

## **Policy AWB Leiden on responsible science with animals**

This is a document of the Animal Welfare Body (AWB) Leiden in close collaboration with the PDC (central animal facility LUMC), the ARF (rodent facility), the bird facility and the zebrafish facility of the Leiden University.

### **Introduction**

Responsible science is essential in all disciplines. When research requires the use of animals, sentient beings, taking this responsibility is even more essential. In those cases where animals need to be used, it is critical that the benefits outweigh the harm done to the animals. Leiden University and the Leiden University Medical Center (LUMC) are two different institutions that share one Animal Welfare Body (AWB). This AWB Leiden promotes a culture of care that is based on *responsible science with animals*, which results in minimal discomfort to all animals in our care and high quality research data.

### **Purpose**

The purpose of this document is to illustrate the view of the AWB Leiden on the use of animals in research to our colleagues at the institutions, the research community, external collaborators and interested outsiders. The Leiden University and the LUMC are leading partners in development of innovative treatments, translational science and fundamental science. Recent information can be found at [www.lumc.nl/research](http://www.lumc.nl/research) and [www.universiteitleiden.nl/en/research](http://www.universiteitleiden.nl/en/research). This research also includes studies wherein critical information could only be obtained with the use of experimental animals. Both the European directive on the protection of animals used for scientific purposes (EU directive no. 2010/63/EU) and the Dutch Experiments on Animals Act ('Wet op de Dierproeven' revision 2014 (Wod)) describe that all involved in science with animals should actively engage in finding alternatives to animal experiments wherever possible. Only if no other options are available and benefits outweigh animal discomfort, then animal use may be justified. Even then all means have to be applied to actively reduce animal numbers and increase animal welfare. This is promoted by the AWB Leiden by actively encouraging team work and taking responsibility for the animals under your responsibility and care. This culture of care is a key pillar for the AWB Leiden, and is being propagated by highlighting the scientific need for high quality experimental design, while constantly monitoring and encouraging refinements, communicating good practises, in personal interactions and an open discussion with the research community.

### **Policy and organization**

All animals (rodents, zebrafish, birds and occasionally other small species) at the Leiden University and the LUMC are housed within one of the four animal facilities. The animal husbandry/housing is according to the applicable legislation regarding the protection of animals used for scientific purposes (EU directive no. 2010/63/EU and Wod). All experiments are executed in a licenced establishment, with the exception of studies on animals in their natural habitat.

The LUMC (PDC) employs a designated veterinarian on site who oversees the health of the animals of all facilities, including those at the Leiden University. At all animal facilities specially trained animal care technicians monitor and take care of the animals seven days a week. Next to the animal care takers, all personnel caring for and using animals are appropriately trained for the relevant techniques, the ability to detect abnormal behavioural, distress and/or signs of illness. In each animal facility personal licenses and competences are registered and checked by the dedicated education and training officers.

All animal experiments including training of procedures are being performed under a project license granted by the Dutch Central Authority for Scientific Procedures on Animals (CCD) after full ethical

evaluation by an impartial Animal Experiments Committee Leiden (DEC). The AWB Leiden advises the applicants in the preparation of project proposals before they are presented to the CCD. In the advice, the AWB Leiden includes the advice of a scientist committed to the AWB and the advice of the designated veterinarian.

All experiments are being performed in accordance with the Dutch Experiments on Animals Act (Wod, 2014). After a licence is granted by the CCD, the AWB Leiden reviews the experimental design, procedures and details in research plans on the level of a defined animal experiment. The AWB Leiden actively asks for advice from the statistician, the designated veterinarian, the education and training officer, the animal facility and the biological safety officer at this stage. In this way, together with the advisors, the AWB Leiden verifies that research plans fit the overall project licence and that the research plan is in accordance with the 3Rs (Reduction, Refinement and Replacement) for responsible science with animals.

All animals used in the experiments are monitored according to the need for that specific procedures as agreed upon in the research plan. All monitoring data and any unexpected welfare related events are registered in detail by the researcher. This data is available at all times for internal audits or inspection by the national inspectorate: the Dutch Food and Consumer Goods Authority (NVWA). Upon any unexpected deviation from the research plan, the AWB Leiden needs to be informed and the research plan has to be adjusted respectively. The AWB Leiden can and will intervene should they deem it necessary for animal welfare.

Animals will be humanely sacrificed in case the experiment specifically defined end points are reached. Humane end points are never standard as they are designed to fit the experiment at hand to reduce unnecessary discomfort.

### **The Animal Welfare Body Leiden**

If there are no alternatives available, *responsible science with animals* is the key drive for the AWB Leiden. The AWB Leiden has fulltime certified staff with ample experience in laboratory animal science and an animal welfare officer overseeing animal welfare in the establishments. This team is empowered by a group of LUMC/Leiden University affiliated scientists with time dedicated to this task. The AWB Leiden reports to the licence holders of both the LUMC and the Leiden University separately.

The AWB Leiden is a central point for researchers, employees and colleagues to clarify and record the scientific reasoning and background for the choices that have to be made during the design of animal experiments. The AWB Leiden critically challenges scientists to justify their use of animals while at the same time helps to find solutions in experimental design that comply with high standards for research and animal welfare alike. The AWB Leiden revises the paperwork and the animal welfare officer regularly monitors the execution of the research within the animal facilities. The members of the AWB Leiden have a strong national and international network that can contribute to local discussions and solutions. In Leiden a team approach is encouraged in animal work by engaging in and stimulating active communication and collaboration between all involved in the care and welfare of animals through regular meetings and discussion. Additionally animal care takers, technicians and researchers invite the AWB Leiden to discuss technical, practical or design challenges, welfare issues and successes in animal welfare or science. This ensures that the methods can be completely and transparently listed in a publication.

With the above the AWB Leiden promotes a culture of care that is based on *responsible science with animals*, which results in minimal discomfort to all animals in our care and high quality research data.