# TAKE THE **PREREGISTRATION** CHALLENGE LIFE SCIENCES



Transparency into the research workflow is a core value of science. Preregistration adds transparency by specifying in advance how data will be collected and analyzed.

### PREREGISTRATION ADDS CLARITY & CREDIBILITY

Preregistration distinguishes hypothesis testing from hypothesis generating research. Both are important. However, the same data cannot be used to generate and test a hypothesis, as often happens unintentionally.

#### HYPOTHESIS TESTING

Statistical tests are specified in advance Goal is to minimize false discoveries

## HYPOTHESIS GENERATING

Exploring through data is encouraged Goal is to avoid missing serendipitous findings

Presenting exploratory outcomes as confirmatory makes results seem tidier, but reduces credibility and rigor.

VS.

### WHY PREREGISTER?

- (1 It increases the credibility of your results.
- It allows you to stake a claim to your ideas sooner.
- It improves your design by encouraing earlier planning.
- You can win \$1,000 for publishing the results.

### PUBLISH IN THESE ELIGIBLE JOURNALS

- Biology Letters Nature Genetics
- Journal of Cell Biology Scientific Reports Philosophical Transactions of the PLOS Biology
- Royal Society B: Biological Sciences Science PLOS ONE
- Royal Society Open Science Nature

And more. . .

Preregistering your study does not guarantee publication in any journal.

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