

## Regulations for Animal Experimentation in Hyogo College of Medicine

[Objective]

### Article 1

The present Regulations aim to stipulate provisions to be abided by in performing animal experiments in Hyogo College of Medicine (hereinafter referred to as “College” ) pursuant to “Law on Welfare and Management of Animals” (Law No. 105, dated October 1, 1973) (hereinafter referred to as “Law” ), “Act on Welfare and Management of Animals” (Act No. 8, dated March 29, 1993 (hereinafter referred to as “Act” ) , “Standards Relating to the Care and Management of Laboratory Animals and Relief of Pain” (Notice No. 88 of the Ministry of the Environment, dated April 28, 2006) (hereinafter referred to as “Care and Management Standards” ) and ” Fundamental Guidelines for Proper Conduct of Animal Experiment and Related Activities in Academic Research Institutions” (Notice of the Ministry of Education and Science, dated June 1, 2006) (hereinafter referred to as “Fundamental Guidelines” ) and in accordance with “Guidelines for Proper Conduct of Animal Experiments” (Science Council of Japan, dated June 1, 2006) to ensure that animal experiments are conducted properly not only from the scientific standpoint but also from the standpoint of animal welfare, environmental conservation, and safety of personnel engaged in animal experiments.

[The Definition of Terms]

### Article 2

(1) Terms used in the Regulations are defined as follows.

(i) “Animal Experiments, etc.” Use of animals for the purpose of education, experimental research or biological drug production and other scientific applications.

(ii) “Experimental Animal” An animal of mammalian, avian and reptilian species, bred and maintained in the Facility, etc. (including those animals in transit to the Facility, etc.) for Animal Experiments, etc.

- (iii) "Breeding and Maintenance Facility" A facility where Experimental Animals are constantly bred or maintained, or Animal Experiments, etc. are conducted.
- (iv) "Laboratory" An animal laboratory where experimental procedures are carried out on Experimental Animals (including temporary holding of animals for less than 48 hours).
- (v) "Facility, etc." A Breeding and Maintenance Facility and a Laboratory.
- (vi) "Animal Experiment Protocol" A protocol to conduct Animal Experiments, etc.
- (vii) "Facility Manager" A person supervising and managing the Facility, etc.
- (viii) "Experimental Animal Manager" A person who, assisting the Facility Manager, is responsible for managing the Experimental Animals, facilities and equipment in the Breeding and Maintenance Facility.
- (ix) "Animal Experiment Researcher" An individual who performs Animal Experiments, etc.
- (x) "Principal Animal Experiment Researcher" One of the Animal Experiment Researchers who manages the work related to the conduct of Animal Experiments.
- (xi) "Animal Technician" An individual engaged in breeding and maintenance of Experimental Animals under the Facility Manager or the Experimental Animal Manager.
- (xii) "Manager, etc." Include the Facility Manager, the Experimental Animal Manager, the Animal Experiment Researcher, and the Animal Technician.
- (xiii) "Law, etc." Laws, bylaws, animal breeding and maintenance standards, basic guidelines and directives, and other related laws (including notifications).

[The Scope of the Regulations]

Article 3

- (1) These Regulations shall be applicable to all Animal Experiments, etc.
- (2) Every effort must be made to adhere to the Regulations even when animals other than those specified in item (ii) of Section (1) of the preceding Article are used for experiments and related activities.
- (3) When a person affiliated with this College performs Animal Experiments in an institute other than the College they must be conducted properly in accordance with the Fundamental Guidelines or guidelines for Animal Experiments under the jurisdiction of other Ministries (hereinafter referred to as “Basic Guidelines, etc.” ).
- (4) When a person affiliated with the College entrusts another institute with Animal Experiments, etc., he must ascertain proper execution of the Animal Experiments, etc. in the institute in accordance with the Basic Guidelines, etc.

[Responsibility of the President]

#### Article 4

- (1) The President shall bear ultimate responsibility for the conduct of Animal Experiments, etc. and the breeding and maintenance of Experimental Animals in the College and shall be responsible for the following items.
  - (i) Maintenance of the Breeding and Maintenance Facility.
  - (ii) Establishment of an Animal Experiment Committee.
  - (iii) Approval of Animal Experiment Protocols and understanding of the status of operation and the outcome.
  - (iv) Measures for improvement based on the outcome in (iii).
  - (v) Approval of the Breeding and Maintenance Facility and the Laboratory.
  - (vi) Safety management of Animal Experiments, etc.
  - (vii) Implementation of education and training.
  - (viii) Measures, such as self-inspection and -evaluation, and public disclosure of information, etc., to enhance the trust of society with respect to Animal Experiments, etc.
  - (ix) Other measures necessary for proper conduct of Animal Experiments, etc.

(2) The President shall be able to delegate part of the responsibilities listed in the preceding section to the Animal Experiment Committee, the Facility Manager and the Experimental Animal Manager.

[Animal Experiment Committee]

Article 5

(1) Hyogo College of Medicine Animal Experiment Committee (hereinafter referred to as “Committee” ) shall be established in the College.

(2) The Committee, with a mandate from the President, shall review or investigate the following matters and submit reports or advice to the President.

(i) Conformity of Animal Experiment Protocols with the Law, etc. and the present Regulations.

(ii) The status of operation and the outcome of Animal Experiment Protocols.

(iii) The installation of the Facility, etc. and the breeding and maintenance of Experimental Animals.

(iv) The content or the system of education and training on Animal Experiments, proper handling of Experimental Animals, and the Law, etc.

(v) Self-inspection and -evaluation and Disclosure of information.

(vi) Other necessary matters concerning proper conduct of Animal Experiments, etc.

(3) The Committee shall consist of the following members.

(i) Several individuals with excellent knowledge and experience regarding Animal Experiments, etc.

(ii) Several individuals with excellent knowledge and experience regarding Experimental Animals.

(iii) Several individuals of scholarship and experience.

(4) Selection and the terms of office of the Committee members and the Committee chairperson and other matters related to the composition and operation of the Committee shall be stipulated separately.

[Establishment of Breeding and Maintenance Facility]

## Article 6

(1) To establish a Breeding and Maintenance Facility (including a change), a prescribed form shall be submitted to the President for approval. The Breeding and Maintenance Facility shall not be established within medical treatment facilities, such as hospital, etc.

(2) Experimental Animals shall not be reared or maintained outside the Breeding and Maintenance Facility.

(3) The President shall have the Committee review the proposed Breeding and Maintenance Facility and, on the basis of advice from the Committee, decide to grant or not to grant approval.

(4) The President shall have the Committee periodically examine whether the Breeding and Maintenance Facility is managed properly or not.

(5) The Committee shall report to the President in case of a problem.

(6) When the Committee brings the attention of the President to a problem related to the Breeding and Maintenance Facility, the President shall direct and advise the Facility Manager to manage the Breeding and Maintenance Facility properly.

(7) The Facility Manager shall remedy the problem in accordance with the directions and advice of the President.

(8) The Facility Manager of the Breeding and Maintenance Facility shall designate an individual with knowledge and experience regarding animal experimentation as Experimental Animal Manager and have him manage the Breeding and Maintenance Facility properly.

[Notification under Prefectural Acts]

## Article 7

(1) The Chairman of the Board of Trustees of Hyogo College of Medicine Educational Corporation (hereinafter referred to as “Chairman of the Board of Trustees” ) shall notify the Governor of Hyogo Prefecture (hereinafter referred to as “Governor” ) of breeding and maintenance of Experimental Animals (including changes) in the Breeding and Maintenance Facility of the College, in accordance with Act No. 25.

(2) The Chairman of the Board of trustees shall designate a person responsible for the management of Experimental Animals in accordance with Act No. 32 and report to the Governor without delay.

(3) The Manager of Department of Academic Research Support shall be designated as the person responsible for the management of Experimental Animals under Act No. 32.

[Requirements for Breeding and Maintenance Facility]

Article 8

(1) The Breeding and Maintenance Facility shall fulfill the following requirements.

(i) It is structured in such a way as to maintain proper temperature, humidity, air circulation, and brightness.

(ii) It has breeding equipment and facilities that match the species and number of animals under care.

(iii) It is made of floors and walls that are easily cleaned and sterilized and has sanitary equipment for cleaning and sterilization of instruments.

(iv) It has a design and sufficient strength to prevent Experimental Animals from escaping.

(v) It is equipped with measures to prevent adverse effects on the surrounding environment due to odor, noise and waste, etc.

(vi) It has an Experimental Animal Manager.

[Installation of Laboratory]

Article 9

(1) When a Laboratory (including a change) is to be established outside the Breeding and Maintenance Facility, a prescribed form shall be submitted to obtain President's approval. However, except for special cases, the Laboratory shall not be installed within medical treatment facilities, such as hospital, etc.

(2) The President shall have the Committee review the proposed Laboratory and, on the basis of advice from the Committee, decide to approve or not

to approve the Laboratory.

(3) No animal experiments shall be permitted outside the Breeding and Maintenance Facility and the Laboratory.

(4) In principle, Experimental Animals shall not be held in the Laboratory for more than 48 hours.

[Requirements for Laboratory]

Article 10

(1) The Laboratory shall fulfill the following requirements.

(i) It has a structural design and strength to prevent Experimental Animals from escaping, and maintains an indoor environment where Experimental Animals, should they escape, are easy to capture.

(ii) It has a structural design that facilitates cleaning and sterilization of places contaminated by excrements and blood, etc.

(iii) It maintains clean conditions and is equipped with measures to prevent adverse effects on the surrounding environment due to odor, noise and waste, etc.

[Maintenance and Improvement of Facility, etc.]

Article 11

The Facility Manager shall strive to conduct proper management of Experimental Animals and ensure maintenance and improvement of the Facility, etc. that are necessary for the conduct of Animal Experiments, etc.

[Abolishment of Facility, etc.]

Article 12

(1) When a Facility, etc. are to be abolished, the Facility Manager shall notify the President by submitting a prescribed form.

(2) The Facility Manager shall try to transfer Experimental Animals under care to other Breeding and Maintenance Facilities, as required, in collaboration with the Experimental Animal Manager and the Principal Animal Experiment Researcher.

[Preparation, Review and Reporting of Animal Experiment Protocol]

Article 13

(1) The Principal Animal Experiment Researcher shall prepare an Animal Experiment Protocol considering the following matters from the standpoint of proper execution of Animal Experiments, etc. and submit an application for implementation of the Animal Experiment Protocol using a prescribed form to the President.

(i) Objective, significance and necessity of research

(ii) Consideration must be given to proper use of Experimental Animals by adopting alternative protocols in which Experimental Animals are replaced with other research materials where possible.

(iii) Consideration must be given to the appropriate use of Experimental Animals by reducing the number of animals used to as few as possible. In these cases, it is necessary to consider the selection of Experimental Animal species appropriate for the purpose of Animal Experiments, etc., the number of Experimental Animals that will determine the accuracy and reproducibility of the results, the genetic and microbiological quality, and the rearing conditions.

(iv) Methods must be used that cause as little pain and distress as possible to Experimental Animals, while still allowing attainment of the scientific objective.

(v) Establishment of a humane endpoint must be considered, at the planning stage, for Animal Experiments, etc. with a high degree of suffering of Experimental Animals, such as lethal toxicity tests, infection experiments, and irradiation experiments, etc.

(2) The President, upon receiving an application specified in the preceding section, shall decide to approve or not to approve, following review by the Committee, and notify the Principal Animal Experiment Researcher of the result in a prescribed form.



(3) The period of approval of the Animal Experiment Protocol specified in the preceding section is less than 3 years.

(4) The Principal Animal Experiment Researcher shall not initiate experiments until after the President approves the Animal Experiment Protocol

(5) When an approved Animal Experiment Protocol is to be changed, the Principal Animal Experiment Researcher must file an application as specified in section (1) to obtain approval of the change in the Animal Experiment Protocol.

(6) Notwithstanding the preceding section, an application, in a prescribed form, for a change in the animal strain or the number of animals to be used, or an extension of the experimental period within the approved 3-year time limit specified in section (3) may be approved by the Committee, through authorization given by the President.

(7) When a different Principal Animal Experiment Researcher takes over animal experiments, the new Principal Animal Experiment Researcher must obtain approval by way of submitting a prescribed form.

(8) The Principal Animal Experiment Researcher shall conduct the relevant experiments and, upon completion or cessation of the Protocol, report the number of animals used and the results obtained, etc., to the President using a prescribed form.

[Experimental Procedures]

Article 14

(1) The Animal Experiment Researcher shall conduct animal experiments based on the Law, etc. and in conformity with Animal Experiment Protocol, and in strict accordance with the following terms.

(i) Animal Experiments, etc. shall be conducted in appropriately maintained and managed Facility, etc.

(ii) Use of proper anesthetics and analgesics.

(iii) Establishment of criteria for discontinuation and completion of the Animal Experiments, etc. (a humane endpoint) and setting of the shortest

possible period of time to which the Experimental Animals are subjected.

(iv) Implementation of proper postoperative management.

(v) Euthanasia shall be properly performed according to “Guidelines on Methods of Sacrificing Animals” (Notification No. 40 of the Prime Minister’s Office and Revised Notification No. 59 of the Ministry of Environment, dated 2000), while giving consideration to the international guidelines, etc.

(vi) Experiments that require caution for the safety management (experiments using physically and/or chemically hazardous materials, pathogens, and genetically engineered animals, etc.) shall meet the Law, etc. and relevant regulations, etc. of the College.

(vii) When Animal Experiments, etc. involving physically or chemically hazardous materials or pathogens are to be conducted, proper facilities and equipment shall be secured for safety and the Animal Technician shall be provided with relevant information.

(viii) Prior to the initiation of the experiment, necessary experimental techniques, etc. shall be acquired.

(ix) A major, highly invasive operation on a living animal shall be performed under supervision of a person of experience, etc.

[Introduction and Transfer of Experimental Animals]

Article 15

(1) The Facility Manager, the Experimental Animal Manager and the Animal Experiment Researcher shall observe the following matters in introducing and transferring Experimental Animals.

(i) Confirmation of the health condition and the presence or absence of abnormality of the animal, and, as needed, confirmation of health by checking microbiological test results, etc. or by placing it in quarantine shall be implemented to avoid impairment of health of the personnel and other Experimental Animals.

(ii) Transfer of genetically engineered animals or specific alien animals shall be carried out in conformity with the Law, etc.

(iii) Measures necessary for helping acclimatization and adaptation of Experimental Animals to the breeding environment shall be taken.

[Breeding and Maintenance of Experimental Animals]

Article 16

(1) The Animal Technician and the Animal Experiment Researcher shall, through their constant communication, supply food and water to Experimental Animals properly according to physiology, ecology and habit, etc., within a scope which does not affect the purpose of the Animal Experiments, etc., and observe the condition of the animals and report any abnormality, if found, to the Experimental Animal Manager during the entire period from the time of introduction of the Experimental Animals to the time of completion or discontinuation of the experiment.

(2) Upon receiving the report mentioned in the preceding section, the Experimental Animal Manager shall provide appropriate treatment, etc. to such animals, within a scope which does not affect the purpose of the Animal Experiments, etc. and report to the Facility Manager, as necessary.

(3) The Facility Manager shall undertake necessary healthcare management for Experimental Animals to protect them from injuries and diseases not related to the experimental purpose.

(4) When an Experimental Animal suffers injury or illness not related to the experimental purpose, the Facility Manager, with proper advice from the Experimental Animal Manager, shall prevent zoonosis and the spread of diseases in the premises by means of treatment or selection,

(5) The Experimental Animal Manager shall provide appropriate advice with respect to the treatment or selection of Experimental Animals described in the preceding section.

[Retention of Records and Reporting]

Article 17

(1) The Manager, etc. shall retain up-to-date records on the source of supply, breeding history and disease history, etc. of Experimental Animals.

(2) The Facility Manager shall annually report to the President the species and number of Experimental Animals reared and maintained.

[Transportation]

#### Article 18

In transportation of Experimental Animals, the Manager, etc. shall strive to maintain good health and safety of Experimental Animals and to prevent them from inflicting harm on people, in strict compliance with the Care and Management Standards.

[Prevention of Harm, etc.]

#### Article 19

(1) The Facility Manager shall establish measures for capturing escaped Experimental Animals.

(2) When an Experimental Animal that potentially harms people escapes from the Facility, etc., the Facility Manager shall promptly report to the President and relevant authorities.

(3) The Facility Manager shall establish preventive measures against infectious and/or allergic diseases originating from Experimental Animals, and bite injury, etc. caused by Experimental Animals, and take necessary countermeasures, if problems occur.

(4) The Experimental Animal Manager, the Animal Experiment Researcher and the Animal Technician shall endeavor to acquire sufficient knowledge of zoonotic diseases and to collect relevant information. The Facility Manager and the Experimental Animal Manager shall establish a system of communication with public health agencies, etc. so that necessary measures can be promptly taken at the occurrence of zoonotic diseases.

(5) When poisonous or noxious animals are bred or maintained, the Facility Manager shall establish effective schemes, such as the storage of antitoxin sera, that enable quick emergency response measures to prevent harm on people, based on the Care and Management Standards.

(6) When Animal Experiments, etc. that might affect the ecosystem, such

as Animal Experiments, etc. using genetically engineered animals, etc., are to be performed, the Facility Manager shall pay special attention to the prevention of escape, etc. in consideration of the condition of the Facility, etc.

(7) The Facility Manager shall take necessary measures to prevent people not involved in the breeding of Experimental Animals or the conduct of Animal Experiments, etc. from contacting with Experimental Animals, etc.

[Emergency Response]

#### Article 20

(1) The President and the Facility Manager shall, in cooperation with concerned administrative agencies, while ensuring consistency with the local disaster prevention plan, etc., prepare in advance a plan for measures to be taken in the event of an emergency, such as an earthquake or a fire, and shall ensure that everyone concerned knows about such plan.

(2) The President and the Manager, etc. shall, in the event of an emergency situation, make every effort as quickly as possible to protect the Experimental Animals, or to prevent the Experimental Animals from escaping and causing harm to humans or causing problems, etc. for environmental preservation.

[Education and Training, etc.]

#### Article 21

(1) The Facility Manager and the Experimental Animal Manager shall attend conferences, etc. organized by relevant ministries and academic societies, etc. to acquire knowledge and information, etc. necessary for the proper conduct of Animal Experiments, etc. and for the proper breeding and maintenance of Experimental Animals.

(2) The Committee, with a mandate from the President, shall periodically implement education and training programs involving the following matters to ensure that Animal Experiment Researchers and Animal Technicians (hereinafter referred to as “Researches” ) shall acquire the basic

knowledge for the proper conduct of Animal Experiments, etc. and for the proper breeding and maintenance of Experimental Animals.

- (i) The Law, etc. and the Regulations, etc. of the College.
  - (ii) The methodology of animal experiments and the handling of Experimental Animals.
  - (iii) Breeding and maintenance of Experimental Animals.
  - (iv) Security and safety management.
  - (v) The use of the Facility, etc.
  - (vi) Matters concerning zoonotic diseases.
  - (vii) Other matters concerning proper conduct of Animal Experiments, etc.
- (3) The Researchers shall receive the education and training programs specified in the preceding section in preparation for Animal Experiments and proper care of Experimental Animals. The education and training programs for the non-College Animal Experiment Researchers shall be stipulated separately.
- (4) The President shall give consideration to proper implementation of the preceding sections (1)–(3).
- (5) The Committee shall retain records on the date, the content, and the names of the instructors and students of the education and training programs.
- (6) Education and training shall be implemented continually as needed.
- (7) The President shall ascertain the effectiveness of the education and training programs provided and issue “Certificate of Education and Training” to those students with whom the effectiveness is confirmed.

[Self-inspection and -evaluation]

#### Article 22

- (1) The Committee, with a mandate from the President, shall periodically implement self-inspection of compliance with the Fundamental Guidelines with respect to the breeding and maintenance of Experimental Animals and the conduct of Animal Experiments, etc. in the College, and compliance with the Care and Management Standards and the present Regulations, and report

the self-evaluation of the self-inspection to the President.

(2) The President shall, as far as it is feasible, endeavor to have the self-evaluation in the preceding section verified by a third party, independent of the College.

[Disclosure of Information]

Article 23

The President shall publicly disclose information regarding the Animal Experiments, etc. in the College (regulations related to Animal Experiments, etc., the status of breeding and maintenance of Experimental Animals, and the results of the self-inspection and -evaluation and the verification, etc.) once a year through website, etc.

[Penalty]

Article 24

(1) The President shall immediately halt Animal Experiments by those who have violated the present Regulations and prohibit them from conducting Animal Experiments for a certain period of time.

(2) The President shall be able to seek advice from the Committee on the imposition of penalty.

[Compliance]

Article 25

Concrete methods for proper conduct of Animal Experiments, etc. and proper breeding and maintenance of Experimental Animals in the College shall be governed by and construed under the "Guidelines" .

[Miscellaneous Provisions]

Article 26

The Committee shall separately identify matters to be deliberated by the Committee and specify a form to be used to apply for the Committee' s deliberations.

Article 27

The President shall separately stipulate necessary provisions other than those in the present Regulations, following deliberations by the Committee.

Article 28

The revision or abolition of the present Regulations shall be undertaken by the Board of Directors' Meeting, following deliberations by the Professors' Meeting.

[Supplementary Provision]

The present Regulations shall come into effect beginning October 1st, 2007.

[Supplementary Provision]

This revision shall come into effect beginning December 15th, 2009.

[Supplementary Provision]

This revision shall come into effect beginning February 7th, 2012.

[Supplementary Provision]

This revision shall come into effect beginning September 21st, 2017.

[Supplementary Provision]

This revision shall come into effect beginning April 1st, 2018.