Objective Lens
Double-Blind Peer Review

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Since our inception in 2013, *Fine Focus* has utilized a double-blind peer review system for submitted manuscripts, ensuring that the most objective recommendations are made by members of our Editorial Board. Your submitted manuscripts are redacted of all identifiers (including names, affiliations, and acknowledgements) before they are made available to 2-3 reviewers. This approach is unusual in scientific journals. Etkin and colleagues (2017) have reported that for one well-known academic journal publisher, 95 percent of physical science and health science journals operate single- blind peer review while 72 percent of life sciences journals are single blind. In fact, I am not aware of any journals in the fields of microbiology or science education other than *Fine Focus* which utilize a double-blind review process. Data to substantiate the claim that double-blind minimizes bias in scientific review does vary according to what is specifically being measured, and by what methods. However, the general consensus viewpoint, reflected in several studies indicates that double-blind manuscript review effectively reduces or eliminates nepotism, gender bias, geographic bias, and personal bias against (or in favor of) specific research groups, laboratories, and/or PIs (Thomkins *et al.*, 2017; Okike *et al.*, 2017), and that most scholars prefer it over a single-blind review process (Ware, 2008).

The purpose of this writing is not to explore the topic comprehensively, but rather to inform and justify to our readers as to why the first international journal in undergraduate microbiology research, *Fine Focus*, has opted to use double-blind review over the traditional single – blind process. No system is perfect, but thus far, no more suitable manuscript review system has been adopted that has enjoyed any degree of practicality and persistence above that of single- or double-blind peer-review. The reason that the single-blind approach remains dominant in the sciences (but not in social sciences and humanities journals, where only 15% use single-blind review according to Etkin *et al.*, 2017) is unclear, but change comes very slowly in the global community of scientists and educators, where collaboration and information-driven action can generate a myriad of opinions and arguments with little hope of decisive action and fundamental change in this regard.

Arguments against double-blind peer review in the sciences include the notion that preparation of manuscripts with redacted identifiers (or blinding the papers by editorial staff after authors have submitted them) would be overly burdensome or too complicated. However, as any active author, or a managing or section editor for an academic journal could attest, this process is quite straightforward and certainly not as time-consuming or technically challenging as most of the other actions necessary during the manuscript submission/uploading process. Critics of double-blind review also indicate that reviewers could probably guess the authors identity and/or affiliations based on the content of the research, key words, or the authors' results. This is unlikely, and in any case a reviewer who would go to this length in a petty attempt to guess the authors is not someone who is likely to be an effective reviewer anyway, and probably should not be on the Board. Following my service as a reviewer, and/or member of the Editorial Board for the *CUR Quarterly, Journal of Food Protection, Journal of Dairy Science, Biologia,* and now Managing Editor of *Fine Focus*, I can submit that most reviewers are well-meaning, sincere, and ethical. They want to do a good job, and evaluate the science more than the authors or the place in which the work was done. Double-blind peer review is a good way to ensure that they stay honest and maintain confidence in our system by the submitting authors and editorial staff.

References

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