

NIH R15 Essentials

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R15 Goals

- **AREA program is to strengthen research environment of schools who are not major recipients of NIH funding**
- **Expose students to meritorious research**
 - **Undergraduate and Graduate or professional students**

R15 Student Involvement

- **Investigator**
 - Experience mentoring students in research
 - Presentations, co-authors on publications and student awards
 - Students who have gone on to biomedical science careers
- **Environment**
 - Pool of available students with interest in biomedical science; senior projects
 - Description of university undergraduate >graduate enrollment
- **Significance**
 - Briefly how this project improves research environment and exposes students to research
- **Approach**
 - Define involvement of students in each aim (experimental design, westerns, data analysis, etc.)
- **Safety and Training**
 - Animal handling or Toxic substance training addressed

Enhancing Reproducibility

- Improving Rigor and Transparency
- 4 Areas of Focus
 - Scientific Premise
 - Scientific Rigor
 - Biological Variables
 - Authentication

Enhancing Reproducibility by Improving Rigor and Transparency

- **Scientific Premise**
 - Significance
 - Research basis for the proposed research
- **Scientific Rigor**
 - Approach
 - Experimental Design, Methods, etc robust and unbiased results
- **Biological Variables**
 - Gender, Age or Underlying health conditions
- **Authentication**
 - Establishing validity of key biologicals or chemicals

Resource Sharing Plan

- **Section not scored but important**
- **Data Sharing**
 - **Publications and deposit in PubMed Central**
- **Sharing Model Organisms**
 - **Animal model and plan for sharing**
- **Genomic Data Sharing**

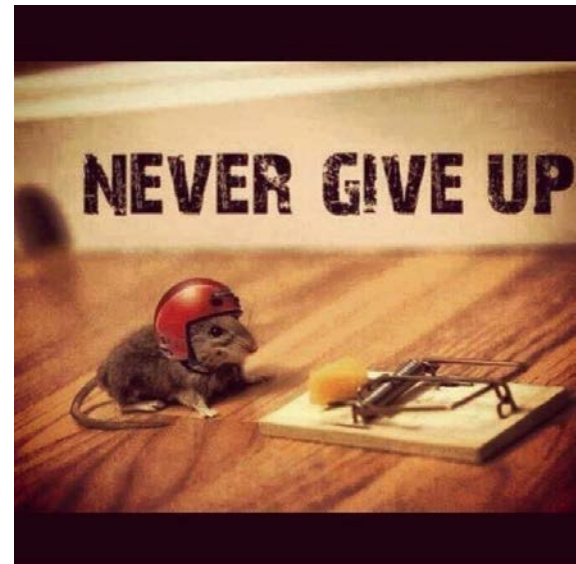
Authentication of Key Biological and/or Chemical Resources

- **Separate section from Approach**
- **Validation of animal model**
 - PCR
- **Cell lines**
 - especially if obtained noncommercial
- **Antibodies**
- **Chemicals**
 - Vendor vs Synthesis validation



Summary

- **Develop a good research idea**
 - Clearly write your proposal
- **Emphasize student involvement**
- **Address the 4 focus areas of Rigor and Reproducibility**
- **Keep trying**



Questions?

