Caution: Laboratory Animal Allergies (LAA)

Laboratory rodents (mice and rats) may be used in this area. Up to a third of personnel working with laboratory mice and rats may develop hypersensitivity to them (and some may develop asthma).

Clinical signs include runny nose, sneezing, coughing, watery or irritated eyes, wheezing, hives, and rashes.

In addition to hair and dander, the primary allergenic sources are mouse and rat urinary proteins, which may cling to dust in bedding and other easily-aerosolized particles. Both duration (how long) and intensity (how much) correlate with the likelihood of hypersensitization. Handling of soiled cages carries the highest risk.

Engineering controls, e.g., equipment that draws contaminated dust particles away from the user, are the best means of avoiding contact with allergens. Examples include filtered caging (especially individually-ventilated cage rack systems), Biological Safety Cabinets (BCSs), fume hoods, and HEPA-filtered change-out cabinets used in the RRF.

Personal Protective Equipment (PPE) can augment engineering controls, or be used when engineering controls are not available. This includes gloves, protective clothing, and respiratory protection. Street clothing should be protected, e.g., with a laboratory coat, to prevent exposure of family members to allergens.

Respirators, such as N-95 masks, should only be used by personnel that have completed a medical evaluation of respiratory fitness and fit-testing. There are available through Campus Health Services and the Department of Environmental Health and Safety, respectively.

If you are concerned about developing LAA or believe that you are becoming sensitized, you should complete a Periodic Contact Health Survey (see: https://louisville.edu/research/iacuc/occupational-health-safety-program-ohsp) and/or seek counseling from Campus Health Services.

For additional information:
Campus Health Services ✆ 502-852-6446
Department of Environmental Health and Safety ✆ 502-852-6670
Research Resources Facilities ✆ 502-852-5268