

Busta 1

1. Inglese: The frequency at which mouse cages are changed has important implications for the animals, animal care personnel, and facility managers. The objective of this study was to determine how bedding volume and the interval between changes affect microenvironmental conditions, health, and behavior of mice housed in individually ventilated cages (IVC).
2. Statuto: Il Rettore
3. Informatica: Si descriva la procedura per effettuare la somma dei valori presenti nelle celle da A1 a A14 su un foglio di calcolo di Excel
4. Normativa sperimentazione animale D.Lgs.vo 26/14: Quali sono i compiti dell'OPBA?

Busta 2

1. Inglese: Atmospheric analysis was performed daily to determine intracage ammonia cage humidity and temperature on a daily basis. Mice were videotaped for 10 min on days 1, 8, and 15, and videos were analyzed for abnormal behaviors. On day 17, 1 mouse from each cage was euthanized, and bronchoalveolar lavage was performed.

2. Statuto: Gli organi dell'Ateneo

3. Informatica: Si descriva la procedura per condividere un file di Excel sulla piattaforma Google Drive con prof.taldeitali@unipi.it e prof.talaltri@unipi.it.

4. Normativa sperimentazione animale D.Lgs.vo 26/14: Che cosa si intende con l'acronimo “3R”?

Busta 3

1. Inglese: Cage changes, although an essential element for appropriate laboratory mouse husbandry, can be disruptive to mice. This required maintenance activity disrupts their scent cues and arrangements of nesting materials while placing them into a 'new' environment at an interval typically defined at the discretion of the facility management to meet general guidelines.
2. Statuto: Il Consiglio di Amministrazione
3. Informatica: Come si crea un grafico a torta in Excel
4. Normativa sperimentazione animale D.Lgs.vo 26/14: Quali sono le modalità consentite dal D.Lgs.vo 26/14 per la soppressione degli animali?

Busta 4

1. Inglese: The laboratory mouse is the most genetically characterized and most common research animal, with an estimated population of 30 million. In recent years, animal facilities have been under growing public and governmental regulatory pressure to increase provisions for animal welfare. Many of the standards in mouse housing that are currently in place were based solely on common industry practices.
2. Statuto: Il Senato Accademico
3. Informatica: Come si crea un grafico a istogramma in Excel
4. Normativa sperimentazione animale D.Lgs.vo 26/14: Quali sono i compiti del “Responsabile del benessere animale”?

Busta 5

1. Inglese: Rodents are exposed to many physiologic stressors during the time of cage changing in laboratory facilities. The intent of changing cages is to keep mice and humans healthy, provide a suitable microenvironment, and ideally reduce stress (which is often done by providing what humans perceive as a clean environment).
2. Statuto: Gli organi del Dipartimento
3. Informatica: Quali sono le differenze tra Word ed Excel
4. Normativa sperimentazione animale D.Lgs.vo 26/14: L'organismo preposto al benessere animale nell'Università di Pisa

Busta 6

1. Inglese: Animal users and caretakers therefore must weigh the stress induced by frequent bedding changes for 'dirty cages' against the realization that the perceptions of humans and mice may differ regarding what constitutes a dirty cage. The vivarium management that oversees husbandry practices and cost containment of laboratory mice also are affected by the cage-changing practices.
2. Statuto: Il consiglio di Dipartimento
3. Informatica: Come si crea una formula in Excel
4. Normativa sperimentazione animale D.Lgs.vo 26/14: L'organismo preposto al benessere animale nell'Università di Pisa, modalità di funzionamento

Busta 7

1. Inglese: The factors to consider for cage-changing intervals should be number and size of animals, size of the primary enclosure, urinary and fecal output, wetness of bedding, and experimental conditions. Many facilities have implemented cage-change intervals of 3 to 7 d with the aim of keeping these values within the recommended limits.
2. Statuto: Il rappresentante legale dell'Ateneo
3. Informatica: Come si crea una formula in Excel per sommare i valori presenti in più celle
4. Normativa sperimentazione animale D.Lgs.vo 26/14: Quali sono le modalità di soppressione degli animali nel caso dei roditori?

Busta 8

1. Inglese: The husbandry and housing of mice should be controlled to remove variables in scientific studies. In an age of mouse genetic standardization and specificity in other husbandry practices (including light cycles, feed, and water quality), cage changing potentially can affect many aspects of a study. Consistent husbandry may contribute to animal welfare goals by potentially reducing the number of animals.
2. Statuto: Composizione e funzioni del consiglio di amministrazione
3. Informatica: Come si esporta un file Excel in formato PDF
4. Normativa sperimentazione animale D.Lgs.vo 26/14: Quali sono le figure previste nella composizione dell'OPBA

Busta 9

1. Inglese: Environmental parameters analyzed in this study consisted of daily intracage ammonia levels, temperature, and humidity. Indices that were assessed in mice at specific time points throughout the study included fecal corticosterone, body mass, cage biomass, behavioral analysis, and bronchoalveolar lavage. Cages were photographed at specific time points to correlate visual appearance with other measured indices
2. Statuto: Composizione e funzioni del senato accademico
3. Informatica: cosa sono i file “.zip”?
4. Normativa sperimentazione animale D.Lgs.vo 26/14: Cosa prevede il principio di “affinamento e riduzione”?

Busta 10

1. Inglese: The husbandry and housing of mice should be controlled to remove variables in scientific studies. In an age of mouse genetic standardization and specificity in other husbandry practices (including light cycles, feed, and water quality), cage changing potentially can affect many aspects of a study. Consistent husbandry may contribute to animal welfare goals by potentially reducing the number of animals.

2. Statuto: Il Direttore Amministrativo

3. Informatica: Come si invia un messaggio di posta elettronica con un documento in allegato

4. Normativa sperimentazione animale D.Lgs.vo 26/14: Cosa prevede il principio di “sostituzione e affinamento”?