An "Beginner's Guide to Peer Review"

Submitting your first manuscript—well, we've all been there before. Though routine for practiced researchers, the process can seem daunting for the unfamiliar. We'd like to help clear up any uncertainty surrounding manuscript submission and peer review for the first-timers out there. Though the nuts and bolts of it differs between publishers, the essentials remain the same peer review by multiple experienced researchers helps to improve your manuscript, and is important for maintaining scientific integrity. What you publish is intended to be shared, learned from, and built upon, therefore it is essential that the science is sound.

The first step in the process is to choose a suitable journal. There are many things to consider here, including, but not limited to: does your manuscript fit the journal's scope? Does this journal conduct peer review? If so, what kind? Is it open-access or subscription? The types of papers published? Quality? Selectivity? Choosing the right journal is an important step to know what comes next for you and your manuscript.

Reviewer anonymity and "blind" peer review
The norm in academic publishing has been to perform a blind peer review, where the authors do not know the reviewer's identities, but the reviewers do know the names of the authors. This is in contrast to the double blind peer review, where both reviewers and authors are anonymous to each other. These practices are to maintain confidentiality. Yet, some publishers have decided to modify this practice to promote open, honest communications sometimes, these reviewer identities are revealed right at the get-go, or sites after publication.

When you receive the reviewer evaluations, this is often accompanied by one of the following recommendations:
- accept
- accept with minor revisions
- accept with major revisions
- reject

If you have the opportunity to negotiate your manuscript, the revised version will then be assessed by the Editor, who will take the final decision on whether to publish or reject your manuscript.

Keep in mind that not all peer-reviews are created equal! They might follow a similar path, but the process can differ depending on the journal. See below for examples.

Standard
- Editor
- Reviewer
- Author revision
- Editor decision

Public
- Editor
- Reviewer
- Author revision
- Editor decision

Frontiers
- Editor
- Reviewer
- Author revision
- Editor decision
- Publisher
- Readers' acknowledged

Next step: Tenure?
Happy publishing, folks!