

Nuevos desafíos en los programas de control sanitario de ratones

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Rodent health monitoring program implemented in animal facilities is dynamic and has been in continuously progress. Laboratory animals can harbor infectious agents known to impact both animal welfare and biomedical research. The animal model quality associated with microbiology and genetic integrity is of great importance to assure reproducibility and validity of research data. For long years, rodent health monitoring was primarily to identify agents causing illness and death in mouse colonies. Recently, according to FELASA guidelines and due to the development of transgenic technologies increasing the number of genetically modified animals used, new paradigms were introduced. The high susceptibility to infectious agents combined with the impact on biosafety poses a risk when dealing with a range of transgenic and knockout models. These are some of the challenges that currently impact on health monitoring, since essentially it focuses on the exclusion of unwanted pathogens in animal facilities. In addition, is important to point out the advances in animal housing and biocontainment systems. Under these perspectives one of the main challenge is to develop an adequate, efficient and reliable health monitoring program, applicable to all infectious agents, those already described and the emerging ones, also associated to different housing systems. In this aspect, topics will address the detection of murine infectious agents using traditional

and new methodologies such as environmental air dust monitoring, considering the new mutant and transgenic models widely used in scientific researches.

Keywords: health monitoring, infectious agent, genetic modified animals.