

etc group



Annual Report 2006-2007

monitoring power
tracking technology
strengthening diversity



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Our Mission

ETC Group is an international civil society organization that promotes critical analysis of emerging technologies from a social justice perspective. We address international governance issues through research, education and advocacy. By supporting just, sustainable and farmer-based food systems, ETC Group strives to protect cultural and biological diversity and advance food sovereignty and human rights.

Our History

ETC Group's work began 30 years ago as the Rural Advancement Foundation International (RAFI). We have conducted groundbreaking research, education and successful social action on issues involving agricultural biodiversity, intellectual property and community knowledge systems. With the emergence of new biotechnologies in the 1980s, our work expanded to encompass wider biodiversity issues. In the 1990s, we brought public attention to biopiracy (a term coined by RAFI), challenged patent claims on cell lines of indigenous peoples and launched an international campaign against genetic seed sterilization (dubbed "Terminator" by RAFI). In 2001 we changed our name to ETC Group (Action Group on Erosion, Technology and Concentration) to reflect a growing focus on research and advocacy related to converging technologies and the impacts on marginalized communities. ETC's newest research focuses on synthetic biology and geoengineering.

Our Gratitude

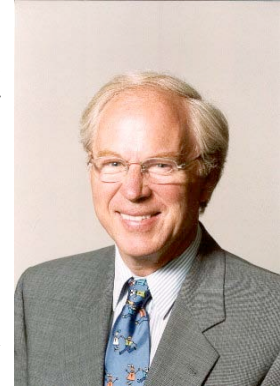
ETC Group gratefully acknowledges financial support from SwedBio, Marin Community Foundation, CS Fund, HKH Foundation, The Lillian Goldman Charitable Trust, the International Development Research Centre, Friends of ETC Group, the Heinrich Böll Foundation and the Ford Foundation.

A Message from our President

30 years not counting

For the past few years ETC's board and staff have been reminding one another of our impending thirtieth anniversary and planning to mark the occasion with some special reflection or, at least, a memorable party. It wasn't until we all met in El Salvador at year-end that we realized our thirtieth year had come and gone.

During the year, however, ETC launched a major study and opened a critical debate on synthetic biology ("extreme genetic engineering"); began a study and campaign on geoengineering in the framework of climate change; looked at the pharmaceutical industry's plans for nanotechnology; and defeated Monsanto's soybean "species" patent at the European Patent Office. All this while the staff presented at seminars in Ethiopia, Kenya, Mali, South Africa, Brazil, Ecuador, India, and several European countries (as well as at home in Canada, the U.S. and Mexico). For the small band of eight staff, this was another hectic, innovative year.



ETC Group traces its roots to an international meeting of agricultural activists in Saskatchewan, Canada in 1977. Only in 1985 did the group incorporate as RAFI. Our name changed to ETC Group in 2001. Over thirty years, ETC's agenda has expanded from its ongoing work on agricultural biodiversity to include biotechnology, biopiracy, human genomics and nanotechnology. Along the way, issues haven't been dropped – others have been added on. This year, taking on synthetic biology and geoengineering should come as no surprise. Whatever the issue, the starting point has always been its importance to marginalized peoples in the global South. And, over the years, ETC has been supported by a handful of generous and clear-eyed funders who have granted it unusual program flexibility. It took ETC Group thirteen years to defeat Monsanto's patent, after all. Sometime in the next few years, we will celebrate all this – but not just yet.

Tim Brodhead

President, ETC Group Board of Trustees

Findings of our External Review:

ETC Group enjoys an extraordinary reputation among South civil society organizations and governments as a highly-effective and cost-efficient source of research and analysis on the socio-economic impact of new technologies impacting developing countries. ETC Group is widely-respected by governments, intergovernmental agencies, scientists and social movements for its political acumen and research accuracy. Its partners consider ETC to be innovative, far-sighted and valuable. ETC's unique style and stance often makes it controversial and the organization has its detractors, particularly in the private sector and among some industrialized governments but the review panel – despite its own diversity of viewpoints – has no hesitation in warmly commending ETC Group to its donors and partners for continuing and strengthened support. ETC Group External Review 2005

The Year in Review

2006
September
October
November
December
January
February
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2007

September ETC Group begins its 30th year in Sweden. We participate in the Dag Hammarskjöld Foundation’s *What Next?* Forum held in Uppsala Castle. Pat Mooney introduces his *What Next? Report 2005-2035: Trendlines and Alternatives*, which includes scenarios of increasing government-corporate collusion driven by the rapid development of potentially dangerous technologies. ETC Group staff conduct workshops on nanotechnology and health, synthetic biology and even performs some slam poetry. After the Forum, we stay in Uppsala to hold our annual meeting.



October We launch an *International Nano-hazard Symbol Design Competition* that becomes one of our most successful efforts to capture public attention and spark debate on the potential impacts of nanotechnology. The competition nets 482 unique designs from 24 countries. We post every entry on our web site in a viewing gallery. *The Washington Post* reproduces some of its staff’s favorites in a front-page article (the Sunday Style section!) with the inspired headline, “Signs Done on Speck: Contest Seeks Perfect ‘Beware of Nanotechnology’ Warning.”

November We participate in meetings in Mexico City of the *In Defense of Maize* network – a movement organized after the 2001 discovery that native corn had been contaminated with genetically modified (GM) varieties – and attend the National Indigenous Congress in Mezcala, Jalisco, where we make interventions on human genomics and Terminator technology.

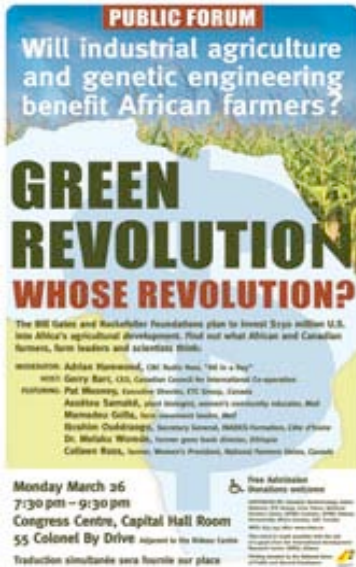


December ETC Group attends a meeting in Washington, D.C. where prominent scientist-entrepreneurs are gathered to discuss possible regulation and governance of synthetic biology. ETC Group makes the case for mandatory regulations, citing a May 2006 Open Letter signed by 38 civil society organizations urging the synthetic biology community to reject proposals for self-governance.

January We release *Extreme Genetic Engineering: An Introduction to Synthetic Biology*, the first critical analysis of scientific and commercial attempts to build living organisms from scratch. In its 64-page report, ETC Group calls for a broad societal debate on synthetic biology’s socio-economic and ethical implications – including impacts on health, environment, human rights and security.

February ETC Group releases *Gambling with Gaia*, the first civil society report exposing the risks and ambitions of “geoengineering” – the intentional, large-scale manipulation of the land, sea or stratosphere to counteract climate change and to profit from carbon trading schemes.





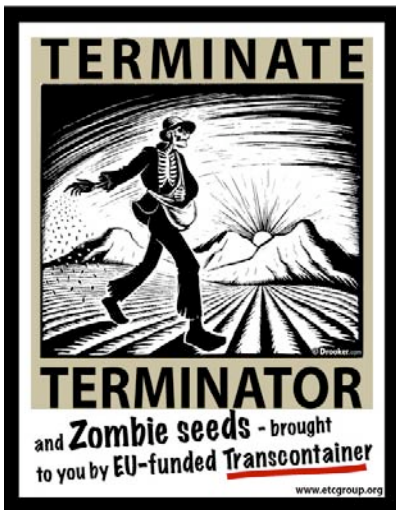
March ETC Group works with partners to host *Green Revolution! Whose Revolution?*, a public event in Ottawa. More than 500 people gather to hear farmers and scientists from Africa give critical assessments of the Gates and Rockefeller Foundations’ *Alliance for a Green Revolution in Africa (AGRA)*. Together with our African visitors, we host a half-day workshop for government policy makers. We also publish an in-depth critique of AGRA.

April ETC Group blows the whistle when we discover that a California-based company called Planktos is preparing to set sail for the Galapagos to dump tons of iron nanoparticles over 10,000 km² of ocean surface – ostensibly to sequester carbon dioxide; in reality, a scheme to profit from carbon credits. With civil society allies, we persuade the Ecuadorian government to challenge Planktos’ iron dumping, calling for international oversight. Two months later (June 2007), the scientific body of the London Convention on Ocean Dumping issues a strong statement of concern on ocean fertilization initiatives.

May Monsanto’s species-wide soybean patent revoked! ETC Group, with the support of 18 civil society organizations worldwide, wins a 13-year legal battle when the European Patent Office revokes Monsanto’s species-wide patent on all genetically engineered soybean varieties and seeds (EP301749) – one of biotech’s broadest and most notorious monopoly claims. (At right, ETC Board member Ricarda Steinbrecher, attorney Tim Roberts and ETC’s Hope Shand in Munich for the hearing.)



June ETC Group breaks the news to the world that the J. Craig Venter Institute has filed patent applications on the world’s first-ever human-made species – a bacterium made entirely with synthetic DNA in the laboratory (dubbed “Synthia” by ETC Group). We immediately request that the patent applications be withdrawn and urge patent offices in the U.S. and Europe to reject them.



July ETC Group uncovers new, EU-funded research on Terminator technology that attempts to challenge the United Nation’s Convention on Biological Diversity (CBD)’s moratorium on field-testing and commercialization of suicide seeds. We take our findings (including a 28-page *Communiqué* on the topic) to the CBD meeting in Paris and begin work with partners to challenge EU’s support for this research, making the link between corporate enthusiasm for suicide seeds and the development of agrofuels.

August 2007 ETC Group co-hosts and participates in an *International Forum on Food Sovereignty and Agrofuels* in Mexico with Via Campesina, CECCAM, CASIFOP and other partners – an important opportunity for civil society to critically address these issues.

Tracking New Trends in Technology

Synthetic Biology

Synthetic biology, the creation of novel life forms using artificial DNA, is developing below the public and policy radar. In 2006 ETC Group, with 38 other civil society organizations, drafted an open letter to the synthetic biology community opposing self-governance proposals and calling for an open and inclusive dialogue and governance process. In January 2007 we released *Extreme Genetic Engineering: An Introduction to Synthetic Biology*.

Synthetic biology is being touted as the solution to climate change and peak oil. The hype and hubris surrounding it diverts public concerns, quells public debate and discourages government oversight and regulation. It conveniently ignores the reality that scientists have the potential to construct dangerous pathogens in the laboratory – either by intent or by accident. Today, despite billions of dollars of public and private investment, a fast growing industry of synbio companies, and the potential for a “Microbe-soft” monopoly over nature, there is a virtual vacuum in societal debate and governance.

Genome scientist J. Craig Venter will raise the stakes when he announces that his team has created the first living, self-replicating organism constructed from synthetic DNA, expected sometime in 2008. Unless there is an alternative voice to respond to these developments, the mainstream media will echo industry’s mantra that synthetic biology will produce cheap fuels and arrest climate change. ETC Group is responding to the immediate need to prepare popular and easily accessible materials that explain the complex science and outline specific concerns raised by synthetic biology.

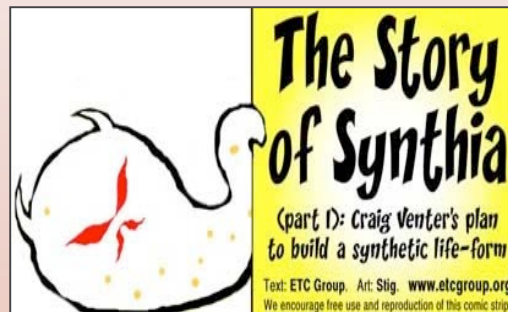
Geoengineering

ETC Group’s *Communiqué, Gambling with Gaia* (January 2007) warned that some countries, led by the United States, are investigating the potential of geoengineering to address climate change. Soon after, we learned about a number of “ocean fertilization” initiatives by private companies planning to dump particles (e.g., iron or urea) into the waters west of the Humboldt Current near the Galapagos Islands, and the Sulu Sea in the Philippines, to stimulate massive plankton blooms. These would theoretically soak up carbon dioxide and earn the companies carbon credits. There is scientific consensus that research to-date does not support ocean dumping schemes because there is no evidence carbon is successfully sequestered and because of unknown, unintended impacts.

We alerted civil society partners, issued press releases and called on the U.S. Environmental Protection Agency (EPA) to launch an immediate investigation. Partners brought the issue to the International Maritime Organization’s (IMO)

London Convention meetings, and they issued a strong statement of concern. At a meeting of the CBD, ETC Group urged governments to examine the potential impacts of geo-engineering on the conservation and sustainable use of biodiversity.

Commercial geoengineering activities – not sanctioned by any government – are advancing quickly in the absence of public debate or inter-governmental oversight. An unknown number of companies are developing plans to profit from earth or ocean engineering and the global South is the target of initial experiments. Civil society and governments in the South must become fully informed, and demand oversight and thorough assessment of social, economic and environmental impacts.



Addressing Nanotech Regulatory Issues

ETC Group issued a news release, *Clean-up - Clam-up - Screw-up? EPA's Nanotech Regs: Ironic Parameter* in response to the lead U.S. environmental regulatory agency's acknowledgement that it had approved at least 15 novel nano-scale chemicals. Further details on the approvals were not available because they were classified as confidential business information.

ETC Group testified at a public meeting held by the U.S. Food & Drug Administration on nanotech, in Washington, DC. Our testimony was widely quoted in national press.

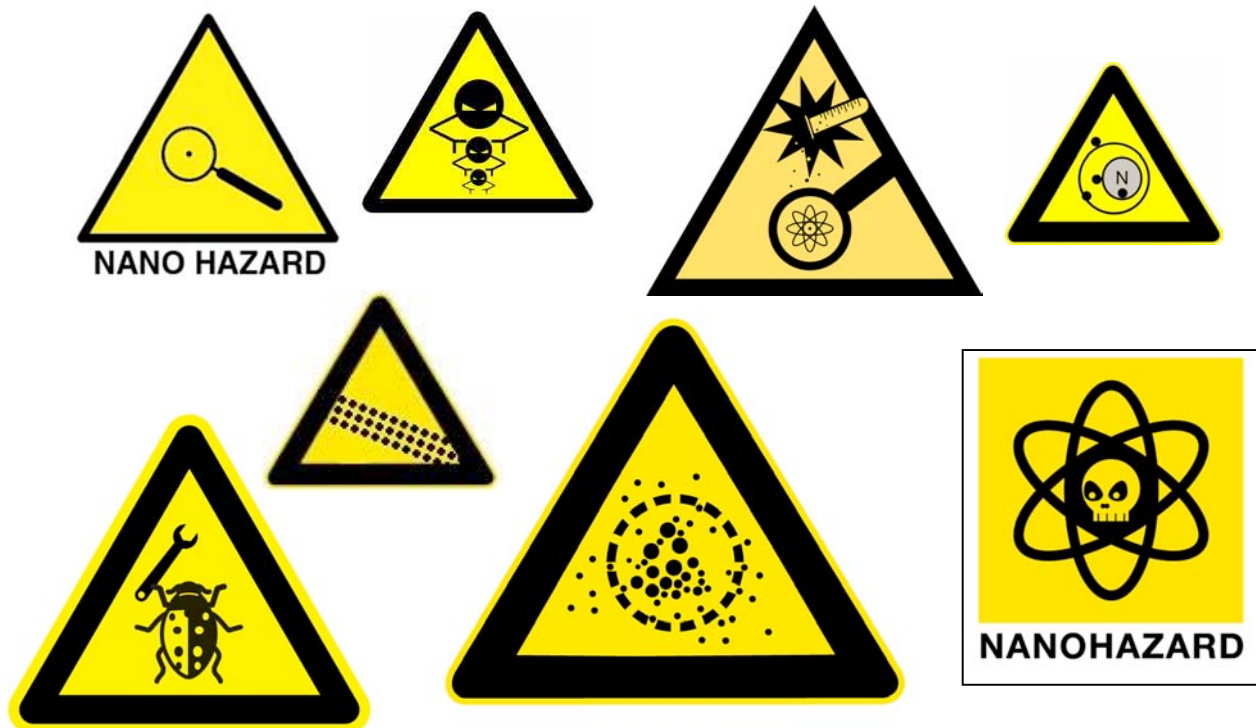
ETC Group – in conjunction with a coalition of public interest, non-profit and labor organizations that work on nanotechnology

issues (including workplace safety, consumer health, environmental welfare, and broader societal impacts,) – issued an open letter to the international nanotechnology community. The letter was a response to a proposed framework for voluntary oversight put forward by industry: *Civil Society/Labor Coalition Rejects Fundamentally Flawed Dupont-ED Proposed Nanotechnology Framework*.

With the joint release on July 31 of *Principles for the Oversight of Nanotechnologies and Nano-materials*, a broad international coalition of consumer, public health, environmental, labor, and civil society organizations spanning six continents, including ETC Group, called for comprehensive, mandatory oversight of the new technology and its products.

An International Nano-hazard Symbol Competition

The *International Nano-hazard Symbol Design Competition* netted 482 unique designs from 24 countries, all posted on our website in a viewing gallery. An eminent panel of judges selected 16 finalists that were presented on a ballot at the World Social Forum in Nairobi in January 2007. We sent the winning symbols to standard setting bodies around the world.



ETC Group Speaks Out

WE GAVE MORE THAN 55 SPEECHES OR PRESENTATIONS AT WORKSHOPS, SEMINARS AND CONFERENCES WORLDWIDE; BELOW IS A SAMPLE.

Sweden: *What Next?* Forum, Dag Hammarskjöld Foundation (DHF) on nanotechnology and medicine, geoengineering and synthetic biology.

Norway: Public event on *New Technologies and the Global South* sponsored by Norwegian Development Fund.

Belgium: European Commission and the European Patent Office on “Intellectual Property and Nanotechnology.” We were the only civil society organization represented.

Belgium: “Converging Technologies for Food: Nanotech, Bioinfo, Cognitive Sciences” European Union’s DG Research.

Switzerland: Synthetic Biology 3.0 (international congress of synthetic biologists) where we spoke on an ethics panel.

Spain: International Seminar *Para quién hacemos ciencia y tecnología (Science and Technology for whom)*, Observatorio de la Deuda en la Globalización.

Germany: Civil Society/NGO Conference on Sustainable Rural Development, spoke on new Green Revolution.

Germany: *Second European Forum on Sustainable Rural Development Sustainable Growth and Poverty Reduction in Rural Africa: How can Europe be a more effective partner?* hosted by European Commission and

Germany’s EU Council Presidency 2007.

Brazil: *Global Dialogue on Nanotechnology and the Poor* meetings on Commodities.

Mexico: Heinrich Böll Foundation’s *International Conference on citizenship and Commons*.

Mexico: *Maize, Geopolitics and Biofuels* panel debate organized by Casa Lamm and *La Jornada*.

India: *Global Dialogue on Nanotechnology and the Poor* – two meetings on nanotechnology and water.

South Africa: Events for CSO partners and indigenous groups on the impacts of GMOs, sponsored by GRAIN.

Kenya: Civil society organizations and government officials to discuss ICENT and nanotechnology.

Kenya: *World Social Forum* “What Next: New Global Challenges, Trend-lines and Alternatives” with DHF; “What Next: Carbon Trading: A Critical Conversation on Climate Change, Privatisation and Power;” “Ban Terminator! The Global Campaign to Ban Terminator: from Brazil (2006) to Bonn (2008);” “What Next: New technologies – implications on health, environment and democracy” with DHF; “The New Politics of Food in Africa: Gates Foundation,

the Second Green Revolution and the role of international institutions;” “Regaining control of our natural resources,” with Friends of the Earth International.

Ethiopia: *Seeds of Survival* (USC Canada) workshops on various topics including agrobiodiversity, emerging technologies and intellectual property rights at a meeting of delegates from 15 countries.

Mali: *Nyeléni 2007 World Forum for Food Sovereignty*, contributions on Terminator, agrofuels and new technologies.

USA: American Bar Association Section of Environment, Energy, and Resources’ *36th Annual Conference on Environmental Law*, “Making Way for the Super Tiny: Are Emerging Legal and Regulatory Frameworks for Nanoscale Materials Adequate?”

USA: *Building Bridges between Science, Business and Society* Nano and Bio in Society (NABIS).

USA: *Agrifood Nanotechnology Workshop*, Michigan State University.

Canada: Organic Growers Conference plenary session, *Challenging Seed Technology*.

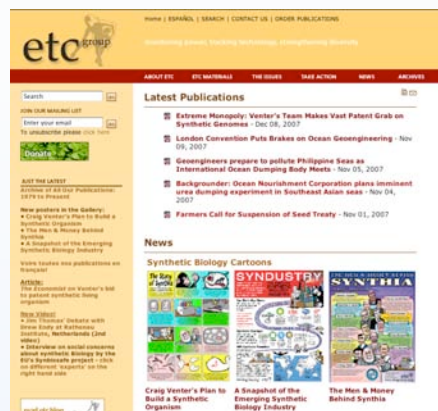
Canada: *The Future of Farm and Food Sustainability*: “Local Opportunities in an Age of Climate Change and Expensive Energy.”

ETC Group Online

WWW.ETCGROUP.ORG

In September, we launched our new website in English and Spanish, and we continue to increase French content. The number of visitors grew throughout the year. 142,000 people downloaded 260,700 documents from our website (25,400 of these visitors came more than once and 3,900 came more than 25 times). Over 11,700 other web pages link to our site.

We also launched a blog to provide news, analysis and reaction to events on a more immediate basis. Our blog is at www.etcblog.org.



Media

IN 2006-2007

ETC GROUP STAFF WERE QUOTED OR CITED IN MAJOR MEDIA NETWORKS WORLDWIDE.

Print Media:

- New York Times (U.S.)
- Washington Post (U.S.)
- BBC News (U.K.)
- Wall Street Journal (U.S.)
- The Guardian (U.K.)
- Daily Telegraph (U.K.)
- La Jornada (Mexico)
- Biodiversidad LA (Argentina)
- Financial Express (India)
- Times News Network (India)
- Melbourne Sun Herald (Australia)
- Wired News (U.S.)
- Le Monde (France)
- Ottawa Citizen (Canada)
- Vancouver Sun (Canada)
- Edmonton Journal (Canada)
- Financial Times (U.K.)
- The Herald (U.K.)
- Foreign Policy in Focus (U.S.)
- Reuters (International)
- CanWest News Services
- InterPress Service
- Le Monde (France)
- Times News Network (India)

- The Economist (U.K.)
- MacLeans (Canada)
- Business Week (U.S.)
- The New Yorker (U.S.)
- Newsweek (U.S.)
- Technology Review (U.S.)
- Materials Today (U.K.)
- The Ecologist (U.K.)
- Grist Magazine (U.S.)
- Science (U.S.)
- New Scientist (U.K.)
- Nature (U.K.)
- New Internationalist (U.K.)
- New York Law Journal (U.S.)
- The Age (Australia)
- GM Watch
- Genetic Crossroads
- True Food Network
- FreeMarket News
- AZoNanotechnology

Online and Blogs:

- Times Online (U.K.)
- ABC Science Online (U.S.)
- Bloomberg
- Nature.com
- Smalltimes

- Online Opinion (Australia)
- Utne.com
- World Science
- The Telegram
- Prism Webcast News
- Slashdot.org
- WatchdogWatch.org
- The Grist (blog)
- Nanodot
- The Loom (blog)
- Nanowerk
- Salon.com
- IUF.org
- Checkbiotech.org
- ALAI Latin American News Agency

Radio and Television:

- CBC Radio (Canada)
- BBC News (U.K.)
- Radio KBOO (U.S.)
- CBC Newsworld
- WDAF-Fox News (U.S.)
- CFRO Vancouver (Canada)
- CNN (U.S.)
- CBC Newsworld (Canada)
- Earthbeat Radio

ETC Group Communiqués

No. 93 Gambling with Gaia (January 2007) is the first civil society report to expose the risks and ambitions of geoengineering – the intentional, large-scale manipulation of the land, sea or stratosphere to counteract the undesired, environmental effects of human activities and to profit from carbon credits.

No. 94 Green Revolution 2.0 (March/April 2007) is an in-depth critique of the Gates and Rockefeller Foundations' Alliance for a Green Revolution in Africa (AGRA) in the context of major international agricultural development initiatives for Africa.

No. 95 Terminator – The Sequel (May/June 2007) provides a detailed overview and analysis of new molecular containment strategies that advance seed sterility platforms, including the Transcontainer's reversible transgenic sterility.

The World's Top 10 Seed Companies – 2006 (May 2007) reveals that, based on 2006 revenues, the top 10 seed corporations account for 55% of the commercial seed market worldwide, with Monsanto taking the top spot.

Finances

STATEMENT OF OPERATIONS FOR THE YEAR ENDING AUGUST 31, 2007

	2006-2007	2005-2006
REVENUE	\$ 800,076	\$ 949,592
EXPENSES		
Salaries and benefits	469,591	499,835
Consulting fees	24,768	26,955
Rent	33,915	35,487
Insurance	3,844	3,836
Interest and bank charges	3,688	3,676
Meetings	61,493	7,754
Professional fees	32,580	12,797
Telecommunications	14,616	14,743
Website management	8,104	15,379
Travel expenses	52,796	25,174
Office expenses	21,064	24,103
Maintenance and repairs	5,853	6,162
Books, printing and distribution	24,532	13,064
Foreign exchange loss	25,507	31,023
Amortization of capital assets	8,479	9,380
Portion of operating expenses charged to projects	(21,691)	(91,926)
PROJECT EXPENSES	46,424	283,320
TOTAL EXPENSES	815,563	920,762
EXCESS (DEFICIENCY) OF REVENUE OVER EXPENSES	(15,487)	28,830

A Selection of Published Articles by ETC Group Staff

“Trends in Intellectual Property and Nanotechnology: Implications for the Global South” by Hope Shand and Kathy Jo Wetter, published in the *Journal of Intellectual Property Rights*, by India’s National Institute of Science Communication for their special issue on ‘Patents and Emerging Technologies,’ Vol. 12, No. 1, January 2007.

“Hype and Hope: A past and future perspective on new technologies for development,” by Pat Mooney, *Development* (2006), 49: 16-22.

“An Introduction to Nanotechnology: The next small big thing,” by Jim Thomas, *Development* (2006), 49: 39-46. Published by the Society for International Development in Rome.

“Medical Applications of Nano-scale Technologies,” by Hope Shand and Kathy Jo Wetter, *World Affairs [India]: The Journal of International Issues*, Vol. 11, No. 2, Summer 2007.

“Implications of technologies converging at the nano-scale: Are we ready for the Little BANG?” by Kathy Jo Wetter, in *Nanotechnologien nachhaltig gestalten: Konzepte und Praxis für eine verantwortliche Entwicklung und Anwendung*, Sebastian Henn, Wilfried Kühling, Peter Markus, editors, Iserlohn, 2006.

“Transgénicos: asalto a la soberanía alimentaria” (an evaluation of the first decade of GMOs) by Silvia Ribeiro for *América Latina en Movimiento* April 2007, published by Agencia Latinoamericana de Información, Ecuador.

Our Board of Trustees

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Mr. Olle Nordberg, Sweden

Dr. Ricarda Steinbrecher, United Kingdom

Dr. Nettie Wiebe, Canada

Dr. Gregor Wolbring, Canada

Also pictured: Sven Hamrell, President Emeritus of ETC Group



Our Staff

Pat Mooney, Executive Director

Hope Shand, Director of Research

Kathy Jo Wetter, Programme Manager

Silvia Ribeiro, Programme Manager

Verónica Villa, Research Assistant

Jim Thomas, Programme Manager

Erin O’Manique, Director of Operations

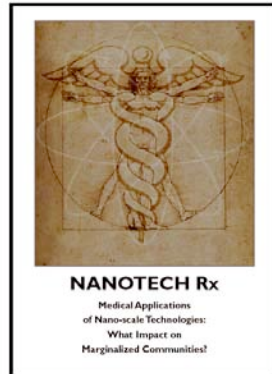
Charlie Shymko, Office Manager



Major Publications by ETC Group in 2006-2007

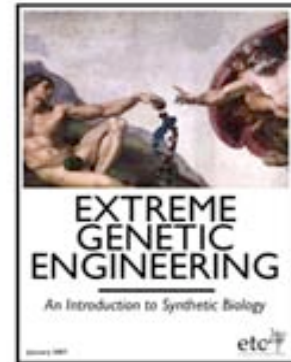
NanoRx - Medical Applications of Nano-Scale Technologies: What Impact on Marginalized Communities?

explores the role that nano-enabled medicine could play in addressing the health needs of marginalized communities, and the impact of nano-medicine on the pharmaceutical industry. Available in English, French and Spanish on our website or contact us at the address below.



Extreme Genetic Engineering: An Introduction to Synthetic Biology

concludes that the social, environmental and bio-weapons threats of synthetic biology surpass the possible dangers and abuses of biotechnologies. The report calls for a broad societal debate on synthetic biology's socio-economic and ethical implications including impacts on health, environment, human rights and security. Available in English and Spanish on our website or contact us.



Receive our documents by email

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Support our work!

You may make a tax-deductible donation via www.etcgroup.org, or send a cheque or money order to ETC Group offices in Canada or the United States. ETC Group is a registered charity under the Canada Revenue Code. Friends of ETC Group (www.friendsofetc.org) is a private non-profit organization under section 501(c)(3) in the United States. ETC Group is also incorporated in the Netherlands.

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