ADVANCED GENETICS Proposal Review & Study Sections - 2022

For the written review (critique) of your assigned proposals, you should follow the general format used by the NIH (prior to 2009). Read the proposals carefully, consulting relevant literature as needed. You should write a 1 to 2-page review, which will serve as the basis for your presentation of the proposal to the review group. Each review should contain the following parts:

**Description:** Describe the nature of the problem to be addressed and how the investigator proposes to approach it. Be objective, avoiding value judgments and criticisms here. This part serves to present the investigator's views, not yours.

**Critique:** Give your evaluation of the proposal here. Consider feasibility, originality and significance. Has the investigator identified a significant problem? Does he/she understand the problem? What are the hypotheses? Do they make sense? Has he/she identified a feasible experimental approach that will address the central issues? Has he/she considered alternatives and chosen the best approach? Is the genetics correct? Is the proposal clearly written?

Although not part of the written critique, your presented evaluation should compare the current proposal to the other proposal that you are reviewing and your proposal.

**Summary:** In a few sentences give your overall enthusiasm for the proposal and give it a score. The scoring is on a 1 – 9 scale (see “Proposal Scoring” sheet, post 2009 scale). In a NIH Study Section the proposal scores are then rank-ordered and percentiled relative to the current and previous two study section meetings. Given very tight NIH budgets over the past few years only the top ~10% of R01 grants are funded in many NIH Institutes.

**NOTE**, dependent Aims are allowed for class proposals this year, so dependencies should not be criticized as they would be for a "real" grant. Still, it's best if the author tries to address them to some degree, e.g. by giving alternative plans or giving evidence that the upstream Aim is highly likely to succeed.

A sample critique of the Long-chain Fatty Acid proposal, which was handed out earlier in the semester, is provided. Note that this was a very strong proposal (when written in the late 1990s). The ones that you receive may not be of an equivalent quality. Weaker proposals usually require more effort to explain the deficiencies.

You will attend one assigned Study Section, on May 9 (Mon), 10 (Tues) or 11 (Wed). The Study Sections will start at 1:00pm and are expected to last ~2.5 hours. The faculty leaders will email you with info on the meeting format (in-person with hybrid, or Zoom-only are possible.) Each proposal will be discussed in turn. The two reviewers of each proposal will describe the proposal and give their assessment, followed by a question and answer period. If the proposal is of high quality, it is up to the reviewer(s) to convince the review panel of their viewpoint by acting as an advocate for the proposal. The review panel (i.e. study section members) will have the Abstract/Specific Aims page for all of the proposals, which should be read before the Study Section. It is up to the review panel to be critical of the proposals; particularly in relation to previously discussed proposals and the two that each of you have reviewed. The review panel will then reach a decision on the proposal and assign it a priority score. Two faculty members who have read all the proposals in your session will help guide the discussion.

You will be evaluated on your participation in the study section and your critiques. Know the two proposals you are reviewing well, as the study section will be relying on you to explain the proposed experiments. Your review and the study section discussion will have no bearing on the grade for the author of the proposal, so we expect that your review and the resulting discussion will critically evaluate the science and the writing. The authors of the proposals being reviewed will not be present at the study section (they will go to a different study section). However, so that no ones feelings are hurt, all the proposal review deliberations should not be discussed with others either before or after the Study Section meeting.

**Prior to study section:** Please email both of your critiques to the faculty supervisors of your section, and the course director (Nancy, nlims@wustl.edu). Please do NOT send it to the other student members of the study section; they will base their discussion off your oral presentation and will not need to see your written critique - this will streamline the process. Please send it as a Word document. Place on each review the following: Upper right-hand corner, "Review of proposal #" where # is the grant-writer's student id.
number. Upper left-hand corner, "Reviewer #" where # is your (the reviewer's) student id number. Put the grant-writer's id number in the filename of the document.

To facilitate improving future proposals that you write, think about the positive and negative aspects of the two proposals that you are reviewing in relation to what you have written.