THE PEER REVIEW PROCESS

Submission and Initial Assessment

- Get to know the journal – every journal has a "guide to authors." This tells you what criteria the editors use for each article. The editors use these criteria as well as previous experience with similar manuscripts.
- 3 possible outcomes: rejected; rejected with specific suggestions on how to improve the study for a future submission (termed an "open door" rejection); sent out for peer review.

Peer Review

- Typically: 3-4 weeks and 2-4 rounds
- A surprising number of authors don't include a list of suggested/excluded reviewers. Journals typically honor lists of up to three excluded reviewers.
- When suggesting reviewers, think of the different sets of expertise that are needed to comment on different aspects of your study; this is how an editor chooses reviewers, and will improve your chances of having a suggested reviewer chosen.
- Never include a former/present collaborator.
- We have a database on every reviewer and all the decisions they have made. If a reviewer performs poorly they may not be invited to review again.
- If we receive discrepant reviews, we may circulate the comments and get other reviewers to tell us whether the criticisms are valid.
- Reviewers are anonymous for several reasons: it prevents bland reviews, corrects for power imbalances, and reduces opportunities for favor trading.

Post-Review

- When editors make a final decision they don't count votes – they make an informed decision based on the referees' comments and our journals' criteria.
- Peer review and editors' comments are meant to help you improve the paper.
- Address the major issues with substantial revisions before sending back the paper.
- Do the hard experiment(s).
- Don't take it personally, and respond (dispassionately) in your point-by-point rebuttal to all of the reviewers' comments.
- In your rebuttal, it helps to explicitly point out new data that has been added, or data which has been modified in revision. This can be accomplished by highlighting new/modified text in the manuscript and/or copying figures into the rebuttal.

Appeals

- If you think the decision was flawed (before or after peer review) you can appeal it.
- Calm down before you respond.
- Appeals work when you can provide a logical (constructive and scientific) argument.

Helpful	Not Helpful
• New data • Referees made factual errors • Specific evidence of bias	• Saying "the referees are unfair" • Cosmetic rewriting of the paper • Celebrity endorsements • Statements about the authors' reputation

WRITING TIPS

The key to good scientific writing is clarity – don't alienate people with too much jargon or poorly constructed sentences. The 4 C's: concision, clarity, cohesion, and correct grammar.

Cover Letter

- The fundamental question is: how well does the manuscript meet the journal's criteria and standards? (This is where you show that you've read the "guide to authors").
- Use the cover letter to explain the appeal of the paper and do not just copy your abstract.
- If there are similar studies, describe why your paper is an advance. Don't intentionally omit relevant references.
- Address it to the right journal.

Title

- Make sure it's clear and not too specialized (don't alienate your audience).
- Scientists read a number of electronic table of contents a week; the title is what will grab them. If it contains too much jargon/abbreviations, you may be restricting your audience.

Abstract

- Make sure it is balanced – a little introduction, key results (not every result), and a concluding sentence – you want a concise (but not an exhaustive) summary.
- Do not over-sell your results.

Introduction

- Cite all relevant articles; it sends the wrong message if you don't.
- Build the argument (funnel method, not the shot-gun approach).
- Suggested structure: What is the problem? Why is it important? What is your hypothesis?

Results

- Active voice, past tense.
- Just rationale and results. Interpret the results only to the point of identifying trends and highlighting physiologically relevant differences.
- Keep methods to a minimum, unless it's a novel technique.

Figures

- In your figure legends, state what is depicted, not methodologically what was done. It's redundant to include methods in the figure legend.
- Don't overcrowd your figures. These will be shrunk, so make sure everything is clear and try to avoid using text (unless it's being used for anatomic labeling).
- Show physiologically relevant comparisons on the figures (don't compare everything statistically).
- Rely on supplementary figures to fill in confirmatory experiments and prove that you're measuring things correctly.

Discussion

- Don't overstate your conclusions.
- Describe how your study relates to previous literature and what gaps in knowledge it fills.
- Anticipate caveats or outline future directions.
- Don't ignore deviations in the data.