

Resources on science and technology

Notes and links on science and technology

Science, Faith and New Technologies: Transforming Life

Volume I: Convergent Technologies

World Council of Churches and World Association for Christian Communication, with Bossey Ecumenical Institute (2006)

This publication presents the challenges posed by newly emerging technologies to people of faith. It is a discussion starter and wants to encourage urgently needed study and reflection by churches, theological faculties and ecumenical bodies in close cooperation with each other. The new technologies represent a new stage of development, which requires a fresh approach and change of perspective.

<http://wcc-coe.org/wcc/what/jpc/pa-booklet-nano1.pdf>

Science, Faith and New Technologies: Transforming Life

Volume II: Genetics, Agriculture and Human Life

World Council of Churches and World Association for Christian Communication (2006)

Discussion-document by the Working Group on Genetic Engineering of the Justice, Peace and Creation Team. This document deals first with the implications of genetic engineering applied to human life and then turns to the implications for agriculture. For those interested in some basic clarifications concerning biotechnology and genetic engineering, the text of a paper written by Tewolde Berhan G. Egziabher and Vandana Shiva in 1997/1998 as a background document for a new phase of discussion on the ethical challenges of genetic engineering is included in this booklet.

<http://wcc-coe.org/wcc/what/jpc/pa-booklet-bio.pdf>

Fearfully and Wonderfully Made: A Policy on Human Biotechnologies

National Council of Churches USA (2005)

This document begins with a theological discussion of our anthropology or self-understanding particularly in regard to biotechnologies which now hold potential for altering ourselves and those for generations to come. A second major section discussed the Church's calling especially in relation to faith and science, biotechnology and ethics, and pastoral care. A third section

describes what we take to be the key challenges for Church engagement. The fourth and final section offers recommendations for consideration and implementation by the General Assembly.
<http://www.nccusa.org/pdfs/BioTechPolicy.pdf>

Equipping the Saints in an Age of Human Biotechnologies

National Council of Churches USA (2005)

A document that outlines current technologies, meant as a starting place for serious study by individuals and church groups who want to contribute meaningfully to biotechnology discussions. Following its theological, ethical, and biological statements, the study document reviews the insufficient and inept levels of regulation and non-regulation in many countries of the world, and at various governmental levels within the United States.

www.nccusa.org/pdfs/BioTechPolicy.html

Why New Technology is a Women's Rights Issue

Association for Women's Rights in Development (2004)

New technologies impact women's lives all over the world. This is transforming our work for gender equality and presenting new challenges to women's rights and sustainable development. This primer explores the complex ways new technologies affect women's rights and their place in a global agenda for gender justice.

<http://www.awid.org/publications/primers/factsissues7.pdf>

Bioethics Declaration: The Right to Live and be Different

Disabled Peoples' International Europe

Up until now most of us have been excluded from debates on bioethical issues. These debates have had prejudiced and negative views of our quality of life. They have denied our right to equality and have therefore denied our human rights. We demand that we are included in all debates and policy-making regarding bioethical issues. We must be the people who decide on our quality of life, based on our experiences. We also call on our organisations to give support, encouragement and reassurance to those of us who are representing our views on bioethical regulatory bodies. Particular support must be given to empower the voice of mental health survivors, people with learning difficulties, people who cannot advocate for themselves and disabled children, in the debate

<http://www.johnnypops.demon.co.uk/bioethicsdeclaration/index.htm>

Convention on Human Rights and Biomedicine

Council of Europe (1997)

Parties to this Convention shall protect the dignity and identity of all human beings and guarantee one, without discrimination, respect for their integrity another rights and fundamental freedoms with regard to the application of biology and medicine. Each Party shall take in its internal law the necessary measures to give effect to the provisions of this Convention. The interests and welfare of the human being shall prevail over the sole interest of society or science. Parties, taking into account health needs and available resources shall take appropriate measures with a view to providing, within their jurisdiction, equitable access to health care of appropriate quality. Any intervention in the health field, including research, must be carried out in accordance with relevant professional obligations and standards.

<http://www.bioethicsanddisability.org/council.htm>

Observations on the Universal Declaration on the Human Genome and Human Rights

Pontifical Academy for Life (1997)

The Holy See is convinced of the importance of this international document on the human genome and the rights of the human person. Faced with rapid developments in science and technology, with all their promises and risks, UNESCO has sought to affirm the need for controls in the area. For the first time, it proclaimed in a solemn Declaration the need to protect the human genome for the good of future generations, together with the rights and dignity of human beings, freedom of research and the demands of solidarity.

[Link](#)

Convention on Biological Diversity UNESCO (1992)

At the Earth Summit in Rio de Janeiro, world leaders agreed on a comprehensive strategy for 'sustainable development' – meeting our needs while ensuring that we leave a healthy and viable world for future generations. One of the key agreements adopted at Rio was the Convention on Biological Diversity. This pact among the vast majority of the world's governments sets out commitments for maintaining the world's ecological underpinnings as we go about the business of economic development. The Convention establishes three main goals: the conservation of biological diversity, the sustainable use of its components, and the fair and equitable sharing of the benefits from the use of genetic resources.

<http://www.biodiv.org/convention/articles.asp>

Universal Declaration on the Human Genome and Human Rights

UNESCO (1997)

The human genome underlies the fundamental unity of all members of the human family, as well as the recognition of their inherent dignity and diversity. In a symbolic sense, it is the heritage of humanity. Everyone has a right to respect for their dignity and for their rights regardless of their genetic characteristics. That dignity makes it imperative not to reduce individuals to their genetic characteristics and to respect their uniqueness and diversity.

The human genome, which by its nature evolves, is subject to mutations. It contains potentialities that are expressed differently according to each individual's natural and social environment, including the individual's state of health, living conditions, nutrition and education.

http://portal.unesco.org/en/ev.php-url_id=13177&url_do=do_topic&url_section=201.html

Position Paper on Bioethics

Disabled Peoples' International (2005)

Demands the presence and acceptance of a disability rights approach in the development of bioethics theories; that the involvement of persons with disabilities at all levels in advice, information, education, and decision making concerning Bioethics must be ensured and that women with disabilities play a key role in issues concerning Bioethics; that the Bioethics debate be taken out of the realm of academia and make the content available and accessible to disabled people from all walks of life around the world.

<http://v1.dpi.org/lang-en/resources/details.php?page=49>

Disability and Bioethics - Life and Death Questions: A Resource Pack for Trainers

It is all too clear that disabled people and their impairments are two of the principal objects of concern in bioethical debates about such things as rationing health care, judgments about people's quality of life, genetic testing and screening, abortion, euthanasia, gene therapy, stem-cell research and similar topics. However, because of a general lack of knowledge about and confidence with the issues, disabled people have been disempowered and marginalised as active participants in these debates. This exclusion must be tackled. The main objective of this pack is to begin to address this exclusion by offering disabled people accessible and balanced material about bioethical issues. This will not only help disabled people empower themselves, but also serves a wider social purpose. This is because disabled people have unique insights, which have so far been ignored, insights crucial to developing a wiser and more informed social understanding of bioethics generally. The pack is available in both PDF and Word formats at:

<http://www.bcodp.org.uk/library/genetics/>

ETC Group

Action Group on Erosion, Technology and Concentration

ETC group is dedicated to the conservation and sustainable advancement of cultural and ecological diversity and human rights. To this end, ETC group supports the socially responsible development of technologies useful to the poor and marginalized and it addresses international governance issues and corporate power.

ETC group works in partnership with civil society organizations (CSOs) for cooperative and sustainable self-reliance within disadvantaged societies, by providing information and analysis of socioeconomic and technological trends and alternatives. Resources include:

- Report Prepared for the South Centre - The Potential Impacts of Nano-Scale Technologies on Commodity Markets: The Implications for Commodity Dependent Developing Countries <http://www.etcgroup.org/documents/SouthCentre.Commodities.pdf>
- A Tiny Primer on Nano-scale Technologies ...and The Little BANG Theory http://www.etcgroup.org/documents/TinyPrimer_English.pdf
- Special Report-Nanotech's 'Second Nature' Patents: Implications for the Global South <http://www.etcgroup.org/documents/Com8788SpecialPNanoMar-Jun05ENG.pdf>

www.scidev.net

The overall aim of the Science and Development Network (SciDev.Net) is to enhance the provision of reliable and authoritative information on science- and technology-related issues that impact on the economic and social development of developing countries. Its goal is to ensure that both individuals and organisations in the developing world are better placed to make informed decisions on these issues. SciDevNet seeks to achieve this objective primarily through running a free-access website, but also by building regional networks of individuals and institutions who share our goals, and by organising capacity-building workshops and other events in the developing world. The web site has resources on the following: Genomics; Nanotechnology; Science Publishing; Technology Transfer.

'Science, IT and society'

Media Development 2/2003

Explores some of the emerging social and ethical issues resulting from the interfaces between the new sciences, information technology and society. Articles include 'Digital cohabitations: The social consequences of convergent technologies' (Pradip N. Thomas); 'Pushing informationalised capitalism into science and information technology' (Dan Schiller); 'Truth and trust in cyberspace' (Paula S. Tompkins); 'The dangers of human cloning' (Steven Best and Douglas Kellner); and 'The ethics of virtual reality: The digital and its predecessors' (Peter G. Horsfield).

http://www.wacc.org.uk/wacc/publications/media_development/2003_2

The No-Nonsense Guide to Science, by Jerome Ravetz.

Oxford: New Internationalist and London: Verso (2005). ISBN 1-84467-503-3

This book 'looks at science as it now is, and shows how we got here. It explains how science can be genuine objective knowledge, and at the same time be conditioned by uncertainty and values. It also shows how our knowledge is selected by processes that reflect those values and the commitments behind them. And it highlights ignorance, which paradoxically is a crucial element in our understanding of the role of science. In general it promotes a "post-normal" approach to science, which takes account of the uncertainty and value-loading that is now so pervasive...'