
Responsible use of animals in research

Imec, in collaboration with VIB and KU Leuven, develops novel tools to study and manipulate brain activity. We work according to the principles of 'Replacement, Reduction, Refinement':

Replacement: We always use alternatives to the animal tests if possible such as in-vitro tests.

Reduction: We always use the smallest number of animals that are necessary to achieve statistically and scientifically relevant results.

Refinement: We always try to minimize the impact on the animal wellbeing.

The lab animals that we use at imec are mice and rats.

We follow all the ethical regulations (European, Belgium and Flemish) with particular focus on reduce, refine, replace actions to minimize tests and do this under supervision of the ethical commission of the Animal Ethics Commission at KU Leuven. People at imec who do the implantation have a MS in biomedical sciences or veterinary medicine and a specific certificate for working with laboratory animals including an ethical training. All experiments are supervised by a certified laboratory director with a PhD in medicine with the help of the Animal Welfare body of imec, affiliated to the Animal Ethics Commission at KU Leuven.

Why can't alternative methods replace animals in research?

Whenever possible, researchers do use non-animal models for research. Computer models, tissue and cell cultures, and a number of other non-animal related research methods are used today in biomedical research. Computer models are used to screen and determine the toxic level of a substance in the beginning of an experiment and tissue and cell cultures have become valuable additions to the array of research tools and techniques. However, animal testing remains a necessity. For example, blindness cannot be studied in bacteria and it is not possible to study the affects of high blood pressure in tissue cultures. The living system is extremely complex. The nervous system, blood and brain chemistry, gland and organ secretions, and immunological responses are all interrelated, making it impossible to explore, explain, or predict the course of diseases or the effects of possible treatments without observing and testing the entire living system of an animal. In the meantime, scientists continue to look for ways to reduce the number of animals needed to obtain valid results, refine experimental techniques, and replace animals with other research methods whenever feasible.

