

**CONCORSO PUBBLICO, PER ESAMI, FINALIZZATO ALLA COPERTURA DI N. 3 POSTI DI CATEGORIA C, POSIZIONE ECONOMICA C1, AREA TECNICA, TECNICO-SCIENTIFICA ED ELABORAZIONE DATI, PER LE ESIGENZE DEGLI STABILIMENTI DELL'UNIVERSITÀ DEGLI STUDI DI NAPOLI FEDERICO II (COD. RIF. 1910) DI CUI N. 1 POSTO RISERVATO ALLE CATEGORIE DI CUI AL D.LGS. 15 MARZO 2010, N. 66, ARTT. 1014, COMMA 1, LETT. A) E 678, COMMA 9, INDETTO CON DECRETO DEL DIRETTORE GENERALE N. 877 DEL 4.10.2019, PUBBLICATO SULLA GAZZETTA UFFICIALE IV SERIE SPECIALE – CONCORSI ED ESAMI N. 83 DEL 18.10.2019.**

**QUESITI ESTRATTI ALLA PROVA ORALE DEL 07 FEBBRAIO 2020 SUDDIVISI PER SCHEDA SORTEGGIATA**

1. In quale allegato dell'attuale legge sulla sperimentazione animale (D.Lgs 26 del 4 marzo 2014) si parla dei metodi di soppressione?;
2. Criteri di stabulazione nei topi;
3. Quali sono le principali zoonosi trasmesse dagli animali da sperimentazione;
4. Il candidato descriva a cosa serve power point
5. Prova inglese. Dal "*testouGuidelines on the care of laboratory animals and their use for scientific purposes-I. using and care*"; (Londra, 1987), il candidato traduca pag 5, ultimo paragrafo: "Separate stores should be provided for food, bedding, cages, cleaning materials and other items. Food and bedding stores should be clean and dry; food stores should be vermin proof, insect proof, cool and sunless. Perishable foods should be stored in cold rooms, refrigerators or freezers. A collection area, vermin free, should be provided for waste, prior to its disposal. Special arrangements should be made for handling carcasses and radioactive or other hazardous material. All establishments should have access to separate facilities for diagnostic investigations, post-mortem examinations and the collection of samples for examination elsewhere. These rooms may not necessarily be in the animal house. Where surgery is to be performed, suitable operating facilities should be provided, including separate preparation areas for the animals, equipment and staff and there should be a post-operative recovery area. Personnel facilities Personnel facilities should include staff and record rooms, and sufficient changing rooms, decontamination areas, first aid and toilet facilities, and space for storing protective, and outdoor clothing, etc. Smoking, eating and drinking should be prohibited from all but specifically designated areas. Animal care personnel may be present at times when normal catering facilities may not be available; special arrangements or facilities for meals may therefore be needed. Training and staffing. The person named in the certificate of designation of the premises as responsible for the overall welfare of the animals should ensure that adequate training is provided for other personnel. The degree of training required will depend on the activities being carried out. Only competent staff should be given responsibility for the care and husbandry of animals. Suitably qualified staff must be available at all times to care for the animals, not least during weekends, statutory holidays and when the normal staff are absent, e.g. due to sickness. Information on training and courses in laboratory animal science and technology is available from the Business and Technician Education Council, the Institute of Animal Technology, the Royal College of Veterinary Surgeons and the Royal Veterinary College, University of London. Several pharmaceutical companies arrange courses for their own staff (see also Smith, 1984). Veterinary care Under the 1986 Act it is a requirement for registered premises that there is a named veterinary surgeon (or other suitably qualified person) to provide advice on the health and welfare of the animals. It is important that the veterinary surgeon has knowledge of the needs of laboratory animals".

1. Cos'è descritto nell'art. 23 dell'attuale legge sulla sperimentazione animale (D.Legs 26 del 4 marzo 2014);
2. Il candidato descriva la mobilitazione delle gabbie seguendo un percorso sporco-pulito;
3. Pulizia e disinfezione dei locali di stabulazione, delle gabbie e dei biberon;
4. Quale programma si può utilizzare per fare un documento di testo;
5. Prova inglese - Dal testo "*Guidelines on the care of laboratory animals and their use for scientific purposes- I. using and care*"; (Londra, 1987), il candidato traduca pag. 7, settimo paragrafo: "Temperature regulation should ensure that there are no un due fluctuations within or between rooms and so avoid causing unnecessary stress. In the majority of establishments in the United Kingdom it will be desirable to provide a cooling system for rooms containing rodents and rabbits to comply with the upper limitations for room temperatures. If this is not available *ad hoc* methods, such as reduction of stocking densities, may be necessary to avoid heat stress. Breeding colonies do not usually require such dose control of temperature. A tolerance of at least be sufficient so long as the new born can be kept warm, Animals kept outdoors or under farm conditions indoors will be maintained at ambient temperatures; for some species shade or shelter will be required in the summer, and in winter, additional heat and food as well as shelter. Requirements for birds vary according to species (see MAFF Codes and UFAW, 1987). Reptiles and amphibians are unable to control their body temperature, except by behaviour. Each species has a preferred body temperature and a range in which it will feed and behave normally. The aim in the laboratory should be to provide such a range. (UFAW, 1987). Where amphibians are maintained at low temperatures, they and their environment should be checked daily. Fish should be kept as close to their natural environmental temperature as practicable (Hawkins, 1981). *Relative humidity*. Extreme variations in relative humidity can have adverse effects on the well-being of animals (Clough, 1984) and, by affecting the rate of heat loss, can influence activity and food intake (Stille, Brezowsky & Weihe, 1968). The relative humidity in animal rooms should normal be maintained at 55 ± 10 per cent irrespective of stocking density; prolonged periods below 40 per cent or above 70 per cent should be avoided. In most cases some form of humidification will be required. Poultry are more tolerant than mammals and a range of 30-70 per cent is suitable (Prince et al., 1965). For most amphibians and some reptiles, 70 percent is desirable but 'dry' reptiles should be kept at 40-60 per cent. Some other amphibians and reptiles may require humidity outside those ranges (Avery, 1979; Davies, 1981; Spellerberg, 1982)... "

1. Quale articolo dell'attuale legge sulla sperimentazione animale (D.Lgs 26 del 4 marzo 2014) regola e disciplina il personale abilitato?
2. Il Candidato descriva quali possono essere i maggiori fattori di stress negli animali da laboratorio (roditori);
3. candidato descriva quali sono i rischi fisici in uno stabulario per animali da sperimentazione;
4. A cosa serve un file Word?;
5. Prova inglese - Dal testo "*Guidelines on the care of laboratory animals and their use for scientific purposes- I. using and care*"; (Londra, 1987), il candidato traduca pagina 4, ultimo paragrafo: "Against ingress by pests such as wild rodent and insects; special care should be taken where drains are present (see Rentokil Guide - Keeping pests out of business premises). Services should be installed in such a way that they are either buried within the fabric of the building, boxed in or clear of the wall surface for easy cleaning. When the fabric of the building is penetrated the holes created should be sealed. Design should take into account the fact that building maintenance may disturb animal and disrupt experiments. Services should be installed to be accessible from outside and with fittings that can be removed by the staff for maintenance or repair elsewhere. Farm animals in pens generally require more robust wall and floor finishes and there should be no projections that may present a hazard to animals or staff. Farm animals that are kept in animal houses should be given at least as much room as recommended in the MAFF Codes. For some procedures the standards of environment and housing required may be much higher than where animals are kept under farm conditions. Exercise areas should be provided for larger farm animals but in some cases such facilities may be impracticable from an experimental, environmental, disease control or security point of view. Maximum stocking levels are limited primarily by the efficiency of the ventilation system. The stocking density for each room for each species likely to be housed should be calculated and be readily available (see *Ventilation*, page 7). Any smell of ammonia is probably because the room contains too many animals, or there is too little ventilation or the room is not being cleaned adequately, or a combination of all these factors; the cause should be investigated. Species that are incompatible, for example predator and prey, or animals requiring different environmental conditions or of different health status, should not be housed

in the same room nor, in some cases, within smell or even within earshot. Precautions should be taken in animal rooms to minimise the exposure of personnel to hazards arising from handling animals, for example bites and scratches, allergens and infections (UFAW, 1987). There should be provision to house separately animals that are ill or injured. Breeding animals are normally maintained separately from animals in procedures. According to the microbiological and genetic quality of animal desired, different levels of separation and physical barrier will be required between breeding and other areas. Breeding and supply facilities will need areas to prepare animals for despatch. Adequate arrangements should be provided for the receipt of incoming animals. Animals brought into an animal house should not put at risk animals already there. Space should be provided for isolation and acclimatisation, where appropriate. General and specialist procedure rooms should be provided as appropriate and may vary from offering minimum facilities, negative pressure isolators or laminar flow cabinets for studies with infectious agents".

1. Quale articolo dell'attuale legge sulla sperimentazione animale (D.Legs 26 del 4 marzo 2014) parla dei metodi di soppressione?;
2. Principali tecniche di allevamento e svezzamento dei roditori;
3. Il candidato descriva quali sono i principali D.P.1. da usare in uno stabulario convenzionale;
4. Il candidato descriva come si prepara un documento word;
5. Prova inglese - Dal testo *Guideline on the care of laboratory animals and their use for scientific purposes- I. using and care*; (Londra, 1987), il candidato traduca pag. 7, primo paragrafo: "Temperature regulation should ensure that there are no undue fluctuations within or between rooms and so avoid causing unnecessary stress. In the majority of establishments in the United Kingdom it will be desirable to provide a cooling system, for rooms containing rodents and rabbits to comply with the upper limitations for room temperatures. If this is not available *ad hoc* methods, such as reduction of stocking densities, may be necessary to avoid heat stress. Breeding colonies do not usually require such close control of temperature. A tolerance of at least  $\pm 1.0^\circ\text{C}$  may be sufficient so long as the newborn can be kept warm. Animals kept outdoors or under farm conditions indoors will be maintained at ambient temperatures; for some species shade or shelter will be required in the summer, and in winter, additional heat and food as well as shelter. Requirements for birds vary according to species (see MAFF Codes and UFAW, 1987). Reptiles and amphibians are unable to control their body temperature except by behaviour. Each species has a preferred body temperature and a range in which it will feed and behave normally. The aim in the laboratory should be to provide such a range (UFAW, 1987). Where amphibians are maintained at low temperatures, they and their environment should be checked daily. Fish should be kept as close to their natural environmental temperature as practicable (Hawkins, 1981). *Relative humidity*. Extreme variations in relative humidity can have adverse effects on the well-being of animals (Clough, 1984) and, by affecting the rate of heat loss, can influence activity and food intake (Stille, Brezowsky & Weihe, 1968). The relative humidity in animal rooms should normally be maintained at  $55 \pm 10$  per cent irrespective of stocking density; prolonged periods below 40 per cent or above 70 per cent should be avoided. In most cases some form of humidification will be required. Poultry are more tolerant than mammals and a range of 30-70 per cent is suitable (Prince *et al.*, 1965). For most amphibians and some reptiles, 70 per cent is desirable but 'dry' reptiles should be kept at 40-60 per cent. Some other amphibians and reptiles may require humidity outside those ranges (Avery, 1979; Davies, 1981; Spellerberg, 1982). *Ventilation* The functions of the ventilation system are: to regulate within prescribed limits temperature and humidity, reduce the levels and spread of odours, noxious gases, dust and infectious agents, to provide sufficient air of an appropriate quality".

1. Fornire un elenco degli animali di cui all'articolo 10, comma 1 dell'Allegato I del D.Legs 26 del 4 marzo 2014;
2. Criteri di stabulazione dei ratti;
3. Il candidato descriva quali sono i rischi chimici in uno stabulario per animali da sperimentazione;
4. Descrivere le principali caratteristiche di excel;
5. Prova inglese - Dal *testouGuidelines on the cere ci laboratory enimeis and theiruse for scientific putposes-l. using and cere"*; (Londra,1987), il candidato traduca pago 5, quinto paragrafo: "Separate stores should be provided for food, bedding, cages, cleaning materials and other items. Food and bedding stores should be clean and dry; food stores should be vermin proof, insect proof, cool and sunless. Perishable foods should be stored incold rooms; refrigerators or freezers, A collection area, vermin free, should be provided for waste , prior to its disposal. Special arrangements should be made far handling carcasses and radioactive or other hazardous material.All establishments should have access to separate facilities for diagnostic investigations, post-mortem examinations and the collection of sarnplés for examination elsewhere. These rooms may not necessarily be in the .animal house. Where surgery is to be performed, suitable operating facilities should be provided, including separate preparation areas for the animals, equipment and staff and there should be a post-operative recovery area, *Personnel [facilities]* Personnel facilities should include staff and record rooms, and sufficient changing rooms, decontamination areas, first aid and toilet facilities, and space for storing protective, and outdoor cloth, illg etc. Smoking, eating and drinking should be prohibited from all but specifically designated areas. Animal care personnel may be present at times when normal catering facilities may not be available; special arrangements or facilities for meals may therefore be needed. Training and staffing. The person named in the certificate of designation of the premises as responsible far the overall welfare of the animals should ensure that adeguate training is provided far other personnel, The degree of training required will depend on the activities being carried out. Only competent staff should be given responsibility for the care and husbandry of animals. Suitably qualified staff must be available at all times to care for the animals, not least during weekends, statutory holidays and when the normal staff are absent, e.g. due to sickness. Information on training and courses in laboratory animal science and technology is available from the Business and Technician Education Council, the Institute of Animal Technology, the Royal College of Veterinary Surgeons and the Royal Veterinary College, University of London. Several pharmaceutical companies arrange courses far their own staff (see also Smith, 1984). *Veterinary care* Under the 1986 Act it is a requirement for registration as a designated premises that there is a named veterinary surgeon (or other suitably qualified person) to provide advice on the healt hand welfare of the animals. It is important that the veterinary surgeon has knowledge of the needs of laboratory animals".

Il Dirigente della Ripartizione Risorse Umane Personale  
Contrattualizzato e Trattamento pensionistico  
F.to Dott.ssa Gabriella FORMICA