

SHORT COMMUNICATION

Society-oriented journalism and scientific publications

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Over the last many decades there has been a progressive increase in academic productivity, as measured by published works in the peer reviewed literature [1]. The impact and knowledge gain are broader than the number of articles published or their citation rates and yet most metrics have no means of factoring in these broader issues. Indicators of achievement focus on quantity of researcher outputs (productivity), value of outputs (quality), outcomes of research outputs (impact) and relations between publications or authors and the wider world (influence) [2,3]. However, the ultimate purpose of research is the discovery of truth and the contribution and service to the society. Few metrics focus on the ethics of research practices and even fewer reflect the impact of research to society [4]. The former may be lacking as ethical behavior is perceived as binary-either one is ethical or they are not; no metrics needed other than 1 or 0. The later, that being impact, has a time dependency that becomes challenging for routine assessment. Impact can be viewed on a time scale of decades, but it is typical for the term impact to be distilled back down to publication and citation counts or fiscal solvency. Hence, neither ethics nor impact are practically useful in routine academic adjudication. The reproducibility or the social effects of research findings are rarely systematically evaluated even in the setting of the current and problematic scientific methodologies, though reproducibility has promise for becoming a mean-

ingful metric [5]. Primary experimental citations confirming a novel finding or translation of basic findings into usable therapeutics can and should be flagged as more meaningful than self-citations, citations in review article or particularly, citations challenging or disproving the validity of a finding.

Promoting research that meets the societal needs requires a broader view of scientific discovery. And the truth is that very few scientists and institutions can provide the environment to succeed in this goal. Meaningful social change is challenging to document and typically unfolds over time. Thus, the academic community should be open to scientific contributions that do not have a direct reflection and effect in the society, perhaps on speculation regarding the potential social impact that a finding may have. It is likely unrealistic to have this expectation from every article published in the literature. The expectation should be that every article should meet some specific standards that are well described and established and being evaluated under the view that scientifically sound research should be given the chance to be published since the final judge of it is the readership and the society in general [6]. This is the prime tenet of peer review, and one of the most valuable elements of reputable journals. In that setting, institutions should reward these behaviors and support practices that enhance the social benefit of research.

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