

Help with Outline of Animal Use and Justification of numbers.

According to federal regulations the UCAR needs assurance that:

- 1) a sufficient number of animals is used to answer satisfactorily the scientific questions posed, and
- 2) an excessive number of animals is not used.

Provide the justification for all animals mentioned in the protocol for all 3 years, including all animals that will be bred.

- Fetuses are not included in the number of animals requested, but should be discussed here since the number of fetuses needed justifies the number of pregnant females needed.
- Do not break the justification down by year. The justification is for the total number of animals requested.
- **Do** include all animals that you will ha

done, the basis for your decision about group size should be discussed. This might include previous experience with this type of measurement, published literature, limits on the number of samples that can be handled at a time, etc. The procedural details (e.g. the doses, routes of administration, etc.) should be provided in the procedure description, not here.

Example:

The proposed studies investigate the effects of CNS Bozoamine receptor blockers on the executive behavior (measured by the Enr

determined that executive behavior is dependent on Bozoamine binding in males but not females.

Genotype	n	Assays	Total	Breeding Ratio
BoRKO	8	2	16	1:4
Wild type	8	2	16	
Total			32	

A total of 32 experimental animals will be required, of which 16 will be BoRKO males. The ratio of BoRKO:wt is 1:4, and males 1:2 therefore we expect approximately 1 of

The proposed studies use mice as a source of cells for a large series of in vitro experiments associated with the expression and regulation of the *onno* gene. We anticipate doing 2 assays per week over the course of 3 years for a total of approximately 300 assays. Each assay requires cells from 1 neonatal (P01) mouse brain (2 per week). Because cells will last in culture only a few days, we will require a new litter each week. We will begin with 8 breeding pairs, then use mice not used for experiments to replace the retired breeders. $8 \text{ pairs} + (150 \text{ litters} \times 8 \text{ mice/litter}) = 1216 \text{ mice}$.

General principles:

When you are providing your justification keep in mind that it must be clear enough so that reviewers can follow your thinking. Tables and summaries help. Leave out experimental and procedural details. This is an outline that should give the reviewers a brief overview of the kinds of procedures the animals will experience and how many animals will experience them. You should make it clear how you determined the number of animals (show your work!). In addition, it is important to state how the size of each group was determined.