

# Research Integrity Framework

## 1. Introduction

The caliber and competence of the faculty as well as the norms of integrity and governance for research that the university requires all researchers to uphold are the foundations of the research community's reputation and success. Five essential principles are outlined in the research integrity statement, including but not limited to:

- Honesty
- Transparency and open communication
- Respect and privacy
- Care and safety
- Accountability

The university expects all individuals conducting research to adhere to the standard procedures for ethical research practices. This entails doing everything within reason to guarantee that research is conducted ethically.

## 2. Research integrity

The university promotes research integrity and offers a framework for good research conduct and governance at the national and international levels. The institution is dedicated to-

- Maintaining the greatest levels of honesty and rigour in all facets of research.
- Maintaining a research environment supported by a culture of integrity and based on good governance, best practices, and support for the development of researchers.
- Ensuring that research is conducted in accordance with appropriate ethical, legal, and professional frameworks, obligations, and standards.
- Using timely, robust, transparent, and fair processes to deal with accusations of research misconduct should they arise.
- Cooperating to bolster research integrity and conduct regular, transparent progress reviews.

As a result, the university has strong procedures in place to handle claims of research misconduct when they occur, in addition to offering support, direction, and training to researchers to ensure that research is conducted in accordance with appropriate ethical, legal, and professional frameworks, obligations, and standards.

## 3. Personal accountability

### 3.1 Students and staff researchers

Any individual engaged in research, including students, employees, honorary staff, affiliated academics, and visiting researchers, is referred to as a researcher for the purposes of this code. A researcher:

- must be truthful throughout the whole research process, from submitting grant applications to disseminating findings and recognizing prior contributions.

- needs to be informed about and abide by all ethical and legal criteria specific to the field of study he/she is working in. This applies to Bangladesh and any applicable foreign jurisdictions where the study may be carried out.
- before beginning any work, must make sure that the necessary permissions have been secured for the research and that he/she is aware of the conditions and restrictions associated with such permissions.
- has to stay vigilant about any perceived or real conflicts of interest, both financial and nonfinancial, that he/she, his/her research teams, or family members may possess and to appropriately resolve them.
- must ensure safeguarding children, women, and adults at risk, preventing bullying, and all types of harassments and misconducts.
- shall be willing to share instrument, software, and data with others, and be open to discussing outcomes, where applicable
- shall be transparent and professional when responding to criticisms of his/her work or that of others.
- must be ready to bring up concerns regarding acceptable research conduct norms with instructor, department, or team when necessary.

### **3.2 Student research supervisor**

A supervisor:

- shall be responsible in making sure that the necessary risk assessments are finished before starting any research.
- shall be responsible for the safety of the students under supervision, he/she must periodically monitor and review the situation, as well as will take action if anything changes.
- must collaborate with students and others as needed to guarantee that all pertinent moral, legal, and academic criteria are met.
- is required to oversee every phase of the research process, which includes developing a research proposal, writing grant applications, designing experimental or study protocols, gathering and analyzing data, and producing the thesis.
- shall assist students in locating and participating in the proper training to guarantee they can do research in accordance with the best practices.
- must have candid discussions about, appreciation for, and acknowledgment of student participation to research projects. This should include establishing expectations for intellectual property and possible authorship.

### **3.3 Research investigator**

Research investigator shall be accountable for ensuring safety, ethics, and other legal criteria. Other team members shall also be accountable if expectations are communicated and recorded within the research group for each member. A research investigator:

- shall ensure that the necessary risk assessments are finished before starting any study. He/she is responsible for the safety of people who are under his/her supervision, so keep an eye on things and review them from time to time or whenever something changes.
- shall guarantee that all pertinent ethical, legal, and academic prerequisites concerning the tasks performed by his/her group are met.
- is required to manage fund appropriately in accordance with government relevant financial policies and university financial regulations.
- shall determine the needs for team building and training, and make sure the team members have received the necessary instructions to conduct the research in accordance with the best practices.

### **3.4 Research management**

#### **3.4.1 Head of academic unit**

The heads of faculties, departments, institutes, and other academic divisions are considered as the head of academic unit within the university. The head of an academic unit:

- must cooperate to protect the welfare and safety of children, women, and adults who are at risk during research activities. He/she should take the necessary measures to ensure that the research environment in his/her academic unit promotes and supports a culture of research integrity and is safe, welcoming, and inclusive.
- shall be well-versed in all applicable university rules and regulations, such as the institution's code of conduct and its commitment towards research integrity, among others.
- shall take necessary measure to guarantee that researchers of his/her academic unit are informed of pertinent university regulations.
- when approving research activities, shall consider whether sufficient administrative, logistics, and professional services are available to support the research.
- shall support and facilitate the necessary training and growth for employees and students in his/her community.
- must take action to guarantee that his/her department or unit complies with the legal requirements and best practices regarding the management of research data.

#### **3.4.2 Principal researcher**

It is the responsibility of the principal researcher to guide the research team in understanding and implementing the best practices. He/she shall guarantee that the research team follows the research integrity framework in all stages of the research.

### **3.5 Research Collaboration**

Collaboration in research is growing and involving people from various disciplines and organizations across the globe. Researchers should be aware of financial, legal, and regulatory requirements, as well as university policies and guidelines, while establishing research collaborations. Research partners and institutions shall satisfy the necessary standards of research

conduct of all parties. The norms and rules that will govern cooperation must be clearly agreed upon and articulated.

This collaboration shall be applicable for both academic and non-academic partnerships, including team projects, intra- and inter-faculty partnerships, and collaborations across institutions as well as cooperation with outside parties. Researchers under the collaboration shall abide by the following research integrity standards:

- The research integrity framework.
- The rules and procedures of both home institution and the relevant partner institutions.
- The guidelines for cross-border cooperation outlined in the “Global Code of Conduct”. The laws and regulations that will apply, including if relevant regulatory permissions and approvals that will need to be obtained and adhered to, such as data control and management, ethical review requirements, publication policy, procedures for handling conflicts, protection of the intellectual property, possible cases of misconduct, etc.
- The authorship policy on submission for publication of the research results.

#### **4. Ethical procedures when using human and animal as subject**

Any study that involves participants’ recruitment, animal usage, methodology, material being examined, topic having possible impact on society, or the use, processing, and distribution of data may give rise to ethical questions.

##### **4.1 General review and accountability for human subjects and animal use**

An internal ethical review procedure shall be applied to all applications involving the use of human and animals in research. All project submissions shall be reviewed by the faculty/ departmental/ institutional ethical review committee/board to make sure that the ethical requirements are satisfied, particularly-

- Must be sure that ethical approval is obtained (if needed) before beginning any research, especially if it involves using animals or live human subjects or data. This covers all necessary approvals from home and abroad, if required.
- It has to take into account and routinely assess the safety and well-being of all parties engaged in the study, including participants and researchers.
- Ensure that those who work with animals are properly instructed and trained to perform procedures and carry out reproducible animal research.
- Researchers working with animals must adopt a team approach that promotes effective communication and teamwork between all parties engaged in the care and well-being of the animals through frequent meetings and discussions.

##### **4.2 Confidentiality of human subjects and their personal data**

i) The University of Dhaka is dedicated to making sure that its research activities involving human subjects, personal data, and/or regulated materials and methods are carried out in a fashion that-

- ✓ respect the welfare, rights, and dignity of every research participant.

- ✓ reduces the danger to participants, researchers, and other parties.
- ✓ handle personal data.
- ✓ strive to maximize research's benefits to the public.

ii) The researcher must require to:

- identify human subjects, personal data, and/or regulated materials and procedures and review proportionately to the level of risk, unless the research's ethical standards are better secured by another recognized approval procedure, such as the Bangladesh Medical Research Council (BMRC).
- avoid or minimize harm to individuals involved in, or affected by, the research through the sound research methodology, early identification and thoughtful assessment of risk, and full disclosure of the study purpose intended uses, and associated risks (unless the relevant ethics committee explicitly approves otherwise because, for example, the research involves the deception of participants).
- protect the confidentiality of the information participants provide and, where appropriate, their anonymity.
- guarantee that participants formally and voluntarily register their consent to participate in such research and can choose to withdraw their participation at any time without facing negative consequences.
- encourage registration of research, expect researchers to publish their findings in compliance with current best practices and the terms and conditions of funders, and demand that researchers be as open and honest as possible when disseminating research findings to others, for example, by making it obvious whether the findings have undergone peer review.
- ensure that the benefits of participating in the research project outweigh any potential risks to participants' health, either directly or indirectly.
- collaborate closely with pertinent peer groups and governmental organizations to stay up to date on advancements, contribute to international policies and standards of best practices, and uphold open and transparent protocols for the conduct and evaluation of research.
- effectively inform employees and students engaged in research about the university's standards and rules.
- raise knowledge of best practices through instruction and training.
- offer suitable training to researchers working with human subjects, confidential information, and/or regulated materials, as well as ethics reviewers (international ethical training or similar certificates), to ensure that their knowledge and abilities remain up to date.
- cultivate a transparent and honest atmosphere that promotes teamwork and prompt disclosure of any potential risks or concerns.

iii) Safeguarding academic faculties, staff, and students when they participate in research:

The university provides its employees and students the same level of security as it does for all other participants. Employees and students may be asked to participate in research projects at the university, but their involvement must be completely voluntary; they may discontinue at any time, and their choice to participate or **not to participate, will not have any bearing** on their job status or academic standing.

#### **4.3 Reporting welfare concerns**

Any employee of the university who has concerns regarding any aspect of the welfare of human or animals on campus should disclose them right away to the chair of the faculty ethical review committee, the academic head of the department, or the head of the institute.

#### **4.4 Safety and health**

Any pertinent danger to the participants in the research projects must be taken into account in any relevant fields and to members of the research team.

- Before beginning any research, all pertinent hazards must be evaluated, risk assessments must be completed, and the necessary safety precautions must be implemented.
- When conducting research, one shall abide by all applicable local health and safety regulations and follow the institutional health and safety policy.
- One shall also notice any pertinent government advice regarding foreign travel.

#### **4.5. Document and data management**

- Maintaining precise and transparent documentation of the steps taken and the permissions received throughout the research process is necessary. This includes records of both the final study outcomes and the interim results that were achieved. This is required not only to demonstrate appropriate research practices but also if inquiries concerning the research's conduct, outcomes, or inventorship of patentable innovations are later made.
- Understanding data privacy obligations is essential. Research data must be gathered, stored, safeguarded, and (if necessary) transmitted in compliance with funding agency guidelines, ethical approval criteria, regulatory requirements (including any applicable international laws), and data protection standards.
- Researchers must erase or destroy any research data in compliance with all legal, ethical, organizational, research funder, and regulatory obligations, as well as once the prearranged retention time has passed.
- It is essential to routinely verify that saved data is still available in case reviewing the data becomes required.

#### **4.6 Authorship**

Authorship is sometimes a sensitive issue. Researchers shall be aware that all contributors are responsible for the content of the research report/manuscript. The author(s)-

- shall agree on the requirements for inclusion on the authorship list, the order of the authors, and responsibility for the publication.

- must be satisfied that the study has been conducted responsibly and ethically. All contributors shall decide upfront for everyone's clarity, and it might need to be renegotiated later.
- who have contributed significantly to the specific output or publication, such as students, technical staff, collaborators, and others, shall only be listed as authors.
- shall be able to recognize each author's unique contribution; they ought to be noted and documented for future use. Large collaborations require the implementation of authorship and individual contribution agreements and governance, as well as the preservation of the records for future use.
- shall include, when relevant, an acknowledgement section that shall list the contributions of all contributors who do not match the requirements for authorship.
- must expressly thank all sponsors and donors of the research in the acknowledgement.
- If there are any official inquiries, the corresponding author will be held accountable for all the information provided and will have to respond.

#### **4.7 Result publication and reporting (conflict of interest, acknowledgment, etc.)**

- Before disclosing any content, you must abide by any legal requirements and duties agreed upon with funding agencies, partners, or other parties.
- In compliance with the 'Disclosure of Conflict and Declaration of Interest Policy', declare any potential conflicts of interest.
- Must honour all legal, ethical, funder, and other contractual requirements while publishing and disseminating research findings honestly and transparently.
- If any researcher utilizes someone else's work in the publication including, but not limited to, text, photographs, figures, and tables, he/she must properly credit all the sources used for his/her study and obtain permission from any people or copyright holders.
- Should publish the findings of anyone's research study in acceptable formats, such as books, journals, chapters, articles, conference proceedings, reviews, software, databases, and creative arts, regardless of whether they corroborate the hypothesis.
- The results and outputs must be communicated in a way that the target audience, as well as various research stakeholders, can comprehend and use.
- It is important to be transparent about the study state, such as ongoing, completed, or post-peer review, when presenting research findings to the public.
- Ought to confront any improper attempts, whether internal or external, to influence the research's interpretation or distribution, and think about bringing them up with the organization.
- Before disclosing any information, he/she should think about whether he/she wishes to use a patent to protect his/her work.
- It should include enough information about the materials, methods and techniques so that others can duplicate them.
- They must not exaggerate the possible importance of the findings and must be transparent about their limits.

- He/she ought to disclose all findings with caution and regard for the privacy of the participants and data.
- Should disclose results following the disciplined standards and, where applicable, the FAIR Principles (Findable, Accessible, Interoperable and Reusable).
- Should deposit raw data in publicly accessible repositories, where appropriate and achievable.
- Research papers that significantly overlap shouldn't be published simultaneously in multiple journals without being disclosed and duly acknowledged for any prior or co-publications.
- He/she shouldn't tamper with the peer review process, doesn't try to find or get in touch with the peer reviewers, and avoids suggesting coworkers or close collaborators who might have a conflict of interest when suggesting potential reviewers.
- If an error is subsequently discovered in previously published research, the published record should be corrected as quickly as possible.
- Should exercise extra caution when sharing unfinished or unpublished work, especially if peer review has not been completed.
- Research output presented in scientific seminars, conferences, symposiums, and other similar settings will not be covered by this.

#### **4.8 Intellectual property rights and copyright**

Research at the university is performed for the benefit of the public, not for immediate profit to businesses or individuals. Education, or the acquisition of knowledge via studies in domains, such as science and technology, medicine, pharmacology, social science, biomedicine, geological, geographical, environmental, commercial, fine art, arts and humanities, and other pertinent areas, may be beneficial to the public. While the university is not allowed to conduct research purely for profit, the university, the research's funder, and the inventor(s) may all profit commercially from the use of the research's findings, according to the expectations of funders. Additionally, commercialization might be the best way to share research findings and benefit the public.

#### **5. Research misconduct**

(i) Research misconduct includes, but not limited to, any of the following actions taken in the course of proposing, carrying out, or disclosing research findings:

- Fabrication or falsification of data, especially the purposeful reporting of research data that is deceptive or inaccurate.
- Data misinterpretation, including the creation of new data and the omitting of analysis and disclosure of inconvenient data.
- Disregarding best practices for the appropriate handling, distribution, and preservation of original data, artifacts, and materials.
- Unrecognized appropriation of other people's work, such as plagiarism, breaching confidentially over unpublished materials, or stealing data, tangible objects, or other resources.



- Misrepresenting one's involvement in a research project, such as by omitting to credit legitimate authors on outputs or giving authorship when none is appropriate; misrepresenting one's credentials, such as training, experience, and publication history.
- Failing to disclose conflicts of interest.
- Failing to adhere to established protocols, legal, professional, or ethical requirements; or failing to take reasonable precautions in carrying out duties to prevent unwarranted harm or risk to human or the environment.
- Disregarding the recommendations for best research practices, such as how to handle privileged, private, or sensitive data gathered about specific people for the study.
- Inappropriate conduct during the peer review of research ideas, findings, or publications that are submitted for publication.
- Mishandling charges of misconduct: neglecting to address potential violations or following established protocols in the examination of purported research misconduct.

(ii) Determining if there was deliberate misconduct or carelessness in any part of a research project's execution serves as the foundation for finding someone accountable for research misconduct. A judgement shall be made regarding whether to examine claims about deliberate and/or careless deviations from standard operating procedures in the course of research, which may not fall under the purview of the previously mentioned guidelines.

- The relevant authority will set up a screening inquiry if it determines that an allegation represents research misconduct. Three things can typically come out of a screening investigation:
  - That there isn't enough evidence to support the allegations, in which case they will typically be rejected.
  - An informal resolution may be used to address an accusation if the screening inquiry finds some merit to the claims but concludes that they are unimportant or that there was no intent to deceive.
  - That there appears to be a basis for additional investigation. In these situations, the relevant authority will organize an inquiry panel, consisting of an unbiased outsider, to conduct a formal inquiry and determine, on the balance of probabilities, if the accusations are true. If an allegation is upheld, it will be referred to a disciplinary panel, which will decide the appropriate penalty to apply.
- Any false allegation (intending to discredit the potential researcher) will be considered serious misconduct.

## **6. Responsibilities during reading, assessing, and revising**

A researcher shall understand the value of peer review as a component of best practices and take part in the evaluation, review, and refereeing of submissions for funding, publication, or promotion. When accepting positions as editors or peer reviewers, one must:

- uphold the defined confidentiality of the peer review process and respect the rights of authors and applicants, including the right to originality of ideas, data, and interpretations offered.

- upfront and truthful about disclosing any potential conflicts of interest and withdraw or decline involvements as necessary when asked to review applications for publication, funding, or promotion.
- conduct peer review with the utmost rigour, objectivity, and respect.
- refrain from participating in peer review of submissions unrelated to his/her field of expertise.
- bring any ethical or other problems regarding the design or conduct of the research to the attention of the appropriate body (editor, committee, representative of the organization, etc.).
- research a topic thoroughly before attending conferences or serving on journal editorial boards.

## **7. Institutional commitments**

Employers will do the following:

- Designate a senior staff person to supervise research integrity and a designated staff member to serve as the initial point of contact for any inquiries regarding research integrity and make sure that this data is updated and accessible to the public on the institution's website.
- Designate a point of contact or a third party or individual to serve as a confidential liaison for whistle-blowers or anyone who wishes to voice concerns regarding the integrity of research being carried out under their authority.