

Center for Biomedical Shared Resources (CBSR) Rigor and Reproducibility Policy

The core facilities comprising the CBSR at the University of Vermont are dedicated to providing clients with data that are both scientifically rigorous and reproducible. To accomplish these goals, we offer the following Rigor and Reproducibility guidelines for our clients:

- **Consult** with the core staff in the planning stage. Consult with a statistician if you need help developing a Power Analysis to assure that your results will be adequately powered.
- Design your experiment with **sufficient controls** (rigor) **and appropriate replicates** (reproducibility).
- Assure that ALL of your reagents (antibodies, cell lines, mice) are **fully validated**.
- Have a clear and **detailed protocol** (SOP) and data analysis plan. Assure that the protocol is strictly followed or that any deviation is well documented.
- Assure that the staff or students performing the experiment are **well trained** and understand each step and the importance of performing them precisely.
- Consult with core staff for best practices regarding image processing and analysis.
- Consult with core staff regarding ethical standards for image manipulation.
- Use only **well-maintained instrumentation**, preferably maintained and operated in a core facility with expert staff (see #1 above).
- **Document all steps**, reagents, equipment and data analysis methods used in the experiment. Assure that the both the documentation and the data itself are properly stored in a safe data management repository.
- You are encouraged to share experimental protocols, results, and data acquired in a core prior to submission of a manuscript for publication.
- **Acknowledge** all grants that support the core (NIH S10, etc.), the core (by name, including its specific RRID#), and core staff in publications.