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Making science more accessible

In February, as part of a series of seminars on the 3R principle held at the German Centre for the Protection of Laboratory Animals at the BfR, Dr. David Mellor from the non-profit Center for Open Science (USA) reported on various strategies for more transparency and higher quality in science. The 3R principle describes the goal of reducing the number of animals in experiments (“reduce”), lowering the level of suffering in experiments (“refine”) or completely replacing animal experiments (“replace”). According to Mellor, the provision of raw data and details of the methods used as well as the pre-registration of preclinical and clinical trials are important for this. The non-publication of original data as well as incorrectly evaluated test results have led to the fact that many research experiments are irreproducible. Greater transparency and improved quality in science could therefore only be achieved through the joint efforts of all parties involved.

More information:
<https://osf.io/>

All animals count

Around 10 million animals are used in animal experiments throughout Europe every year. However, the number of laboratory animals is actually significantly higher. 14 million additional animals were systematically recorded for the first time for 2017. A large part of them is the result of breeding, which often results in more animals being bred than ultimately needed. Furthermore, the number also includes animals bred for tissue and organ sampling. Researchers can help to reduce these numbers. For this purpose, the German Centre for the Protection of Laboratory Animals has developed the “Animal Study Registry” database, in which animal experiments can be registered with all necessary details and by doing so, avoid unnecessary repetition of experiments. Moreover, the Centre is committed to placing the welfare of all laboratory animals more in the focus of science and society. In this way, it contributes to ensuring that really all animals count.

More information:
 Lewejohann, L. et al. 2020. Cut back on surplus laboratory animals. *Nature* 578: 515. DOI 10.1038/d41586-020-00517-3 (open access)



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Better reproduction of animal experiment data

The question of how the quality of animal studies and, therefore, their validity can be improved has long been discussed in international research. In order to support the reproducibility of laboratory animal studies, the German Centre for the Protection of Laboratory Animals at the BfR organised a special meeting on pre-registration of preclinical studies as part of the Reward/Equator Conference 2020 in February in Berlin. At the meeting, the requirements that animal registries must meet were discussed and how pre-registration can be encouraged and its success be measured. The “Animal Study Registry” database set up at the BfR at the beginning of 2019 can make a contribution to reducing the number of animal experiments by reducing the number of redundant studies and preventing follow-up studies based on qualitatively insufficient data.

More information:
 Heini, C. et al. 2019. Rethinking the incentive system in science: animal study registries. *EMBO Reports* 21(1): e49709. DOI 10.15252/embr.201949709 (open access)