matters more than journal impact factors.

Bioessays 2011;33(6):400-402. Effort involved in producing a particular paper is difficult to quantify. Nevertheless, working hard and number of authors are the most important factors affecting number of citations. According to the author, effort - and how to measure it - should be incorporated into future bibliometric studies. doi: 10.1002/bies.201100020

SCIENCE

Habibzadeh F. Geopolitical changes and trends in Middle Eastern countries' contributions to world science over the past three decades. Archives of Iranian Medicine 2011;14(5):310-311 It is not possible to study the Middle East science growth without considering its geopolitical changes. Despite a nearly constant tension over the past 3 decades, science production in this region has grown nearly four times faster than the rest of the world. In particular Iran and Turkey had a fast growth, followed by Cyprus, Oman, and the United Arab Emirates.

Khatib F, DiMaio F, Cooper S et al. Crystal structure of a monomeric retroviral protease solved by protein folding game players. Nature Structural & Molecular Biology 2011; epub. September 18. Foldit is a multiplayer online game that allows players worldwide to solve complex protein-structure prediction problems. A 15-year-old AIDS problem was recently solved in just three weeks by a group of online gamers. They created a model of a protein that scientists haven't been able to model themselves, using a game-like structure. This result indicates a high potential for integrating video games into the real-world scientific process and for solving, if properly directed, a wide range of scientific problems. doi: 10.1038/nsmb.2119

Leshner AI. Innovation needs novel thinking. *Science* 2011;332(6033):1009.

Science, technology and innovation are critical drivers of economic growth and national well-being of a country. Investing in them has become a hope for many countries, both rich and poor. But innovation demands that novel ideas are pursued, and to attract them some long-held traditions and modes of operation need to be re-examined. Some issues are highlighted to foster innovation and economic success. Among them, the peer-review process, the evaluation timeline and criteria for judging and rewarding performance, the increase in number of young researchers and diversity of scientific human resource pool.

doi: 10.1126/science.1208330

O'Keeffe J, Willinsky J, Maggio L. Public access and use of health research: an exploratory study of the National Institutes of Health (NIH) Public Access Policy using interviews and surveys of health **personnel.** Journal of Medical Internet Research 2011;13(4):e97 In 2008, the National Institutes of Health (NIH) Public Access Policy mandated open access for publications resulting from NIH funding. This study measured current use, interest, and barriers among health personnel of research to establish the potential impact of NIH Policy on health care quality and outcomes. The results of the study showed expectation for a positive impact. doi:10.2196/jmir.1827

Peng RD. Reproducible research in computational science. *Science* 2011;334; 1226-1227

Computational science has led to exciting new developments in many scientific areas. The availability of large public databases has allowed researchers to make meaningful scientific contributions. Replication is the ultimate standard by which the value of scientific claims is assessed, particularly when full independent replication of a study is not feasible. However, there are some barriers to reproducible research, and the author proposes some steps to improve the current situation.

doi: 10.1126/science.1213847

SCIENCE COMMUNICATION

Barron P. The library of the future: Google's vision for books. Learned Publishing 2011:24:197-201 Much of the world's most useful information is locked within books and it is stored offline. As a consequence, the vast majority of books ever written are not accessible to the majority of people. In this article the author, Google's Director of External Relations for Europe, the Middle East and Africa, points out some of the huge opportunities that lie ahead in the relationship between the Internet and the world of books. He discusses Google's vision of the power and value to society of its book digitization programme, Google Books, launched in 2004 with the aim of bringing as many as possible of the world's books online. doi: 10.1087/20110307

Spiegelhalter D, Pearson M, Short I. **Visualizing uncertainty about the future.** *Science* 2011;333(6048):1393-1400.

In this review current practice for communicating uncertainties by means of graphic visualizations are examined, using examples drawn from sport, weather, climate, health, economics, and politics. The most suitable choice of visualization to illustrate uncertainty depends closely on the objectives of the presenter, the context of communication, and the audience. Useful recommendations are provided, although careful case studies are needed describing the development and evaluation of specific examples in a wide range of contexts. doi: 10.1126/science.1191181

Gasparyan AY. Familiarizing with science editors' associations.

Croatian Medical Journal
2011;52(6):735-739

The role of editors' associations is evolving to solve the numerous problems of efficient writing, editing, and publishing. This article presents activities carried out by some international science editors' associations, that include developing standards and guidelines of science writing, editing, indexing, research reporting, peer review, editorial independence, and other editorial policies. They also facilitate distribution of information and networking, conducting research, and publishing periodical literature. doi: 10.3325/cmj.2011.52.735

Thanks to James Hartley, Valerie Matarese, Françoise Salager-Meyer, Mariolina Salio, Sylwia Ufnalska and Kate Whittaker.

Anna Maria Rossi Publishing Unit, Istituto Superiore di Sanità, Rome annamaria.rossi@iss.it

Council nominations

At the AGM in Tallinn in June 2012, a new Council will be elected. The following members of the existing Council are standing down:

Vice Presidents: Alison Clayson; Reme Melero Ordinary members: Petter Oscarsson; Edward Towpik

Below is a list of nominees who have accepted.

President	Joan Marsh	UK
Vice President	Ana Marusic	Croatia
	Eva Baranyiova	Slovakia
Member	Paola DeCastro	Italy
	Alex Edelman	France
	Elea Giménez Toledo	Spain
	Shirin Heidari	Switzerland
	Izet Masic	Bosnia & Herzegovina
	Chris Sterken	Belgium
	Sylwia Ufnalska	Poland

At present there are seven nominees for five places on Council. Members of EASE may also, not less than 90 days before the General Meeting (9 March), nominate any eligible member of the Association for each office or position. Each nomination must be made in writing to the Secretary, by two members, and should enclose a signed letter from the nominee agreeing to his/her nomination, and a brief curriculum vitae of

the nominee. These nominees shall be added to the list drawn up by the nominations committee. Details of the procedure may be found in the Statutes and Bye-Laws of EASE, available on the About EASE section of the website.

Science Editors' Handbook



We are pleased to announce that Pippa Smart is joining the Publications Committee and will take responsibility for the Science Editors' Handbook. Pippa runs her own company, providing services for publishers, research and publishing associations, agencies development editorial groups. She teaches a course on how to be a successful journal editor, which she ran for EASE in Warsaw last year and will

be holding again in Tallinn in June.

The Science Editors' Handbook was created to encourage good practice in the editing of publications in the sciences. From its humble beginnings in 1982, the Handbook now runs to 57 chapters arranged in four sections, Editing, Standards and Style, Nomenclature and Terminology and Publishing and Printing. It now needs updating to reflect developments in editing and publishing, particularly with regard to the digital transition. Anyone interested in contributing should contact Pippa (pippa.smart@googlemail.com).