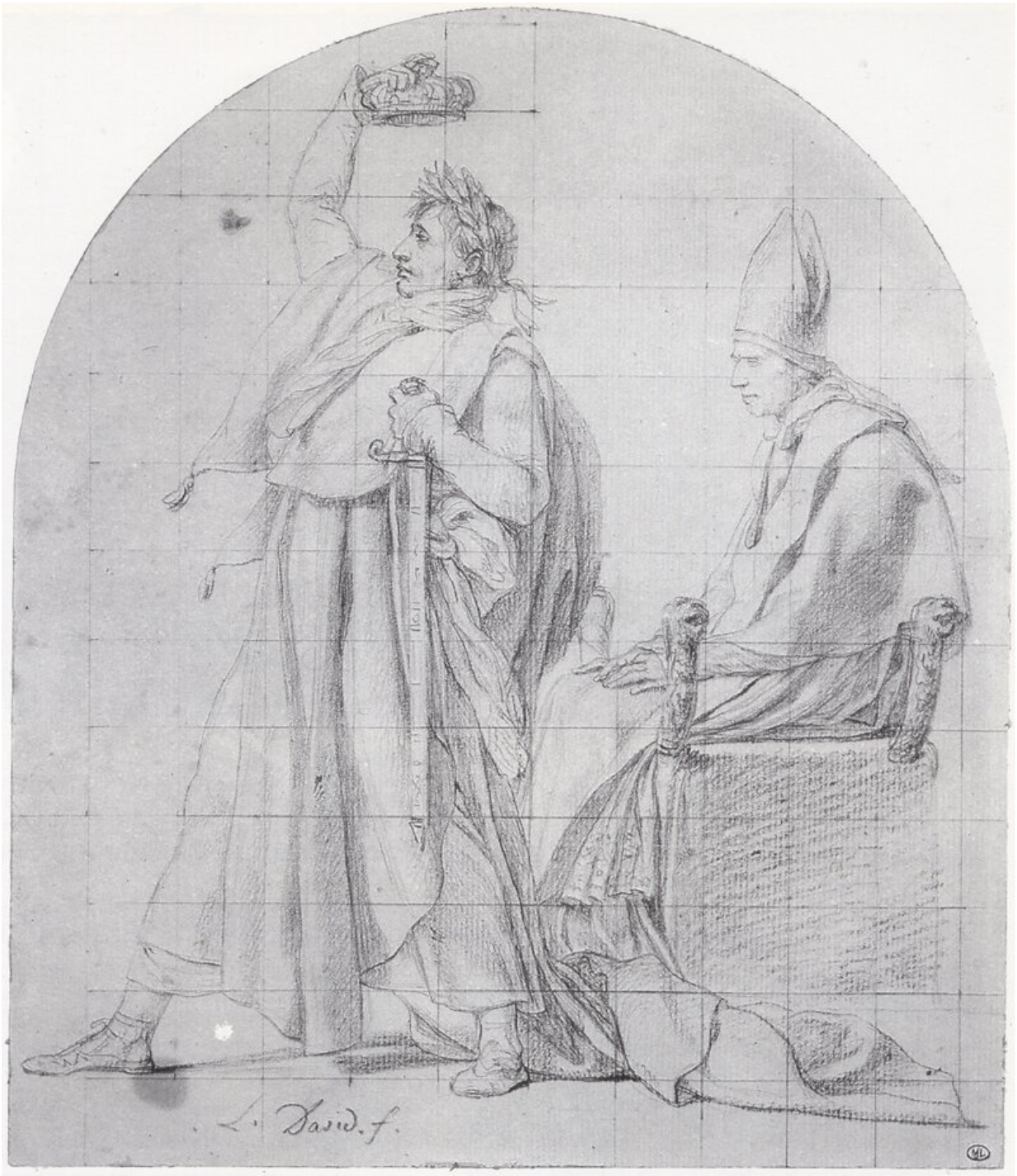
Massive study reveals editorial bias and nepotism in biomedical journals

November 23 2021



Sketch by David of Napoleon crowning himself (L'Empereur Napoleon se couronnant lui-même). Credit: Jacques-Louis David, Wikipedia, CC 0 (creativecommons.org/publicdomain/zero/1.0/)

Scientific journals are expected to consider research manuscripts dispassionately and without favor. But in a study publishing on November 23rd in the open access journal *PLOS Biology,* Alexandre Scanff, Florian Naudet and Clara Locher from the University of Rennes, and colleagues, reveal that a subset of journals may be exercising considerable bias and favoritism.

To identify journals that are suspected of favoritism, the authors explored nearly 5 million articles published between 2015 and 2019 in a sample of 5,468 of biomedical journals indexed in the National Library of Medicine. In particular, they assessed authorship disparity using two potential red flags: (i) the percentage of papers in a given journal that are authored by that journal's most prolific author, and (ii) a journal's Gini index, a statistical measure widely used by economists to describe income or wealth inequalities.

Their results reveal that in most journals, publications are distributed across a large number of authors, as one might hope. However, the authors identify a subset of biomedical journals where a few authors, often members of that journal's editorial board, were responsible for a disproportionate number of publications. In addition, the articles authored by these "hyper-prolific" individuals were more likely to be accepted for publication within 3 weeks of their submission, suggesting favoritism in journals' editorial procedures.

Based on a large available database, this survey could not perform a detailed qualitative analysis of the papers published in such journals suspected of biased editorial decision-making, and extensive further work will be needed to assess the nature of the articles published by hyper-prolific authors in journals flagged as potentially "nepotistic."

Why would this matter? Such "nepotistic journals," suspected of biased editorial decision-making, could be deployed to game productivity-based

metrics, which could have a serious knock-on effect on decisions about promotion, tenure and research funding. To enhance trust in their practices, the authors argue that journals need to be more transparent about their editorial and peer review practices and to adhere to the Committee on Publication Ethics (COPE) guidelines.

Locher adds, "To highlight questionable editorial behaviors, this study explores the relationship between hyper-prolific authors and a journal's editorial team."

More information: Scanff A, Naudet F, Cristea IA, Moher D, Bishop DVM, Locher C (2021) A survey of biomedical journals to detect editorial bias and nepotistic behavior. *PLoS Biol* 19(11): e3001133. doi.org/10.1371/journal.pbio.3001133