

ethical principles in animal experimentation

basic principles

Article 1

Progress in the field of human knowledge, and especially progress in biology, human and animal medicine is necessary.

Article 2

Man needs animals in his quest for knowledge just as he does to feed and clothe himself, and for his work. He thus has the duty to respect animals, his auxiliaries, who are living beings just as he himself is a living being.

Article 3

Every person involved in biological experimentation must recognize the fact that animals are gifted with sensitivity and memory, and that they have the capacity to suffer without any recourse to pain alleviating means.

the responsibilities of the investigators

Article 4

The investigator is on moral grounds responsible for his options and his acts within the field of animal experimentation.

Article 5

Experiments concerning living vertebrates and the collection of tissues on living subjects for research purposes must be performed by a qualified biologist, or under his direct supervision. The conditions within which the animals are maintained in the course of experimentation must be defined and monitored by a competent veterinarian or scientist.

Article 6

In the course of studies which involve the use of animals, a reasonable probability must prevail that the said studies will significantly contribute to

the acquisition of knowledge which will in turn concur to improve the health and welfare of man and animals.

Article 7

Statistical methods, mathematical models and in vitro biological systems must be used when they are appropriate to complement animal experimentation, and to reduce the number of subjects used.

Article 8

The investigator must use the most suitable animal for his research, and he must also take into account the levels of sense and psychic awareness which are inherent to each species. Animal species in danger of extinction, as defined within Annex I of the Convention on the International Trading of Animals in Danger of Extinction, will only be used under exceptional and well defined circumstances. As much as it is at all possible, animals used in laboratories will originate from specialized breeding outfits providing the best conditions of biological equilibrium.

Article 9

The investigator will make sure that the conditions under which the laboratory animals are kept are the best possible, and he must provide the required care to said animals before, during and after experiments.

Article 10

The investigator's duty is to spare the animals any physical or psychic pain which is not absolutely essential. He will implement methods which enable the limitation of suffering and pain whenever these conditions cannot be avoided.

These ethical principles have been established within the European Centre of Tufts University at Talloires (France) under the aegis of Fondation Marcel-Mérieux in August 1979 by an international group constituted at the outset of the International Symposium for "The Laboratory Animal at the Service of Mankind". This symposium took place in Lyons in September 1978 on the occasion of the centenary of the death of Claude Bernard. This, in point of fact, is the confirmation of principles which have been applied over a long period of time in several countries. An editing effort has been made in order to make these principles clearly understandable, and acceptable on an international level.



terminology concerning laboratory animals in relation with their health status

	Gnotobiontic animal		Agnotobiontic animal		
	Axenic Germ-free	Gnotoxenic Microbially defined	Heteroxenic I.O.P.S. or E.O.P.S (indemnes d'organismes pathogènes spécifiques) or S.P.F. (Specific Pathogen Free)	Holoxenic Conventior	
definition	Harbours no detectable microbial living species	Exclusively harbours one or more microbial species, living, known, and detectable	Statut Sanitaire Contrôlé pour Usages particuliers (controlled health status for special use)	Harbours several micro-organisms: a) non-pathogenic, defined, purposely seeded microbial flora. b) microbial flora non-pathogenic for the species, spontaneously acquired in the animal breeding unit, in most cases through contact with humans.	Harbours any pathogenous or non-pathogenous micro-organism
breeding environment	Isolator	Isolator	Isolator or cage fitted with a filter cover	Protected unit Protected area	Area without particular precautions
obtained	Obtained by hysterectomy or aseptic hysterotomy	Derived from axenic subject which is given willingly or not one or more known microbial species	Derived from the axenic subject which is given a fraction of the microflora of an holoxenic animal containing any opportunist germ.	Derived from the axenic or gnotoxenic subject which acquires a microflora from its environment	No special procedure