#### POLICY AND PROCEDURES FOR RESEARCH ETHICS APPROVAL AND PLAGIARISM POLICY

Without ethical culture, there is no salvation for humanity.

-Albert Einstein





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#### 1. Introduction: Research Integrity and Preventing Academic Misconduct

The objective of East West University (EWU) is not only to provide high quality comprehensive educational and career enhancing training that are compatible with the changing times and the demands of the marketplace, but also to make use of, and to encourage a wide range of research with which staff members and students can engage. Research integrity and preventing misconduct must be at the core of high quality research and good science. All research work at EWU should adhere to the highest ethical standards; any research work carried out at EWU which has significant ethical implications will have to be submitted for independent ethical review. In any research study involving people, their datas, or tissue, the dignity, rights, safety and well-being of participants must also be significant considerations. Research involving animals, pathogens and genetically engineered micro-organisms should also go through a sustained and intensive review process. Ethical scrutiny in all such cases will be essential. Such scrutiny is intended to assist in protecting research participants from harm, but a further important consideration is that the researcher is facilitated and supported in carrying out research which has the potential to be of benefit for society. In other words, the scrutiny must be carried out efficiently, and according to the highest possible professional and ethical standards.

Another and related ethical concern is to ensure originality and to prevent plagiarism in academic work. To these end, faculty members as well as students will have to familiarize themselves with the plagiarism policy of the university and learn how not to get involved in any kind of practice that makes them vulnerable to charges of academic dishonesty and misconduct.

The guidelines given in this document describe the overall principles and procedures by which the University will make ethical judgments on research investigations that involve human beings as participants or animals, pathogens and genetically engineered microorganaisms, and judge cases brought before it of plagiarism and academic dishonesty. In applying these principles, a balance has to be found. On the one hand, the University requires that appropriate safeguards are in place, but on the other, and of course, it does not want to impose unnecessary regulatory barriers that would prevent research from taking place.

Finally, this document comes with appendices and templates that can be used by faculty members and students when research work is to be carried out or writing produced that need to conform to the highest ethical standards.

#### 2. EWUREC and Forms of Ethical Review

- **2.1** Research projects that will need the approval of the East West Research Ethics Committee (EWUREC) include the following:
- i) Research involving human participants, their personal data and tissues collected,
- ii) Research that poses a reputation risk to the University or its researchers,
- iii) Externally funded research that need to meet the standards expected of funding agencies,
- iv) Evaluation studies involving human participants,
- v) Research which does not involve human participants but which is high risk, or which has the potential for negative effects on the environment or on society,
- vi) Research that involves experimentation on animals,
- vii) Research involving tissues from protected animals obtained from a third party who must ensure that the material was obtained legally and ethically before transferring any

materials to EWU.

- viii) Research involving pathogens and other microbes that may severely impact on nature or could be harmful for individuals.
- ix) Research involving genetically engineered microorganisms that may affect the environment.

#### 2:2 Ethical Review and Documentation in Cases of Plagiarism

Research projects will need to have requiste documentation and acknowledgement when they involve;

- i) Use of published or unpublished sources that need to be acknowledged,
- ii) Use of copyright materials,
- iii) Interaction with human participants from outside the university who have been interviewed and quoted, and whose ideas have been sought and used in the writing

#### 2: 3 Ethics of Student Research

Student research is expected to meet the same ethical standards as research conducted by staff members but is proportionate to the level of risk of the project.

#### 2:4 Light Touch Reviews

- i. "Light touch" reviews may be conducted when the potential of the research to cause harm to participants and others and to the environment are not deemed significant or high risk.
- ii. Researches that do not involve direct participation of living human persons may also be eligible for light touch reviews, unless they significantly affect living persons or the environment.

#### 2:5 Exclusion of Ethics Review

Ethics review is generally not required for projects/researchers that do not involve human or living animal subjects or handle sensitive materials, and for those that draw on published and unpublished material already in the public domain and out of copyright. Such review is also not necessary where the people involved do not contribute to the actual findings. Neverthless, acknowledgement is an act of courtesy even in such cases.

#### 3. Principles and Procedures for Obtaining Ethical Approval

For all research projects covered by this guideline, approval must be given by the EWU Ethics Committee before work commence. The primary task of the Research Ethics Committee lies in the ethical review of research proposals and their supporting documents, with special attention given to the nature of any intervention and its safety and protection for participants and researchers, to informed consent processes and documentations, and to the suitability and feasibility of the proposal.

A decision by the EWUREC to give ethical approval to a research project does not imply an expert assessment of all possible ethical issues, or of all possible dangers or risks involved; nor does it detract in any way from the ultimate responsibility which researchers must themselves have for all research which they carry out, and for its effects on human participants.

The committee will address ethical matters information supplied by the researcher. Any Information submitted is expected to be properly researched, full, truthful and accurate.

Any decision to change the University's policies or procedures for ethical review of research does not imply that previous policies or procedures were inappropriate and any such changes do not invalidate ethical approval that has been given.

The following is a step-by-step guide to the procedures to be followed:

- Submission of Ethical Application Form and other application paper work (e.g. consent form and participant information sheet, consent of chair of department) to Member Secretary. (see appendices)
- ii. The EWUREC shall make decisions at scheduled meetings at which a quorum is present (see 5.0); regularly scheduled meeting dates shall be announced in advance.
- iii. In order to respond to applications within 8 weeks, applications can be considered between meetings but the Chair is responsible for ensuring that an appropriate level of scrutiny informs the decision.
- iv. Any decision made by the Chair should be on the basis of detailed scrutiny by at least two members of the Committee. The decision will be reported to the next available meeting of the Committee for ratification.
- v. In certain circumstances a 'light touch review' of ethics applications may be appropriate; this means that the EWUREC Chair may approve the project without sending the application for further scrutiny. The Chair's decision will require ratification by the EWUREC at its next meeting.
- vi. In respect of a proposal being put forward by a member of the Reviewing Committee, those involved in the research submission should withdraw from the meeting while the submission is being considered.
- vii. Observers, who should play no part in the Committee's deliberations, may be invited, subject to the prior agreement of members. Observers should be allowed only if they accept in writing the same duty of confidentiality as the Committee members.
- viii. Meetings shall be minuted and there shall be an approval procedure for the minutes.
- ix. EWUREC members shall keep a register of all proposals that come before them. The registers shall form the basis of EWUREC's annual report.
- x. EWUREC should always be able to demonstrate that they have acted responsibly in reaching a particular decision. When EWUREC rejects research proposals, the reasons for that decision shall be made available to the applicants and, where appropriate, opportunities for resubmission provided. Where approved, the basis for that decision should be recorded.
- xi. The EWUREC shall consider valid applications in a timely manner. A decision should be reached and communicated to the applicant, wherever possible, within 8 weeks of the submission of a valid application.
- xii. Once an application is approved, the investigators must not deviate from it as approved. The Chief Investigator must notify the committee of any proposed amendments and allow the committee time to consider and approve them beforehand. Similarly, if there is any change to the personnel involved in the investigation, the committee should be asked to approve this amendment and should be provided with details of the qualifications and experience of the new investigator(s).
- xiii. Where the application is not approved, this decision, and the reasons for reaching that decision, will be communicated to the Chief Investigator in writing. The Committee may give guidance as to modifications that the applicant may wish to consider with a view to making a new application.
- xiv. Where significant amendments are made to the research protocol, the researcher is responsible for notifying the EWUREC of these amendments for approval.
- xv. If further information or amendments are sought for a particular application from the relevant investigators, the member secretary may be delegated authority by the committee to consider the additional information or changes made, and either to approve it on behalf of the committee, or to

- return it to the committee for further consideration. The information and amendments must be provided before ethical approval can be given. Any decisions will be reported to the next meeting of the Committee for endorsement.
- xvi. Any adverse events which occur as a result of the research should be notified to EWUREC.
- xvii. Review by Chair's action may be undertaken in the case of staff project proposals which are being submitted for funding from major funding bodies, where ethical approval is a prerequisite. In such cases, full review will be postponed until the outcome of the funding bid is known, but must then be carried out in line with the requirements of both the University and the funding body.
- xviii. Where the research is terminated prematurely, a report shall be provided to the relevant committee within 15 days, indicating reasons for early termination.

#### 4. Obligations of Research Teams

There is an obligation on all investigators to protect participants, and potential participants, from possible harm and to preserve their dignity and rights.

- i. Investigations should not involve any significant risk to the physical or mental well-being of the participants.
- ii. Confidentiality and privacy of participants must be maintained.
- iii. An appropriate person (the Chief Investigator or equivalent) must take responsibility for the investigation; in particular, in the case of student investigations, the student's supervisor is responsible for the investigation, and must act as the Chief Investigator.
- iv. Transparency and openness, including accurate reporting of data.
- v. Investigations which duplicate other work unnecessarily, or which are not of sufficient standard to make a useful contribution to existing knowledge, are in themselves unethical.
- vi. Investigators should justify the number of participants chosen for each study.
- vii. Consent by or on behalf of participants in an investigation.
- viii. Protecting a person's right to autonomy and dignity, including, but not confined to, bodily integrity, privacy and confidentiality.

#### 5. Complaints

No appeal can be made against the decision of the Research Ethics Committee. Complaints on procedural grounds should be sent to the Vice Chancellor. The Vice Chancellor will place it to syndicate.

THIS FORM MUST BE COMPLETED, SIGNED, DATED AND ATTACHED TO EACH RESEARCH WORK/
THESIS/DISSERTATION TASK THAT YOU CONDUCT AS PART OF ACADEMIC ACTIVITIES OR AN INDIVIDUAL
RESEARCH ACTIVITY

1.	ADMINISTRATIVE DETAILS
	Title of the Research:
Stu Dep	me of the Student/Researcher: dent ID number [If applicable]: partment: ulty:
Dat	Date submitted:
Cou	urse Instructor /Research Guide/ Dissertation supervisor:
Plag ack any out	compulsory student /researcher declaration giarism refers to using another person's intellectual work and presenting it (without apposite nowledgement of the author or source) as one's own work. Plagiarism is an academic misconduct. If reasonable ground is found for believing that plagiarism has taken place, disciplinary procedures as lined in the East West University Core Policy for Academic Honesty and Preventing Plagiarism will be cituted.
PLE	ASE TICK TO INDICATE THAT YOU HAVE SATISFIED THESE REQUIREMENTS
	I have read the East West University Core Policy for Academic Honesty and Preventing Plagiarism and the relevant referencing guides.  I understand the consequences of committing academic misconduct as outlined in the abovementioned policy.
	This academic work /thesis/ dissertation/ assignment is my own work.  I have not previously submitted this or a version of it for assessment in any other unit of study at the University or any other institution without having obtained proper approval of the concerned guide/authority/teacher.
	I have taken proper and reasonable care to prevent this academic work /thesis/ dissertation/ assignment from being copied by others for the purpose of academic uses.
	For the purpose of proper assessment of my work, I give permission to act according to University policy and practice to reproduce this academic work and provide a copy to another member of staff for the purpose of cross-checking and moderation, and to take steps to authenticate the assessment,

Signature of the Student/Researcher:

work on a database for future checking.

Date:

which includes submitting a copy to a checking/detection system that in turn may retain a copy of this

# THIS FORM MUST BE COMPLETED, SIGNED, DATED AND ATTACHED TO EACH RESEARCH WORK/ THESIS/DISSERTATION TASK THAT YOU CONDUCT AS PART OF ACADEMIC ACTIVITIES OR AN INDIVIDUAL RESEARCH ACTIVITY

#### 1. ADMINISTRATIVE DETAILS

Date:

	Title of the Research:
Stude	e of the Student/Researcher: ent ID number [If applicable]: rtment: ty:
Date	due: Date submitted:
Cours	se Instructor /Research Guide/ Dissertation supervisor:
Intellicreat and i copyr creat owne  I o I tl si	MPULSORY STUDENT /RESEARCHER DECLARATION  ectual property refers to intangible properties, which are creation of 'intellect' or 'mind' of the ors. Such creations can be literary or artistic works, scientific product or process, or symbols, names mages used in commerce. The just-mentioned intellectual creations are protected by laws, namely right, patent, trademark or trade name etc. respectively. Management and licensing of intellectual ion of the students/researchers/staff of the East West University is regulated by the Core Policy for orship and management of Intellectual Property adopted by the University.  PLEASE TICK TO INDICATE THAT YOU HAVE SATISFIED THESE REQUIREMENTS  have read and fully understood the East West University Core Policy for ownership and management of Intellectual Property.  am fully aware of the fact that rights of any intellectual creation, which has been supported by niversity grants or university resources, shall be owned by university.  am fully aware of the fact that if intellectual property right over any intellectual creation is owned by the university further decisions concerning licensing and management of that intellectual property hall be made by the University.  am aware of the fact that copyright and moral right over dissertation/thesis that I wrote as part of my cademic programme shall be owned by me.
□ I	am fully aware of the fact that any of my scientific creation or innovation, which has resulted from esearch funded jointly by University, and any other third party, the ownership of intellectual property ver the innovation will be governed as per agreement amongst the university, me, and the concerned nird party.
ir	am fully aware of the fact that during my research activities, if I need to use other people's stellectual creation, I must acknowledge the source and receive prior permission of the original stellectual property rights owner, if required.
Signa	ture of the Student/Researcher:



#### Appendix III: Intellectual Property and Stand of East West University

Intellectual property [hereinafter also referred to as IP] refers to intangible properties,

which are creation of the 'intellect' or the 'mind' of the creators. Such creations can be literary or artistic works, scientific products or processes, or symbols, names and images used in commerce. The above-mentioned intellectual creations are protected by laws, namely copyright, patent, trademark or trade name etc. respectively.

As a knowledge-producing hub, the higher education institutes or universities or research organizations are supposed to be concerned with specific policies regarding copyright, patent, and in some cases trademarks or trade-names. East West University also takes seriously its concern in adoption and compliance with IP policies. In this regard, the university shows its commitment to respect and observe the existing intellectual property laws of Bangladesh as well as the 'IP Policy for University Manual for IP Management at University' prepared by the Higher Education Quality Enhancement Project (HEQEP) of the University Grants Commission of Bangladesh.

#### University Core Policy for Ownership and Management of Intellectual Property:

- 1. Rights over intellectual property created by any student, university personnel, researchers, staff, project staff, visitors and others, using grants or funds or using the university's resources or facilities, or created pursuant to a written agreement with the university, shall be owned and managed by it, if no contrary cataract or agreement exists between the university and the concerned creator or inventor. However, the above mentioned university ownership of the intellectual creations supported by the University shall not hinder the concerned inventor / creator /scientist/researcher:
  - i. to use their 'moral rights' over the creations.
  - ii. to use their intellectual creations for their research or academic activities in the University
- 2. In cases of creations or inventions supported partially by university resources, the IP rights over the creation will be partially and proportionately owned by the university.
- 3. In cases of collaborative innovation funded by the university and research conducted by any individual researcher, whether as a part of the academic program or any individual research activity, the cost of patent filing will be borne by university. In cases of collaborative innovation funded by university and any other third party, the cost of patent filing will be covered as per the concerned agreement.

- 4. In cases of any creation or invention of any student, university personnel, researchers, staff, project staff which came into existence not as a result of using any resource or fund or official assistance of the university, the IP rights over the creation will not be owned or claimed to be owned by the university.
- 5. In case of any creation or invention of any student, university personnel, researchers, staff, project staff supported jointly by the university and any third party, the IP rights over the creation will be governed as per the agreement between the university, the inventor/creator[s], and the concerned third party [ies].
- 6. Copyright on thesis/ dissertation created as a part of academic programs of the students/researchers/creators will be owned by the concerned student/researcher/creator. In this connection, the owner of the Copyright shall grant royalty-free permission to the university to reproduce and distribute copies of the concerned creation for teaching and research purposes both within and outside the university.
- 7. Any decision concerning licensing and management of the intellectual property owned by the university or any decision concerning dispute as to ownership of any intellectual creations of any student, university personnel, researcher, staff, project staff, and visitor, shall be made or resolved by the University IP Cell, which will be guided by the Vice Chancellor of the university.
- 8. The University IP Cell shall make decisions in line with the existing intellectual property laws of Bangladesh, University core IP policy and the 'IP Policy for University Manual for IP Management at University' prepared by the Higher Education Quality Enhancement Project (HEQEP) of the University Grants Commission of Bangladesh.
- 9. The University IP Cell shall work for building awareness among students, university personnel, researchers, staffs, project staffs, visitors and others regarding University core IP policy and other relevant rules, laws, or policy documents.



# Appendix IV- No Objection Certificate for Publication of Dissertation/ Thesis/ **University Publications**

1. Name of the Applicant:	
2. Age (in Years):	
3. Permanent Postal Address:	
4. Postal Mailing Address:	
5. Email Address:	
Phone:	Mobile:
6. Title of the Dissertation (In Capital Letters):	
7. Name of the Department:	
9. Month & Year in which the Degree was awarded	:
10. Name of the Instructor:	
11. Other Information: (if any):	
Department/IP Cell has no objections in regards to	the publication of the work mentioned above

Signature of the Applicant Signature of Head of Department

Signature of Secretary IP Cell



#### **Appendix V- Deed of Assignment**

Recital: Students/inventor/creator/university personnel enrolled/ appointed by the University are bound by the university's rules and regulations, especially those framed under the IP Policy of university. Pursuant to the IP Policy, Students/ Inventor/ creator/ university personnel involved in the research and development, will assign ownership and transfer all the rights and privileges subsisting in the Intellectual Property (IP) or potential Intellectual Property generated and created by the use of resources / facilities of the university and affiliates of the university and its affiliates. If and when the Intellectual Property under this deed of assignment is commercialized, the net revenue generated from the licensing and technology transfer of IP owned by the university would be shared as per the IP Policy of the university.

This D	eed of Assignment is entered into on this day of_		
BETWI	EEN		
Mr. / [	Mrs. / Ms	_ (Name) aged about	years (age)
	(nationality),	_ (designation) having	permanent address at
	and currently residing at _		
	Assignor), which expression shall, unless repugnant in first part.	the context, include its	successors and assigns,
AND			
	West University, an Institution declared under the, Bangladesh (hereinafter referred than the context, include its successors and assigns, or	o as 'Assignee'), which	•
	THEREFORE, IN CONSIDERATION OF THE MUTUAL PRAINED, THE PARTIES DO HEREBY AGREE AS FOLLOWS:	OMISES, COVENTS AND	TRANSACTIONS HEREIN
1 "Δ	.SSIGNMENT"		
a) b)	<ul> <li>The Assignor hereby irrevocably assigns and transfe with respect to Patent /Design Application No</li> <li>This assignment is further supported by the term university.</li> </ul>	dated ns and conditions laid	_ filed by the Assignor. out in the IP Policy of
c)	By this Assignment the complete ownership of the Patent /Design Application rests with the universal However, this assignment is subject to further most between the parties.	sity for Bangladesh and	overseas jurisdictions.
2 (	OVENANTS		

a) The Assignor has full right and absolute authority to assign the said Patent /Design Application in

The Assignor and the Assignee both hereby covenant as follows:

the manner aforesaid.

. b)	The inventions above-mentioned are made during the course of research done in university, in the Department of		
c)		s free and clear from all encumbrances and claims.	
d)	long as the said Patent /Design Appl	Id and use the said Patent /Design Application exclusively so lication exists, and earn and enjoy the profit or income there interruption on the part of the Assignor or persons claiming tions.	
e)	The Assignor will execute any further perfectly assuring the said Patent /De	her agreements as may be required for further and more esign Application unto the Assignee.	
IN WIT	NESS WHEREOF the Parties hereof hav	re put their hands the day and year first herein written.	
Assigno	or:	Assignee:	
<u>Signatı</u>	<u>ure</u>	<u>Signature</u>	
Name:		Name:	
Design	ation:	Designation:	
Date:		Date:	
Witnes	SS:	Witness:	
<u>Signatu</u>	<u>ure</u>	<u>Signature</u>	
Name:		Name:	
Date:		Date:	



# Appendix VI- Prior Art Search Report Format

Prior Art Search Report Format Date on which search performed: \_\_\_\_\_

Searcher's Name, affiliations:				
1.	Summary of Invention:			
Mc	ore Detailed Description of the Invention:			
	•			
2.	Search Strategy:			
Tal	oulate the search queries and number of hits is given in the table	holow		
#	Search String	Number of Hits		
_				

	1			1	
3.	Results of Search	Results			
#	Reference	Relevant Passage from the Reference	R	televancy	Comments
Pat	ent Search				
Nor	n-Patent Search				
Rel	evancy				
- Pc	ossibly/clearly affe	cts novelty of the invention			
- Pc	ossibly/clearly affe	cts inventive step of the invention			
4.	Observations and	Conclusions:			



#### Ethical use of animals for research

Experimentation involving animals is a crucial part of research to understand human and animal biology, the cellular-molecular-genetic mechanisms involved in healthy and disease affected people and animals, and to discover novel and efficacious drugs for better treatment. However, the use of animals in research is a very sensitive and intricate topic and requires critical thought and judgement. Therefore, all studies involving animals must obtain approval from the 'East West University Research Ethics Committee' (EWUREC). The use of animals for research is justifiable if the study has the potential to generate new knowledge or may be beneficial for human or animal well-being.

To ensure that the care and use of animals is conducted in compliance with national and international standards, the EWUREC applies a set of guidelines based on 'The Three R's' i.e. 'Replacement, Reduction and Refinement' (Russell WM, Burch RL. *The Principles of Humane Experimental Technique*. London, Methuen, 1959) which is a globally accepted principle governing the ethical conduct of research involving animals.

#### The guidelines for conducting research on animals in East West University are stated below:

- 1. Before investigators begin their activities, 'Application for Approval of Animal Use Protocol' must be submitted to the EWUREC for ethical assessment.
- 2. The objective of the study should be clearly stated in the application showing the significance of the study in generating new knowledge, or the benefit of the study for human and animal welfare.
- 3. The necessity to use animal models instead of alternative research models which do not require living animals (e.g. *in vitro* or *in silico* models) should be justified.
- 4. Least number of animals, to obtain quality results (statistically significant), should be used for the study.
- 5. The selection of the animal species for the study should be justified showing why this species is the most appropriate in the context of the scientific objectives.
- 6. Suitable and adequate methods to reduce, prevent and mitigate pain or suffering of the animals throughout the study must be clearly stated.
- 7. The endpoint of the study should be pre-defined and the animals should be euthanized once the endpoint is reached.
- 8. Any deviation from the above-mentioned guidelines must be justified.
- 9. Any changes to the approved 'Animal Use Protocol (AUP)' (procedure, species, personnel, etc.) must be documented through submission of an Amendment Form and approved by the EWUREC before implementation.
- 10. The investigators and/or responsible must maintain records that will permit the EWUREC to verify that the well-being of animals has been monitored as mentioned in the 'Application for Approval of Animal Use Protocol'.



#### Appendix XI: Application for Approval of Animal Use Protocol (AUP)

1.	Please refer to the EWU Policy at <a href="http://www.ewu">http://www.ewu</a>
2.	A complete description of the proposed animal use and care will be needed. Incomplete application will be returned to the applicant resulting in delay in the granting of approval.
3.	Hand-written documents will not be accepted for review.
4.	Submission is to be made on the prescribed form electronically or by email, and accompanied by a signed hard copy. It should be mailed to:

- 5. Any changes to the approved Animal Use Protocol (AUP) (procedure, species, personnel, etc.) must be documented through submission of an Amendment Form and approved by the EWUREC before implementation.
  - a) Any **SIGNIFICANT** changes to an approved project in progress (e.g. the inclusion of new procedures involving potential pain, surgery or anaesthetization, or a change in Principal Investigator or course director) require ethical review (and approval) from EWUREC prior to initiation.
  - **b)** Any NON-SIGNIFICANT changes to an approved project in progress (e.g. increase in number of animals used within 10%, changes in location of experiment or changes in personnel) require administrative/light touch review (and approval) prior to initiation.
- 6. Approval of AUP will be for a <u>maximum of 3 years</u>. Following this, a new application is required.



Date received:

**Application No.:** 

# **East West University**

# **Animal Use Protocol (AUP) Application: Project Summary**

Project title		
Project duration		
Keywords (maximum 5 words)		
Objective of the project	Research	
	Breeding protocol	
	Teaching	
	Pilot study	
	Conservation of species	
	Others (Please specify below)	
Describe the project objectives in brief (600 characters maximum)		
Describe the possible benefits to science, humans or animals from this project (600 characters maximum)		
Mention the species and number of animals required for the study		
Mention the possible negative impacts on the animals and the fate of the animals at the end of the study		
Application of the 3R rules		
1. Replacement (600 characters maximum)		
Justify why animal model must be used rather than models that do not require animals (in vitro, in silico etc.)		
2. Reduction (600 characters maximum)		
Justify how the number of animals required for the study are kept minimum		

3. Refinement (600 characters maximum)
Justify the choice of animal model(s) for the study and show how it is the most refined for the study objectives
Pain management (600 characters maximum)
Describe the methods to reduce, eliminate or prevent pain and other sufferings of the animals



Office Use Only
Date received:
Application No.:

# **East West University**

#### **Animal Use Protocol (AUP) Application**

This completed Animal Use Protocol (AUP) Application needs to be submitted to and approved by the East West University Research Ethics Council (EWUREC) prior to commencement of the animal study.

#### SECTION 1a: PRINCIPAL INVESTIGATOR/COURSE INSTRUCTOR

Principal Investigator here refers to the main person responsible for the care and use of animals in this protocol (i.e. not necessarily be the grant holder)

Full Name:		Tel:	
Academic Title:		Fax:	
Department:		Mobile:	
Email:		1	
Experience or trained working with animals?	Yes (	provide evidence) *	No #
*Evidence includes certificate of training, publicat	ion involvi	ng animal studies	
#Provide tentative date for training			

#### **SECTION 1b: DESIGNATED EMERGENCY CONTACT(S)**

Full Name	Mobile phone	Email

#### SECTION 1c: CO-INVESTIGATOR(S)/RESEARCH ASSISTANTS

List the names of all other individuals (besides the PI) authorised to conduct procedures involving animals under this protocol:

Full Name:	Tel:				
Academic		Fax:			
Department:		Mobile:			
Email:		l			
Experience or trained working with animals?	Yes (ı	(provide evidence) * V No #			
*Evidence includes certificate of training, publicati	on involvi	ng animal studies			
Provide tentative date for training					
Full Name:		Tel:			
Academic Title:		Fax:			
Department:		Mobile:			
Email:		I			
Experience or trained working with animals?	Yes (	provide evidence) *	No #		
*Evidence includes certificate of training, publication of training, publication of training	on involvi	ng animal studies			
Full Name:		Tel:			
Academic Title:		Fax:			
Department:		Mobile:			
Email:					
Experience or trained working with animals?	Yes (	provide evidence) *	No #		
*Evidence includes certificate of training, publication	on involvi	ng animal studies	<u> </u>		
<sup>‡</sup> Provide tentative date for training					

# SECTION 2: PROJECT TITLE/PROJECT TYPE/PROJECT COMMENCEMENT

Project Title (In lay terminology, please give a descriptive title of your research project or course taught):

······································				
Please specify the type of	of AUP application ( $oxtime X$	all that apply):		
Research		Others		
Pilot study		Please specify:		
Breeding protocol				
Teaching				
Type of application:				
First submission				
Modification (Registration no.):				
Proposed length of study	y using animals:			
Start date:		End date:		
SECTION 3: FUNDING				
Grant type:				
Others:				

· Funding status:	Date awarded:
	ords or less in simple language. Outline the objectives of the project splicance of the expected results to human and/or animal health.
Please cite three (3) recent referen	ices related to the proposed study.
REFERENCES:	

the

# SECTION 5 (a-d): JUSTIFICATION OF ANIMAL USE AND THE THREE R's

The EWU Research Ethics Committee (EWUREC) requires "that animals should be used only if the researcher's best efforts to find an alternative have failed". The three R's (Replacement, Reduction and Refinement) are the cornerstone of ethical animal research, and EWUREC requires investigators to implement the 3R's when they are preparing to use animals for scientific or teaching purposes.

Please cite up to three (3) relevant references for Sections 5.a and 5.c.

<b>5.a.</b> Are there alternative non-animal methods used by other investigathis AUP (e.g. tissue cultures, <i>in vitro</i> monoclonal antibody, compute these alternatives are not appropriate for this project and whe experiments?	er model, etc.)? If yes, describe why
References:	
1.	
2.	
3.	
<b>5.b</b> How is the use of the least number of animals to be ensured?	

<b>5.c</b> What characteristics of this/these species make them appropriate for the proposed study? The include structural, behavioural, physiological, biochemical, or other features or considerations (availability of species-specific reagents, or the use of well-established model) which make the compatible with the research objectives. <b>Cost is not a primary consideration</b> .	such as
<b>5.d</b> If animals are housed for more than 24 hours in the animal facility, please specify the environment provisions and any housing restrictions required, i.e. social housing, specific materials objects, etc.	
SECTION 6: EXPERIMENTAL OBJECTIVES AND DESIGN	
<b>6.</b> a Describe the objectives of the experiments.	

**6.b** Describe the experimental design; what will be done to the animals in a step-by-step description when applicable and the statistical techniques to be employed. Where possible, use charts and diagrams (may be added as appendices) to show relationships between different activities and demonstrate the distribution of animal numbers in different procedures. Please cite up to three (3) relevant references related to the proposed study.

Pre-treatment management
Experimental design
REFERENCES:
1.
2.
3
<b></b>
<b></b>

SECTION 7: SURGICAL/NON-SURGICAL INTERVENTION AND PAIN MANAGEMENT **7.a** Give details of the surgical procedure and pain management during, and/or after surgical intervention in live animal studies. Please specify anesthetic, analgesic, antibiotic and other drugs used in pain management. **7.b** Give details of the **non-surgical procedure** and pain management during, and/or after the procedure in live animal studies. Please specify the anaesthetic, analgesic, antibiotic and other drugs used in pain management.

**7.c** List <u>all</u> procedures, manipulations, and/or measurements that will be performed on the animals. Include post-operative care, specify analgesics & anaesthetics with dosages and routes of administration, and special procedures used.

PROCEDURES  Including physical or chemical restraint, blood sampling, injection of compounds, e.g. antibiotics, chemicals, etc.	Frequency (no. of times each animal is subjected to the same	No. of animals involved	Pain/distress classification (C, D, E)	Anaesthetics/ analgesics Antibiotics
antibiotics, thermicals, etc.	procedure)			Drug, dosage, route

Ind	PROCEDURES  cluding physical or chemical restraint, blood sampling, injection of compounds, e.g. antibiotics, chemicals, etc.	Frequency (no. of times each animal is subjected to the same procedure)	No. of animals involved	Pain/distress classification (C, D, E)	Anaesthetics/ analgesics Antibiotics  Drug, dosage, route

## **SECTION 8: CLASSIFICATION OF PAIN/DISTRESS**

Please check one  $\boxtimes$ . Information and examples on the classification can be obtained from these websites:

http://tulane.edu/asvpr/iacuc/hsc/upload/3-USDA\_Classification.pdf http://www.esf.edu/animalcare/documents/USDApainLevels.pdf

□с	<u>Classification C:</u> Animals upon which teaching, research, experiments, or tests will be conducted involving no pain, distress, or use of pain-relieving drugs.
□ D	<u>Classification D:</u> Animals upon which experiments, teaching, research, surgery, or tests will be conducted involving accompanying pain or distress to the animals and for which appropriate anaesthetic, analgesic, or tranquilizing drugs will be used.
E	Classification E*: Animals upon which teaching, experiments, research, surgery, or tests will be conducted involving accompanying pain or distress to the animals and for which the use of appropriate anaesthetic, analgesic, or tranquilizing drugs will adversely affect the procedures, results, or interpretation of the teaching, research, experiments, surgery, or tests.

\*An explanation of the procedures producing pain or distress in these animals and the justification for not using appropriate anesthetics, analgesic or tranquilizing drugs must be provided below.

#### **SECTION 9: ANIMAL USE**

9.a List ALL ANIMALS involved in the study.

Species/Strain	Quantity	Weight/Ag e	Gender	Accommodation (Building & Room)	Experimental Area (Building & Room - surgery and/or procedure rooms)

<b>9.b</b> Explain how the total number of animals to be used was determined:		

#### **SECTION 10: SOURCE OF ANIMALS**

Please specify details of the animals in table below and indicate if health certificate (or equivalent) is available for the animals.

Species	Source/Supplier	Address/Location	Phone number	Health Certificate	Mode of transportation

# SECTION 11: EXPERIMENTAL AND/OR HUMANE ENDPOINT

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When experimental procedures produce animals that may become ill, it is necessary to define an endpoi	nt
to ensure that an experimental animal's discomfort, pain and/or distress is terminated, minimized	or
reduced.	
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<b>11.a</b> Indicate any clinical conditions or abnormalities expected or that could arise as a result of the proposed study or teaching exercise (e.g. behavioural changes such as increased grooming, vocalization or postural changes, or physical abnormalities such as anorexia, dehydration, diarrhoea, etc.)			
	_	physiological signs, list the criteria that we teaching exercise or experiment, or to te	
SECTION 12: ANIMAL DISPOSAL Indicate how animals are to be disposed	of after completi	on of the project/research.	
Euthanasia [ $\boxtimes$ select preferred technique	ue(s)]:		
☐ Anaesthetic overdose	(specify agent:	ketamine (i.p, 150mg/kg) & diazepam (i.p,15mg/kg)	)
☐ Cervical dislocation*	•		
☐ Exsanguination (under anaesthesia)			
☐ Decapitation *			
$\square$ CO <sub>2</sub>			
Others (Specify)			
* Provide justification for using physical r	methods of eutha	nasia, and state the location that it is dor	ie:

Method of carcass disposal (Include method of disposing contaminated organs/tissues):		
	OUS AGENTS & MATERIALS erial to be used and hazardous dosage:	
<b>NOTE:</b> If a Biosafety a must be submitted to	nd/or Radiation Safety risk assessment is required, a separate application the relevant bodies.	
Potential Hazard to <b>An</b>	imals	
	IIIIIII	
Biological		
Chemical		
Carcinogen		
Drug		
Ionizing Radiation		
Other (i.e. allergen)		
Potential Hazard to <u>Hu</u>	<u>mans</u>	
Biological		
Chemical		
Carcinogen		
Drug		
Ionizing Radiation		
Other (i.e. allergen)		

Describe potential health risks to animals or humans. Specify any special animal care required because of the hazard(s) involved. Specify precautions to be taken by personnel. Specify any special containment requirements (i.e. storage, waste/disposal requirements, etc)

# **SECTION 14: SIGNATURES**

Your signature indicates that (check each box where applicable before signing):

		Animals used in this research or teaching project will be cared for in accordance with the
1		principles contained in Guide for the Care and Use of Laboratory Animal (8th Edition),
	until the Bangladesh Code of Practice for the Care and Use of Animals for Scientific	
		Purposes is made available.
		https://grants.nih.gov/grants/olaw/Guide-for-the-Care-and-Use-of-Laboratory-
		Animals.pdf
2		Alternative procedures that do not involve the use of living animals has been considered.
3	П	Minimum number of animals will be utilized that is consistent with objectives of
		described research/teaching program.
4		The species that you propose to use.
5		You will use techniques and facilities that are in accordance with the <b>Guide for the Care</b>
		and Use of Laboratory Animal (8th Edition)
		https://grants.nih.gov/grants/olaw/Guide-for-the-Care-and-Use-of-Laboratory-
		Animals.pdf
6		You will notify the EWUREC of any revisions to this AUP.
7	П	You will keep copies of all approved AUPs, revisions and amendments in an accessible
		file.
8		This project has been reviewed for scientific merit.
9		Pharmaceutical grade chemicals are used, when available, for animal-related procedures.
10		Experimental animals are housed in Animal Facility of the respective department of
	EWU.	
		Animals from external sources need to be quarantined or housed according to the
		Standard of Procedure for Quarantine of Laboratory Rodent and Rabbit.
		Experimental animals are housed in External Animal Facilities.
11		Animals from external sources need to be quarantined or housed according to the
		Standard of Procedure for Quarantine of Laboratory Rodent and Rabbit.
	1	

AUP form completed by

**Email address** 

Co-Investigator's signature	Date signed	
Principal Investigator's signature and stamp	Date signed	
Dean of Faculty/Head of Department' signature and stamp	Date signed	
FOR EWUREC OFFICE USE ONLY  Decision of East West University Research Ethics Comm	nittee (EWUREC)	
Approved		
Approved Pending Minor Modification		
☐ Withhold Approval Pending Justification and Clarification		
Rejected		
This AUP form has been reviewed by the EWUREC and t information provided.	the decision has been made based on the	
Signature of EWUREC Chair	Date	
Date of AUP Approval:		