MIDDLESEX UNIVERSITY

SCHOOL OF SCIENCE & TECHNOLOGY

Natural Sciences Ethics Committee (NSEC) Ethics Codes

Introduction

The following lay out basic general principles for a code of conduct for the ethical practice of research for the Natural Sciences Ethics Committee (NSEC).

Members of the departmental research community (which includes members of staff acting as researchers, or as supervisors of students undertaking research, as well as these student researchers), require such a code and should at all times maintain standards of conduct worthy of professionals working in a particular field of activity.

**1. Integrity**

Researchers must not violate the specific trust held in them by their associates in research, peers, the University or society at large. Sources for moral wisdom emerge from many places—family, faith communities, culture, and tradition—but there are standards for professional ethics upon which there is wide agreement—truth telling, careful record keeping, integrity, collaborative practices, and avoidance of conflicts of interests.

**2. Professional Image**

As representatives of the department and of the wider academic community researchers must refrain from any conduct or action in their role as a researcher which would unjustifiably detract from the good name of the institution and the relevant professional body to which they may belong.

**3. Right to knowledge and its obligations**

Seeking knowledge and conveying this knowledge is a fundamental function of research. It follows from the right to pursue knowledge that researchers have a moral obligation to society as well as an obligation to the University to perform scientifically and ethically rigorous research that is communicated to their peers and, as appropriate, to the wider general community.

**4. Competence and appropriate care**

Researchers must make every effort to continually improve their research and to ensure that their knowledge is current. Researchers must refrain from participating in or initiating work which they are not competent to perform. They should be willing, when in doubt; to obtain such advice and assistance as will enable them to perform their research competently and safely.

**5. General principles of reliable research design**

In seeking new data, it is very important that good methodology (i.e. sound research design) be employed. This will ensure trust in the accuracy of the data that are collected and facilitate correct interpretation of this data.

**6. Ethical consideration**

The standard for sound research design in human experimentation derives from these underlying ethical principles. The first principle established by the Universal Declaration on Bioethics and Human Rights is the respect of human dignity and human rights, with an emphasis on the following two points:

“The interests and welfare of the individual should have priority over the sole interest of science or society.” and;

“If the application of the principles of this Declaration is to be limited, it should be by law, including laws in the interests of public safety, for the investigation, detection and prosecution of criminal offences, for the protection of public health or for the protection of the rights and freedoms of others. Any such law needs to be consistent with international human rights law.”

Researchers have a responsibility to the participants in research to ensure the safety of volunteers and staff taking part in research programmes, and it is an accepted norm in the pursuit of this goal that research design is of the highest scientific quality. This includes using the minimum number of participants needed to achieve valid results.

**7. Confidentiality in research involving humans**

Researchers should take precautions to protect confidentiality of participants and data. The identity of the participant, or any information which may identify the participant, may not be revealed without the participant's adequate prior consent in writing. Researchers and other collaborators should deal with all data obtained through their project in such a manner as not to compromise the personal dignity of the participant or to infringe upon the participant's right to privacy.

**8. Intellectual property**

Researchers should aim to safeguard their interests in relation to intellectual property, and the interests of the University. For further details see relevant University documentation.

**9. Conflict of interest**

Conflict of Interest means any outside activity, commitment, or interest that may adversely affect, compromise, or be incompatible with the obligations of an employee to the University. It includes but is not limited to situations where a significant financial or other interest could directly and significantly affect the design, conduct or reporting of research.

**10. Dissemination of ethical principles**

Researchers should report to students under their supervision the basic ethical principles that are detailed in this code. This will provide positive reinforcement of those values which society can expect of graduates from our subject areas.

**11. Publication of results and timely reports**

Because peer review remains one of the main means of assessing the validity of research, researchers are encouraged to publish results as soon as practicable.

Repeatability of an experiment in laboratories at diverse locations is generally regarded as one of the main criteria for its reality. All things being equal, when a researcher finds a major discrepancy in results reported in the literature, he or she should be encouraged to notify the scientific community of the findings without fear of condemnation. Timely publication may also prevent needless repetition of research.

**12. Improper Conduct**

Misconduct in research or the improper conduct of research should be distinguished from honest error or honest discrepancies in interpretations or judgment made of data. "Misconduct" or "Scientific Misconduct" is taken here to mean fabrication, falsification, plagiarism, or other practices that seriously deviate from those that are commonly accepted within the scientific community for proposing, conducting, or reporting research. It does not include honest errors or honest differences in interpretation or judgments of data.