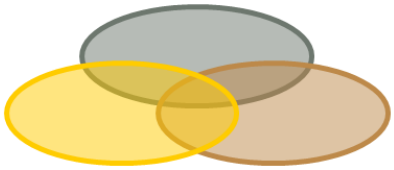
POLICY AND PROCEDURES FOR RESEARCH ETHICS APPROVAL AND PLAGIARISM POLICY

Without ethical culture, there is no salvation for humanity.

-Albert Einstein



EAST WEST UNIVERSITY

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[The following documents and appendices have been composed from various sources. Professor M. M. Shahidul Hassan contributed the introductory section. The Appendices were contributed by other members of the committee; they include, Professor Chowdhury Faiz Hossain, Dr. Farhana Ferdousi, Dr. Md. Mahatab Uddin, Dr. Reatul Karim and Dr. Suraia Nusrin. Professor Fakrul Alam coordinated the work of the committee and edited the document.]

CONTENTS

APPENDICES

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. Composition of University Research Ethics Committee

The Executive Director of the Center for Research and Training, EWUCRT, will act as Secretary to EWUREC. The Secretary has the obligation to provide further information to researchers as and when necessary in formulating applications and submitting research papers and relevant documents commissioned by EWUCRT. S/he will be responsible for informing them of the decisions of the EWREC, and where the applications are rejected, or the submissions require to be amended, the reasons for decisions. The Secretary of the EWUREC is responsible for maintaining a record of all submissions made to it and the decisions reached regarding research.

As a minimum, the EWUREC shall comprise of the following:

Role	Affiliation	Nomination	Remarks
Chair	Pro Vice Chancellor		By position
Deputy Chair(03)	One from each Faculty	By the BoT/VC	For five years
Member Secretary	Executive Director of EWUCRT	Ex-officio	
Faculty members (02)	Faculty members	By Syndicate/VC	For three years (extended to maximum 5 yrs)
External Member (02)	BSMMU/DMCH/DU/Social Science Research Council /Govt. Organization /Industry	BSMMU/DMCH/DU/Social Science Research Council /Govt. Organization /Industry	For five years
Co-opted Member (03)	Faculty member	By Chair of EWUREC	For three years

All members of EWUREC are expected to respect the confidentiality of EWUREC's work. University members and external members are required to sign a confidentiality statement on their appointment to the EWUREC. This statement will confirm that they will respect the confidentiality of the EWUREC's work in relation to information of a commercially sensitive nature, or relating to intellectual property rights.

Any member of the EWUREC or anyone asked to provide expert advice to the EWUREC who has an interest which may affect his/her consideration of a particular application or matter is required to declare that interest and, if necessary, should temporarily withdraw from the meeting for consideration of that proposal.

4. The Role of EWUREC

i. To develop, review and evaluate the University's Research Ethics Policy Procedures and guidelines for the EWUREC for the ethical review of all research conducted by academic staff members and students and submit it to Syndicate for approval.
ii. To design application forms and other forms related to submission of research work outcomes and lodging complaints, etc.
iii. To advise researchers, participants in research and faculty members on ethics components of ethics and procedure, to disseminate information on the proper ethical conduct of research, and to provide an avenue for the spread of good ethical practice.
iv. To ensure and monitor best practice of research ethics across East West University.
v. To receive, consider, review and approve applications from members of the Faculty (staff and students) to carry out research which may not directly involve human participants but which raises significant ethical issues relating to its impact on the environment or society.
vi. For multi-faculty research projects, ethical approval is to be sought from the lead investigator/project manager (or where the lead investigator does not sit within, a EWU faculty member).
vii. To encourage a culture within the academic community which recognizes the central importance of ethical considerations in the design and performance of research.
viii. To keep reference manuals and uptodate policy documents in line with international as well as national copyright laws on use of copyright laws, patents, etc.
ix. To have committee members review randomly research procedures, outputs and publications in each academic trimester year.
x. To provide training regarding research ethics, research methodology and research governance. As a condition of appointment, a member should agree to take part in initial and continuing education appropriate to his or her role as a research ethics committee member.
xi. The primary task of EWUREC lies in the ethical review of research proposals and their supporting documents, with special attention being given to the nature of any intervention and its safety and protection for participants and researchers, to informed consent processes and documentation, and to the suitability and feasibility of proposals.
xii. In order for the committee to review research studies requiring ethics approval effectively, a maximum of 05 applications will be considered at each meeting.
xiii. To provide support to the researcher where circumstances might otherwise challenge their academic freedom, or intellectual property rights, or put the researcher in emotional, psychological or physical danger.

5. Quorum of EWUREC Meetings

One- third of the members are eligible to attend.

6. Frequency of EWUREC Meetings

At least one meeting should be held each academic semester.

7. Roles and responsibilities of EWUREC Members

i) Attend all EWUREC meetings

ii) Receive ethics applications for scrutiny and complete and submit scrutinizer reports within agreed timescales.
i) Promote a research ethics culture within the EWU community.
ii) Act as a contact person for staff members and students seeking advice on research ethics.
iii) Contribute to research ethics policy development.
iv) Attend training on research ethics – both internal and external events.
v) Assist in delivering training research ethics to staff members and students.
vi) Contribute expertise on specialist areas of research – for example, research with human tissue, research in the National Health Service, and research involving industries.
vii) Provide advice on research ethics to module leaders delivering research training.
viii) Lead by example of good research practice.

8. 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:

i. 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.

9. 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.

10. 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.

APPENDIX I: PLAGIARISM DECLARATION

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:

Name of the Student/Researcher:
Student ID number [If applicable]:
Department:
Faculty:

Date due: Date submitted:

Course Instructor /Research Guide/ Dissertation supervisor:

2. COMPULSORY STUDENT /RESEARCHER DECLARATION

Plagiarism refers to using another person's intellectual work and presenting it (without apposite acknowledgement of the author or source) as one's own work. Plagiarism is an academic misconduct. If any reasonable ground is found for believing that plagiarism has taken place, disciplinary procedures as outlined in the East West University Core Policy for Academic Honesty and Preventing Plagiarism will be instituted.

PLEASE 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, which includes submitting a copy to a checking/detection system that in turn may retain a copy of this work on a database for future checking.

Signature of the Student/Researcher:

Date:

APPENDIX II: INTELLECTUAL PROPERTY DECLARATION

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:

Name of the Student/Researcher:
Student ID number [If applicable]:
Department:
Faculty:

Date due: Date submitted:

Course Instructor /Research Guide/ Dissertation supervisor:

2. COMPULSORY STUDENT /RESEARCHER DECLARATION

Intellectual property refers to intangible properties, which are creation of 'intellect' or 'mind' of the creators. Such creations can be literary or artistic works, scientific product or process, or symbols, names and images used in commerce. The just-mentioned intellectual creations are protected by laws, namely copyright, patent, trademark or trade name etc. respectively. Management and licensing of intellectual creation of the students/researchers/staff of the East West University is regulated by the Core Policy for ownership and management of Intellectual Property adopted by the University.

PLEASE TICK TO INDICATE THAT YOU HAVE SATISFIED THESE REQUIREMENTS

- ☐ I have read and fully understood the East West University Core Policy for ownership and management of Intellectual Property.
- ☐ I am fully aware of the fact that rights of any intellectual creation, which has been supported by university grants or university resources, shall be owned by university.

- I 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 shall be made by the University.
- I am aware of the fact that copyright and moral right over dissertation/thesis that I wrote as part of my academic 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 research funded jointly by University, and any other third party, the ownership of intellectual property over the innovation will be governed as per agreement amongst the university, me , and the concerned third party .
- I am fully aware of the fact that during my research activities, if I need to use other people's intellectual creation, I must acknowledge the source and receive prior permission of the original intellectual property rights owner, if required.

Signature of the Student/Researcher:

Date:

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 Deed of Assignment is entered into on this ___ day of_____.

BETWEEN

Mr. / Mrs. / Ms. _____ (Name) aged about _____years (age) _____ (nationality), _____ (designation) having permanent address at _____ and currently residing at _____ (hereinafter referred to as Assignor), which expression shall, unless repugnant in the context, include its successors and assigns, of the first part.

AND

East West University, an Institution declared under the UGC Act, …. and having its main campus at _____, Bangladesh (hereinafter referred to as 'Assignee'), which expression shall, unless repugnant the context, include its successors and assigns, of the other part.

NOW THEREFORE, IN CONSIDERATION OF THE MUTUAL PROMISES, COVENTS AND TRANSACTIONS HEREIN CONTAINED, THE PARTIES DO HEREBY AGREE AS FOLLOWS:

1. "ASSIGNMENT"
    a) The Assignor hereby irrevocably assigns and transfers to the Assignee _____the right with respect to Patent /Design Application No. _____ dated _____ filed by the Assignor.
    b) This assignment is further supported by the terms and conditions laid out in the IP Policy of university.
    c) By this Assignment the complete ownership of the Inventions covered under aforementioned Patent /Design Application rests with the university for Bangladesh and overseas jurisdictions.

However, this assignment is subject to further modifications and amendments as may be agreed between the parties.

2. COVENANTS

The Assignor and the Assignee both hereby covenant as follows:

a) The Assignor has full right and absolute authority to assign the said Patent /Design Application in the manner aforesaid.
b) The inventions above-mentioned are made during the course of research done in university, in the Department of_____.
c) The said Patent /Design Application is free and clear from all encumbrances and claims.
d) The Assignee shall be entitled to hold and use the said Patent /Design Application exclusively so long as the said Patent /Design Application exists, and earn and enjoy the profit or income there from and without any objection or interruption on the part of the Assignor or persons claiming under them, for the overseas jurisdictions.
e) The Assignor will execute any further agreements as may be required for further and more perfectly assuring the said Patent /Design Application unto the Assignee.

IN WITNESS WHEREOF the Parties hereof have put their hands the day and year first herein written.

Assignor:	Assignee:
Signature	Signature
Name:	Name:
Designation:	Designation:
Date:	Date:
Witness:	Witness:
Signature	Signature
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: _____

_____

_____

_____

More Detailed Description of the Invention: _____

_____

_____

_____

_____

_____

_____

2. Search Strategy: _____

_____

_____

_____

_____

_____

Tabulate the search queries and number of hits is given in the table below

#	Search String	Number of Hits

3. Results of Search Results

#	Reference	Relevant Passage from the Reference	Relevancy	Comments
Patent Search				
Non-Patent Search				

Relevancy

- Possibly/clearly affects novelty of the invention

- Possibly/clearly affects inventive step of the invention

4. Observations and Conclusions: _____

_____

_____

_____

_____

_____

Appendix VII- Ethics Related to Human Participation in Business and Management Research

Ethical issues are key concern in research as they relate to the integrity of any research and of the disciplines that are involved. Ethical issues arise at a variety of stages in business and management research. In particular, research involving in human participation is of high ethical concern in business and management research. East West University is also concerned about ethics related to the human participation that might arise in the course of conducting research.

According to Diener and Crandall (1978) the following four main areas are of concern in respect to ethical issues:

- whether there is harm to participants;
- whether there is a lack of informed consent;
- whether there is an invasion of privacy;
- whether deception is involved

Harm to participants

While a research has the potential to harm participants, there is a possibility of rejecting such research by people. Harm can be defined under a number of aspects including, physical harm; harm to participants' development or self-esteem; stress; harm to career prospects or future employment; and 'inducing subjects to perform reprehensible acts', as Diener and Crandall (1978: 19) put it.

Lack of informed consent

Within business research ethics, the issue of informed consent is another important concern. The idea is that possible research participants should be given adequate information that may facilitate their decision about whether or not they wish to participate in a study.

Invasion of privacy

This third ethical area relates to the issue of the extent to which invasions of privacy can be accepted. Privacy is very much linked to the notion of informed consent, because, to the degree that informed consent is given on the basis of a detailed understanding of what the research participant's involvement is likely to entail, he or she in a sense acknowledges that the right to privacy has been surrendered for that limited domain.

Deception

Deception arise when researchers present their research as something other than what it is.

University core policy in research involving human participation:

1. According to university policies, prior to conducting any research, the researcher should inform prospective participants about components of the research that might reasonably be expected to influence their willingness to take part in the study.

2. In the case of sensitive research topic, there must be precise instructions for informed consent procedure and consent should be obtained in writing.

3. Researcher should be open and honest about the research, its purpose and applications .

4. Researcher should avoid any kind of deception in their research.

5. Participants should be informed very clearly that they have the right to withdraw at any time without any penalty.

Appendix VIII- Application for Ethics Approval for Human Participant Research

This Application needs to be submitted to, and approved by the East West University Research Ethics Council (EWUREC) prior to commencement of the research related to human participation.

Principal Investigator:

Name

Mailing Address (if different from Dept/Faculty):	
Department/Facult:	
Phone:	
Title/Position:	

Faculty:

If your project has more than one Principal Investigator, provide their name(s) and contact information.

Name

Mailing Address (if different from Dept/Faculty):	
Department/Facult:	
Phone:	
Title/Position:	

Faculty:

Name

Mailing Address (if different from Dept/Faculty): Department/Faculty:	
Phone:	
Title/Position:	
Faculty:	

Project Information

Project Title:

Source(s) of Project Funding:

Anticipated Start Date: / /

Anticipated End Date: / /

Discuss: **a) Research objective(s) and question(s)** **b) The importance and contributions of the research**

Methodology of the study	
Check all that apply:	

(a) Audio and video recording of participants

(c) Interview of participants (in person / by telephone) (d) Group interviews or discussions

(e) Observation of participants

(f) Use of standardized questionnaire or survey (In person telephone mail back email web-based)

Possible Inconveniences, Benefits, Risks and Harms to Participants

Any potential or known benefits associated with participation

To the participant

To society

To state of knowledge

Inconvenience

Mention any potential inconveniences to participants:

Estimate of Risks

Mention any risk to the participant:

Inconvenience

Will participants be fully informed of everything that will be required of them prior to the start of the research?

Is there any compensation for participating in the research? (e.g., gifts, money, social advantage, bonus points) Yes/No

If yes, explain the nature of the compensation and why you consider it necessary.

Informed Consent

How would you obtain consent from participants:

.

Approval from the EWUREC is valid for a period of three (3) years

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 FOM EWUREC OFFICE USE ONLY

Decision of East West University Research Ethics Committee (EWUREC)

Approved

Approved Pending Minor Modification

Withhold Approval Pending Justification and Clarification

Rejected

This AUP form has been reviewed by the EWUREC and the decision has been made based on the information provided.

Signature of EWUREC Chair Date

Date of AUP Approval:

Appendix IX (Part A)- Research Involving Samples Collected from Humans

Research involving samples collected from human must obtain approval from the 'East West University Research Ethics Committee' (EWUREC). The EWUREC sets a guideline according to national and international standards for research relating human samples. A summarized version of policies regarding human sampling is given below:

1. All biological samples collected from human source must be obtained with consent of the willing participants. The samples should be treated as contributions from the participants and must be treated with respect and care. A high level of transparency must be maintained at all times in all areas whenever dealing with research results.

2. All potential risks physical, social, psychological and legal must be assessed before carrying out any research. The risk involved should be minimal and research must only proceed forward when the potential benefits outweigh any potential risks to the participants. Participants must be well aware of all risks associated with donating samples.

3. The use of collected samples must be maximized by planning for both present and future applications. Whenever possible both new and existing samples must be used with existing resources in an ethical and useful manner. From sample collection to sample preparation and characterization and proper sample storage, the research use of collections of samples can be maximized.

4. Researchers must decide or a strategy regarding what feedback will be provided to an individual relevant to the participant's health and the research findings.

5. Researchers may not use any collected sample or human body parts for use for any direct financial gain. Researchers may also not prompt any participants for sample donations by providing them with any financial benefits. However payment of reasonable expenses may be acceptable. Participants must be made aware if their samples are being used for any commercial research; the samples must not be sold or licensed in any way.

6. While seeking consent from the donor, the information provided must be made comprehensible to them and must also provide support to the participants when they are making decision on whether to donate or not. For minors, a detailed permission must be sought from their legal guardians before sample collection.

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7. If samples are collected during routine diagnostic procedures, the patient must be informed and their consent must be taken, whenever the leftover material after diagnosis or treatment is used for research.

8. Any research involving human biological sample must undergo a separate ethical review to ensure the rights, safety, dignity and well-being of the research. When required, legal approaches must also be met.

9. All researchers must treat any personal or medical information provided by the donor and related to the research as confidential. They must also inform the donor about what information will be used during the study so that they might protect and safeguard their confidentiality.

10. All researchers must remain up to date with all the latest ethical, legislative, regulatory and governance requirements that is related to their field of research.

11. In case of research with microbes isolated from human sample, experiments must be conducted in a well-equipped laboratory facilitated with bio-safety precautions.

*** Please fill up Appendix X.**

Appendix IX (Part B)- Research Involving Microbiological Samples

Ethics are of vital importance in microbiology. No new scientific or technological development can claim immunity from ethical scrutiny. More specifically, moral and ethical concerns are of considerable importance in influencing public attitudes towards microbiological research. Therefore, EWU Research Ethics Committee (EWUREC) sets a guideline to secure the biosafety and biosecurity according to the national and international standards relating to research involving microrganisms. A summarized version of the policies and guidelines has been mention below-

1. All microbiological samples collected from environment must be obtained with proper care so that the natural landscape and natural habitats are not displaced or damaged.
2. Microbilogical samples collected from humans should be obtained by maintaining EWUREC policy regarding Human Samples (Appendix IXA).
3. Genetically modified microrganisms should be handled with highest possible precautions.
4. A high level of ascetic techniques and transparency must be maintained at all times in all areas whenever dealing with microbiological samples.
5. Researchers involved in isolating microorganisms should refrain in engaging any activity or research that would be intended or likely to cause harm to plants, animals, humans, or environment.
6. Microbiological researchers should recognize the duty to the public to propagate a true understanding of science. They should avoid making statements known to be premature, false, misleading, or exaggerated and discourage any use of microbiology contrary to the welfare of human kind.
7. Researchers should work for proper and beneficent application of scientific discoveries and call to the attention of the public or the appropriate authority's misuses of information derived from microbial research.
8. The ethical issues of microbiological characterization techniques in controlling the infectious diseases and avoiding the spreading should include both individuals and public at large since professional ethics is the moral bond that links a profession, the people it serves, and society.
9. It is important for researchers to have a set of standard operating procedures that should be followed, and any deviation from these procedures would require ethical and scientific justification where the choice of test systems should be based on valid scientific procedures. If an alternative, inexpensive test, with the same performance indicators, is available, the researchers are ethically mandated to provide information about that test as

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well to both working individuals related to the project and EWUREC. Procurement of equipment and consumables dealings with suppliers necessarily need to be transparent.

10. At the end of the experiments, suitable methods must be used to kill microorganism in samples and other disposable consumables before discarding them in appropriate waste containers. Reusable glasswares must be sterilized and instruments used must be disinfected at their use.

11. Ethical issues in the documentation of tests and environmental variables should include a definition of what test is carried out, when, how, and by whom. In addition, it is ethically wrong to allow unqualified personnel to carry out tests without supervision of principal investigator. Raw and derived data from the tests need to be documented carefully, and any tampering with this data is unethical.

12. Researchers are ethically mandated to provide information about interpretation and limitations of the test. Confidentiality of every result needs to be maintained.

13. The researchers are encouraged to communicate knowledge obtained in their research through discussions with their peers and the relevant experts.

*** Please fill up Appendix X .**

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Appendix X: - Application Form for Ethical Clearance of Research Proposals Involving Samples Collected from Humans and/or Microbial Samples

Section I: General Information about Research/Project Details

1. **Title of the Research/Study:**

2. **Objective of the Research/Study:**

3. **Detailed Methodology:**

4. **Required Number of Human Participants/Samples and Justification of this Estimated Number:**

5. **Place of the Study/Institution(s):**

6. **Type of Study:**

7. **Duration of Study:**

   Research Start Date (Tentative):

   Expected Completion Date:

8. **Is the Research/Study Funded?** **YES / NO**

9. **If yes, mention the source of funding:**

10. **Type of the Research:** MPhil-PhD Research / MS Thesis Research / Undergraduate Research / University Funded Research / Govt. Funded Research / Contract Research /Others

    If others please specify:

11. **Will students work in this project?** **YES / NO**

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12. How will students be selected?

13. Will consent be obtained from students?

14. Will students be provided incentives/payments?

15. If yes, what is the source of funds?

16. What are the possible benefits/risks to students?

17. Have arrangements been made to report results to students?

18. Will students be fully informed and trained of everything that will be required of them prior to the start of the research?

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Section II: General Information about the Investigator(s)

1. **Principal Investigator(s):**

   Name:

   Qualification:

   Detail Address:

   Mobile: Telephone (Off/Res):

   E-mail:

2. **Co-Investigator(s):**

   Name:

   Qualification:

   Detail Address:

   Mobile: Telephone (Off/Res):

   E-mail:

3. **Persons(s) Conducting the Project/Study:**

   Name:

   Qualification:

   Detail Address:

   Mobile: Telephone (Off/Res):

   E-mail:

.

Section III: Checklist for Working with Human Samples

Circle the appropriate answer to each of the following (If not applicable write NA)

1. Are the subjects going to be informed clearly about the objective and procedure of the study? Yes No

2. Does the study involve participants who are particularly incapacitated/ vulnerable to give informed consent? (e.g. minor, people with learning disabilities, patients, etc.) Yes No

3. Will the study involve the following risks to the subjects?

   a. Physical risks Yes No

   b. Psychological risks Yes No

   c. Social risk Yes No

   d. Discomfort to subjects Yes No

   e. Invasion of the body Yes No

   f. Invasion of Privacy Yes No

   If yes, please specify the measures that are proposed to manage these risks.

4. Will the study involve collection or disclosure of information on sensitive topics? (e.g., sexual activity, drug use, mental health etc.) Yes No
   If yes, please also fill up Appendix XV.

5. Will the study use records (Hospital, Medical, Death, Birth or Other)? Yes No

6. Will blood/body fluid, tissue samples, abortus or organs be obtained from participants? Yes No

7. Will the samples be stored in appropriate conditions (especially temperature)? Yes No

8. Will the participants be informed about the procedures to be followed during sample collection, including alternatives used? Yes No

9. Is pain/severe discomfort likely to result from the study? Yes No
   If yes, state how to minimize unnecessary pain and/or distress.

10. Will drugs, placebos, or other substances (e.g., drinks, foods, dietary Yes No

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supplements) be administered to the study participants?
If yes, name each substance with its amount.

11.	Will the study use a Participant Information and Informed Consent Form? If yes, please attach a copy of the form along with this application.	Yes	No
12.	Will measures be taken to ensure confidentiality, privacy and data protection where appropriate?	Yes	No
13.	Will the participants have right to refuse to participate or to withdraw from the study?	Yes	No
14.	Will compensation be given to participants where there are risks or loss of working time, or where privacy is involved in any particular procedure?	Yes	No
15.	Will the study involve experiments involving microbes?*	Yes	No

*** If answer of number 15 is yes, please fill up section IV.**

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Section IV: Information on Study Involving Microorganisms

1. Methods of data collection: _____

2. Locations of Samples Collection: _____

3. Will the study involve the following risks?
   - ☐ Displaced or damaged natural landscape?
   - ☐ Displaced or damaged natural habitats?

If yes, please justify the appropriateness of the study.

4. Will the study cause harm to-
   - ☐ Plants?
   - ☐ Animal?
   - ☐ Human?
   - ☐ Environment ?

If yes, please justify the appropriateness of the study.

5. Will the study involve genetical modification of any microorganism or use any genetically modified microbe?
If yes, please mention the purpose of the genetic modification, or the altered characteristics of the genetically modified microbe (in case of using already genetically modified microbe) and the precautions that will be taken to ensure biosafety.

6. Describe the possible benefits to science and/or humans from this study.

.

7. Will the experiments be conducted in a well equipped laboratory with bio-safety and biosecurity precautions?

8. Are the personnel involved are properly trained for maintaining bio-safety?

9. Describe the methods that will be used to kill the microbes present in the samples and consumables at the end of experiments.

10. Describe the method that will be used to sterilize or disinfect the reusable glasswares and instruments at the end of experiments.

11. Describe the information about interpretation and limitation of the test.

12. How the confidentiality of result at each stage will be maintained/ensured?

.

Approval from the EWUREC is valid for a period of three (3) years

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**

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FOR FOM EWUREC OFFICE USE ONLY

Decision of East West University Research Ethics Committee (EWUREC)

- ☐ Approved
- ☐ Approved Pending Minor Modification
- ☐ Withhold Approval Pending Justification and Clarification
- ☐ Rejected

This form has been reviewed by the EWUREC and the decision has been made based on the information provided.

Signature of EWUREC Chair Date

Date of Approval:

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

1. Please refer to the EWU Policy on Ethical Use of Animals for Research.

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 **maximum of 3 years**. Following this, a new application is required.

Office Use Only
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:				
Experience or trained working with animals?		**Yes (provide evidence) ***		**No #**

*Evidence includes certificate of training, publication involving 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:				
Experience or trained working with animals?		**Yes (provide evidence) ***	√	**No #**

*Evidence includes certificate of training, publication involving animal studies

#Provide tentative date for training_____

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 involving animal studies

#Provide tentative date for training _____

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 involving animal studies

#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 AUP application (☒all that apply):

Research	☐	Others	☐
Pilot study	☐	Please specify:	
Breeding protocol	☐		
Teaching	☐		

Type of application:

☐ First submission

☐ Modification (Registration no.):

.

Proposed length of study using animals:

Start date: _____ End date: _____

SECTION 3: FUNDING

Grant type:

Others: _____

Funding status: Date awarded: _____

SECTION 4: LAY DESCRIPTION

Provide a typed abstract of 250 words or less in simple language. Outline the objectives of the project, the experimental approach, and the significance of the expected results to human and/or animal health.

Please cite three (3) recent references related to the proposed study.

.

REFERENCES:

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.

5.a. Are there alternative non-animal methods used by other investigators for the type of work proposed in this AUP (e.g. tissue cultures, *in vitro* monoclonal antibody, computer model, etc.)? If yes,

describe why these alternatives are not appropriate for this project and why must animals be used in these experiments?

References:

1.

2.

3.

5.b How is the use of the least number of animals to be ensured?

5.c What characteristics of this/these species make them appropriate for the proposed study? These might include structural, behavioural, physiological, biochemical, or other features or considerations (such as availability of species-specific reagents, or the use of well-established model) which make the model compatible with the research objectives. **Cost is not a primary consideration**.

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5.d If animals are housed for more than 24 hours in the animal facility, please specify the environmental enrichment provisions and any housing restrictions required, i.e. social housing, specific materials, space, objects, etc.

SECTION 6: EXPERIMENTAL OBJECTIVES AND DESIGN

6. 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

…..

….

.

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 *all* 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 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 ☒. 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

☐C	**Classification C:** Animals upon which teaching, research, experiments, or tests will be conducted involving no pain, distress, or use of pain-relieving drugs.

☐ D	**Classification D:** 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/Age	Gender	Accommodation (Building & Room)	Experimental Area (Building & Room - surgery and/or procedure rooms)

9.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

When experimental procedures produce animals that may become ill, it is necessary to define an endpoint to ensure that an experimental animal's discomfort, pain and/or distress is terminated, minimized or reduced.

11.a 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.)

11.b In terms of species-specific behavioural changes and physiological signs, list the criteria that will be used to trigger the decision to remove an animal from the teaching exercise or experiment, or to terminate the teaching exercise or experiment.

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SECTION 12: ANIMAL DISPOSAL

Indicate how animals are to be disposed of after completion of the project/research.

Euthanasia [☒ select preferred technique(s)]:

☐ Anaesthetic overdose (specify agent: ketamine (i.p, 150mg/kg) & diazepam (i.p,15mg/kg))

☐ Cervical dislocation*

☐ Exsanguination (under anaesthesia)

☐ Decapitation *

☐ CO_2

☐ Others (Specify _____)

* Provide justification for using physical methods of euthanasia, and state the location that it is done:

Method of carcass disposal (Include method of disposing contaminated organs/tissues):

SECTION 13: HAZARDOUS AGENTS & MATERIALS

Specify each agent/material to be used and hazardous dosage:

NOTE: If a Biosafety and/or Radiation Safety risk assessment is required, a separate application must be submitted to the relevant bodies.

Potential Hazard to ***Animals***	
Biological	
Chemical	
Carcinogen	
Drug	
Ionizing Radiation	
Other (i.e. allergen)	

Potential Hazard to ***Humans***	
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):

1	☐	Animals used in this research or teaching project will be cared for in accordance with the 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	☐	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 **Guide for the Care 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	☐	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.
11	☐	Experimental animals are housed in **External Animal Facilities**. Animals from external sources need to be quarantined or housed according to the

.		Standard of Procedure for Quarantine of Laboratory Rodent and Rabbit.

Approval from the EWUREC is valid for a period of **three (3) years**. If required, AUP must be renewed after the expiry date even if no revisions are made. At the end of the animal experiment**, a closure report** of the animal use is to be submitted to http://www..... for EWUREC review.

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 Committee (EWUREC)

- ☐ Approved
- ☐ Approved Pending Minor Modification
- ☐ Withhold Approval Pending Justification and Clarification
- ☐ Rejected

This AUP form has been reviewed by the EWUREC and the decision has been made based on the information provided.

_____

Signature of EWUREC Chair Date

Date of AUP Approval: ☐

East West University Research Ethics Committee' (EWUREC) encourages the ethical collection and use of Bangladeshi native flora.

Lack of commercial availability of many plant species, greater demand for native plants in horticultural settings and the reestablishment of native plants in restoration efforts can require that seed and/or other plant material be prudently collected from plants in their native habitats. Likewise, plant material necessary for study and research purposes must also be collected under ethical guidelines.

EWUREC has developed the following guidelines for the ethical collection of native plant materials (including seeds or flower parts, leaf or stem material, or any other plant part):

1. Become informed about Bangladeshi plant species that are threatened, endangered, sensitive, or otherwise of special concern. These plants should never be collected unless authorized by the land owner or administrator and the collection would not result in a loss of population viability. The viability concern can be lifted if special circumstances exist.
2. Collect only if you are a trained individual, or are accompanied by a trained individual, who is knowledgeable of proper collection methods, and can propagate, curate or otherwise process all of the plant material collected.
3. Collect only if you have all necessary permits and/or permissions allowing collection on public and private lands, and adhere to all terms and conditions. It is the responsibility of the collector to know property ownership at all times and obtain permission from private property owners before entering the property.
4. There may be specific locations where collection is prohibited; seasonal or other restrictions may also apply.
5. Collecting methods should conform to accepted industry standards. Leave enough of each plant or an adequate number of seeds or propagules to allow for regeneration and for wildlife that may depend on leaves, roots or seeds for food. Do not collect whole plants unless needed for appropriate reasons, such as research, salvage, or if underground parts are needed for identification purposes. When circumstances exist that will result in destruction of plants, salvage of those plants may be appropriate if authorized by the land owner or administrator.
6. Keep good records of the location, habitat and geography of the environment in which a collection is made. Transfer this information whenever the plant materials change hands. Always consider preparing a voucher specimen with proper labeling for deposit in a recognized, publicly accessible herbarium, so as to provide absolute identification of the plants collected and for scientific and biodiversity documentation.
7. Leave no trace of your visit. Be sensitive to any area in which you collect plant materials. Tread lightly when off designated trails and, whenever collecting, minimize collection material needed.

8. Use good judgment. You should pass up a plant for seed or collection if it is not abundant. If a plant or population looks weak or unhealthy, do not collect from it – the extra stress may harm the plant, and you may transport a disease to or away from the site.
9. When collecting non-native species, use accepted precautionary measures to prevent seed or propagative plant parts from escaping the collection.

Modified from ethical guidelines of Colorado Native Plant Society (CoNPS).

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Appendix XIV- Humanities & Social Science Research Ethics

Key Principles

1. Ensure emotional well-being, rights, dignity and personal values of all research pariticipants and make proviions for psychological counselling, if needed.
2. Keep research participants in the know about objectives, methods and end use of research. Make them aware of possible risks.
3. Ensure participation that is voluntary and guarantee right to withdraw if desired
4. Ensure that where needed participants obtain criminal record clearance
5. and civil liabilities issues are taken into consideration.
6. Carry out independent and original research and avolid prejudice and conflicts of interest
7. Ensure confidentiality of participant responses and endeavor to preserve anonymity wherever possible.
8. Seek advice/approval to conduct research from institutional Ethics Committee
9. Complete application for approval of research project involving human participants.

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Appendix XV- Application for Approval of Research Project Involving Human Participants

A

1. Applicant details

2. Project title

3. Other investigator(s)

4. Project dates

5. Funding body

5. Is this a project Involving students?

6. If student project, details of students

B

1. Brief summary of project

2. Summary of methodology adopted

3. Brief description of ethical issues involved or comment on senstive aspects of the project

4. Strategy Used to Deal With Ethical Issues of Sensitive Topics

5. Possible Risks Involved for Researcher

C

1. How will partitipants be recruited?

2. Has consent been obtained from participants? In case of posthumous investigations, from next of kin?

3. Will the research involve children or vulnerable groups? If so, why?

4. In case of children, whose consent has been obtained?

5. Will particpants be provided incentives/payments?

6. If participants are to be paid, what is the source of funds?

7. What are the possible benefits/risks to participants?

8. Has arrangements been made to report results to participants?

D. Confidentiality

1. How will confidentiality be ensured?

2. Who can acccesss the data?

3. Where will the consent forms, information sheets and project data be stored?

4. For how long will the data be preserved?

5. Will there be any future use of data/findings beyond the research?

6. Will interviews be audio or video taped? Has consent been approved for that purpose?

7. Where will the tapes be stored?

E. Contributors Roles

1.Have all the researchers been adequately recognized in the final report?

F. Additional Information

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Sign here

The information provided above is, to the best of my knowledge, complete and correct. I will abide by the ethical principles adopted by the professional body of my discipline as well as the university's code of conduct and ethical guidelines.