Introduction to Science, Technology and Human Rights

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AAAS Scientific Responsibility, Human Rights and Law Program
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Outline

- What are human rights?
- What connects science, technology and human rights?
- How can you become involved in human rights?
What are human rights?

- fundamental entitlements
- guaranteed by law
- inherent to *all* human beings
- derived from the mere fact of being human
Basic characteristics

- universal: everyone, without exception
- inalienable: cannot be waived or taken away
- indivisible, interdependent, and inter-related: come as a package
- responsibility: governments
Governments’ responsibilities

- **To respect:** Cannot do anything that will violate a human right

- **To protect:** Cannot allow a third party to do anything that will violate a human right

- **To fulfill:** Must do what is needed to make sure a human right is enjoyed
International Bill of Rights

- Universal Declaration of Human Rights (1948)
- International Covenant on Civil and Political Rights (1966)
- International Covenant on Economic, Social and Cultural Rights (1966)
- Life
- Torture
- Fair trial
- Information
- Expression
- Association
- Political participation …

- Work
- Housing
- Health
- Education
- Culture
- Benefits of Scientific Progress …

International Covenant on Civil and Political Rights (1966)

International Covenant on Economic, Social and Cultural Rights (1966)
Key Human Rights Treaties

- Civil and Political Rights (1966) - 167
- Economic, Social and Cultural Rights (1966) - 160
- Racial Discrimination (1965) – 175
- Discrimination Against Women (1979) – 187
- Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment (1984) – 153
- Rights of the Child (1989) - 193
- Protection of the Rights of all Migrant Workers and Members of their Families (2003) – 44
Key Human Rights Treaties: US Ratifications

- 1992 - Civil and Political Rights 1966 - 167
  - Economic, Social and Cultural Rights 1966 - 160
- 1994 - Racial Discrimination 1965 – 175
  - Discrimination Against Women 1979 – 187
- 1994 - Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment 1984 – 153
  - Rights of the Child 1989 - 193
  - Protection of the Rights of all Migrant Workers and Members of their Families 2003 – 44
  - Rights of People with Disabilities 2008 – 59
Key Human Rights Treaties: US Signed

- 1992 - Civil and Political Rights 1966 - 167
- 1994 - Racial Discrimination 1965 – 175
- 1994 - Torture and Other Cruel, Inhuman or Degrading Treatment or Punishment 1984 – 153
  - Protection of the Rights of all Migrant Workers and Members of their Families 2003 – 44
- 2009 - Rights of People with Disabilities 2008 – 59
…Article 37 of the United Nations Convention on the Rights of the Child, which every country in the world has ratified save for the United States and Somalia, contains an express prohibition on capital punishment for crimes committed by juveniles under 18.

… In sum, it is fair to say that the United States now stands alone in a world that has turned its face against the juvenile death penalty.

… It does not lessen our fidelity to the Constitution or our pride in its origins to acknowledge that the express affirmation of certain fundamental rights by other nations and peoples simply underscores the centrality of those same rights within our own heritage of freedom.

Roper v. Simmons, 543 U.S. 551 (2005)
“Our human rights agenda for the 21st century is to make human rights a human reality, and the first step is to see human rights in a broad context. Of course, people must be free from the oppression of tyranny, from torture, from discrimination, from the fear of leaders who will imprison or disappear them. But they also must be free from the oppression of want - want of food, want of health, want of education, and want of equality in law and in fact.”

Hilary Clinton, December 2009
To enhance the prospects for success [in enhancing scientific and educational partnerships between the U.S. and Muslim-majority countries] we should begin by stressing three points.

First, the U.S. needs to define a coherent and comprehensive policy for pursuing science diplomacy with Muslim-majority countries…

Second, the focus of a better-integrated effort should be on improving education and fostering scientific and technological infrastructure…

Third, these efforts must complement, not replace, U.S. efforts to promote human rights and democratic governance in the Muslim world.

Ahmed Zewail, June 2010
How are science, technology and human rights connected?
Science, Technology and Human Rights: Connections

1. Scientists, engineers and health professionals have human rights
2. Scientists as a constituency for human rights
3. Applying S&T for human rights
4. Negative human rights implications of S&T
5. The human right to enjoy the benefits of science and its applications
Scientists, Engineers and Health Professionals have Human Rights

These rights include:

- freedom to associate with colleagues
- freedom to conduct research (responsibly)
- freedom to communicate your findings
- freedom of movement (including right to travel)
- right to cooperate internationally
US media sets eyes on Argentina’s "manipulation of numbers"

Argentina’s Statisica Institute controversy was joined Sunday by a most reputable newspaper, the Washington Post that called Indec numbers a "manipulation (...) done under pressure from above."

In an article titled "Doctored data cast doubt on Argentina", the US media claims that the Indec "altered socioeconomic data to reflect numbers palatable to the presidency," and quotes Lucas Belfort, an 18-year veteran at the institute, as saying: "They just screwed the real numbers, reality did not matter."

The newspaper explains that the author of the article tried to interview officials at the Economy Minister, the Indec and the Argentina Presidency but that all officials declined to comment. The most the journalist could receive, as an answer was a sentence from the Economy Ministry spokesman, Sergio Pugli, who repeated the same sentence officials have been saying for weeks: "The new minister, Amado Boudou, is undertaking a review of INDEC methodology going back to 1999 and is creating a technical council of academics to advise the institute."

Official statistics
Don’t lie to me, Argentina
Why we are removing a figure from our indicators page

Feb 25th 2012 | from the print edition

Imagine a world without statistics. Governments would fumble in the dark, investors would waste money and electorates would struggle to hold their political leaders to account. This is why The Economist publishes more than 1,000 figures each week, on matters such as output, prices and jobs, from a host of countries. We cannot be sure
Science, Technology and Human Rights: Connections

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Why me?

- Governments’ commitment to human rights is only as strong as society’s demands for their rights.
- Scientists, engineers and health professionals can apply their skills and expertise to human rights issues.
- Technically rigorous and independent analysis adds credibility to human rights demands.
AAAS Science and Human Rights Coalition

A network of scientific and engineering organizations that recognize a role for scientists and engineers in efforts to realize human rights.

**Members:** scientific and engineering associations, professional societies and academies

- Member/Affiliate Organizations: 50
- Affiliated Individuals: 70
Being a constituency for human rights

- Organize a public inquiry on the human rights impacts of a research or infrastructure project
- Conduct a review to determine how human rights might be incorporated into your code of ethics
- Petition a human rights tribunal to hold a hearing on a human rights issue related to your field
- Issue a public statement on a human rights topic relevant to your discipline
- Submit an amicus curiae brief to the court on a human rights question related to your discipline

For other examples:
http://srhrl.aaas.org/coalition/about/memberactions.shtml
Psychology and Juvenile Justice

- Juvenile death penalty – *Roper v. Simmons*
- Juveniles and mandatory life imprisonment - *Miller v. Alabama* and *Jackson v. Hobbs*
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Science and Human Rights at AAAS

- Forensic and genetic sciences
- Statistical and information management techniques
- Encryption
- Geospatial image analysis
Liliana Pereyra, mid-1970s
21-year-old bank clerk who had disappeared on October 6, 1976, when she was five months pregnant.
(Family of Liliana Pereyra; AAAS Archives)

Clyde Snow at the trial of the Argentinean junta, 1985
(Courtesy of Daniel Muzio)

Liliana Pereyra’s skeletal reconstruction
(AAAS Archives)
Kosovar refugees: Policy or Panic?

Using data from the border registries and camp surveys to:

- establish where refugees came from, across time
- link refugee flows with Yugoslav movements and NATO actions
- assess competing explanations for refugee flows
From: Ball, P. (1999), *Policy or Panic: The Flight of Ethnic Albanians from Kosovo March – May 1999*
Temperature above ambient:
- 11.6 °C / 20.9°F
- 9.2°C / 16.6°F
- 4.3°C / 7.7°F

Gas Flare
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<tr>
<th><strong>AAAS On-call Scientists</strong></th>
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<tr>
<td><strong>Physicians for Human Rights</strong></td>
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<tr>
<td><strong>Project:</strong> Document evidence of torture to support asylum applications</td>
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<tr>
<td><strong>Location:</strong> USA</td>
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<td><strong>Scientists:</strong> Health practitioners (10)</td>
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<td><strong>Montana Innocence Project</strong></td>
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<td><strong>Project:</strong> Provide evidence in post-conviction claims of innocence</td>
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<td><strong>Location:</strong> Montana</td>
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<td><strong>Scientist:</strong> DNA and forensic analysts, crime scene reconstruction</td>
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<td><strong>Global Rights</strong></td>
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<td><strong>Project:</strong> Assess impact of extractive industries on local communities</td>
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<td><strong>Location:</strong> Congo, Guinea, DRC</td>
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<td><strong>Scientists:</strong> Geologist, psychologists</td>
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<td><strong>Environmental Defender Law Center</strong></td>
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<td><strong>Project:</strong> Review and advise on technical reports in oil cleanup case</td>
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<td><strong>Location:</strong> West Africa</td>
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<td><strong>Scientist:</strong> Industrial and chemical engineers</td>
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[http://oncallscientists.aaas.org/default.aspx](http://oncallscientists.aaas.org/default.aspx)
AAAS On-call Scientists

- 750+ volunteer scientists, engineers and clinicians (59 volunteer engineers)
- Volunteers come from over 40 countries
- 100+ matches with human rights organizations
- Projects in the United States and around the world.
On-call Scientists: Current Needs

- Physicist with expertise in optics – specific expertise in camera lenses on mobile devices
- Expert in the meta data collected by mobile devices
- Expert in the health issues related to air pollution arising from a coal fire power plant
- Extractives experts - mining processes
- Environmental impact mitigation, best practices in environmental clean-up
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Presidential Commission for the Study of Bioethical Issues

“Ethically Impossible”: STD Research in Guatemala from 1946-1948

Moral Science: Protecting Participants in Human Subjects Research
Human rights implications of science and technology

- Identify, engage and protect vulnerable populations
- Apply high quality standards
- Address dual-use applications
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The Benefits of Science and Technology as a Human Right

“States shall recognize the right of everyone … to enjoy the benefits of scientific progress and its applications.”

-- International Covenant on Economic, Social, and Cultural Rights, Article 15
“States shall recognize the right of everyone … to enjoy the benefits of scientific progress and its applications.”

-- International Covenant on Economic, Social, and Cultural Rights, Article 15

“To advance science and innovation throughout the world for the benefit of all people”

-- AAAS Mission
Article 15, International Covenant on Economic, Social and Cultural Rights

Governments shall:

1. recognize the right of everyone to *(b) enjoy the benefits of scientific progress and its applications*;
2. *conserve, develop and diffuse science* and culture;
3. respect the *freedom indispensable for scientific research* and creative activity; and
4. recognize the benefits of *international contacts and co-operation* in the scientific and cultural fields.
Broad Acceptance of the Right

- 160 governments have ratified the International Covenant on Economic, Social and Cultural Rights
- All G8 countries, with the exception of the US, have ratified the Covenant
- The right is recognized in international and regional treaties, e.g., bioethics (2005); human genetic data (2003); biomedicine (1997 - Europe)
- The right is recognized in several national Constitutions: Armenia (1995); Moldova (1994); Paraguay (1992)
What does the right mean? UNESCO

Purpose:

to launch a process of research and dialogue on the content of this right

Participants:

lawyers, academics, medical ethicists, human rights practitioners, UN experts, AAAS
Venice Statement

17. “The comprehensive elucidation of this right, raising awareness of it, its implementation, and the monitoring of its realization require the cooperation and participation of [among others]... the scientific and academic communities.”
“Recognizing that this right lies at the heart of the AAAS mission and the social responsibilities of scientists, AAAS will:

pursue opportunities to collaborate with the global scientific community so that the voice, interests and concerns of scientists can be brought to this process [and]

engage the domestic and global scientific communities in defining the content of the right and determining its application to a diverse range of scientific disciplines and issues of concern to the scientific community”

AAAS Board of Directors, Statement, April 2010
AAAS – Article 15 assessment

Fundamental characteristics of the right:

1. Focus on the rights of marginalized and vulnerable populations
2. Participatory decision-making
3. International cooperation
4. Protection from science and technology that violate human rights
5. Scientific freedom

Issues for consideration:

1. Scientific responsibility
2. Right to benefit from science and national security
3. Third party actors and obligations
4. Right to benefit from science and intellectual property
Article 15: Focus group process

Acoustical Society of America
American Academy of Forensic Sciences
American Astronomical Society
American Philosophical Association*
American Psychological Association
American Historical Association
American Society of Mechanical Engineers
American Society of Tropical Medicine and Hygiene

American Sociological Association
American Statistical Association
Association of American Geographers
Chemists
Ecological Society of America
Geological Society of America/American Geological Institute
Linguistic Society of America
Society for the Psychological Study of Social Issues
How can you become involved in human rights?
What can you do?

Increase your knowledge and understanding

Raise awareness within your organization
  newsletters, Annual Meeting sessions, trainings

Use human rights to inform your work
  when deciding a research or development question
  when setting funding priorities
  when designing and assessing projects
  when developing a course curriculum

Apply your skills to human rights challenges

Rely on human rights explicitly as appropriate
  when addressing governments bound by human rights
  when advocating for policy change
Thank you!

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