Merit Review Criteria

Dr. Cedric L. Williams, From slide presentation "Beyond the Basics, 2015"

Intellectual Merit

How important is the proposed activity to advancing knowledge and understanding within its own field or across different fields? (The Project: IMPACT)

- 1. Are the studies developed to specifically resolve some theoretical debate within your field?
- 2. Will they provide new evidence to link existing findings?
- 3. Can the findings be applied to understand other disciplines, model systems, etc.
- 4. Are your questions addressing compelling "unknowns" in the field or simply validating existing findings ("we already know this")?

Is the proposer (individual or team) well qualified to conduct the project? Reviewers will comment on the quality of prior work. (The Person: PI and collaborators)

- 1. Current competitive proposals are Multidisciplinary.
- 2. Assess mechanisms at several levels of analysis, from behavior to molecules.
- 3. If you are not an expert in an area, have you assembled a competent team of collaborators?
- 4. Can you document evidence of functional interactions between your lab and collaborators (papers, thesis committees., lab rotations, etc.)?

To what extent does the proposed activity suggest and explore creative and original concepts? (INNOVATION; Potential for being Transformative)

- 1. Is this "BAND WAGON" research?
- 2. How does your experimental approach to the question at hand differ from current or traditional approaches & techniques?
- 3. Will your studies only CONFIRM rather than EXTEND current knowledge?
- 4. Will your project address the compelling "UNKNOWNS" in the field?

How well conceived and organized is the proposed activity? (Project Plan; Feasibility)

- 1. Are the SPECIFIC AIMS independent of each other?
- 2. Are the AIMS supported by strong Pilot findings or preliminary data?
- 3. Have you demonstrated that you and your team have expertise in all experimental approaches associated with the project?
- 4. Have you clearly articulated the advantages of your approach over currently used techniques or protocols?
- 5. Use this section to ELIMINATE every possible CRITICISM!

Broader Impacts

How well does the activity advance discovery and understanding while promoting teaching, training and learning?

How well does the activity broaden the participation of underrepresented groups (e.g., gender, ethnicity, disability, geographic, etc.)?

Will the results be disseminated broadly to enhance scientific and technological understanding? (Data Sharing/Management Plans)

What are the benefits of the proposed activity to society?

For more on Broader Impacts, see http://www.nsf.gov/od/iia/special/broaderimpacts/ .