**NEW GRANT GUIDELINES**

**WHAT ARE THE UPDATES?**

**1. UPDATES TO RESEARCH STRATEGY GUIDANCE**

The research strategy is where you discuss the significance, innovation, and approach of your research plan. Let's look at an R01, for example:

The new research strategy guidelines require that you:

- State the strengths and weaknesses of published research or preliminary data crucial to the support of your application
- Describe how your experimental design and methods will achieve robust and unbiased results
- Explain how biological variables, such as sex, are factored into research design and provide justification if only one sex is used

**2. NEW ATTACHMENT FOR AUTHENTICATION OF KEY BIOLOGICAL AND/OR CHEMICAL RESOURCES**

From now on, you must briefly describe methods to ensure the identity and validity of key biological and/or chemical resources used in the proposed studies.

These include, but are not limited to:

- **CELL LINES**
- **SPECIALTY CHEMICALS**
- **ANTIBODIES**
- **OTHER BIOLOGICS**

Standard laboratory reagents that are not expected to vary do not need to be included in the plan. Examples are buffers and other common biologicals or chemicals.

**3. NEW REVIEWER GUIDELINES**

Here are the additional criteria the reviewers will be asked to use:

- Is there a strong scientific premise for the project?
- Have the investigators presented adequate plans to address relevant biological variables, such as sex, for studies in vertebrate animals or human subjects?
- Have the investigators presented strategies to ensure a robust and unbiased approach, as appropriate for the work proposed?

**4. WHY UPDATE THE GUIDELINES?**

The updates focus on four areas deemed important for enhancing rigor and transparency:

- **PREMISE**
  - The scientific premise forming the basis of the proposed research

- **DESIGN**
  - Rigorous experimental design for robust and unbiased results

- **VARIABLES**
  - Consideration of relevant biological variables

- **AUTHENTICATION**
  - Authentication of key biological and/or chemical resources

Send inquiries to reproducibility@nih.gov

See also NIH Notice NOT-OD-16-011