Title: Guidelines for Use of Anesthetic Cocktails and Diluted Drugs in Laboratory Animals

I. **Purpose:**

To provide guidance regarding the formulation, safety, and efficacy of in house made (extemporaneously compounded) anesthetic cocktails and diluted drugs for use in laboratory animals.

II. **Background:**

In house compounded injectable anesthetic combinations and diluted stock medications are commonly used in laboratory animals; however, the stability and efficacy of many of these compounds is not well established. It is essential to ensure that all drugs used in laboratory animals are safe and efficacious.

III. **Policy:**

- In house made anesthetic cocktails and diluted medications must use sterile, pharmaceutical grade compounds, must be combined using sterile technique, and be stored in a sterile vial in a cool place and away from light.
- Compounds must be labeled with the final concentration of each component, an expiration date, and the initials of the person preparing the compound.
- Due to concerns with stability, expiration dates (use-by date) in the case of anesthetic cocktails (e.g., ketamine + xylazine) should be 30 days from the date of compounding or the earliest expiration date of any single compound used, whichever is first.
  - In the case of published data indicating a particular cocktail is stable for longer than 30 days, that published time period may be used provided the reference is readily available at all times.
- Diluted drugs prepared aseptically and stored in sterile vials under refrigeration should be discarded within 30 days or the expiration date of the original stock, whichever is earlier.
- In addition, if the user notices any cloudiness or bacterial/fungal growth inside the vial, it should be discarded immediately.
- All the anesthetic agents and procedures should be approved by the IACUC prior to use in animals.
• Contact Environmental Health & Safety (hazwaste@ucdavis.edu) for proper disposal of controlled and hazardous substances.

IV. References:


