

Animal Experimentation

The SNSF supports high-quality research projects from all disciplines. **Animal experiments** are **elementary for biomedical research**. They are used to investigate physiological functions and causal relationships and how they regulate organisms. They thus contribute to improved knowledge of the animal species used, but also to comparable functional mechanisms in other animal species and humans.

How are animals protected?

- Legal basis: the Animal Welfare Act and the 'Tierschutzverordnung' / 'Ordonnance sur la protection des animaux' regluate the handling of and research on vertebrates, cephalopods and crustaceans.
- **Principles**: the dignity of animals must be respected; they must not be subjected to unjustified pain, suffering or harm, nor must they be put in fear, mistreated or subjected to unnecessary stress.
- **Authorization of animal experiments**: granted by cantonal veterinary offices, in case of stressful animal experiments in consultation with the cantonal animal protection commissions, which are composed of academics, veterinarians and representatives of animal protection.
- **Prerequisites for authorization**: 7-stage <u>harm-benefit analysis</u>. Researchers must explain how they take account of the 3R principles in the planned project (replace, *e.g.* use cell cultures instead of animals; reduce, *e.g.* use animals in more than one experiment; refine, *e.g.* administer better anesthetics and painkillers).

Authorized animal experiments are monitored. The authorities monitor the animal experiment facilities and the researchers are obliged to keep a record of each animal, to report annually to the cantonal veterinary offices and to report problems (unexpected experiment progress) immediately. The FSVO keeps <u>statistics on animal experimentation</u>.

Since 2015, every university is obliged to have 3R and animal welfare specialists to support researchers in the application process and to ensure that ethical and legal guidelines are met.

What does the SNSF do?

The compliance with ethical principles, legal regulations and good scientific practice is a fundamental principle of the SNSF and is applied to all projects, from the submission and evaluation of applications, to the release of grants and payment of annual instalments, until their completion.

- **Submission**: obligation to declare animal experiments and confirmation of compliance with the legal provisions is an integral part of every application.
- **Evaluation**: topicality, quality, feasibility and appropriateness of the methodological approach are assessed by national and international experts for each research project and are decisive for the funding decision.
- Release of grants/payment of annual installments: only occurs if all necessary approvals are available in valid form.
- P3 database: is publicly accessible and provides information on the results of projects.

With its guidelines on Open Access and Open Research Data, but also with its BioLink infrastructure initiative, the SNSF actively contributes to the 3R principles.

A critical discussion of the topic of animal experiments also takes place in the research magazine <u>Horizons</u> at regular intervals.

SNSF numbers 2020

- SNSF total: 546 of a total of 5,775 projects contain animal experiments (9% of all projects and 14% of the total funding of CHF 915 million).
- Division Biology and Medicine: 423 of 1,146 projects supported by the division contain animal experiments (37% of all projects and 37% of the total funding of CHF 207,6 million).

To consider

- The majority of projects with animal experiments contain animal experiments only in subprojects.
- Actual funds paid out for animal experiments: approx. 10% of the above-mentioned shares (SNSF total: CHF 13 million; Biology and Medicine Division: CHF 7,6 million), since approx. 20% of the contributions are research funds and 80% salaries.