Lab-testing of animals on the rise here

Push to be biomedical hub spurs growth, but strict rules are in place

By SHERRION KAVAY

ABOUT 250,000 research animals were euthanized last year, according to the National Research Council (NRC) of the National Academies of Sciences. This is a decrease from the number of animals euthanized in 2013, when 269,000 animals were killed. The decrease is attributed to a decrease in the number of animals used for research, which is in turn due to advances in alternative methods to animal testing.

The use of animals in research has been a controversial topic for many years. Some people argue that it is necessary to use animals in research to advance scientific knowledge and improve the health and well-being of humans and other animals. Others argue that it is unethical to use animals in research and that alternative methods, such as computer simulations and in vitro tests, should be used instead.

The NRC is responsible for setting guidelines for the use of animals in research, and it provides guidance on how to conduct research that is both effective and humane. The NRC’s guidelines include recommendations for minimizing the number of animals used in research, reducing the number of animals used per experiment, and ensuring that the animals are treated humanely.

The NRC also conducts reviews of research proposals to ensure that they meet the guidelines for animal welfare. Proposals that do not meet the guidelines are not funded.

The use of animals in research is a complex issue, and there are no easy answers. However, efforts to develop alternative methods and to improve animal welfare are important steps in reducing the number of animals used in research and in improving the ethical standards of research.

Local research labs follow ‘best practices’

Local laboratory conditions are based on international best practices, according to Singapore’s Ministry of Education. The Singapore laboratory follows the guidelines of the International Laboratory Animal Resource Network (ILAR) and the Association for Assessment and Accreditation of Laboratory Animal Care, Inc. (AAALAC). These guidelines provide the framework for the use of animals in research, and they are designed to ensure that animals are treated humanely and that research is conducted with the least possible discomfort to the animals.

The ILAR guidelines are based on the principles of the 3Rs (replacement, reduction, and refinement), which are designed to minimize the number of animals used in research and to reduce the number of animals used per experiment. The 3Rs are: replacement (using alternative methods, such as computer simulations and in vitro tests, instead of animals), reduction (using statistical methods to reduce the number of animals used per experiment), and refinement (using methods that are less stressful and more humane).

The AAALAC guidelines are based on the principles of the Four Freedoms (freedom from pain and suffering, freedom from fear and distress, freedom from hunger and thirst, and freedom to express normal behavior), which are designed to ensure that animals are treated humanely.

The Singapore laboratory follows these guidelines and is accredited by the AAALAC. This accreditation is an important indicator of the quality of the laboratory and the care of the animals.

The laboratory also follows the guidelines of the National Research Council of the United States, which provides guidance on the humane care and use of research animals. The laboratory is also a member of the International Laboratory Animal Resource Network (ILAR), which is a network of laboratories that share information on the use of animals in research.

The laboratory is committed to using alternative methods and to improving the welfare of the animals. It has a dedicated animal welfare committee that meets regularly to discuss the care and welfare of the animals. The committee is composed of scientists, veterinarians, and animal care staff.

The laboratory also participates in animal welfare training programs and in animal welfare research. It is committed to continuing education and to improving the care and welfare of the animals.

The laboratory is also committed to publishing its research findings and to sharing its expertise with other laboratories.

The laboratory is proud of its commitment to animal welfare and to the use of alternative methods. It is committed to continuing its efforts to improve the welfare of the animals and to advancing scientific knowledge.