

## CHECKLIST: DISCUSSION

- Hypothesis: have you interpreted your results with respect to your hypothesis?
- Prediction (if present in your intro): do your data match your prediction?
- Argument: have you introduced your argument before presenting your evidence?
- Support: have you compared your results with similar studies? Have you explained any discrepancies with studies that reached alternate conclusions?
- Have you explained the patterns in your results with respect to biology, theory, and/or underlying mechanisms (with appropriate reference to literature)?
- Links: have you interpreted your results according to the background laid out in your Introduction?
- Objective: have you addressed the objective of the study? If not, explain and recommend a follow-up study (based on sources!)
- Conclusions: have you provided a take-home message at the end of your discussion, focusing on your main result/argument?
- Citations: have you cited your sources properly? Is each cited source in your reference section?
- Organization: does your discussion flow logically from the specific to the general?
- Convention: have you followed conventions for units, numbers, and scientific names?

## CHECKLIST: INTRODUCTION

- Background: have you provided sufficient background for the reader to understand what you are going to address?
- Literature: have you reviewed and acknowledged previous work on which your paper builds?
- Citations: have you cited your sources properly? Is each cited source in your reference section?
- Purpose: have you clearly stated the question you are posing, which builds on previous research?
- Statement of Intent: have you clearly indicated (at the end of your introduction) how you intend to answer your question?
- Hypothesis: have you clearly stated your hypothesis?
- Prediction: have you clearly stated your prediction(s) at the end of your introduction (if applicable)?
- Organization: does your Introduction flow logically from general to specific?
- Style: have you used the active voice wherever possible?
- Convention: have you followed conventions for units, numbers, and scientific names?

#### CHECKLIST: METHODS

- Detail: could a competent researcher reproduce your results?
- Materials: have you described the equipment and materials exactly when their use could affect the outcome of the experiment?
- Steps: have you reported the steps you took to achieve your results?
- Specifics: have you specified all concentrations, amounts, numbers, times, and conditions?
- Statistics: have you identified any transformations, statistical analyses, or mathematical equations that you used? Have you cited where necessary?
- Conventions: have you correctly applied conventions for numbers, units, and scientific naming?
- Style: written in the passive voice, past tense, and is it chronologically ordered?

#### CHECKLIST: TEXT for RESULTS

- Summary: have you summarized or highlighted the key trends in your data?
- Detail: do not present numbers in your text, if numbers are included in your graphic
- Statistics: have you reported the relevant test statistics for your statistical analysis (if appropriate)?
- Language: have you used 'significant' correctly?
- Consistency: do your data and results correspond with your Methods?
- Graphics: have you made reference to your graphic parenthetically?
- Conventions: have you followed conventions (metric!)?
- Discussion: have you interpreted or explained your results? If yes, then get rid of the interpretation/explanation.
- Style: written in the past tense and organized logically?

#### CHECKLIST: GRAPHIC for RESULTS

- Redundancy: are your data presented in only one form? (i.e. not in a Figure and a Table)
- Placement: does your graphic come after the text?
- Naming: have you numbered your Figures (and Tables) according to the order they are first mentioned in the text?
- Description: have you provided an appropriate legend/title?
- Axes: have you clearly labelled your axes, indicated units (where appropriate), and chosen appropriate scaling?
- Independence: can a reader understand the graphic without referring to your text?
- Convention: have you followed standard conventions for units, measurements, and scientific naming?
- Guidelines: have you followed all of the guidelines for formatting a graphic?
- Appeal: is your graphic aesthetically appealing and professional looking?
- Statistics: Have you included appropriate statistics (e.g. Tukey's)? Have you included a note for any statistics relevant to the graphic?