How does the journal impact factor affect the CV of PhD students?

Fabian Sanchis-Gomar

In his editorial “Dear DORA”, Howy Jacobs commented on the recent San Francisco Declaration of Research Assessment (DORA) to address the misuse of the journal impact factor (IF) and discussed alternatives. DORA stipulates that the IF must not be used as a surrogate measure of the quality of individual research articles, or to assess an individual scientist’s contributions in hiring, promotion and funding decisions. DORA and many other commentators, such as Howy Jacobs, therefore advocate the use of additional, alternative metrics and other measures to make a more fair and realistic judgment about the quality of a scientist’s or research group’s publications.

The nearly single-minded focus on the IF has had a detrimental effect on many aspects of research. Scientists, eager to increase their chances to get tenure, promotion or the next grant, may perform research that is more likely to get published in a high-IF journal rather than pursuing interesting ideas. Tenure and grant committees may not select the best candidate but the one with the most impressive publication list. And journals editors might reject good papers because they would be less cited than publications from other fields. But, how does the journal IF affects the curricula vitae of PhD students? Worldwide, many PhD students benefit from a 4-year fellowship, whereas others work during this crucial period without any financial support. In Spain for instance, owing to the strict fiscal austerity, there is an increasing tendency for many PhD students to cover their own expenses, simply working for free. It is also the norm for many PhD students that their chairs or supervisors tell them that they need at least one publication in a top journal—such as Nature, Cell or Science—to bolster their CV and crucially improve their chances to get tenured later in their career. In practice, however, publication in a top journal is highly unlikely. Thus, time goes by, the 4 years eventually come to an end, and the final defense of the doctoral thesis gets closer without a publication in a top journal. But it does not increase the likelihood of getting published in lower-impact journals either if the only accepted yardstick is a high IF. Unfortunately, this reduces students’ chances to obtain a postdoctoral fellowship and their future career options diminish. This is a major waste of time, effort and money in particular for those students who had to finance their PhD out of their own pockets.

As frequently pointed out, this IF mania makes no sense. Seniors scientists and supervisors should help PhD students to retain an open mind instead of vying for a top publication. It is also part of the responsibilities to help their students build a solid research CV and the unnecessary mania of publishing in the highest-IF journals does not make this task easier. At the end, it is the young scientists who suffer most as their future career prospects are jeopardized.

Conflict of interest
The author declares that he has no conflict of interest.