Individuals must submit a final report (max 6 pages, not including figures/tables or references) of their group’s findings from the 6-week course. Here are the report specifications:

**Title & Author** – Create a few informative and descriptive titles. Select the most appropriate title after completing the document. Start with your name in bold and include the names of all the contributing authors and the site/department where the work was done. Should include the following:

- Title of Project
- Names, end with Louis Lapierre, PhD and Joslyn Mills, PhD
- BIOL0600
- Genetic Screening in Model Organisms
- Date

**Summary/Abstract** – This section is a concise description (less than 300 words) of your research project and findings. Define the scientific problem, principal objective, methodology, results, and conclusions of your study. If applicable, explain the implications of your work to future research. This section should be clear enough to be readily understood by a general reader with some scientific background. Although this section is the first one in the body of the report, write this section last, after you’ve formulated your ideas for the rest of the paper.

**Introduction** – The introduction is meant to familiarize the reader with the scientific area you are studying. In doing so, you should provide a foundation for describing the overall importance of the specific problem you are addressing. State your hypothesis(es) and/or objective(s) and describe the reasoning behind them. Describe your model system and its advantages over other approaches. There will be a lot of overlap with your intro from your proposal.

**Experimental Methods** – Concisely describe all of the specialized and general methods used in your study so that another individual could potentially use the information to repeat and verify your observations. Briefly describe your targeted screen of 50+ genes on your strain of interest with the intent of describing how you found your target; the details you used in your proposal are not necessary. You also do not need to include your hit list, as that was part of your proposal as well. This section should not be a step-by-step instruction manual. Include the names of specialized chemicals, biological materials, and/or other equipment or supplies not typically used by laboratories. If a well-documented procedure was used as method, provide a brief general description along with a reference to the original procedure. Determining what to include or exclude may not be easy for you to determine without experience. A good rule of thumb is to ask your peers if they’ve heard of a particular method. If so, you can consider not including detailed descriptions of these methods (i.e., SDS-PAGE, agarose gel electrophoresis, PCR, etc.)

**Results** – Your figures will be included in this section, as well as text describing your figures. This section should represent an objective view of your results; reserve all data interpretation for the discussion. You should refer to figures, tables, and other data presentation formats to effectively communicate your results. Use the text to point the reader to the most relevant observations. In this section, you should also describe the results of control experiments and observations that are not presented as part of a formal figure or table. Do not use raw data as your figures. Also, mark your figures with appropriate identifying labels; improperly labeled figures are impossible to evaluate. To simplify formatting, all figures and tables are part of the appendix of the report and should be placed at the end of the report, after references. The maximum 6-page limit for the report does not include Figures and Tables.

**Figures and Tables** – Each figure must be numbered consecutively and be associated with a title and figure legend that briefly describes the method(s) used to generate the data (title and legend...
Tables must be numbered consecutively separate from figures and should have clear and descriptive headers (headers go above the table.) If any annotations are used in the table, briefly define them below the table.

Examples

**Discussion** – This section provides an opportunity to interpret your findings as they support (or contest) your hypothesis(es) and objective(s). Do not simply restate your results. If you believe that your results are supportive, describe your rationale for this conclusion and describe follow-up experiments that may be necessary. If your results contest your hypothesis, explain possible alternative hypotheses and how you might go about experimentally testing your new hypothesis(es). If your results are inconclusive, describe alternative methodologies that could be used to come to a final conclusion regarding your hypotheses. Keeping in mind that one study will not necessarily answer an overall question, where does your study lead you next? What questions remain? Be creative, and don’t be afraid to speculate about future directions.

**References** – Cite articles that the instructor provides or that you find for yourself that are relevant to your study. Use either the “author, date” format (APA style), and list referenced articles in alphabetical order at the end of the report or the number format (AMA style), and list referenced articles in the order they were cited. Use only primary literature (original research articles authored by the original investigators) and/or reviews. **Do not use a web site as a reference!** If you prefer to use bibliography software, EndNote is my favorite, but there are others available.

**General Formatting Considerations** - Follow the specifications described below:
1. Font – 11 or 12 point Arial, Helvetica, Palantino, Times, or Times New Roman
2. Length – 6 pages (not including figures/tables and reference list)
3. Margins – 1 inch (top, bottom, and sides)
4. Page #s – top right or anywhere on the bottom
5. Page Breaks – do not use page breaks between sections

Please submit your final report on Canvas before 11:59pm EST on Friday, December 11. You will receive feedback within 2 weeks of submission.