

Tips for writing Methods—Overview

- Include enough information to replicate the experiment
 - List manufacturers name and location (City, ST)
 - Be **concise and clear** in your description
- Use subsections with descriptive titles
 - Put in logical order
 - Begin with topic sentence to introduce purpose
- Use clear and concise full sentences
 - NO tables and lists
 - Passive voice expected
- Use the most flexible units
 - Write concentrations (when known) rather than volumes
- Eliminate 20.109 specific details
 - Example “labeled Row A, Row B...”
 - Do not include details about tubes and water!
 - Assume reader has some biology experience
 - Include parts of the protocol that the teaching faculty completed, but do not say “completed by teaching faculty.”

Methods: sub-sections

- Use sub-sections to group procedures
 - Include descriptive titles
 - Use logical, rather than chronological order
- Separate sub-sections with titles
 - Brief, but specific
- Include an introductory sentence
 - State the purpose or goal of particular method / group of procedures

Methods: language choices

- the protein vs. **FKBP12**
 - Give your products names
- combined or mixed vs. **vortexed**
 - Be precise about the procedure used
- cleaned vs. **purified or isolated**
 - Use the more scientific terminology
- **avoid jargon and define all abbreviations**

Consider sentence structure—
passive voice is often expected in Methods

“FKBP12 was purified using...”

“... purity was examined using polyacrylamide gel electrophoresis (130 V for 30 min) then visualized with a”

1. PUT THE SUBJECT OF THE SENTENCE FIRST
2. BE SURE THE SUBJECT AND THE VERB MATCH

Remember the steps you didn't do

- For time reasons, the teaching faculty completed some procedures...
 - You should still include these!
 - Details are provided on the wiki

**DO NOT WRITE THAT THESE STEPS WERE
COMPLETED BY TEACHING FACULTY**

What can you improve in this example?

“Template DNA and primers were mixed with 20 uL of 2.5X Master Mix in a PCR tube. Water was added to 50 uL. A tube without template was prepared and labeled control.”

Be specific, what was your template? And from what will it be amplified? How much?

What is the sequence of the primers? And what was the final concentration in the reaction?

“Template DNA and primers were mixed with

Give the final concentration, not the stock concentration.

This information can be assumed by your reader.

20 μ L of 2.5X Master Mix in a PCR tube. Water

The volume is not important, just the concentration. Also, include manufacturer information for purchased reagents.

Your reader will know that reaction mixes are prepared in water.

was added to 50 μ L. A tube without template

Because the final concentrations are reported, the final volume is not important.

was prepared and labeled control.”

Though including a no template control is important, consider a more concise way to include this information by omitting unnecessary details.

Revised example...

“*FKBP100* was amplified from pcDNA3-FK100 (1 ng/uL) with primers pr1 (5′ ...AGA... 3′) and pr2 (5′ ...CTC... 3′), each at 2 pmol/uL, using 1X Master Mix (5Prime, City, ST). A no template control was included.”