Purpose – The purpose of this policy is to ensure proper identification of each individual and group of rodents in a cage.

Background - Proper identification of research animals is an essential component of a research and is designed and mandated by the Guide. It allows an easy method for tracking animals throughout a research project and assists animal care staff in providing care for animals. The Guide states: “identification cards should include the source of the animal, the strain or stock, names and contact information for the responsible investigator(s), pertinent dates (e.g., arrival date, birth date, etc.), and protocol number when applicable. Genotype information, when applicable, should also be included, and consistent, unambiguous abbreviations should be used when the full genotype nomenclature is too lengthy”.

Policy - Cage cards are used for every rodent cage; additional forms of identification are added to individually identify mice within a cage.

Cage card information:

Based on the Guide’s mandate, UMDNJ requires the following information on every cage card: principle investigator’s name, approved protocol number, name of contact person (can be PI), and contact’s phone number (email address is not acceptable as sole contact information). The PI listed on the cage card MUST be the PI associated with the protocol number. Date of birth must also be included on every cage card for studies using geriatric animals (rodents older than 18 months).

UMDNJ recommends (but does not require) additional information be included on cage cards: source of animals, stock or strain, sex, genotype information (if applicable), and pertinent dates (birth date for non-geriatric animals, arrival date, etc.). UMDNJ recognizes that this information is not always available for every animal.

Individual animal identification:

Temporary Markings: Temporary markings are used short-term for individual animals. Use an indelible marker of varying colors to write numbers, bars, or other distinguishable markings on the tail or the ears. If temporary marking are used for duration exceeding 3-4 days, repeat markings every 3-4 days.

Tattooing: Use an electric tattoo machine to write numbers on the tail using only sterile and sharp tattoo needles; tattooing is easier to perform under general anesthesia. If not using general anesthesia, apply a local anesthetic on the tail before tattooing (EMLA cream or a local anesthetic spray).

Micro-tattooing: Use a micro-tattooer or animal lancet to inject tattoo ink in the toe pads and/or the ears. Whenever possible, use a simple identification code to minimize the number of toes tattooed.
**Microchip Transponders:** Microchip transponders are implanted subcutaneously between the scapulae for permanent identification of individual animals. Briefly anesthetize animal; pluck or shave the skin and disinfect with surgical scrub (betadine or chlorhexadine solution). Apply digital pressure with a sterile gauze pad if bleeding is noted after implantation. If necessary, a drop of surgical glue is applied to the needle entry site.

**Ear Tags:** Mice are ear tagged at weaning age or older using tags no more than 5mm in length. Ear tags are rinsed in 70% alcohol before use to help prevent ear infection. Tags are positioned at the lateral base of the ear, approximately 3mm from the edge of the ear pinna. Ear tags are not placed too close to the edge of the pinna or too close to the cartilage at the base of the ear pinna.

Proper location of ear tags:

Monitor the tag implantation site 2-3 times a week for signs of local infection. Contact veterinary staff if any complications occur.

**Ear Punch:** Ear punches are sterilized before use; sanitize the ear punch between each cage of animals with 70% ethanol. The punch is placed approximately 3mm from the edge of the ear pinna:

**Toe clipping:** The Guide states: “toe-clipping should be used only when no other individual identification method is feasible. It may be the preferred method for neonatal mice up to 7 days of age as it appears to have few adverse effects on behavior and well-being at this age.” Refer to IACUC policy #9 for further information.

Any exceptions to this policy must be approved by the IACUC
References -


3. Basic biomethodology for laboratory mice.  
   http://www.theodora.com/rodent_laboratory/identification.html