

Is There “Self Plagiarism” and “Salami” Publishing in *JASMS*?

In 2011, I (R.A.J.O.) completed handling 100 papers as associate editor for the *Journal of the American Society for Mass Spectrometry*. On reflecting on this milestone, I noted that I had rejected two papers on the advice of referees who raised concerns over overlap between the *JASMS* manuscripts submitted and papers that were written by the same authors and were in press in other journals. This experience raised my interest in the topics of self-plagiarism (also known as duplicate publication, multiple publication, and redundant publication, and defined as a publication “which duplicated previous, simultaneous, or future publications by the same author or group” [1]) and salami publishing (defined as publications that provide “a minor incremental increase in understanding and could reasonably have been published within one larger article” [2]). Further, I asked whether plagiarism is an issue with *JASMS* authors, and I raised my concerns at the 2011 *JASMS* editor’s meeting.

At that meeting, I presented a paper that highlighted that the issue of self-plagiarism and salami publishing in the Surgery journals was found to be as high as one in six papers [1]. An article in *Nature* suggested “the problem may be going undetected” in “basic research” [3]. I also made the point that we need to know if such undesirable practices have been carried out by authors who have published in *JASMS*.

The Editorial Board recommended we examine all papers published in 2009 to establish if there were any cases of “redundant” and “salami” publishing. In particular, we were interested in addressing the question “had any *JASMS* paper been previously or subsequently published in another journal?”

Methodology

The iThenticate program (<http://www.ithenticate.com/>) was used to establish potential overlap between 268 *JASMS* articles published in 2009 and any other articles in the literature. Based on advice from Michael Weston (Senior Editor, Springer, New York) regarding the best way of obtaining meaningful reports on each of the 2009 *JASMS* articles, the file for each *JASMS* article was uploaded to iThenticate after all the references were removed. The iThenticate report that we received for each article provided a Similarity Index that allowed us to check if there was plagiarism.

Outcome

All of the *JASMS* articles gave a high Similarity Index (ranging from 52 % to 90 %) because the reports included the actual *JASMS* article that was checked since it was published. When the *JASMS* article under study was removed, the Similarity Index was significantly lower in most cases, suggesting there was little overlap between the published *JASMS* article and papers published in other journals. Five papers were closely examined and compared with papers published by the same research groups in other journals. Some overlap was found, typically in the experimental section. This raises the interesting question of how much overlap is acceptable. As noted by Giles [3], “researchers routinely commit minor plagiarism without dishonest intent, such as reusing parts of an introduction from an earlier paper. To help editors resolve these cases, some journals set an upper limit for the amount of text that can be reused, usually about 30 %.” While *JASMS* has not defined such a limit, we highly recommend that authors do not cut corners by replicating parts from previous papers.

Many of our colleagues do not regard self-plagiarism as a serious matter, especially in experimental sections. They ask “how many ways can we describe an experimental protocol that we use over and over for different chemical systems?” We suggest that authors attempt to recast these sections, even in minor ways, to avoid accusations of self-plagiarism. If certain descriptions are clear, concise, highly valued, and evolved from considerable efforts, authors can always quote this material and give an attribution. The same is true for material in introductory sections. Instead of copying the well-phrased materials, authors should simply use a direct quote (use quotation marks), and give proper attribution.

Copying and republishing material may be particularly an issue with graduate and post-doctoral students, who are not aware of the problem or who have trouble writing with ease and speed and feel that taking some material from here and there is something that won’t be noticed. Faculty and senior authors should discuss these matters with junior authors and urge them to avoid copying and remind them of the evolving tools that are becoming available for checking for overlap.

While it was reassuring that there appears to have been no example of “redundant” and “salami” publishing in the 2009 *JASMS* papers, when I reported the result at the recent 2012 *JASMS* editor’s meeting, it was agreed that our community needs to be vigilant. Thus, *JASMS* is planning the use of

iThenticate on all new submissions, and we will continue to rely on our expert reviewers to alert us of potential problems.

It is interesting to note that since we began this project, there have been several editorials on issues such as plagiarism and retractions [4–8]. Clearly, these are major ongoing concerns for the scientific community, and we would welcome any comments from our *JASMS* readers. We can use our new section of “News and Views” (Gavin Reid, editor) as a venue for discussion.

Finally, we thank Michael Weston for advice on the use of iThenticate and the Editor-in-Chief and the Associate Editors of *JASMS* as well as the ASMS Board (particularly Evan Williams) for their interest in, and support of this project.

References

1. Schein, M., Paladugu, R.: Redundant surgical publications: tip of the iceberg? *Surgery* **129**, 655–661 (2001)
2. Roberts, J.: An author's guide to publication ethics: a review of emerging standards in biomedical journals. *Headache* **49**, 578–589 (2009)
3. Giles, J.: Special report: taking on the cheats. *Nature* **435**, 258–259 (2005)
4. Zimmer, C.: A sharp rise in retractions prompts calls for reform. *The New York Times*, April 16 (2012)
5. Marcus, A., Oransky, I.: The Paper is not sacred. *Nature* **480**, 449–450 (2011)
6. Bonnell, D.A., Hafner, J.H., Hersam, M.C., Kotov, N.A., Buriak, J.M., Hammond, P.T., Javey, A., Nordlander, P., Parak, W.J., Schaak, R.E., Wee, A.T., Weiss, P.S., Rogach, A.L., Stevens, M.M., Willson, C.G.: Recycling is not always good: the dangers of self-plagiarism. *ACS Nano* **6**, 1–4 (2012)
7. Vitse, C.L., Poland, G.A.: Plagiarism, self-plagiarism, scientific misconduct, and VACCINE: protecting the science and the public. *Vaccine* **30**, 7131–7133 (2012)
8. Sweedler, J.V.: Two unrelated items to avoid, one for me and one for you. *Anal Chem.* **84**, 4635–4636 (2012)

Richard A. J. O'Hair

Associate Editor, JASMS

School of Chemistry

Bio21 Institute of Molecular Science and Biotechnology

ARC Centre of Excellence for Free Radical Chemistry

and Biotechnology

The University of Melbourne

Victoria 3010, Australia

e-mail: rohair@unimelb.edu.au

Joyce Neff,

Managing Editor, JASMS

Department of Chemistry

Washington University in St. Louis

St. Louis, MO, USA

e-mail: neff@wustl.edu