Guidelines for Materials and Methods sections
- written in past tense, and assume that the reader assumes that the experiments were performed sequentially (don’t say then, then, then).
- When you cite another author’s method, be sure to state what modifications were made.
- Use a logical order when describing methods. This is not necessarily chronological order.
- Related methods can be described together.
- Use of subheadings is often helpful.
- You can combine materials and methods.
- For field studies, include time and date of study. State how you sampled, e.g. protocol for randomization, or if you couldn’t, why?
- For ecological studies, define the study site with detailed GPS coordinates and a map.

Guidelines for Materials
- Identify and define materials used. State genus species used in italics with Genus capitalized like Homo undergraduensis, strain and stock centres where obtained. For cell cultures, where the cells came from, what do they represent, e.g. JURKAT cells are wild-type t-leukemia cells. Include passage number, if known.
- For animal care, include how the organisms were fed, housed, cared for, also report your approving body, e.g. animal care permit number, and approval.
- Explain any crosses that you made and how it was done.
- For wild-collected animals or plants, say their geographical origin and describes permits.
- For all reagents, state the manufacturer and catalog number.
- For antibodies and plasmids, report the source, and naming convention.
- If shelf life is a consideration, report that.
- For nucleic acid or protein sequences, include as an appendix.
- For all experiments, state how many replicates and how many samples were used.

Describe the analytical techniques used
- Describe parameters and configurations for microscopes, gels, etc.
- If necessary, state how equipment was calibrated.
- Include how you addressed the assumptions of the analysis, if any.
- What program was used, what version of that program
- For image analysis, changing brightness or contrast on all panels of a figure equally is OK but don’t add or remove information.
- Always state what statistical test was used (not just “it was significant”)