



Tuesday Tips is a new outreach effort by OGCA. The idea behind *Tuesday Tips* is to convey tips, tricks and other helpful information around the area of research administration. Our goal is to post on (almost every) Tuesdays. If there is something you would like to see covered on *Tuesday Tips*, email: UAF-GCReATE@alaska.edu. For more Tips visit [OGCA website](#).

Your One Page Guide to Rigor and Reproducibility

NIH developed a one-page guide to explain how to address rigor and reproducibility in your NIH application. This resource walks through each of the four key areas of scientific rigor, explaining how and where to address each area in your application. In addition NIH linked to additional resources in case you need more in-depth information on any of the four key areas.

Click the image to download the guide as a [PDF](#).

For additional information visit NIH's webpage on [Rigor and Reproducibility](#).

OGCA website: www.uaf.edu/ogca

Rigor and Reproducibility in NIH Applications Resource Chart

NIH Grants Policy Website: <http://grants.nih.gov/reproducibility/index.htm>

NIH Website: <https://www.nih.gov/researchtraining/rigor-reproducibility>

4 AREAS OF FOCUS	WHAT DOES IT MEAN?	WHERE SHOULD IT INCLUDED IN THE APPLICATION?
Scientific Premise	<p>The scientific premise for an application is the research that is used to form the basis of the proposed research.</p>	<p>Research Strategy ¾ Significance</p>
Scientific Rigor (Design)	<p>Scientific rigor is the strict application of the scientific method to ensure robust and unbiased experimental design, methodology, analysis, interpretation and reporting of results.</p> <p>Emphasize how the experimental design and methods proposed will achieve robust and unbiased results.</p> <p>* See related FAQs, blog post, examples from pilots</p>	<p>Research Strategy ¾ Approach</p>
Biological Variables	<p>Biological variables such as sex, age, weight, and underlying health conditions, are often critical factors affecting health or disease. In particular, sex is a biological variable that is frequently ignored in animal study designs and analyses, leading to an incomplete understanding of potential sex-based differences in basic biological function, disease processes and treatment response.</p> <p>Explain how relevant biological variables, such as the ones noted above, are factored into research design, analyses, and reporting in vertebrate animal and human studies. Strong justification from the scientific literature, preliminary data or other relevant considerations must be provided for applications proposing to study only one sex.</p> <p>* See related FAQs</p>	