

Press Release Statement: February 27th 2017 Animals in experimental research in Europe are treated with care

A Europe-wide survey of institutes conducted by the Basel Declaration Society (BDS) has indicated that researchers using animals in their research treat them with due care. The survey polled a total of 755 researchers from 26 countries, and detailed analysis of the results indicates that there is a strong commitment among animal researchers across Europe to put into practice the principles of the 3Rs (Refine, Reduce, Replace)

## What are the 3Rs?

**Refine:** The use of methods that alleviate or minimize potential pain, suffering or distress and enhance animal welfare for the animals used.

**Reduce:** The use of methods that enable researchers to obtain comparable levels of information from fewer animals, or to obtain more information from the same number of animals.

**Replace:** The use of methods that avoid or replace the use of animals in research, such as *in vitro* studies (in cell structures) and experiments simulated by means of computer models.

## About the survey

Many researchers report that the breeding platforms in their institutions are designed to reduce the number of animals used. Improvements in the practice of animal husbandry frequently went beyond what was required by law.

The institutions attach great value to the training and continuing education of their personnel. This was clearly apparent from the responses, which showed that students are learning about the 3Rs at an ever-earlier stage in their career development. Only about 2% of respondents had never encountered the principle of the 3Rs.

This improvement in the education of young animal researchers has had a major positive impact on the planning and execution of animal experiments, which is an important *Refinement*. The survey also showed that the application of biostatistical methods is an effective way to both *Refine* and *Reduce* the number of animals used. During the experiments, it is essential for the well being of the animal that it is monitored and that criteria for the termination of an experiment are formulated beforehand. Three-quarters of respondents followed these practices.

Efforts in basic research to replace animal experimentation with methods such as *in vitro* cell and tissue cultures or computer simulations were reported to be less promising. This is a reflection of how extremely difficult it is to understand the complex functions of a three-dimensional organism with its many different cell types and substances without animal research. Computer simulations can only be used if a biological process is already well-described. Moreover, as is also the case with data from cell or tissue cultures, results from computer simulations have to be



validated in the whole animal. Nonetheless, both computer simulations and *in vitro* methods with cell and tissue cultures are increasingly used.

More than half of the respondents found that *Refinement* has the most potential for improvement in animal research.

The full report on the survey is available on the Basel Declaration Society's website <a href="http://www.basel-declaration.org/projects/3r-report/">http://www.basel-declaration.org/projects/3r-report/</a>

For more information please contact: Prof. Kevan Martin, Board member of the BDS kevan@ini.uzh.ch Phone: +41 44 635 30 52

Prof. Gregor Rainer, Board member of the BDS gregor.rainer@unifr.ch Phone: +41 26 300 86 89

## What is the Basel Declaration Society (BDS)

Like the Helsinki Declaration, which forever altered the ethical landscape of human clinical research, the aim of the Basel Declaration is to bring the scientific community together to further advance the implementation of ethical principles such as the 3Rs whenever animals are being used and to call for more trust, transparency and communication on the sensitive topic of animals in research. The Basel Declaration Society, founded on October 5th 2011, strives to promote the Basel Declaration.