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EDITORIAL

Dear Author

The peer review process might look like a black box from your perspective. Why are some papers accepted, others rejected—some even without entering the peer review process?

We believe it is eminently important that authors understand our editorial policies when submitting a manuscript to *Pediatric Research*. In what follows, we first summarize our views of what should and what should not be part of a paper that we consider worthy of peer review and publication in the Journal. We then briefly describe the major steps of the review process, focusing on the points we consider most important.

General Issues

The previous editors have introduced the possibility that authors self-assign their papers to one of four categories. Please continue doing so, but give another minute of thought to which category you want to see your paper assigned. We define *basic research* as benchwork done at the molecular or cellular level, clarifying basic physiologic or pathophysiologic mechanisms. Experiments using animals, simple systems (*e.g.* cell cultures or single cells), or human cells/tissue would belong to this category. *Translational research* is any research, basic or clinical, that helps bridge investigation and application. For example, basic research exploring pharmacological possibilities or epidemiologic research exploring public health intervention options would be in this category. Under *clinical research*, we see mainly clinical observation studies (risk factor epidemiology) and the traditional randomized clinical trial. *Population studies* are large-scale health-related projects in well-defined nonclinical populations.

Obviously, *novelty* is a crucial characteristic for a paper to get high ratings. However, in some cases, confirmation of previous results in independent clinical populations or of experimental results in a different animal species is as important as the first observation. If your paper presents data for the first time, please mention it, both in the cover letter and in the paper itself.

It should go without saying, but "cut-and-paste" kind of *plagiarism* from the work of others is not acceptable. Although we understand that in some cultures verbatim quotes from others' work is actually considered good form, it is not acceptable in *Pediatric Research*.

Not all projects of scientific data gathering need to be *hypothesis* based. We believe that exploratory fishing expeditions (data trawling) in large data sets are perfectly acceptable, if the investigators show that they know their fishing grounds and give a good description of what kind of fish they are after. Still, hypothesis testing remains an important component of the scientific process. And again, if you have a hypothesis, and your work was designed to test it, please say so in the methods section of your paper.

We are not among those who erroneously equate *statistical testing* with "proof of truth." *p*-values are a function of both effect size and sample size. Therefore, we will continue rejecting small studies that report a negative result but are underpowered to do so meaningfully. The same goes for confidence intervals calculated for point estimates.

We receive comprehensive, well thought-out papers that use multiple approaches at various levels to make a point. Such papers come with multiple tables and figures and provide the reader with a wealth of *data*. Other submissions are rather simple, short, report the results from a few experiments (or even just one), and come with one or two tables or figures. We have to admit that we prefer the former kind of paper. Sometimes, however, a short and straightforward paper can be very important and highly novel. We promise to do our very best to select these for publication from among the preliminary studies that do not provide sufficient data to make their point cogently.

At the core of our perspective of what makes a great paper is the concept of *mechanism*. Any submission, whether based on experiments or observation, will be evaluated with this question in mind: Do the investigators provide mechanistic data or at least mechanistic explanations? Simple experiments that only provide observations (*e.g.* exposure to × up-regulates Y in mouse cells) are not sufficient, if no additional data are provided that further explore the link.

This brings us to the eminently important point of causation, the concept at the basis of all science. Authors and reviewers alike frequently bemoan the issue that "this study cannot prove causation." Be assured, we do not believe that any study can do this all by itself. Not even the most rigorously designed experiment or clinical trial can prove causation, because causation is a concept of inference and not a characteristic that can be observed. We, therefore, encourage caution when talking about causation in your paper, or review.

Peer Review Process

Tier I: editorial review. The first step is to select, among the many submissions we receive, those papers we consider worthwhile of the time of our section editors, editors, and reviewers. If after editorial review, we feel that 1) the paper does not comply with scientific standards, 2) the work does not explore potential mechanisms of observed phenomena, or 3) the paper might not appeal to the readership of *Pediatric Research*, we may make the decision to reject without review. This expedited decision is intended to save your time, because papers that do not meet the criteria mentioned above will be back on your

desk faster. If not rejected following editorial review, the paper will enter the second stage of the review process.

Tier II: peer review. The second step, the actual peer review, is initiated by the handling editor, who invites reviewers to evaluate the study. During submission, authors should identify the most relevant section for the study, as well as your preferred and opposed reviewers. We will try to respect your wishes but reserve the option not to follow your suggestions. We always try to find at least two reviewers. In the few cases where this is not possible, papers are reviewed by one editor and one reviewer. Occasionally, we will invite an additional reviewer if the two initial reviews are substantially different, or if statistical or ethical issues are identified during the review. We always try to get the best, quickest, and most courteous reviewers for your paper. We succeed often but not always.

Editorial Decision

Following completion of the review, the handling editor will make a recommendation. If the decision is to revise (Major or Minor), the manuscript is reviewed by an editor for compliance with Journal style and then returned to the author for revision. If the decision is to Accept or Reject, all editors in the chain of recipients offer an opinion and submit a recommendation. The opinion of all editors serves as the basis for these ultimate decisions. If a revision is invited, acceptance is by no means guaranteed after resubmission. With very few exceptions, a submission receiving two consecutive editorial recommendations of "Major Revision" (*i.e.* following revision, the study still requires additional experimental work and/or the soundness of the methodology remains questionable) will be rejected. Overall, we currently reject approximately 70% of all submissions, and this number is likely to increase as a consequence of our efforts to further improve the quality of the Journal.

Rebuttals

We understand that final rejection always generates dissatisfaction. We believe, however, that the review process outlined above makes it unlikely that an article worthy of publication would be rejected. Therefore, it is unlikely that we will retract a final rejection based simply on a nicely crafted rebuttal letter. We therefore discourage rebuttals, unless you firmly believe that we have made an egregious error.

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