CODE OF ETHICS OF ESTONIAN SCIENTISTS

Foreword

The objective of the Code of Ethics of Estonian Scientists is to formulate and make scientists aware of the general ethical principles, which every scientist must adhere to in his/her activities. This Code, presenting essential guidelines, does not bear upon specific ethical issues that exist in some specialised fields of science. The Code is expected to regulate the relations amongst scientists and with the society. It will set benchmarks to help scientists to pass moral judgement over their own activity and that of their fellow scientists. The principles fixed here should lay in the foundation of the ethical training of young scientists. The task of the Code of Ethics is to highlight the moral dimensions of science and the social responsibility of scientists. The problem of individual responsibility of a scientist has gained in significance lately, in view of the occasional inability of societal institutions to keep pace with the dramatic progress of science and technology..

Having adopted this Code, Estonia follows the pattern of many scientific institutions in Europe and the U.S.A. Codes of ethics in the whole world base on the understanding that good practice nurtures trust within the scientific community and between science and society, both of which are necessary for scientific advance. Scientists should be able to have confidence in the outcome of research of other scientists. Society should be able to have confidence in the integrity of scientists and truthfulness and veracity of research results. Unfortunately, that trust has recently been eroded, because many countries have evidenced serious ethical transgressions in scientific research, putting at peril the authority of science and the trust the society places in scientists. In order to prevent such a development in Estonia and to reinforce public trust in science, all scientists should be aware of the importance of highly ethical conduct and their personal responsibility for forming the societal stance on science.

1. General principles

- 1.1. The ethics in science is based on fundamental values, norms and principles, determining the moral conduct of scientists, their responsibilities to the society and the environment.
- 1.2. In his/her research work a scientist shall be guided by accepted standards of best practice, the general concepts of which this code defines.
- 1.3. Scientists will hold it to their heart that the society should attach value to science.

- 1.4. Scientists will undertake to further implementation of research knowledge for the welfare of humankind, for preservation and consolidation of the ecosystem and for economical and sustainable use of the natural resources.
- 1.5. Scientists will undertake to uphold the freedom of scientific thought, to condemn the censorship of scientific creativity and attempts to monopolise research directions. Scientists will permit the restrictions to be imposed on dissemination in some specific case of scientific advances.
- 1.6. By retaining critical mind and sound scepticism scientists will act to promote knowledge-based decisions and to stand up against the use of unproven results and unscientific claims, when the decisions crucial to society are being taken.
- 1.7. All those in science will undertake to train and develop young scientists. These activities should not be limited to providing the technical skills necessary to enable them to conduct their research. Training must also inculcate the core ethical standards and norms of science, hence the mentor must pose as a moral epitome to the young scientists, as regards the science and community.
- 1.8. Scientists will be morally liable for any such activity which may have a material impact on the development of the whole humanity, environment, country or a social institution.

2. Scientific research

- 2.1. Scientists will adhere to the highest professional standards while mapping and practising research.
- 2.2. In every single phase of scientific research scientists must preserve integrity.
 - Scientists will avoid any scientific misconduct or fraud, such as fabricating or falsifying data or records, piracy or plagiarism, sabotaging the work, records or protocols of other scientists, breach of confidence as a reviewer or supervisor.
- 2.3. Scientists will remember that the scientific research is an ongoing process. They must take critically the findings and be willing to reassess their earlier achievements, in the face of new facts come to light.
- 2.4. Scientists have a duty to ensure that intellectual property arising from their work is properly safeguarded.
- 2.5. Scientists will undertake, whenever possible, to ensure that the outcome of their study is used to the best interests of the society and environment.
- 2.6. Scientific research involving interactions with people must not trespass on human dignity and basic human rights. In case of such research, the individuals will be informed about

all aspects of the proposed research. Their voluntary agreement to participate will be secured – the principle of 'informed consent'. Personal information obtained will be handled and kept under conditions of the highest possible confidentiality, and information obtained will be used exclusively for the purposes of the research.

3. Self-regulation in scientific community

- 3.1. Scientists will make every effort to build a creative atmosphere with the team, displaying tolerance towards colleagues, wholeheartedly acclaiming their success.
- 3.2. A scientist will value highly the competence and professionalism in conducting scientific research. He/she will be frank and fair, when there is a need to give an opinion on the lack of ability or proficiency of a colleague, in particular if that impedes or damages the advancement of science and society. However, the competency of a fellow scientists may be queried only provided there is a well supported proof.
- 3.3. In critique, discussion and debate scientists will proceed from the equity principle and the confidence in facts and research outcome. Scientists will not interpret the facts arbitrarily or in pursuance of their personal interests.
- 3.4. Scientists will not require of their collaborators that they shoulder his/her own assignments.
- 3.5. When in a superior position, scientists will apply democratic style of leadership.
- 3.6. When publishing research outcome of a team project all participants involved in work will be referred to as authors; if needs be, their individual contribution will be indicated. The practice of honorary, or "ghost" authorships is inconsistent with theses principles and with good scientific practice.

4. Scientist as a mentor and as a student

- 4.1. Scientists will hold in respect both their mentors and students.
- 4.2. Scientists will encourage independent work of students, their unfettered and critical thinking. Scientists will respect free expression of their opinions.
- 4.3. Scientists will not hinder the communication of their students with other scientists and scientific institutions.
- 4.4. Scientists will view their students objectively, withholding from deprecating and criticizing them.

5. Scientist as an expert

- 5.1. Scientists will act as experts only within their sphere of competence, referring to their knowledge and experience.
- 5.2. Scientists will agree to act as experts only provided they can remain impartial.
- 5.3. Scientists will perform expert examinations honestly, impartially and with responsibility.
- 5.4. Scientists will adhere to the principle of equality, when performing expert examinations. Any discrimination on grounds of sex, race, political opinions or cultural backgrounds will be inconsistent with these principles.
- 5.5. While performing expert examinations, scientists will abide by the confidentiality principle.
- 5.6. In the course of expert examinations scientists will retain their independence and defy coercion, when drawing and presenting conclusions.
- 5.7. When electing to fill research vacancies or other academic positions, scientists as experts will objectively appraise the candidates. They shall not give preference their students, representatives of the same school or other attendants and associates of theirs.
- 5.8. When acting as opponents of a thesis scientists will be impartial. To preclude any bias, the opponent must not have joint publications with the author of thesis.

6. Scientist and society

- 6.1. Scientists will commit themselves to pursuit of new knowledge and its application for the welfare of society and environment. The information delivered to community must be reliable, scientists will discourage presentation of unverified data as hard facts.
- 6.2. Scientists will promote the spread of scientific knowledge and repulse dissemination of pseudo-scientific theories, misconceptions and misrepresentations.
- 6.3. Scientists will consider it their obligation to publish research results also in the popular science form.

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More documents on the research responsibility and science ethics are available on the website of the International Council for Science (ICSU):

http://www.icsu.org/freedom-responsibility/research-integrity/statements-codes-reports