

Update on the investigation into the publication record of former *BJSM* editor-in-chief Paul McCrory

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After *BJSM* and its publisher, BMJ, retracted an article for plagiarism by former *BJSM* editor-in-chief, Dr Paul McCrory, further allegations about McCrory's publication record were brought to our attention¹⁻³ and have been investigated. This article provides an update on our investigation and outlines next steps.

McCrory was editor-in-chief of *BJSM* between 2001 and 2008, during which time he authored numerous articles in the journal. Many of these articles were opinion pieces of which he was listed as the single author. Over his broader career, McCrory published at least 164 articles in BMJ journals, of which 40 were coauthored research articles. McCrory also had a leading role in producing the consensus statements for concussion in sport, which have been published in *BJSM*.⁴⁻⁸

INVESTIGATING ALLEGATIONS ABOUT SINGLE-AUTHOR PAPERS BY MCCRORY

All allegations of publication misconduct received by BMJ and *BJSM* relate to articles in which McCrory is listed as the single author. We have verified allegations about each of the nine articles authored by McCrory that were the subject of complaint. These articles are being retracted.⁹⁻¹⁷

Five of these retractions are due to plagiarism⁹⁻¹³ and three are due to duplicate (or redundant) publication.¹⁴⁻¹⁶ Plagiarism is scientific misconduct. To plagiarise while holding the position of editor-in-chief of a journal is an abuse of the power and responsibilities that come with this office. It undermines both science and the trust placed in

editors to protect the integrity of the scientific record.

Since our investigation has revealed a pattern of publication misconduct on the part of McCrory, we have decided to place a notice to readers, an expression of concern,¹⁸ on all articles published in the *BJSM* of which McCrory is identified as the single author. If and in so far as there are new allegations against McCrory arising out of his publications in the *BJSM* or other BMJ journals, we will investigate them and take further action as appropriate. We have offered McCrory the opportunity to inform us of any other of his articles that may fall short of acceptable publishing standards, although he is yet to provide any additional information.

In another *BJSM* article that is being retracted,¹⁷ McCrory inaccurately quoted and misrepresented the position of Augustus Thorndike as stated in an earlier 1952 publication. The misrepresentation distorts Thorndike's recommendations for managing ongoing participation in contact sport following concussion, which McCrory uses to support a key argument in the article.^{17 19} An editorial by Stephen Casper and Adam Finkel³ gives an account of the matter. They explore to what degree McCrory's distortion may have impacted on the understanding and application of concussion research.

THE STANDING OF WORK COAUTHORED BY MCCRORY

BMJ and *BJSM* have received no complaints about published work in relation to which McCrory is listed as a coauthor, as opposed to a single author. Here is our position in relation to other articles that include McCrory as a coauthor.

Consensus statements in sport

McCrory's past role as editor-in-chief of *BJSM* is one of several positions of leadership and influence that McCrory has held in sports and exercise medicine and in his specialist area of sports-related concussion. His involvement in the concussion consensus statements is his most influential work. It may be noted that after the plagiarism allegations surfaced, McCrory resigned

from his role as a member of the Scientific Committee of the International Consensus Conference on Concussion in Sport,²⁰ as well as his leadership position in the Concussion in Sport Group (CISG), an international association of clinicians and scientists with an interest in sports-related concussion.

BJSM has published five iterations of the concussion consensus statement: Vienna 2001, Prague 2004, Zurich 2008, Zurich 2012 and Berlin 2016.⁴⁻⁸ McCrory is listed as the first author on the four most recent versions. *BJSM* and BMJ have reviewed in detail the most recent iteration, Berlin 2016,⁸ and our conclusion is that we have no concerns about plagiarism. Prior to its publication, Berlin 2016 was approved by all its coauthors and reviewed by then *BJSM* editor-in-chief, Karim Khan. Additional original research and systematic reviews were published alongside Berlin 2016 (*BJSM* issues 11 and 12, 2017), which included supporting evidence and methodology on which that iteration of the consensus statement was based. These papers were all externally peer reviewed. Beyond this, the question of the extent of McCrory's contribution to and influence on the five versions of the consensus statement is a matter within the purview of the scientific committee appointed by the CISG. *BJSM* has provided guidance to support rigour in the development of consensus statements that it publishes, which should reduce undue influence of any one individual.²¹ This includes considerations for panel selection, the inclusion of diverse perspectives and the presentation of dissenting opinions.

Research

BMJ journals have published 40 research papers in which McCrory is listed as a coauthor, and the vast majority of these were published in *BJSM*; 18 were published during McCrory's editorship of *BJSM*. These date back to the early 2000s, since when manuscript submission systems and processes have changed. McCrory is one of several authors on his research papers, often collaborating with individuals at other institutions. In some papers, he is listed in a prominent first or last author position. We have not received any specific allegation of misconduct relating to these papers. The responsibility for investigating the integrity of McCrory's research rests with his institution.

CONCLUSION

The scientific record relies on trust, and BMJ's trust in McCrory's work—specifically the articles that he has published as a single author—is broken. We will investigate any new allegations that we receive about McCrory's work published in BMJ journals.

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We ask other publishers and his institution to do the same.

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