



Radiation oncology authors and reviewers prefer double-blind peer review

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We read with interest the article by Tomkins et al. (1) in PNAS. While editors of the *International Journal of Radiation Oncology • Biology • Physics* (IJROBP), a medical journal that specializes in the use of ionizing radiation to treat cancer and other conditions, we switched from single-blind to double-blind peer review in 2011. As radiation oncology is a small specialty (4,236 full-time, board-certified radiation oncologists practicing in the United States), we suspected that many of our peer reviewers knew or suspected the authors of the manuscripts (2, 3). For 3 mo all IJROBP reviewers and one author per paper completed questionnaires regarding demographics, attitudes, and perceptions of blinding. We also evaluated correlates of the outcomes of peer review. Questionnaires were received from 408 authors and 519 reviewers (100%). The majority of respondents favored double blinding; only 6% of authors and 13% of reviewers disagreed that double blinding should continue in IJROBP. In all, 50% of the reviewers did not suspect the identity of the author of the paper that they reviewed; 19% of reviewers believed that they could identify the author(s), and 31% suspected that they could. Similarly, 23%

believed that they knew the institution(s) from which the paper originated, and 34% suspected that they did. Of those who at least suspected origin and provided details ($n = 133$), 13% were entirely incorrect. We found submissions from last authors with higher h-indexes (>21) were more likely to survive initial review, regardless of author gender or h-index both before and after double-blind peer review was introduced.

Although the reviewers could sometimes guess the author or institution, a significant finding of our study is that the authors themselves preferred double-blind peer review. This is likely because the majority of authors studied were younger (51.7% were under age 40) and had lower academic rank (44.8% were residents/trainees or assistant professors/instructors). These individuals typically have less prestige and lower h-indexes compared with their associate- and full-professor peers, and they have the most to gain by receiving an unbiased review of their manuscript. We have even been told that this is now viewed as an attractive aspect of our journal's editorial process for some authors who are considering where to submit their research.

- 1 Tomkins A, Zhang M, Heavlin WD (2017) Reviewer bias in single- versus double-blind peer review. *Proc Natl Acad Sci USA* 114:12708–12713.
- 2 Smith BD, et al. (2010) The future of radiation oncology in the United States from 2010 to 2020: Will supply keep pace with demand? *J Clin Oncol* 28:5160–5165.
- 3 Jagsi R, et al. (2014) Attitudes toward blinding of peer review and perceptions of efficacy within a small biomedical specialty. *Int J Radiat Oncol Biol Phys* 89:940–946.

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