The complex world of science editing

ABSTRACTS

PLENARY LECTURES

What is science?
Professor Sir Tim Hunt, Cancer Research UK, London, UK
It is difficult to say exactly what "Science" is. To some, it's a body of knowledge about the natural (as opposed to the supernatural) world. According to others, it's simply a way of looking at the world (George Orwell) or a method to find out about the world ("Science as a way of knowing" according to the excellent, late John A. Moore). Scientific understanding is rooted in curiosity about how the world works, leading to the asking of questions about how the world works, and trying to answer those questions by observation, experiment and analysis. It is more about producing a conceptual framework for understanding the world than a list of facts, although facts have to be taken into account as evidence. Different scientists work in very different ways: physicists tend to ask different questions from biologists, even when they are studying the same things. And they seek different kinds of answers, although paradoxically, the answers are not incompatible with each other. For various reasons, science can be extremely difficult to understand, even when it's well-understood by the specialists in a given field. It is very easy to get lost and bored, a big problem for school science.

Inter/multi/trans-disciplinarity: the challenge for publishing
Milena Žic Fuchs, Faculty of Humanities and Social Sciences, University of Zagreb, Croatian Academy of Sciences and Arts, Croatia
HORIZON 2020, the EU Framework Programme for Research and Innovation, introduces the notion of the so-called Societal Challenges. On one hand, these cover the huge span from the individual to the manifold global dimensions. On the other hand, they are implicitly inter/multi/transdisciplinary. It follows that research results (hopefully) will transcend disciplinary/domain boundaries and achieve the aims of HORIZON 2020 in the sense of "solving" the Societal Challenges. What does this mean for the future of publishing research results? If the results of HORIZON 2020 will truly be inter/multi/transdisciplinary, will the existing array of journals be ready to accept articles that go beyond the boundaries of their usually disciplinary orientation? Or will new journals appear? Apart from authorship, it will be the approach and the cross-domain content of articles that may open up "questions" for editors.

An example will be provided on the experience gained from the ESF Junior Summit "Water: Unite and Divide", an experiment of bringing together 36 early-career researchers on a topic which does not have a history of inter/multi/transdisciplinary research. Eventually, the results appeared as an open-access variant of the Journal of Water Resource and Protection (http://www.scirp.org/journal/jwarp/). In the new publishing landscape, will developments go in the direction of open-access journals becoming the main outlets for inter/multi/transdisciplinary research results? Will this induce a different balance between the open-access journal domain and "traditional" journal publications?

Research into peer review: how could peer-reviewed publications be more efficient?
Elizabeth Wager, Publications Consultant, Sideview, UK; Visiting Professor, University of Split Medical School, Croatia
Peer-reviewed publications have changed remarkably little in over 300 years. The format of most journal articles is essentially unchanged and many journals still view the printed version as the authoritative one. Similarly, the peer-review process, while taking advantage of electronic communications, is almost the same as that used in the 17th century. There has been little research into how publications are used and how they could be made more useful, but online publication and social media offer great potential for innovation. I will assess the traditional model, review developments and innovations, and consider what more could be done to improve the efficiency of the academic publication process and the usefulness of scientific research to a range of user groups.

Reporting guidelines: lessons for journal editors from the EQUATOR network
Doug Altman, Centre for Statistics in Medicine and EQUATOR Network, University of Oxford, UK
A fundamental principle is that readers of research articles need to know exactly what was done, and be given an accurate, complete and transparent account of what was found. They should not have to guess or assume what was done. Further, there should be enough detail to allow replication of the study in principle. Yet each year numerous new reviews of published research articles continue to demonstrate that a substantial proportion of journal articles are seriously deficient. Key information that readers need to appraise or use the findings is often missing. How can it be that none of the authors, peer reviewers or editors has detected that so many articles are substandard and, indeed, often unfit for purpose? Ensuring that journal articles are of maximum value to readers is clearly not a priority of many of those who write research articles, nor those who review them. Widespread deficiencies in research publications weaken the evidence-base for clinical practice. In the health research field many reporting guidelines have been developed in recent years, detailing the key elements of research that should be reported, with as yet modest success. I will consider what actions are needed by different stakeholders to help to raise standards more rapidly, in particular editors and peer reviewers. I will also consider the extension of these ideas beyond health research.

www.equator-network.org
PARALLEL SESSIONS

A: Social media and the journal as process not product
Moderator Alan Salt, University of Leicester, UK

Social media and the Annals of Botany Alan Salt, University of Leicester, UK
The Annals of Botany is a journal that publishes journals but it does far more than that. The striking feature of the Annals of Botany editorial meeting is that the editors are very proactive in relating to the field of Plant Science. Annals of Botany experience with large-scale translation – going well beyond

Over the past 12 years or so, biomedical journals and The Lancet group are an example for other journals with strong social links to their conference activity, like discussion, and engage in social media can put published research within a wider scientific context. It means there is a future for discipline-based journals beyond simply a collection of “articles as homepage”. This will highlight the value Annals of Botany gives researchers beyond publishing individual papers, which serves as a relevant example for other journals with strong social links to their fields.

Social media and The Lancet group
Sarah Etkiehalter, The Lancet Diabetes & Endocrinology, London, UK

The Lancet group has developed its social media strategy as a means to engage its readership and enhance their experience of published content, rather than simply as a marketing tool to drive website traffic. The Lancet group also uses social media as a platform to raise awareness of and promote discussion around the many global health issues to which The Lancet group actively contributes. The Lancet group’s social media strategy and touch on a few points that should be considered when embarking on a new social media strategy for any journal.

B: Sustainability and usability in biomedical translation: issues and approaches to problem solving
Moderator Mary Ellen Kerans, Mediterranean Editors and Translators, Spain

Over the past 12 years or so, biomedical journals and The Cochrane Collaboration have accumulated a great deal of experience with translating research going beyond the basics of titles and abstracts for indexes. Behind-the-scenes discussions of how to manage such translation have raised questions about process, quality, sustainability, costs and whether editorial goals are being met. A certain degree of public discussion has also taken place. This parallel session will showcase information from some of these discussions for the benefit of editors, translators and managers of large and small biomedical journals. New developments in the practical, sustainable management of large-scale, long-term translation projects will be described. We plan to leave time for panelists to interact and for participants to join the discussion, so interested EASE members should bring their questions and concerns.

Why quality can be difficult to define, achieve and sustain: What an editor who recruits translators needs to know and answer the question “what is quality?”. This approach will have Mary Ellen Kerans, Freelance editor and translator, Barcelona, Spain

Developments in full-text journal translation in Brazil, since reported in 2008 (METM08, Split)
Claudia Buchwost, and Denise Arend
“Scientific Linguagem, Brazil, and freelance editor, Revista Parkinson, Brazil”  Both a structural and American will be Public Health, “Scientific Linguagem, Brazil, and Production Editor, Revista Brasileira de Psiquiatria

Sustainable large-scale translation of Cochrane Reviews for local language users: finding an approach to support productivity and quality control
Jaimie Reid and Harriet McLehose, The Cochrane Collaboration, UK

Presenting translated plain language summaries of Cochrane Reviews in the public, avoids duplication in format and presentation and observations about uptake
Livja Puljak and Irena Zakuraj Grkovic, The Cochrane Collaboration, Croatian Branch

C: A common standard for sex/gender policies in reporting research and journal management – an open call to EASE members
Moderators Shrinit Heidiard and Tom Babor

Sex and gender differences are too often unaccounted for in scientific research, although these variables can be important determinants of both health and disease. This applies to all disciplines other than health research. The impact of, for example, environmental contaminants, interventions and innovations cannot be fully assessed if sex and gender dimensions are not accurately defined and reported and will not be known if they are not systematically reported. In addition, there is an increasing awareness of the gender bias among authors, reviewers, editors, and editorial board members, and a growing recognition that a more gender-balance will be necessary for the health and innovation. In 2013, the Gender Policy Committee of the European Association of Science Editors (EASE) conducted an electronic international survey in order to map existing sex and gender editorial policies in a wide variety of scholarly journals. The survey probed not only for current practices, but also for opinions regarding sex and gender policies in scientific journals and publishing houses. The Gender Policy Committee is leading the development of Common Standards for gender considerations in scientific publishing and journal management. The Common Standards provide guiding principles on how to improve journal/gender policies. In the broader context of science and innovation. At this session, the draft Common Standards will be presented for public consultation. Delegates are encouraged to provide feedback on the draft Common Standards and share experiences, and take part of editors and editorial societies across a wide range of disciplines. At this session, the draft Common Standards will be presented for public consultation. Delegates are encouraged to take part of editors and editorial societies across a wide range of disciplines. At this session, the draft Common Standards will be presented for public consultation.

D: Publication ethics: case studies from COPE
Moderators Irene Hames, UK, Mirjam Gunz, Switzerland, and André van Steirteghem, Belgium; Committee on Publication Ethics (COPE)

This afternoon, the Committee on Publication Ethics (COPE, http://publicationethics.org/) provides advice to editors and publishers on all aspects of publication ethics, along with the support and resources they need to implement good publication practice. It holds a quarterly Forum to which all COPE members (there are now more than 9,000, from over 50 countries) can bring challenging cases for discussion and advice. Over 17 years, COPE has built up a searchable database of more than 500 cases, covering a wide range of topics and stages in research publication, such as duplicate publication, authorship disputés, and plagiarism. In this interactive workshop, a number of cases based on real-life experiences or simulations will be presented as cases of pressing issues currently faced by editors and journals, will be discussed. The new COPE Case Taxonomy, comprising 18 main classification categories and 100 keywords, will be introduced, and an analysis of the cases will be presented.

E: Publication metrics
Moderator Paolo de Castro, Instituto Superior de Sanita, Roma, Italy; Published all projects, including strong influence of communication and directly affect the different actors of the process (mainly authors, readers, funding agencies and institutions).

On MET’s guidelines for choosing an English language consultant
Mary Ellen Kerans, Continuing professional development chair, Mediterranean Editors and Translators

A common standard for sex/gender policies in reporting research and journal management – an open call to EASE members
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EASE’s view on publication metrics and the San Francisco Declaration on Research Assessment
Arjan Polderman1 and Chris Sterken2
1EASE, The Netherlands; 2Israel, The Journal of Astronomical Data (University of Brussels)

This presentation will give an overview of EASE’s activities concerning the use and misuse of the Journal Impact Factor. The 7th EASE Conference of 2000 devoted three workshops to this topic and the closing plenary session to this topic and it was suggested that EASE should take action to discourage improper use. This resulted in the EASE statement on inappropriate use of impact factor metrics. In 2012, that position paper was re-issued as the San Francisco Declaration on Research Assessment (DORA). EASE was asked to support the initiative, which we did, because the DORA has the same purpose as the EASE Statement: eliminating journal impact factors and the related metrics and consequently in career and funding considerations. Some aspects of the DORA will be elaborated.

Behavior of obsolescence in Mexican public health journals
Mega Luc Atrian Salazar1 and Salvador Gorbea Portal2
1Spanish National Research Council, Valencia, Spain; 2Spanish National Research Council, Spain

The rapid growth of information is reducing the usefulness of the scientific literature. The bibliometric regularity known as obsolescence is a characteristic that is being described in the system of scientific communication. Furthermore, its behavior is measured in multi-synchronous studies from

June 2014
An impact factor for biosources

Laurence Mable, Elena Bravo, Alessia Calzolari, Ann Campana, Doorena Fedorica, Nrpohanat, Anna Maria Ross,
Paola De Castro

Inserm, Université Toulouse III–Paul Sabatier, Toulouse, France; Istituto Superiore di Sanità, Rome, Italy. The Biosourced Research and Education (B RRF) project is an ongoing international initiative to create suitable methods to recognize and measure the use and impact of biological resources in scientific/academic work, in order to maximize access to and use of biological materials and associated databases, and to recognize efforts involved in their maintenance. The goal is the adoption of a biobank unique identifier for easy and reliable retrieval of biobank-based research. The BRIF and journal editors subgroup undertakes multi-sectoral activities involving both researchers and science editors, to foster the definition of a standardized citation format for biological resources. An international Association of Science Editors has actively participated in many of the subgroup initiatives, including the workshop held in June 2013, organized to discuss the best strategies to promote the use of controlled vocabulary thesaurus used for indexing articles, such as the NARCIS Thesaurus. The presentation will describe recent initiatives of the subgroup, in particular those involving the National Library of Medicine (NLM) and concerning the Medical Subject Headings, which is the NLM controlled vocabulary thesaurus used for indexing articles for PubMed, and the NLM Citing Medicine, which provides instructions and guidelines for authors, editors and publishers for formatting citations to different types of material.

F: Professional development for editors

Moderator Pippa Smart, PSP Consulting, UK

What skills does an editor need, and how can you be sure that your authors and your journal are meeting the changing publishing environment? Increasing ethical awareness and exposure of fraudulent publishing practices have led to criticism of editorial practices and increased the need for editors to prepare for these challenges before publication. How do editors maintain up-to-date knowledge of their environment and ensure that they are working optimally? This session aims to provide a snapshot of available support in different regions of the world. Speakers will discuss available resources and development opportunities, and reveal if editors are aware of what is available, and how willing they are to invest time and effort in taking advantage of the opportunities.

What editors want and what they get

Pippa Smart, PSP Consulting, UK

This presentation is designed for editors, publishers and editorial office staff. All the proposed implementation steps can be applied to journals large and small and are designed to be submission system agnostic. The primary learning goal of the presentation is to outline proven practical steps towards implementation which, if followed, should ease the transition and help to place the burden on all journal stakeholders (editors, authors, reviewers). Following the presentation, attendees will be able to adapt, and utilize, the steps outlined at their own journal.

H: Evaluating editorial research and collaboration among editors’ associations

Moderator Ana Marulaj, Journal of Global Health and Universal Medical Information, Croatia

How can editors assure the quality of their work? Where is the evidence base for editorial policies and procedures? What is editorial research? This session will present experiences from different editors around the world and explore possible ways of collaboration among editorial organizations in research into peer journals, research and scientific communication.

The Mexican Association of Biomedical Journal Editors

Magda Luz Atria Salazar, President, Asociación Mexicana de Editores de Revistas Biomédicas, A. C., Mexico

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Author education strategies beyond cultural boundaries
Roohi Ghosh and Clarinda Cerejo, Editage, India
Education on topics such as manuscript preparation, the publication process, good publication practices, and new developments in the field can play a critical role in helping English-as-a-second-language (ESL) authors stay ahead in the race to publish in reputed international journals. Drawing on our long-standing experience with author education in India, we will share our experiences of a successful author education strategy that traverses cultural boundaries. We will discuss different training platforms that can be used for educating ESL authors, such as webinars, workshops, lectures, and written resources. The poster will also present the challenges and opportunities of cross-cultural differences in the teaching approach to be adopted for authors in Japan, South Korea, and China. We hope that other professionals involved in author education can use these insights and practical tips to develop a successful training plan.

Experiences of the reviewing process in a biotechnical field: Chemical and Biochemical Engineering Quarterly Journal Tamara Jurina and Željko Krunić, University of Zagreb, Faculty of Food Technology and Biotechnology, Croatia
This work presents the experiences of a young editor on the journal Chemical and Biochemical Engineering Quarterly Journal (CBEQJ). The journal has about 300 manuscripts, of which 85% are rejected. Based on this work experience, we know that the reviewing process is conducted in three stages. In the first stage, the manuscript is submitted to peer review by at least two international experts in the field. Experts are selected using the Web of Science database with the keywords from the submitted manuscript. The last stage comprises metrological, English language and technical revisions of the accepted manuscript. On average, each year the journal receives about 300 manuscripts, of which 85% are rejected. Based on this experience, we give advice and additional tips to develop a successful training plan.

The role of international collaboration among publishers: the Mexican champaign of EASE is born
Magda Luz Atrián Salazar, University of México
This work presents the experiences of a young editor on the journal Mexican Journal of Biotechnological and Applied Research (MEDITE). This journal is aimed at different scientific disciplines; an international survey on authors’ awareness of publication ethics; a study on the prevalence and attitudes towards plagiarism in biomedical publishing; a survey of journals’ instructions to reviewers on how EQUATOR guidelines are followed by reviewers; use of CrossCheck guidance to detect plagiarism in different disciplines; cross-disciplinary analysis of published data, a study of whether there are specific characteristics of clinical trials primarily designed for the purpose of marketing; and public disclosure of clinical trial data. The number and quality of applications has decreased. According to the CNPQ, we will set up a research commissioning programme which will be elaborated during the next COPE Strategy Meeting (July 2014).

Mediterranean Editors and Translators
Mary Ellen Kerou, Continuing Professional Development Chair, Mediterranean Editors and Translators Council Mediterranean Editors and Translators (MET) set out to be the leading organisation of editors and translators from the Mediterranean. We organise their training. MET’s focus is on peer training that is not based on a bibliography and that aims at the educational goal of meeting the future needs for biotechnical sciences. We have no proof that this approach leads to better work quality among wordface workers, but Council recently discussed why we feel it is. I will briefly sketch out MET’s first 10 years’ experience and tell something of Council’s views towards a more productive alternative.
such as misconduct, fraud, predatory journals, manipulation of data, plagiarism, forging, retraction. There are too many low quality manuscripts that result from poorly designed studies and lack of novelty, often a product of multiple institutional pressures. Scientific journal editors, besides editing the manuscripts, have a unique chance to educate our authors, reviewers, and editorial board members. EASE has been instrumental in these endeavours not only in providing excellent materials but also in organizing workshops and lectures for authors and editors all over the world. This has often been done in cooperation with publishing houses and universities. EASE resources, including immediate information from EASE conferences and articles published in European Science Editing, can also be used in other educating models. I will present my own experience in teaching scientific writing at undergraduate and postgraduate levels in the Czech Republic, acquired during the last decade at four universities, in courses for Ph.D. students organized by the Czech Academy of Sciences, and other institutions. A special lecture is always devoted to academic misconduct and its consequences. The written evaluations submitted by the course attendees and discussions report a positive learning experience, often indicating their first encounter with unacceptable practices in science. This educating model for students and young scientists may contribute to prevention of unacceptable practices in science.

Analysis of evaluation items for scholarly journals supported by Korean Federation of Science and Technology Societies based on item response theory
Geum-Hee Jeong and Sun Huh, Hallym University, Chuncheon, Korea
The Korean Federation of Science and Technology Societies (KOFST) has supported science journals published in Korea since 1971. From 2012, KOFST began to evaluate candidate journals with 35 evaluation items. We have assessed the usability of each item, using item analyses based on item response theory. This may provide information to KOFST about how best to support journal publication. Item analyses were applied to 35 items for 540 candidate journals. Analyzed contents were difficulty parameter based on Rasch model and difficulty parameter based on two-parameter item response theory. Journal history, full text XML, permanence of paper, author's check list, and editor training showed higher difficulty parameter based on Rasch model. Editor training, journal history, full text XML, and page charge showed higher difficulty parameter based on two-parametric item response theory. Since description of journal history, editor training and full text XML are selected as difficult items using both the Rasch model and the two-parametric item response model, editor training should be provided more frequently and full text XML production should be encouraged for better visibility of journals.

Ten Tips to keep in mind when writing articles
Sung-Tae Hong, Journal of Korean Medical Science, Korean Academy of Medical Sciences, Seoul, Korea
Writing a good quality scientific article takes experience and skill but the process can be helped by following basic principles. I propose “TEN Tips” that editors can encourage authors to use to improve their manuscripts. These have been developed to facilitate reader-friendly scientific communication and citation. They may help peer review or editing as well as writing. The Ten Tips have a culinary flavour. It is strongly recommended to write the first draft rapidly, then allow it to cook slowly, tasting repeatedly. During the drafting and slow cooking, prepare and trim the manuscript following the Ten Tips:
1. Keep to a clear plan for the article: plan the article carefully before writing, including contents, conclusion, target journal, authorship and references
2. Keep to the formatting requirements of the target journal
3. Keep consistency: prepare the manuscript using a consistent flow of contents or items
4. Keep scientific confidence: all authors must be confident of their results and conclusion
5. Keep your story: write the manuscript to tell a scientific story
6. Keep sentences sexy: make sentences simple and short
7. Keep in mind Rule of Ten 1: only 10% of people who read the title go on to read the abstract, so an informative and attractive title is essential
8. Keep in mind Rule of Ten 2: only 10% of people who read the abstract go on to read the text
9. Keep the Rule of First and Last: begin the text with a topic paragraph and close it with a resolution paragraph. Begin each paragraph with a topic sentence and close it with a resolution sentence
10. Keep connecting words: connect sentences by repeating keywords within a paragraph.

Mentoring for publication in a Master’s degree programme in hospital pharmacy
Louise Mallet, Université de Montréal, and Julie Méthot, Faculté de pharmacie, Université Laval, Canada
In 2011, a 1-credit course on writing a scientific publication and on the peer-review process for scientific articles was launched. This course is given to the residents enrolled in the Master’s degree programme in hospital pharmacy in the Université de Montréal’s Faculty of Pharmacy. To pass the course, the residents have to submit an article to a peer-reviewed journal. Data pertaining to the communication course were compiled in 2011-2012 and 2012-2013. These data concerned the number of teams, the selected journals, and the type and number of articles published. The results concerning the articles accepted and published will be presented. The pharmacy scientific communication course has enabled all the residents to experience writing a scientific article, to receive peer-review comments for improving their article, and to submit it to a peer-reviewed journal. We hope that this experience will inspire this new generation of pharmacists to publish in scientific journals.

Golden rules for science editors: a draft for discussion
Sylwia Ufnalska and Arjan Polderman
We propose a brief list of “golden rules for science editors” and welcome feedback for further development.
1. Be aware of your target audience.
2. Ensure a fair peer review process.
3. Pay due attention to ethical issues: data fabrication or manipulation, plagiarism, authorship, and conflict of interest.
4. Inform authors about progress and delays as soon as possible.
5. Do your best to ensure that publications are complete, concise, and clear, with correct citations.
6. Make sure that the abstract properly summarizes vital information (background, objectives, methods, results, and conclusions) and contains major keywords.
7. Ensure safe long-term storage of publications and documentation of the editorial process.