

SCIENCE POLICY

Watch dogs: Scientific integrity at *Science Advances*

As a AAAS/*Science*-family journal, *Science Advances* is committed to publishing innovative, original research that significantly advances the frontiers of science. Our success in this mission to date is anchored in part in the commitment of our authors to adhere to the highest levels of integrity in the conduct and reporting of their studies, which in turn yield the sterling quality of the submissions we publish. Most researchers adhere to these standards because they understand that the advancement of science is predicated on the conduct of research that is grounded in ethical, transparent, and reproducible methods. *Science Advances* upholds and promotes excellence in research and, therefore, strives to ensure that all the work published has been conducted with the highest levels of scientific integrity.

In line with most other scientific publications, *Science Advances* is guided by widely recognized standards of integrity in the publication of science including recommendations and procedures developed by the Committee on Publication Ethics (COPE), the International Council of Medical Journal Editors, and the National Institutes of Health. COPE, in particular, has developed standardized workflows and other practical resources to educate and support members in dealing with ethical problems that arise in scientific publishing, ranging from how to respond to claims of fabrication or falsification of data, to checking potential plagiarism of text or ideas, to responding to disputes related to authorship or conflicts of interest. This guidance provides options of how to respond when charges of scientific misconduct are found to be true, as well as when problems uncovered are honest mistakes or authentic differences in opinion.

Our work in this arena is anchored in the recognition that most research institutions themselves have strong policies in place to promote and enforce high standards of scientific integrity, coupled with well-established procedures for dealing with researchers who have lapsed in adhering to these guidelines. In most cases,

research institutions hold direct responsibility for adjudicating instances where members of their community have fallen short of expectation regarding research integrity in practice and/or publication. When breaches in conduct are identified, we work with the responsible research institutions and respect the outcomes of in-house inquiries and investigations. *Science Advances* will not publish papers unless and until any issues related to research or publication integrity are fully resolved.

Science Advances is unique among the *Science* family of journals in that we are led by a large, diverse group of academic editors, representing a very broad spectrum of scientific areas and communal practices. To ensure that we maintain standards and practices consistent with COPE and similar guidelines, the editors of *Science Advances* have appointed a member of the board to serve as the journal's Scientific Integrity Officer. I am the first to serve in this important role and to work with the journal staff to review problems with scientific integrity that come to light. The journal staff, academic editors, and I, together are committed to ensuring that all parties involved in creating and submitting an individual manuscript—whether submitted, under review, being prepared for publication, or already published—have maintained the high standards of professional integrity demanded by COPE, the *Science* family of journals, and shared by many other scientific publications.

In a world that increasingly reflects confusion in distinguishing between truth and falsehoods, it is ever more critical that scientific journals vigorously defend the scientific method as a means to gain true understandings of our world. That can only be achieved through cleaving rigorously to principles of scientific integrity.

— Philip Yeagle

10.1126/sciadv.aav5705

Citation: P. Yeagle, Watch dogs: Scientific integrity at *Science Advances*. *Sci. Adv.* **4**, eaav5705 (2018).



Deputy editor.
Email: philipyeagle@aaas.org

Copyright © 2018
The Authors, some rights reserved;
exclusive licensee
American Association
for the Advancement
of Science. No claim to
original U.S. Government
Works. Distributed
under a Creative
Commons Attribution
NonCommercial
License 4.0 (CC BY-NC).

Watch dogs: Scientific integrity at *Science Advances*

Philip Yeagle

Sci Adv 4 (10), eaav5705.
DOI: 10.1126/sciadv.aav5705

ARTICLE TOOLS <http://advances.sciencemag.org/content/4/10/eaav5705>

PERMISSIONS <http://www.sciencemag.org/help/reprints-and-permissions>

Use of this article is subject to the [Terms of Service](#)

Science Advances (ISSN 2375-2548) is published by the American Association for the Advancement of Science, 1200 New York Avenue NW, Washington, DC 20005. 2017 © The Authors, some rights reserved; exclusive licensee American Association for the Advancement of Science. No claim to original U.S. Government Works. The title *Science Advances* is a registered trademark of AAAS.