

Ana Marušić started the first session with a lecture on enhanced publications in the digital age with an insight on how enhanced are scientific journals in Croatia. Liz Wager talked about responsible publication, authorship, and how to get your research published. Lea Škorić gave an overview of publication practices in Croatian medical journals.

After the coffee break, Nicolae Constantinescu showed the importance of sharing research results as API accessible data and Želimir Kurtanek pointed out the problems related to big data research publishing. Mirjana Pejić-Bach presented the results of the analysis of most common title words used in the publications of Croatian researchers. The session was concluded with the sponsor presentations from Thomson Reuters IP and Science, and MDPI.

The first lecture after the lunch break was held by Siniša Zrinščak, who talked about the evaluation of scientific journals in Croatia and the changes in the evaluation criteria in the last two decades. Nina Antičić talked about a self-sustainable scholarly open access journal “Brodogradnja”. Damir Modrić and Ivan Rajković gave an interesting presentation on image manipulation and usage of multimedia in research publications. Snježana Dimzov gave an overview of the most commonly used research material among students and compared the use of print versus digital material, while Franjo Pehar critically reviewed the usability of digital textbooks.

PubMet2016 was described as very successful, with numerous interesting topics and relevant speakers, and

Jadranka Stojanovski concluded by inviting all to the next PubMet2017 conference which will be held in Zagreb. Friday afternoon was reserved for a tour of old Zadar city, and on Saturday morning several attendees joined organiser Jadranka Stojanovski on a trip to Krka waterfalls.

Zrinka Pongrac Habdija; Iva Grabarić Andonovski
Food Technology and Biotechnology, Zagreb, Croatia

Marina Mayer
Ruđer Bošković Institute, Zagreb, Croatia



Klapa Kontrada at the conference dinner

Correspondence

A manual on scientific writing and publishing for authors

I have written about 7 essays for ESE regarding the use of many different words, phrases, clichés and other matters which unnecessarily clutter up scientific papers submitted to journals and annoy editors. This is an issue that must now be directed towards novice (and in some cases, even “experienced”) authors. However, these occasional essays do not set out clearly or sequentially how authors should go about preparing succinct, lucid and sound papers for publication in currently acceptable formats. The best papers are not only succinct, but have some style about them; these are most welcome when they come across the desk because the majority of papers submitted these days are very poorly presented. Indeed they seem to be getting worse, becoming increasingly stereotyped. To some extent the conventional format restricts authors in this way, but good authors can comply and still have style.

Editors often receive papers that can be scientifically sound, but are poorly presented often because the English is weak and many of the arguments are unclear. Unfortunately this means that they are likely to be rejected, editors usually being reluctant to pass them out to peer-reviewers (ie unless their policy is to send all papers out). Editing a paper to make

it more comprehensible and presentable can be a tedious and time-consuming task for an editor running a busy journal; few are prepared to take on the task, particularly as the number of papers being submitted increases.

However, there are several ways to get round these problems. One is to get authors to find good native English speakers to help them redraft their papers before submission and present their arguments more cogently. A second is to refer the authors to a company that specialises in editing difficult papers. A third is to advise them to find good books and articles on scientific writing to learn how to write a good paper. The fourth is to promote the training (notably of researchers) in the art of scientific writing along with a thorough insight into the sequence of steps from submission to publication, to include such matters as copyright, ethics and, *inter alia*, conflicts of interest. In a recent article for *The Biologist*,¹ I draw attention to the almost complete lack of training in both these regards in institutions worldwide. In brief, a comprehensive approach to the whole business of scientific writing *and* publication needs to be available to all scientists and doctors in the biomedical world (as also in other disciplines).

What company would fail to put a great deal of effort into showing to best advantage a very fine product as a result of months or years of labour-intensive effort and development? A good deal of training has to be put into getting the product ready for presentation to the general public. The scientific paper is the product of months, often years, of research and development, yet scant (if any) training is given to budding authors expected to tell the world about their recent discoveries. This neglect is a global issue; very few universities, colleges, institutions or other organisations offer more than a perfunctory lecture. This has been going on too long and is a travesty.

Editors of scientific and medical journals could help in this matter by requesting that establishments whose staff members send in weak papers ought to provide the necessary training. Few of us editors have the time to take this action, although it desperately needs some firm action from everyone concerned with the future of scientific publication. From my experience in globe-trotting to give courses in institutions from Riga in the North to New Zealand in the South, from Rio in the West to Hong Kong in the East, there is another problem. I personally have not come across any place where someone is skilled enough and prepared to train researchers by giving a thorough course. The one- or two-day courses that I give can only scratch the surface of the problem.

While EASE has done a good job in producing a Science Editors' Handbook, it is surprising how few comprehensive handbooks or manuals are available for authors. There are quite a number of books and articles (eg 2-4) dealing with different aspects of the problem, some being more concerned with improving English presentation for non-native speakers.⁵ It is not EASE's place to produce a definitive handbook or manual for authors, but editors have to recognise the problem, as better manuscript presentation can significantly reduce their load. After many years of editing biomedical journals (about six journals in the last 20 years), I created two organisations (*Manuscript Presentation Service* and *BioMedES*) to help achieve the second scenario mentioned above for improving papers. Referring papers to editing services is not as useful as training authors from the start since they become reliant on these services rather than learning to do the job properly themselves. There seems to be some change in attitude in this regard, however, as some major publishers have at last

seen the value of introducing such services of their own. I would add, however, that many of these services correct the English as best they can, but often with little understanding of the scientific content and context of the manuscript. It is difficult to present a paper on some intricate aspect of molecular biology or nanoparticle technology if you (a) have not got a good scientific background, and (b) cannot offer some expertise in the field of the article.

In conclusion, there seems to be the rather depressing outlook of finding an ever increasing volume of second-rate papers coming across editors' desks from authors who have not been properly trained in the very important business of writing good papers. This is a rather drab prospect that needs to be addressed in no uncertain terms and corrected. Editors can respond positively *by concertedly drawing attention to this urgent need for training*. My intention, other than raising this issue, is not to give yet more courses/workshops around the world, but to provide a manual that is as readily available and affordable as possible for authors (considerably less expensive than most other books on the subject), covering everything from the very first drafting to the final event of having a paper published.⁶ It is this comprehensiveness regarding both the writing and the publishing processes that is so important if we are to raise the standard of present day papers, particularly of primary research articles.

Denys N Wheatley

Oncology News; Cancer Hypotheses; BioMedES
editor@biomedes.co.uk

References

- 1 Wheatley DN. Why aren't researchers taught how to write and publish? *The Biologist* (in Press).
- 2 Zeiger M. *Essentials of Writing Biomedical Research Papers*. 2nd Edition. McGraw-Hill, 1999. ISBN 2-07-134544-2
- 3 Day R and Gastel B. *How to Write and Publish a Scientific Paper*. 7th Edition. Cambridge University Press, 2006. ISBN 9-1-107-60747-7
- 4 Hofmann AH, Isaac A O. *Writing in the Biological Sciences*. 1stnd Edition. Oxford University Press, 2014. ISBN-13: 978-0-199-76528-7
- 5 Glasman-Deal H. *Science Research Writing, for Non-Native Speakers of English*. Imperial College Press, London, 2010. ISBN 978-1848-163102
- 6 Wheatley DN. *Scientific Writing and Publishing – A Manual for Authors*. Kindle Edition, Amazon books.