



動物中心-現場快報

淺談動物中心的「五流」管理

製表：獸醫師 劉光祐



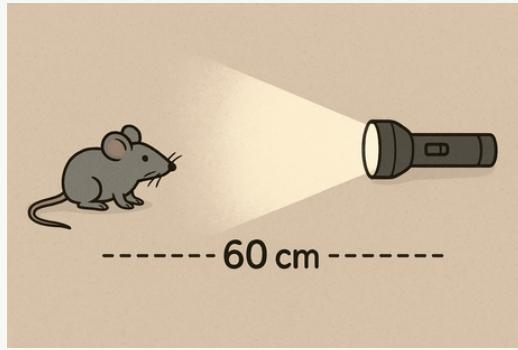
流向	內容	管理重點
人流	研究人員、飼養員、管理人員進出路線	分區出入口，避免與動物流、物流交叉；進入設施前需著裝包覆身體各部位
物流	飼墊料、器材、耗材等	潔淨物流與汙染物流分開；物品進入前需滅菌或消毒，或置於傳遞箱照射紫外光
動物流	實驗動物的進出與移動	動物進出需單一動線，避免交叉感染；且動物入室後以只出不進口原則
廢棄物流	屍體、排泄物、污染物、廢棄物	廢棄物必須單獨路線輸送，並依生物醫療廢棄物標準回收清運
氣流	空調、通風、壓差設計	於動物房潔淨區室內維持正壓，避免外部氣流倒灌污染動物房

製圖：生成式 AI

人員夜間使用紅光手電筒 請將光源與動物保持適當距離

文：獸醫師 劉光祐

小鼠與大鼠為典型夜行性動物^[1]，本為落實 3R 原則中「精緻化」的精神，本校動物中心於各樓層動物房飼育室走道處掛有紅光手電筒^[2]，供試驗人員於夜間觀察使用。為避免干擾實驗動物晝夜節律，根據現場實測取得之數值，使用本中心所提供之手電筒時，請將光源與動物距離保持至少 60 公分，敬請各單位人員配合。



製圖：生成式 AI

參考文獻：

1. "Light and the laboratory mouse. Journal of Neuroscience Methods" (Peirson et al., 2018)
2. AAALAC International. (2021). Frequently Asked Questions – Lighting.



TMU LAC - NEWSLETTER

Five Flows in Laboratory Animal Center

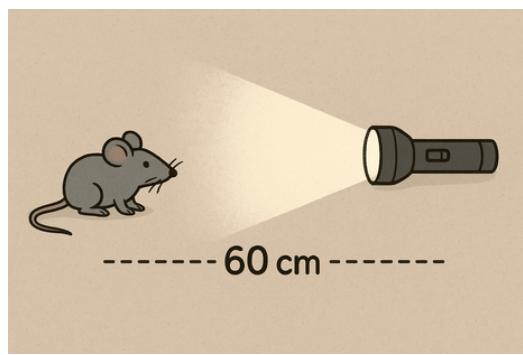
By Liu, K. Y., Vet of TMU LAC

Flow	Content	Key Management Points
Personnel Flow	Movement of researchers, animal caretakers, and staff	Separate entry/exit routes; avoid crossing with animal and material flows; gowning, handwashing, and disinfection required
Material Flow	Feed, bedding, equipment, consumables	Clean and waste materials separated; sterilization or disinfection before entry
Animal Flow	Movement and housing of laboratory animals	Unidirectional routes; prevent cross-contamination between different animal groups
Waste Flow	Carcasses, excreta, contaminated materials, waste	Transported through a separate route and collected in accordance with biomedical waste disposal standards
Air Flow	Ventilation, air conditioning, pressure design	Positive pressure in clean areas to prevent reverse air contamination

Respect the Dark Cycle: Use Red Flashlight

By Liu, K. Y., Vet of TMU LAC

Mice and rats are nocturnal animals ⁽¹⁾. To implement the principle of Refinement under the 3Rs, the Animal Center has provided red flashlights in the corridors of animal rooms on each floor for personnel to use during nighttime observations ⁽²⁾. To avoid disturbing the animals' circadian rhythm, please keep the light source at least 60 cm away from the animals when using the flashlight. We kindly ask for your cooperation.



Picture generated by ChatGPT

References :

1. "Light and the laboratory mouse. Journal of Neuroscience Methods" (Peirson et al., 2018)
2. AAALAC International. (2021). Frequently Asked Questions – Lighting.