

Best practice guidelines on conveying scientific findings to the public in the era of preprints

Preprints are a valuable contribution to science, allowing scientists to quickly and freely share new research with their peers before journal publication.

As preprints become increasingly common across scientific and medical research, however, press officers at universities and research institutions will encounter new pressures and dilemmas around publicity and embargoes.

If early stage results are proactively made available to journalists, two important problems can arise: (i) any findings later found to be incorrect through the process of peer review and editing could be prematurely presented to the public as fact; and (ii) significant findings will not get a proper chance at widespread media coverage if they have been previously reported at preprint stage, which prevents the wider public learning about important research discoveries.

Our goal is to help ensure that journalists and the public continue to receive reliable and trustworthy information about science, health and medicine in the era of preprints. These guidelines aim to help achieve this.

- Guidance to authors. Authors of new research should be given clear and strong guidance from
 their press office advising them to avoid seeking publicity for research findings while still in
 preprint form. Authors should be encouraged to wait until publication in a peer reviewed
 journal and to work with their press office to publicise results. This is in line with the guidance to
 authors by several major journals including PLOS, The Lancet, The BMJ and Nature.
- Press releases. Press officers should not press release scientific findings at preprint stage.
 Preprints should be considered early stage work, available to the scientific community but not yet ready to be presented to the public as fact. Press releases for research papers should continue to be issued at the time of publication in a peer-reviewed journal.
- 3. Embargoes. Embargoes provide a number of safeguards: they avoid the rush to publish; they allow journalists time to speak further to authors and seek third party comment; and they ensure all journalists around the world can cover a story at the same time, maximising impact for authors and raising public awareness of important new research. The embargo can still have an important role to play in the era of preprints. University comms teams who issue embargoed press releases should continue to do so in line with the journal's own policy, even when an early version of that research exists on a preprint server such as bioRxiv or medRxiv.