Hypercompetition and research integrity

Scientific journals are part of the scientific endeavor, which can be characterized as a complex system. Other players besides journals are part of the system, such as academic institutions, funding agencies, regulators, and researchers. Journals also continue to be the main vehicle for communicating research results and thus play an important role in the interaction among researchers. Editorial policies and good publishing practices allow journals to contribute to the promotion of research integrity, valorization of science, and prevention of waste of research funds. Journals also function as a sentinel site to detect malfunctions in the system.

Fang et al. identified growth in recent decades in the number of article retractions, and found that research misconduct was the main reason for retraction. Despite this increase, the number of retracted articles is still small in relation to the total number published, and cases of articles retracted due to fraud or suspected fraud tend to be concentrated in a small number of authors.

However, cases of research misconduct involving data fabrication, falsification, and plagiarism are only the tip of the iceberg in a more widespread problem that involves, among others, design errors and lack of transparency in reporting results, adoption of analytical strategies through which data are tortured until they reveal a desired result, and selective publication of results. Such unwanted practices have contributed to the excessive publication of positive results and low reproducibility of results, thereby diminishing the value of the scientific contribution to society and leading to waste in resources allocated to research. The latest report on research integrity by the U.S. National Academies of Sciences, Engineering, and Medicine used the term “detrimental research practices” to refer to this type of conduct.

Because it is a complex system, the malfunctioning of science cannot be attributed exclusively to the deviant conduct of a handful of researchers. This would contribute little to the search for effective solutions to emerging problems. Although competition has positive impacts by fostering creativity and creating innovative solutions for society, current hypercompetition in the scientific community produces an environment that favors misconduct and research practices that are detrimental to scientific methods.
In 2017, as the result of an initiative by the Oswaldo Cruz Foundation (Fiocruz) Editors Forum, CSP had its application accepted for membership in the Committee on Publication Ethics (COPE). COPE was created in 1997, and its mission is to guide science editors and publishers on issues pertaining to publication ethics. Its website provides a set of materials on publication ethics, including an online course, a forum in which editors can request guidance on dealing with cases of misconduct, guidelines, and flowcharts. The material is available free of cost to members and non-members, except for the online course and full participation in the forum, which are restricted to members. Non-members can access the cases and guidance provided by COPE and posted in the forum, but only members can make queries.

Membership in COPE is a milestone for our editorial policy. It signals to the CSP readership, reviewers, and authors our strict adherence to guidelines on best publishing practices. However, we believe that our role in fostering research integrity extends even further. We thus intend to continue holding debates on this topic with researchers, faculty, and graduate students, opening the pages of CSP to the discussion on alternative models for evaluating science. “Embracing diversity” is the theme chosen for the CSP cover page in 2018. In keeping with this theme, we hope to contribute to an evaluation model for the Public Health field that respects the differences in its subareas and fosters the creation of a more collaborative, just, and productive scientific environment.