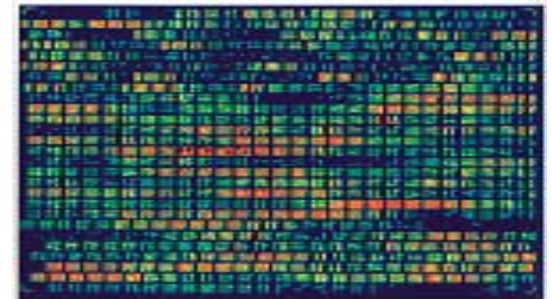




FUTURE DIRECTIONS IN THE ETHICAL CONDUCT OF HEALTH RESEARCH IN CEE&NIS



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Medical University of Sofia, Bulgaria

CURRENT MAJOR BIOETHICAL ISSUES:



ORGAN TRANSPLANT AND BIOETHICS

ABORTION AND BIOETHICS

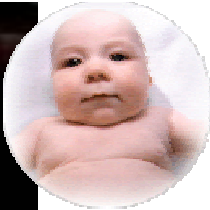


CLONING AND BIOETHICS

EUTHANASIA AND BIOETHICS

IN VITRO FERTILIZATION AND BIOETHICS

HUMAN GENOME AND BIOETHICS





Oath of Hippocrates

I swear by Apollo, the Physician, and Aesculapius and health and all-heal and all the Gods and Goddesses that, according to my ability and judgment, I will keep this oath and stipulation:

To reckon him who taught me this art equally dear to me as my parents, to share my substance with him and relieve his necessities it required: to regard his offspring as on the same footing with my own brothers, and to teach them this art if they should wish to learn it, without fee or stipulation, and that by precept, lecture

or other mode of instruction, I will impart a knowledge of the art to those of my teachers, and to disciples bound to me, according to the law of medicine, but to none other.

I will follow that method of treatment which, according to my ability and judgment, I consider for the benefit of my patients, and abstain from every pernicious and mischievous. I will give no deadly medicine, nor suggest any such counsel; furthermore, I will not administer any instrument to produce abortion.

In purity and with Holiness I will pass my life and practice my art, and I will not be a person who is suffering with a stone, but will leave the honors of this work. Into whatever houses I enter I will go in for the benefit of the sick and will abstain from every voluntary act of seduction; and further from the seduction of females or men.

NEVER, in connection with my professional practice, or in my private life, may I see or hear in the lives of men which ought to be kept secret, and will not divulge, as reckoning that all such should be kept secret.

If I continue to keep this oath unviolated may it be to me and the practice of the art, respected by all men, a source of health and happiness; and if I trespass and violate this oath, may the reverse befall me.





Hartheim Institute, one of six hospitals and nursing facilities where the Nazis carried out their euthanasia program



On December 9, 1946, an American military tribunal opened criminal proceedings against 23 leading German physicians and administrators for their willing participation in war crimes and crimes against humanity. In Nazi Germany, German physicians planned and enacted the "Euthanasia" Program, the systematic killing of those they deemed "unworthy of life." The victims included the mentally retarded, the institutionalized mentally ill, and the physically impaired.

Further, during World War II, German physicians conducted pseudoscientific medical experiments utilizing thousands of concentration camp prisoners without their consent. Most died or were permanently crippled as a result. After almost 140 days of proceedings, the American judges pronounced their verdict on August 20, 1947. Sixteen of the doctors were found guilty. Seven were sentenced to death. They were executed on June 2, 1948.

**OUR SHOPPING LIST
MIGHT INCLUDE:**

RESEARCH OBJECTIVES

“In pursuing NIH-funded human research investigators institutions and IRB members must adhere to several general ethical principles:

- respect for persons
- beneficence
- justice”

RESEARCH OBJECTIVES

“ Ensuring consistency with stated principles may be particularly challenging when working with non-Western cultures or in foreign countries where the very concepts and meaning of “individual”, “risks”, “benefits”, informed consent”, etc. may be very different and/or where the standards for conducting research may be at odds with US standards. In addition, constant advances in communication and information technologies affect how research data are define, recorded, stored and maintained, thereby providing new challenges for maintaining privacy and confidentiality.”

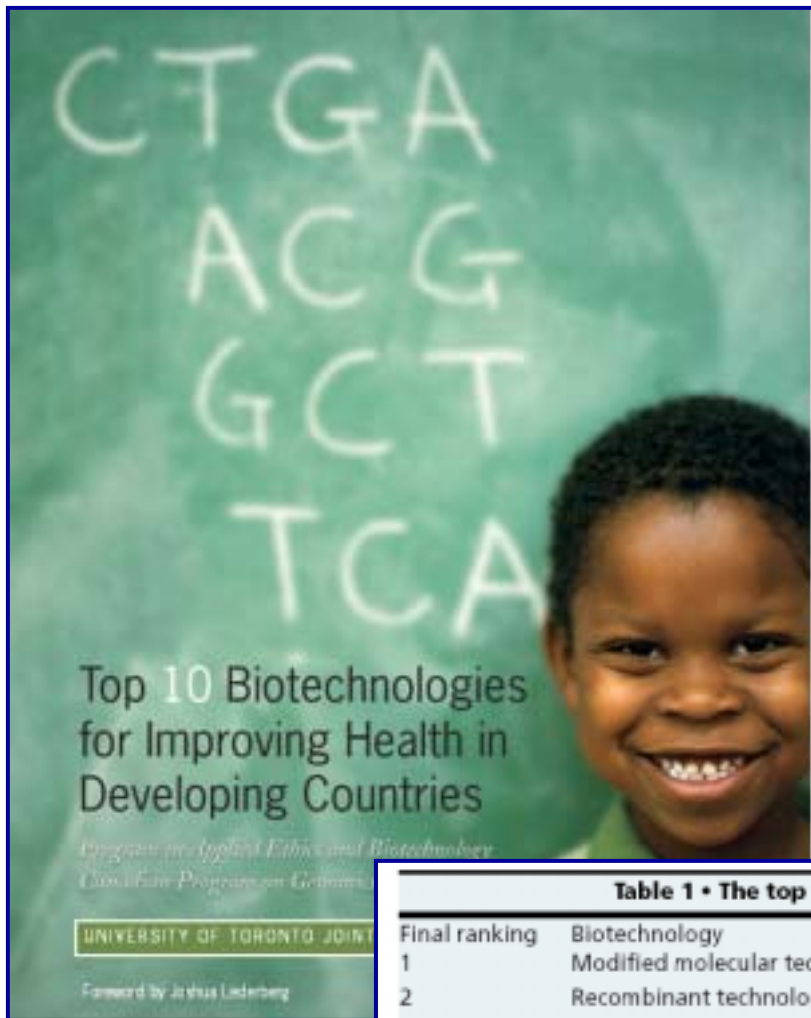
PURPOSE

“Human genetic variation research, especially as it relates to risk factors for common, complex disorders, is leading to increased knowledge regarding variation among individuals and how this variation may contribute to the health status of individuals”

“Information regarding variation within and among groups, in particular, will increasingly be generated, because the map will facilitate the conduct of association studies in selected populations, where certain diseases are more or less prevalent”

PURPOSE

“While the ultimate goal of studies aimed at relating human genetic variation to disease risk is the improvement of human health, concerns have been raised that the findings of some genetic variation research may be misunderstood. Concerns have also been raised that such findings, if interpreted incorrectly, and misused, will exacerbate, rather than ameliorate, already-existing health disparities among racial, ethnic and social-economic groups.”



3 “Current inequities in global health present major ethical challenges to the international community.” – P. Singer

“The enormous resources offered by genomics, the conscience of science must now turn to their application for alleviating human grief, pain and mortality.” – J. Lederberg

Table 1 • The top ten biotechnologies with scores based on rankings of the expert panel

Final ranking	Biotechnology	Final score
1	Modified molecular technologies for affordable, simple diagnosis of infectious diseases	288
2	Recombinant technologies to develop vaccines against infectious diseases	262
3	Technologies for more efficient drug and vaccine delivery systems	245
4	Technologies for environmental improvement (sanitation, clean water, bioremediation)	193
5	Sequencing pathogen genomes to understand their biology and to identify new antimicrobials	180
6	Female-controlled protection against sexually transmitted diseases, both with and without contraceptive effect	171
7	Bioinformatics to identify drug targets and to examine pathogen–host interactions	168
8	Genetically modified crops with increased nutrients to counter specific deficiencies	159
9	Recombinant technology to make therapeutic products (for example, insulin, interferons) more affordable	155
10	Combinatorial chemistry for drug discovery	129

“10:90
GAP”

With most biotechnologies being applied to the health problems of industrialized nations, the WHO and other health bodies have voiced serious concerns about the **looming "genomics divide" between North and South.**

Already, 90 per cent of all medical research is targeted at problems affecting only 10 per cent of the world's population. This so-called **"10/90 gap"**, extending into the new biotechnology field, **threatens to produce even greater disparities in health, as wealthier countries become healthier,** and the spread of infectious disease, the rise in chronic illness and persistent environmental pollution continue to degrade health and hold back progress in developing countries.

Canadian Program on Genomics and Global Health

UNIVERSITY OF TORONTO JOINT CENTRE FOR BIETHICS

- 1 Molecular technologies for affordable, simple diagnosis of infectious diseases - 288
- 2 Recombinant technologies to develop vaccines against infectious diseases - 262
- 3 Technologies for more efficient drug and vaccine delivery systems - 245
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The adaptation to the standards of the EC Directives in relation to medical research and the role of ethics committees.

PRIVIREAL PROJECT, coordinated by the University of Sheffield, UK.

THE FIFTH FRAMEWORK PROGRAMME 1998-2002



Biomedical ethics and bioethics in the context of respect for fundamental human values

Main objectives: (i) to develop an ethical framework for research and to clarify the responsibilities of researchers, policy makers and economic actors. (ii) to contribute to a balanced dialogue between the public and the actors in the field, and an increased public awareness and consultation on ethical issues. (iii) to help inform decision makers and citizens with regard to appropriate policy options, and to anticipate and address questions raised by scientific and technological developments, including those arising from this programme. (iv) to create and support pan-European networks of ethical expertise.



THE FIFTH FRAMEWORK PROGRAMME

1998-2002



Priorities:

Ethical aspects of scientific and technological developments, notably: (i) The human genome, genetic testing and screening, testing for predisposition, and biodiversity. (ii) The use of information technology in medicine and the use of modern technologies and methods in plant and animal breeding. (iii) Xenotransplantation.

Ethical framework for life sciences, notably: (i) The involvement of human beings in research, in particular children and vulnerable groups. Research in developing countries. (ii) The use of human tissues (including stem cells) and the use of animals in research, in particular non-human primates. (iii) Ethical conduct of research and issues linked with the dissemination of results.

... AND WHAT ELSE?