

## **Introduction**

The National Council for Research and Development is appointed by the government and operates through its plenum and committees, one of which is the Committee for Ethics in Science and Intellectual Property.

The Committee for Ethics in Science and Intellectual Property has decided to take a number of steps in order to raise the awareness of members of the scientific research community - both researchers and students - regarding questions of ethics in scientific research. The intention of the Committee is to bring the level of awareness as to the importance of engaging in research ethics, and the level of professionalism in doing so, to international standards prevalent in the United States and a number of European countries. The Committee decided, at the first stage, to disseminate throughout the scientific research community, a document manifesting the values and principles of scientific research. A draft was prepared and distributed, commented on and improved. The revised version is now being distributed to all institutions engaged in scientific research and higher education in Israel.

At the second stage, the Committee intends to provide these bodies with teaching aids, to include both general and modular elements, suitable to the various fields of research. At the third stage the Committee will offer general guidelines for the establishment and maintenance of professional bodies within each of the institutions engaged in scientific research or education, both to foster ethics and to investigate allegations of ethical misconduct. In this, Israel lags significantly behind the United States, and in the Committee's opinion, steps should be taken to narrow this gap, in a prudent and gradual fashion.

The pursuit of ethics in scientific research and other professional fields, fundamentally entails fostering understanding of ethical values and principles, both for their own sake, and in order to increase their practical application. The investigation of misconduct is unavoidable, but should never be considered the foremost concern in the field of professional ethics.

The Committee for Ethics in Science and Intellectual Property will also welcome any comments on "The Ethics of Scientific Research: Values and Principles", as well as inquiries regarding all aspects of its work. The Committee will bring all comments to discussion, and will endeavour to take them into consideration.

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## **The Ethics of Scientific Research: Values and Principles**

### **1. Truth**

1.1 The scientist is concerned with the expansion of human knowledge of the world, the deepening of human understanding of its aspects, and the enhancement of human

ability to exploit this knowledge for the achievement of goals vital to humanity, or having social merit.

1.2 The scientist serves these goals, in every branch of science, by acting in accordance with the methods of scientific research in each branch, and the rules of conduct in the scientific community in general.

## **2. Freedom**

2.1 The scientist serves the goals of scientific research, based on the principle of scientific research freedom, which is one of the most prominent expressions of the democratic system.

2.2 The scientist undertakes the obligation to comply with practical restrictions imposed upon freedom of scientific research by the principles of the democratic system, for the adequate safeguarding of human life, welfare, dignity and liberty.

2.3 The scientist is willing to undertake the obligation to comply with practical restrictions in the areas of development and application, to the extent that these are required by social or economic considerations, in keeping with the principles of the democratic system.

## **3. Responsibility**

3.1 The scientist bears full responsibility for every scientific research or experiment he or she conducts, particularly with regard to its direct effect on human lives and on human physical and mental health, welfare, dignity and liberty.

3.2 The scientist bears special responsibility for such direct effects upon those participating as patients or subjects, in scientific research or experimentation. The principles of the Helsinki Declaration regarding clinical experiments upon humans determine the scientist's threshold of responsibility, and it was in the spirit of these principles that the threshold of responsibility in non-clinical human experimentation was established.

3.3 The scientist pays real heed to considerations regarding the very need to use animals in planned or conducted research and experimentation, and to considerations regarding the lives and welfare of the animals being used, particularly with regard to minimising the suffering that may be inflicted upon them during the course of the experiment or thereafter.

3.4 The scientist acts out of a sense of responsibility, on grounds of which they constantly take into account in the knowledge that the results of his or her research may be used to attain goals within a wide range, from the beneficial to humanity to the criminal and abhorrent.

## **4. Integrity**

4.1 The scientist performs every scientific act in accordance with all of the requirements of the scientific method within the framework of which he or she works, and at the highest standards

4.2 The scientist analyses data and , generalisations, experiments and theories, whether his or her own or another's, equitably, and with the requisite scope, depth and precision.

4.3 The scientist presents his or her data in full, precisely, frankly and fairly.

## **5. Collaboration**

5.1 The scientist acts within a universal framework of scientific collaboration, based on the shared scientific goals.

5.2 The scientist fosters scientific collaboration by maintaining an atmosphere of openness, mutual assistance and trust among scientists, their assistants and students.

5.3 The scientist merits individual, collective and institutional credit and may possess pursuant rights to intellectual property. for scientific achievements to which he or she has made a unique or significant contribution,

## **6. Professionalism**

6.1 The scientist engages in his or her scientific pursuits in a wholly professional manner, making judicious and continual use of the special knowledge, particular to his or her area of expertise.

6.2 The scientist strives to keep abreast of developments in his or her area of expertise and in every area of knowledge pertinent to his or her work.

6.3 The scientist draws practical conclusions in the field of ethics of scientific research from the values and principles of scientific research.

6.4 The scientist imparts the values and principles of scientific research to all those conducting research or experimentation under his or her supervision, particularly to students in every course of study serving to prepare them for professional activity within the scientific research community.