Author's response to reviews

Title: e-MIR2: a public online inventory of medical informatics resources

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Author's response to reviews: see over
Cover Letter in Response to Review’s Comments

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“e-MIR²: a public online inventory of medical informatics resources”

Dear Editor:

We would like to acknowledge the comments of the two reviewers. However, we wish to point out the inconsistency and potential bias of one of the reviewers which is a concern given the need for the most impartiality achievable in a review process.

The contrast between the two reviewers’ comments on the revised manuscript could not be more stark. Reviewer #2 believes that the paper has definitively improved and is ready for publication. However, reviewer #1 seems to believe that the paper has become worse. He states that version #1 was “An article of importance in its field”, whereas now version #2 is “An article of limited interest”. We cannot understand how, after actually following some of the suggestions of this reviewer, the paper can now have lost its importance to the field!

Of course, we have been willing to follow some of the reviewer #1 suggestions, those that were made in a constructive way and were useful to improve the paper – as it is usual in most peer review processes. This has been the case for reviewer #2, whose recommendations we have followed until she considered the paper ready for publication. Version #2 of the manuscript includes the following changes:

- We decided to change the term “taxonomy” to “classification schema” to avoid misunderstandings with definitions. Additionally, we expanded the description of the methodology used to create the classification schemas.

- We have checked again the categories to create the new versions of the classification schemas as depicted in Figure 1. Some categories have been condensed into one unique category (e.g. datawarehouse and warehouse has been joined into the warehouse category).
In response to the comments of reviewer #1, we would like to point out the following:

1. It appears that the reviewer might not be familiar with the type of papers published in BMC MI&DM, given his comments. The reviewer states that he would not support the publication of the manuscript as a scientific paper but rather as a short or technical paper. In fact, this had been our intended goal. This was not a “research” paper, but a “database” paper. We assumed that no one could expect that we provide a new method for a “database” paper. Such a goal should be, obviously, appropriate for a “research” paper. Thus, we actually agree with the reviewer in this fundamental issue.

2. The author remarks that the method is no longer of great interest. Again, the method is not a key point for a database paper. In fact, we could delete it, since it would not be required for a database paper in this journal. Incidentally, we would like to point out that the method was not borrowed from others, since it was originally presented by the authors in a previous “research paper” published in BMC Bioinformatics [De la Calle G, García-Remesal M, Chiesa S, de la Iglesia D, Maojo V: BIRI: a new approach for automatically discovering and indexing available public bioinformatics resources from the literature. BMC Bioinformatics. 2009 October, 10(1):320].

3. There are many sentences from the reviewer that are difficult (or impossible) to understand in English. Examples are numerous, such as: “the authors argue that there isn’t any paper published in MI presenting resources”. “I and many authors agree, so why do you select this set disregarding any paper to the field? Simply including them in the list of references is not enough”. “Partly done in functionality, layout and usability was remained”. “When defining the terms, state of the art and other terminologies must be taken into account. Here, the authors can learn”. “The web interface is inconvenient in use, and required scrolling since the usual wide screen monitor resolution is not acknowledged”. In some of these cases, it is difficult to see what the reviewer is referring to, and how we can address his suggestions, which creates a problem in answering the review.

4. There is a fundamental argument in favor or our manuscript, related to a statement of reviewer #1: “For instance, the authors argue that there isn’t any paper published in MI presenting resources. But, however, in my opinion there are much more, which are not detected simply because the title and abstract are searched only, and it is quite unusual to include the web address in either of this”. First, there is, to our knowledge, no paper presenting a review or inventory of open resources in the area of medical informatics. And, the reviewer does not point to one. This suggests his first statement is inaccurate. Second, the reviewer suggests searching the whole text of papers, which is not possible
for most journals, since they are not open without subscription. We could do this for the open journals, of course, but not for the rest, which would require ignoring most of the major journals in the field, like JAMIA, Journal of Biomedical Informatics, Methods of Information in Medicine, Artificial Intelligence in Medicine, Computers in Biology and Medicine or the International Journal of Medical Informatics. This would lead to an incomplete and pointless exercise. What the reviewer suggests is therefore impossible and would condemn, a priori, any similar effort. In this regard, first, the paper is original, since there are no similar examples in the area of Medical Informatics. The reviewer should know this, since this has been a topic of discussion for more than a decade. The openness of publications in the bioinformatics area has not been similarly followed in medical informatics, for a variety of reasons. And second, the paper is important, since it follows the idea of publishing open resources, which is, in fact, the same strategy followed by many journals —such as the BMC journals— and by many professionals in this and other areas.

5. Reviewer #1 states “Why can you distinguish anatomy and disease? Why are only microarrays and neuroimages included, what with all other? ... In conclusion, the authors failed in this point”. In this work, we deliberately tested an automated method which should be usefully generalizable for many fields, and so have included only the information found on the papers in the sample we analyzed, as it would be unfair otherwise. We did not want to use a manual approach, which would have been more easy, of course, and more complete, but not scalable given the tedious and error-prone human effort involved.

6. The kind of references provided by the reviewer does not seem to be neutral and scientific. First, the author suggested one of his own references, which might be useful, of course, but does not seem an objective, neutral example —and is not actually adequate, as suggested below. Secondly, using the Wikipedia as a reference is not, either, a publishable example.

7. Reviewer #1 states that “the modifications are rather some words than a comprehensive methodological improvement”. Here, again, such a statement is misleading. For instance, a sentence such as: “we have now processed forty thousand papers instead of ten thousand” contains eleven words, but these few words actually show that we have processed 30,000 additional papers.

8. The reviewer presents his own reference [Spreckelsen C, Deserno TM, Spitzer K. The visibility of medical informatics regarding bibliometric indices and databases. BMC Med Inform Decis Mak 2011;11(24)] to suggest us that there are many more journals that we have not included, suggesting that we should have done that. We have read his
reference and we have found a fundamental flaw in his own paper, already published in BMC Medical Informatics and Decision Making. He and his coauthors presented as “journals” MIE Procs, Proc AMIA Symp, Medinfo and Stud Health Technol Inform. However, these are not journals, since they refer to the proceedings of the three most popular conferences in the area of medical informatics, which are the Medical Informatics Europe, the American Medical Informatics Association Annual Symposium and the World Congresses of Medical Informatics, or Medinfo, published under different names over the past decades. These conferences are well known in the area of medical informatics to all—or most—scholars. They are conferences, not journals, and such an erroneous classification leads to a basic and fundamental error at the core of the BMC paper that the reviewer suggests us to use. Or they cite Bioinformatics, Proteins and Nucleic Acids Research, which are bioinformatics journals and only rarely publish papers that we might tangentially label as “medical informatics”. Similarly, the reviewer and coauthors did not include JAMA and the New England Journal of Medicine (NEJM), which routinely publish some papers in medical informatics—some of them now classics. In all these cases, to analyze the journals and conferences of medical informatics there is much more needed than using only statistics and some available databases, which is knowledge and expertise in the area. In this regard, one of the authors (CK) has been a pioneer of the area of medical informatics since 1970, he is currently a Vice President of the International Medical Informatics Association, Fellow of IEEE, AAAI, the American College of Medical Informatics (ACMI) and member of the US Institute of Medicine of the National Academies of Sciences. He and another author (VM, also an ACMI Fellow) have been many times in the boards of many of the most prominent journals and conferences in the area. This is a topic that we have analysed for a long time (CK participated in one of the earliest comprehensive reviews of the field in 1985!). Thus, we were using our experience, not only statistics.

In this regard, we were puzzled by some of the subjective comments of reviewer #1 in his two reviews. As a peer scholar in the area of medical informatics, we were particularly astonished when the reviewer stated that “we can learn” from the state of the art. Besides the gratuitous condescension of this remark, our previous point shows clearly the actual evidence for our knowledge of the state of the art as long-standing authors and editors. In addition, reviewer #1 states that “The only information of interest is: 609 MI resources are collected on http://www.gib.fi.upm.es/eMIR2, which is a free accessible resource collection”, and suggests to publish that in the website of the journal. Incidentally, our previous BMC Bioinformatics paper, mentioned above, was referenced in a short comment one year later in the section “Science careers”, by the editors of the top ranked Science Magazine (http://blogs.sciencemag.org/sciencecareers/2010/07/easier-access-t.html). If the reviewer has changed his mind to now to suggest that this manuscript only deserves a note on a website, the fact is that a much larger note on the results from our previous BMC paper has already made it into one of the two top international scientific journals.
10. To make explicit the names of the reviewers is a policy that we appreciate and defend. This cannot be used to counterattack the reviewer. However, in this case, given the unusual, personal comments of the reviewer, we must point out that his background and expertise is in biomedical imaging, as checked from Pubmed. Only 2-3 papers of his can be fully ascribed to the field of medical informatics. With such a background, it is more even more surprising to see the kind of comments reviewer #1 made.

11. In conclusion, we would like to call your attention once again to the fundamental lack of accuracy and fairness of reviewer #1, while acknowledging the comments of the other reviewer that recognizes the efforts carried out by the authors to improve the manuscripts according to the prior revision.