

► The Bill and Melinda Gates Foundation

►► Bill Gates calls for prioritizing vaccines at the 64th World Health Assembly

Bill Gates addressed government leaders at the recent World Health Assembly, which is the highest-level decision-making body of the World Health Organization. He called upon them to increase funding support for global vaccine roll-out, also stressing their accountability in providing the large benefits of vaccination to every child. He also called for this support to be shown at the GAVI Alliance pledging meeting in London in June 2011. Vaccines remain the most cost-effective interventions in averting the deadly burden of childhood infections; in recent years, Bill Gates has assumed a role of the most prominent advocate who ensured that vaccines were given proper attention and funding support. The most recent estimates show that the GAVI Alliance's vaccination roll-out has resulted in several millions of child deaths prevented over the past decade.

►► Bill Gates calls for polio eradication, United Kingdom responds positively

In early 2011, Bill Gates called the global health community for a final push, which should see polio eradicated. This crippling disease is hardly remembered in wealthy countries, but there are still areas of the world where the vaccine has not reached children and where pockets of disease persist. Bill Gates launched his call in a Manhattan town house that was once a property of possibly the most highly profiled victim of this disease – Franklin D. Roosevelt. The push to eradicate polio can be dated back to 1985, and the Bill and Melinda Gates Foundation started their large investments towards this goal in 2005. The Foundation's donations have changed the context and they have now emerged as the key donor – having invested up to US\$ 1.3 billion (€ 0.9 billion). British Prime Minister David Cameron has responded positively, announcing that the United Kingdom would double its contributions to polio eradication.

►► Smallpox eradication pioneer expresses scepticism over Gates' polio goal

Donald Henderson is an acclaimed pioneer of smallpox eradication. Having heard Bill Gates' call for polio eradica-

tion, he expressed some scepticism over the feasibility of this goal. As reported by the Financial Times, Donald Henderson said that polio eradication had "...become more of a 'movement' than a public health initiative capable of being examined by objective judgment." In his opinion, polio may not be "susceptible" to eradication in the same way as other infectious diseases have been in the past. He sees the future of the fight against polio in cheaper, but sustained control programmes with regular annual immunisations, which should minimize the devastating effects of polio over time.

►► Gates Foundation announces winners of Grand Challenges Exploration grants, launches Round 7

The Bill & Melinda Gates Foundation have been praised for their remarkable grant-awarding scheme. They provide US\$ 100 000 (€ 69 407) to each of the large number of recipients who propose to start-up innovative research with potential to improve lives in poor countries. This unique funding scheme, called "Grand Challenges Exploration" (GCE), offers a total of US\$ 100 million (€ 69 million) to the awardees. It has been designed to encourage innovation and enable creative researchers worldwide to test genuinely novel ideas that could address persistent global health issues in an effective way. A total of 88 new winners were announced after Round 6 of these grants had been closed. The Foundation has been accepting proposals for Round 7 of the scheme up until late May 2011. The new calls focus yet again on research areas where unconventional thinking is needed. The topics in Round 7 included creating ways to accelerate, sustain and monitor polio eradication; creating the next generation of sanitation technologies; creating low-cost cell phone-based solutions for improved uptake and coverage of childhood vaccinations; designing new approaches to cure HIV infection; exploring nutrition for healthy growth of infants and children; and applying synthetic biology to global health challenges.

►► WHO's programme for research and training in tropical diseases wins the 2011 Gates Award

This year's Gates Award for Global Health has been given to the Special Programme for Research and Training in

Tropical Diseases (TDR). This programme, hosted and co-financed by the headquarters of the World Health Organization in Geneva, has also been funded by UNICEF, UNDP and the World Bank. One of the world's largest public health prizes was awarded to programme Director Robert

Ridley at a ceremony in Washington, USA. Over the past 36 years, the programme has attracted researchers from all over the world who worked with TDR to find improved health solutions for people in poor countries, resulting in major progress against many infectious diseases of the poor.

► The GAVI Alliance (formerly The Global Alliance for Vaccines and Immunisation)

►► GAVI raises US\$ 4.3 billion, exceeds targets and meets its financial needs until 2015

The global vaccine charity – Global Alliance for Vaccines and Immunisation (GAVI) – held a donor summit in London on June 13th in a bid to overcome its financial shortfall and secure its financial needs for the next several years. International donors eventually pledged US\$ 4.3 billion (€ 3 billion), which will be used to vaccinate nearly 250 million children against the leading causes of child deaths such as pneumonia and diarrhoea. The donors which were critical for this success, which far exceeded gloomy expectations, were the governments of the United Kingdom, Norway and the Bill & Melinda Gates Foundation. The United Kingdom pledged US\$ 1.34 billion (€ 0.9 billion), the Gates Foundation promised US\$ 1 billion (€ 0.7 billion) and Norway offered US\$ 677 million (€ 463 million). This should allow GAVI to carry out all its immunization plans through 2015.

►► Ten years of GAVI Alliance – Progress Report 2010

Earlier this year GAVI has marked 10 years of its operations. It has also appointed a new Chief Executive Officer (CEO), Seth Berkley, who has been a founder and CEO of the International AIDS Vaccine Initiative. His strong track record as a global vaccines advocate has been praised and his appointment widely welcomed. GAVI has also issued its progress report for the year 2010. Some of the highlights include an estimate of more than 5 million future child deaths that have been prevented through GAVI activities. GAVI also estimated that more than 288 million additional children had been immunised with support from GAVI and its partners. Recently, GAVI are increasingly focusing on vaccines that could prevent childhood pneumonia and diarrhoea – the leading killers. It is hoped that this could contribute to preventing further 4 million deaths by 2015.

►► Large pharmaceutical companies finally reduce the prices of vaccines for the poor

In June 2011, leading pharmaceutical companies that produce vaccines against childhood infections announced that they will reduce the costs of their products for the poorest countries by a truly substantial amount. GlaxoSmithKline (GSK), Merck, Johnson & Johnson and Sanofi-Aventis have all agreed to cut prices through the international vaccine alliance, GAVI. This welcome move comes after years of pressure and calls on these companies to consider this reduction in order to enable life-saving vaccines to reach the low resource settings, where child deaths from the preventable infectious diseases tend to cluster. The vaccines included in this strategic decision by the companies will protect against diarrhoea (i.e., rotavirus) and human papillomavirus. A pentavalent vaccine which prevents diphtheria, tetanus, pertussis, hepatitis B, and *Haemophilus influenzae* type b will also be offered at a dramatically reduced price. GlaxoSmithKline will supply developing countries with its vaccine against rotavirus at a 95 per cent discount to the western market price.

►► Non-governmental organizations unhappy with appointment of a drug company to GAVI board

Although the GAVI Alliance continues to make remarkable progress towards immunizing children world-wide and preventing diseases and deaths, it is not free of critics. There are several non-governmental organizations (NGOs) which continue to stress that GAVI serves well the interests of large pharmaceutical companies, too, and that it has not done enough to improve the value for the money which GAVI donors are currently paying for the life-saving vaccines. They demand to see the prices of those vaccines low-

ered substantially. Earlier this year a Dutch pharmaceutical company Crucell (recently acquired by Johnson & Johnson) has been appointed to the board of the GAVI Alliance, which again sparked NGOs' "... concerns over conflicts of interest and demands for tougher competition to reduce prices," according to the Financial Times. This is because nearly 60% of Crucell's revenues in 2010 were coming from sales of its pentavalent vaccine to GAVI.

►► **GAVI strengthened by the former CEO of MTV networks**

The Global Alliance for Vaccines and Immunisation (GAVI) has announced that Bill Roedy, who was the key developer

of the MTV Networks, has agreed to join the GAVI network and assist their advocacy for immunisation world-wide. Bill Roedy, former CEO of the MTV, will become the first GAVI Envoy. This unexpected appointment underscores the importance of the public perception of the value of immunization. The recent scare over (apparently unfounded) reports that some vaccines may be linked to autism in children has revealed how quickly the behaviour of the general public changes under the influence of media reports, regardless of their accuracy. Mr Roedy is expected to raise awareness about the importance of vaccines, especially in fighting the main killers of children globally – such as pneumonia and diarrhoea.

► The World Bank

►► **Shifting the funding for global health from vertical to horizontal**

As recently discussed in the *New England Journal of Medicine*, health systems researchers have long debated whether health care is better organized 'vertically' or 'horizontally'. Vertical funding usually refers to supporting one (or a few) specific diseases, while horizontal funding can affect many diseases at the same time, through supporting health care systems. Examples of vertical interventions in global health are e.g. smallpox and polio immunization programmes. Horizontal approaches include e.g. support to primary care, as advocated by the World Health Organization's 1978 Alma Ata Declaration, or sector-wide approaches to promoting health care reform, supported by the World Bank. The US President's Emergency Plan for AIDS Relief (PEPFAR) and the Global Fund to Fight AIDS, Tuberculosis, and Malaria are further examples of disease-specific funding initiatives. Although many theoretical models predict larger benefits from horizontally structured support, there are very few such programs in place. In the world of global health today, it is much easier to get donors enthusiastic about the more specific, vertical programs.

►► **Innovative health financing – the role of Advance Market Commitment**

According to Wikipedia, an 'advance market commitment' (AMC) is "...a binding contract, typically offered by a government or other financial entity, used to guarantee a viable market if a vaccine or other medicine is successfully developed. As a result of such a commitment, the market for vaccines or drugs for neglected diseases would be compa-

rable in size and certainty to the market for medicines for rich countries. This would enable biotech and pharmaceutical companies to invest in the development of new vaccines to tackle the world's most pressing health problems, such as pneumonia, diarrheal disease, HIV/AIDS and malaria, in the normal course of their business decisions." An editorial in *Lancet Infectious Diseases* recently described how the roll-out of the GAVI initiative is helping to provide poor countries with low-cost pneumococcal vaccines: "The recent launch of pneumococcal vaccination in Nicaragua under AMC has shown that innovative approaches to health financing can benefit both global health and pharmaceutical companies."

►► **Center for Global Development publishes an analysis of the future of development finance**

In a recently published 'Working Paper 250', posted online by the Center for Global Development (which conducts independent research and develops practical ideas for global prosperity), it has been stressed that development finance is currently "at a turning point." The report mentions a "triple revolution of goals, actors and tools." The report predicts that "...as much of Asia grows its way out of poverty, aid will increasingly be focused on Africa and on countries plagued by instability, or with governments unable to meet the basic needs of their populations." Also, the share of development finance directed to tackling global public goods – like climate change, conflict prevention, and public health – is likely to expand substantially. The authors predict that the responsibility for addressing global challenges will increasingly be borne by coalitions that cut

across States, the private sector and civil society. It sees the role of multilaterals (such as WHO, GAVI, Global Fund, UNICEF, UNAIDS and the World Bank) as focussed on providing a coordinated mechanism/platform for delivering common objectives.

▶▶ World Bank identifies five poor African states as potential “Growth Poles”

Africa is lagging behind the rest of the world in most economic and health indicators. However, this presents the continent with a remarkable opportunity for growth and development over the coming decades, at the rate which could hardly be expected anywhere else, according to the World Bank. Its new strategy for the continent aims to leverage growing South-South investments, which have recently been initiated by the growing low and middle income economies like China, India, Brazil and South Africa. The World Bank would like to ensure more inclusive development. To foster this development strategy, the World

Bank suggested five poor states as ‘Growth Poles’ of the new Africa. These poles are being planned in Madagascar, Cameroon, Mozambique, The Gambia and the Democratic Republic of Congo.

▶▶ Pakistan seeks financial aid from the World Bank to purchase polio vaccine

The government of Pakistan has been reported to request an emergency financial package worth US\$ 41 million (€ 28 million) from the World Bank to purchase oral polio vaccine. The move should support its polio eradication initiative. The financial package should be awarded by the International Development Association of the World Bank. This assistance to the government of Pakistan is given under the third project since the year 2003, enabling it to procure OPV as part of the larger global campaign. The aid should help Pakistan to meet this year’s vaccine requirements in support of the National Emergency Action Plan 2011 for polio eradication in the country.

▶ United Nations (UN)

▶▶ High-level UN meetings to focus on burden of non-communicable diseases

In January 2011, Ban Ki-moon called on the world’s business leaders to help address the risk factors which underlie the most prevalent non-communicable diseases (NCDs). Health ministers from many countries met under the auspices of the United Nations in late April 2011 to adopt tougher measures against non-communicable diseases. These measures include preventive approaches, such as the promotion of healthy lifestyles and encouraging a multi-sectoral approach to prevention and treatment of NCDs. NCDs, principally heart disease, stroke, cancer, diabetes, and chronic respiratory diseases, have recently emerged as the leading cause of morbidity and mortality not only in high-income countries, but also in low and middle income countries. The UN High-Level Meeting (UN HLM) on NCDs in September 2011 will present global leaders with an opportunity to develop a coordinated global response to NCDs.

▶▶ General Assembly appoints Ban Ki-moon to second term as UN Secretary-General

On 21st June 2011 the United Nations General Assembly agreed to appoint Ban Ki-moon to a second consecutive

term as the Secretary-General of the Organization. Under the resolution, which was adopted by acclamation, his second term will run until the end of 2016. He is the eighth person to serve as UN chief and has been in office since January 2007. Following the re-appointment, Ban Ki-moon told the Assembly that he was “proud and humbled to accept it.” He also said that the UN had “laid a firm foundation for the future” on a number of issues since he assumed office, including climate change, nuclear disarmament, education, sustainable development and global health.

▶▶ WHO highlights the growing burden of non-communicable diseases

In April 2011, the World Health Organization reported that chronic illnesses of late onset (such as cancer, heart disease and diabetes) now cause more deaths than all other diseases combined. WHO, the United Nations’ health body, issued a global report on non-communicable diseases (NCDs). NCDs have reached epidemic proportions and pose a much greater threat world-wide than infectious diseases. They caused about 63% of the 57 million deaths recorded globally in 2008. Nearly 80% of these deaths were in low and middle income countries. Furthermore, NCDs are also projected to rise further in the coming decades, especially in rapidly growing middle income countries. Cost effective in-

terventions, such as reducing risk factors, early detection and timely treatment, will become critical in tackling the problem. However, the capacity of many low and middle income countries to implement those interventions is poor.

▶▶ **United Nations are increasingly harnessing the power of social media**

The United Nations Department of Public Information (DPI) is increasingly using social media and the internet to disseminate the work of the United Nations, according to UN News. In April 2011, Kiyo Akasaka, Under-Secretary-General for Communications and Public Information, told the opening of the latest session of the UN's Committee on Information that the recent popular uprisings across North Africa and the Middle East illustrated the power and reach of social media tools. Furthermore, in an effort to encourage individuals to help feed tens of thousands of hungry children across the world, the United Nations World Food

Programme (WFP) has created a social media platform through which people can make donations to the agency.

▶▶ **Tracking the progress towards UN's Millennium Development Goals**

Each year the World Health Organization presents a report summarizing the state of health in its 193 member countries. Part of the report usually focuses on tracking the progress towards the UN's Millennium Development Goals (MDGs). These goals, set in 2000 by consensus of all member states, aimed to ensure political commitment to accelerating global progress in health and development. This year's report shows continuing overall progress, but there are still regions where little or no improvement has been made. Child mortality in some countries in sub-Saharan Africa is now higher than it was in 1990, while the fourth MDG demands a reduction by two-thirds between 1990 and 2015. In parallel, the World Bank estimated that two-thirds of developing countries are either on track, or very close, to meeting key targets for tackling extreme poverty and hunger.

▶ **UN AIDS**

▶▶ **UN Secretary General calls world leaders to end AIDS by 2020**

Ban Ki-moon used the three-day UN's summit on AIDS in June 2011 to call upon world leaders to end AIDS by 2020. He said: "That is our goal – zero new infections, zero stigma and zero AIDS-related deaths." The meeting in New York marked the 30th anniversary of the discovery of human immunodeficiency virus (HIV). According to UN's estimates, some 34 million people have AIDS, but up to 50% do not know that they have the disease. More than 9 million people still do not get antiretroviral treatment, and about 1.8 million people die from AIDS each year. Ban Ki-moon stressed that new infections have dropped by 20% since 2001, when the world leaders first organized and developed plans to control the pandemic. The meeting was attended by 30 presidents and heads of government, and African leaders spoke of the desperate need for more financial support to fight the disease in their nations.

▶▶ **UN AIDS summit aims to cover 15 million sufferers with medical treatment**

A UN AIDS summit this year has set a target of more than doubling the global coverage of life-saving AIDS treatment. The concrete target is to provide 15 million AIDS patients

with antiretroviral treatment by 2015. Over the past three decades, the number of cases increased from a small group of young homosexual men in Los Angeles to 34 million men, women and children globally, who are estimated to be living with HIV today. It is hoped that, within the next decade or two, this trend can be reversed and AIDS stopped through a combination of high coverage of antiretroviral drugs and the development of a vaccine that will prevent the disease.

▶▶ **Cheaper antiretroviral drugs will be offered to 70 of the world's poorest countries**

Although cocktails of AIDS drugs which once cost more than US\$ 10 000 (€ 6905) per year in wealthy countries are now available in poor countries for less than US\$ 200 (€ 138), many patients still receive drugs which were developed decades ago and can have very serious side effects. The World Health Organization now recommends combinations containing tenofovir because they have fewer side effects and show less risk of development of resistance by the virus. The current price of one such combination is US\$ 159 (€ 110), which is down from about US\$ 400 (€ 278) three years ago. The lower prices of these drugs will be offered by eight Indian pharmaceutical companies. They were negotiated by the Clinton Health Access Initiative, with support

from British foreign aid and the Bill and Melinda Gates Foundation. The funding which will guarantee the initial payments, and which is crucial to getting the Indian suppliers to increase the production of these drugs, will come from Unitaid. Unitaid is an independent agency founded at the United Nations, which collects several agreed taxes which were set up to finance global health programs.

▶▶ **Babies who escape mother-to-child HIV transmission are at increased risk of other diseases**

According to a study published by *JAMA*, babies who manage to escape mother-to-child HIV transmission still face up to a four times greater risk of dying in the first year of life. The main reason is thought to be a greater susceptibility to infectious disease. Researchers examined some 100 mothers and babies in South Africa and compared antibody levels among children who were born infected with HIV to children who escaped HIV. Those who did not get HIV showed lower levels of antibodies to whooping cough, tetanus and *Pneumococcus* infections. All those infections are vaccine-preventable, but vaccines are not always available to these children. Births of HIV-positive babies have dropped dramatically in the past decade due to use of medications that mothers can take during pregnancy to prevent transmission.

▶▶ **China reports large successes in AIDS mortality reduction**

Government scientists in China have reported that AIDS mortality in the country has decreased by nearly two-thirds since free antiretroviral drugs were introduced in 2002. It is estimated that the coverage by AIDS drugs among those who need it in China has reached about 63%, while it was practically non-existent in 2002. Consequently, a 64% drop in mortality (measured per 100 'person-years') is reported: from 39.3 in 2002 to 14.2 in 2009. The study, which was led by China's national Center for control and prevention of AIDS and other sexually transmitted diseases, was published by *Lancet Infectious Diseases*. The number of infected people in China has reached nearly 750 000, but in a population of 1.3 billion the prevalence is still less than 1 in 1000 population. Of those infected, it is estimated that more than 300 000 have been tested and more than 80 000 are being treated. China begins treatment when a patient's CD4 cell count (which is a measure of immune system strength) drops below 350 per cubic millimetre. The government's experts are now debating whether to start treatment as soon as a patient tests positive for HIV. This strategy, also known as 'treatment as prevention', can reduce the risk of new infections by up to 96%, because it protects sexual partners.

▶ UNICEF

▶▶ **UNICEF's 'State of world's children' report for 2011 focused on adolescents**

The key theme of UNICEF's 'State of world's children' (SOWC) report for the year 2011 is investing in adolescence to break cycles of poverty and inequity. Today, young people throughout the world face the problems of economic turmoil, climate change, environmental degradation, urbanisation, migration and the rising costs of healthcare. Strong investments during the last two decades have resulted in large progress in the health and welfare of young children, but there have been fewer gains in areas critically affecting adolescents. Anthony Lake, UNICEF Executive Director, said that "...adolescence is a pivot point – an opportunity to consolidate the gains we have made in early childhood or risk seeing those gains wiped out." In the report, UNICEF says investment is needed to improve data collection to increase the understanding of adolescents' problems; invest in education and training to help adolescents lift themselves out of poverty; expand opportunities

for youth to participate and voice their opinion; promote laws, policies and programmes that protect the rights of adolescents; and prevent poverty and inequity.

▶▶ **UNICEF's initiative to promote transparency in vaccine pricing**

Many stakeholders in the global health community have been expressing concern in recent years that large pharmaceutical companies are using the global health funding drive to generate huge profits on life-saving vaccines. They argued that vaccines against life-threatening childhood infections should be made available for the poor at much reduced prices, and profits reduced. UNICEF launched an initiative recently to improve transparency by making vaccine prices available on its website. For the first time, UNICEF publicly listed the prices it pays individual drug manufacturers for vaccines. It is hoped that this move will lead to a more competitive market and lower prices, while the donors will also be assured that UNICEF and GAVI are getting reasonable prices. UNICEF has traditionally been one

of the largest buyers of children's vaccines and this move should ensure that vaccine supply is sustainable and affordable. UNICEF's partners in immunisation, such as GAVI Alliance, welcomed this positive development.

▶▶ **UNICEF carries out yellow-fever immunization, supports restoring education in Côte d'Ivoire**

Although the country has been facing political uncertainties and concerning unrests in aftermath to the 2010 presidential elections, UNICEF carried out immunization against yellow fever among nearly 1 million people in this troubled country. This move was conducted in four health districts with UNICEF's support as a result of 25 reported deaths from the disease since November 2010. UNICEF's Officer-in-Charge for Côte d'Ivoire, Sylvie Dossou, expressed gratitude to the GAVI Alliance for providing the yellow-fever vaccines, and to the World Health Organization for their partnership with UNICEF in carrying out this critically important campaign. In addition, UNICEF assisted more than 1 million children to return to school after months of disruption to the country's education system, caused by the political and security crisis in the country.

▶▶ **Online consultation process launched to set standards for child-friendly businesses**

Together with Save the Children and UN Global Compact, UNICEF has launched an online consultation process. The aim is to invite businesses and civil society to take an active role in developing a global standard of business principles pertaining to children's rights. An online consultation process should enable representatives of the private sector and civil society to shape the Children's Rights and Business Principles, setting the standard for child-friendly businesses everywhere. A series of follow-up meetings and global consultations is planned. The first meeting will take place in London, and it is hoped that it will attract leading business and civil society representatives.

▶▶ **On the 21st annual Day of the African Child, UNICEF reminds governments to protect children**

A very large number of children in Africa still experience violence, exploitation and abuse – many of them on a daily basis. This problem is particularly troublesome among children who live and work on the streets of Africa. Recently, on the occasion of the 21st annual Day of the African Child, UNICEF called on African governments to strengthen support systems which can provide a more protective environment in families and communities to keep children safe. The main approach is to strengthen families through the provision of basic social, health and education services.

▶ World Health Organization (WHO)

▶▶ **World Health Organization undergoes a major reform**

The last World Health Assembly – the highest-level decision-making body at the World Health Organization (WHO) – has supported proposed reforms which could bring the most substantial changes to the agency in more than six decades of its history. The reforms are clearly needed at WHO. Only a decade ago, it was the only important agency focused on global health issues. Today, it is struggling to maintain its relevance amidst the surge of sharply focused, well managed, innovative, and better funded big new players, such as The Global Fund, the GAVI Alliance and the Bill & Melinda Gates Foundation. Global health

issues have attracted an unprecedented interest among the donors over the past decade, but WHO has not seen much of these funds. In fact, WHO reported a US\$ 300 million (€ 209 billion) deficit in 2010. The reforms at WHO will see the agency slashing its next budget by nearly US\$ 1 billion (€ 0.7 billion) and cut hundreds of jobs at the Geneva headquarters and elsewhere at regional offices. The agency's Director General, Margaret Chan, explained these cuts as being due to financial problems among rich donor nations and the exchange rate for the weak U.S. dollar. Addressing the annual assembly, she also said WHO was clear of suspicion of pharmaceutical industry influence on the management of the H1N1 pandemic, and that innovative fi-

ancing mechanisms from the GAVI Alliance had helped to introduce new vaccines against childhood pneumonia and diarrhoea to developing countries.

▶▶ **WHO: fighting for relevance in the new world of global health**

After long consultations with WHO member states on its funding support, Director-General Margaret Chan called the WHO overstretched and unable to respond with sufficient speed and efficiency to many global health problems. More than six decades ago, the United Nations (UN) granted the WHO extensive normative powers which established this agency as the only relevant authority on international health globally. However, several modern initiatives, such as the Global Fund to Fight AIDS, Tuberculosis and Malaria, the GAVI Alliance (formerly the Global Alliance for Vaccines and Immunisation), US President's Emergency Plan for AIDS Relief (PEPFAR) and well-funded donor agencies (such as the Bill & Melinda Gates Foundation) established themselves as the new leaders in their respective fields of interest. These agencies do not suffer from constraints which often interfere with WHO's efficiency. Now, WHO is facing a financial crisis, at a time when funding support for global health issues has never been greater. Many donors question the WHO's actual performance, find the new initiatives a better and safer investment, and worry about the WHO's vision, efficiency and focus. The existing funding support for WHO largely targets its extra-budgetary activities, while there seems to be little enthusiasm for supporting the WHO's core budget, which is under the tight political control of its leaders.

▶▶ **An attempt by the WHO to explore the issue of fake medicines will require more time**

Fake drugs, or counterfeit medicines, are beginning to pose an increasingly serious threat to global public health. It is estimated that up to 15% of all medicines that are being sold worldwide are fake. This problem has attracted attention at the World Health Assembly in 2010. The member states requested WHO to establish an intergovernmental working

group on counterfeit medicines which will decide WHO's role in tackling this problem. According to the journal *The Lancet*, although this intergovernmental group was required to make specific recommendations to this year's 64th World Health Assembly in May 2011, they only met once (in February 2011) and agreed that they needed more time.

▶▶ **WHO's careful warning on mobile phone link to brain cancer**

In June 2011, the World Health Organisation issued a statement which was quickly disseminated through the global media. The agency warned that there was some evidence linking use of mobile phones to brain cancer. But this warning was worded very carefully, and rightly so. Most human diseases are hugely multi-factorial and caused by an interaction of many risk factors and their interplay with the genetic susceptibility of the host. Because of this, contributions of individual risk factors to an overall burden of disease in the population are typically rather small, albeit real. Because of this general property of most human diseases, it is wise not to overplay the role of individual risk factors, such as mobile phone use, when reporting these disease associations to the media. The story could have potentially been very damaging to the thriving mobile phone industry, but a well-balanced warning from the WHO will be unlikely to cause such damage.

▶▶ **WHO to address innovative financing of research and development for the poor**

The WHO has established a Consultative Expert Working Group on Research and Development: financing and coordination (CEWG). The group met in April 2011 to define their mandate and work plan. One of the main tasks of this group will be to assess proposals for innovative financing of research and development which should serve the needs of the people in low resource settings. CEWG launched a call for proposals and ideas for innovative financing, which will be posted on the CEWG website. CEWG plans to analyse the proposals and submit its report to the World Health Assembly in 2012.

► Environment

►► Study reveals global hotspots of climate change and food insecurity

A project by the CGIAR Research Program on Climate Change, Agriculture and Food Security (CCAFS) was set out to identify hotspots of climate change and food insecurity. They reported nine climate change indicators which included decline in the length of the growing period for crops, long periods of high temperature and increase in rain intensity. When these were combined, Southern Africa emerged as highly exposed, followed by the regions of northeast Brazil, Mexico, Pakistan, India and Afghanistan. This analysis means that millions of people already living in poverty are to be challenged further, with hotter and more variable weather, which will pose a threat to crop yields and livestock.

►► Strange mass death events affecting animal species are being reported worldwide

Since the middle of 2010, the world media have been reporting a series of rather strange events involving the mass death of different animal species. Birds and fish were predominantly involved. The events seem to be isolated from each other, but they have received a significant attention from the media and internet bloggers. The academics are still uncertain on how to explain these rare events. There is a growing list of proposed factors and explanations, but very little certainty over the true causes. Some believe that these mass death events are truly alarming, because they might indicate an early warning about the disturbances in Earth's natural cycle, which could possibly be related to the global climate change. Among suspected or proposed causes, the media suggested new infectious diseases, earthquakes or mass collisions and stress caused by fireworks.

►► Australia experiences some of the worst floods in living memory

A high intensity rainfall in January 2011 caused major flooding across much of the western and central parts of the state of Victoria, Australia. Although the true extent of

the damage is nearly impossible to assess, a rough estimate predicted a loss in revenues from Australia's GDP of nearly 30 billion Australian dollars. The floods damaged a large portion of Australia's coal mines and cotton fields, along with many other natural resources. The events follow the 2010 weather pattern of La Niña, which brings wetter conditions to eastern Australia. It has been reported that last year's La Niña was the strongest since 1973.

►► A book suggests links between climate change, health and political stability

Dan Ferber and Paul Epstein are the authors of the new book: *Changing Planet, Changing Health: How the Climate Crisis Threatens Our Health and What We Can Do About It* (University of California Press, April 2011). According to the authors, climate change threatens more than our environment. Steadily rising temperatures have already led to the spread of infectious diseases – such as malaria in Kenya, Lyme disease in Maine, and cholera. It is also thought to contribute to food shortages and malnutrition. An unstable climate can even fuel political and social unrest – for which they see an example in the recent revolts in the Middle East and North Africa.

►► A report points to high corruption levels in countries most affected by climate change

The watchdog group Transparency International (TI) has released a report entitled *Global Corruption: Climate Change*, based on contributions from more than 50 experts. According to this report none of the countries most affected by climate change (mainly in Africa and South Asia) scored higher than 3.5 in a corruption scale, with 0 being extremely corrupt and 10 being very transparent. They stated that corruption risks are high because of the complexity, uncertainty and novelty around many climate issues and mechanisms to fight climate change need to be strengthened and made more transparent to reduce increasing risks of corruption.

► Demography

►► More than a billion residents of India to get unique twelve digit identification numbers

'Aadhar', a project to provide unique twelve digit identification numbers (UID) to all residents of India, was initiated in January 2009. Apart from providing identity, the UID will enable better delivery of services and effective governance. In becoming a single source of identity verification, it could enable the easier roll-out of wide number of services such as bank accounts, passports, driving licences and many others. It is hoped that proof of identity and greater financial inclusion could lay the basis for checking fraud and corruption, avoiding duplication and targeting intended beneficiaries in a range of welfare programs. The first set of Aadhar cards were handed over by the Indian Prime Minister in September 2010 and it is expected that in the next five years all 1.2 billion Indian residents will have an Aadhar card.

►► Hundreds of millions keep moving to urban areas in China

One of the main strategic focuses of China's economic plan for the next decade is the idea of urbanisation. In the past 20 years, more than 200 million people have moved from villages to bigger cities, which is the most extensive process of urbanisation the world has ever seen. According to some estimates, urbanisation will continue to grow, with as many as 300 million people moving to cities over the next couple of decades. The country's leaders hope that urbanisation will transform hundreds of million of Chinese into consumers. At the same time, the movements to cities should help maintain high investment rates.

►► New census exposes gender imbalance in India

India's 2011 census shows a serious decline in the number of girls under the age of seven, with the female/male ratio dropping from 0.98 (in 1961) to 0.92 (in 2011). This represents the most striking gender imbalance seen since the Indian independence. Although the proportion of women in the Indian population is steadily growing (mainly due to factors such as longer life expectancy), India's ratio of young girls to boys is one of the most unbalanced in the world. Some researchers explained this by neglect of very

young female children and possibly the increased availability of antenatal screening for gender. Activists interested in this issue claim that the current level of imbalance suggests that up to eight million female foetuses may have been aborted in the past decade in India.

►► One-child policy in China may be revised in urban areas

China's one-child policy, which was introduced in 1979, was a major demographic policy decision launched at the beginning of China's economic reforms. In 2007, Chinese authorities assessed that the policy had prevented about 400 million births. The policy has been revised in the rural and minority areas of China where, if the first child of a family was a girl, the family is allowed to have a second child. On March 6 this year, during the annual Chinese People's Political Consultative Conference and the National People's Congress, further revisions have been proposed. Experts have suggested that since the aging population problem has become increasingly prominent, and with the growing sex-ratio imbalance, a revision of one-child policy should also be considered in urban areas, starting from 2015.

►► U.N. Reports steady rise of refugees

According to the New York Times, The United Nations refugee agency reported that 43.7 million people around the globe are displaced from their homes by conflict or persecution. The number is the highest reported in the past 15 years. In addition, 80% of all refugees in the world are being sheltered in the world's poorest countries, which cannot continue to withstand this large burden on their own. The UN's refugee agency, based in Paris, France, suggested in its 2010 Global Trends report that Pakistan, Iran and Syria were the world's biggest hosts of refugees, sheltering about three million people. Among the wealthy countries, Germany has the largest refugee population (about 600 000 people). António Guterres, the United Nations high commissioner for refugees, said that "Fears about supposed floods of refugees in industrialized countries are being vastly overblown or mistakenly conflated with issues of migration, with... poorer countries (being) left having to pick up the burden." He urged industrialized nations to address this worrying imbalance by increasing the number of people they accept.

► Economy

►► South Africa becomes the fifth member of the 'BRIC club'

According to the Guardian, Jacob Zuma, South Africa's president, had succeeded in gaining an invitation to join the BRIC (now BRICS) club of Brazil, Russia, India and China in their third summit on China's Hainan Island in April 2011. With the United States and Europe still trying to overcome the 2008 financial crisis, these five large, populous and fast growing economies are trying to challenge the world's traditional councils of power. Recently, after the announcement that the French Finance Minister Christine Lagarde will be the likely new head of the International Monetary Fund (IMF), the BRICS club stated that the choice of managing director should not be based on nationality alone, but also on competence.

►► G8 leaders off track on their Gleneagles commitments

In the G8 summit in Gleneagles two years ago, the leaders of the eight richest countries agreed to double their annual aid to poor nations to US\$ 50 billion (€ 58 billion) per year, with half of that money going to the world's poorest countries in Africa. But during the recent G8 summit in Heiligendamm, it was clear that the rich world was well off track to deliver on their Gleneagles commitments. A report by Oxfam suggested that, if present trends were to continue, the G8 would miss its target by about US\$ 30 billion (€ 21 billion).

►► One thousand economists join the call on G20 to accept 'Robin Hood' (Tobin) tax

The Robin Hood tax is a package of financial transaction taxes. It was proposed by a campaigning group, largely composed of civil society non-governmental organizations. Campaigners have suggested the tax could be implemented globally, regionally or unilaterally by individual nations. Conceptually similar to the Tobin tax (which was proposed on foreign currency exchange only), it could be imposed on the purchase and sale of stocks, bonds, commodities, unit trusts, mutual funds, and derivatives such as futures and options. Recently, a thousand economists from 53 countries have written to G20 finance ministers asking them to apply the 'Robin Hood tax' on transactions in financial markets.

The idea is to levy a very small charge (around 0.05%) and use the money raised from this charge to maintain rich nations' commitments to the developing world. One of the main objections to this tax from the speculators is that since there are millions of trades every minute in global financial markets it will be unworkable to calculate the tax. However, this argument is rather unconvincing, since share transactions are already being taxed.

►► Brazil seeks a role in Africa through friendly approach towards local workforce

According to Reuters, Brazil seeks a different approach in Africa from that already practiced by China. At building sites from Angola to Zambia, teams of Chinese workers often do the work instead of Africans. Wherever local African residents are employed, there have been reports that Chinese may be treating them rather roughly. But engineering groups from Brazil, such as Odebrecht (recently contracted to fix Liberia's railway), decided to employ locals and to treat them well. Odebrecht and other Brazilian companies want to distinguish themselves from companies from other emerging powers and to find a sustainable role in Africa through an approach which is friendly to the locals.

►► India announces plans to invest in Africa

The 2nd Africa – India Forum Summit was held this year in the Ethiopian capital, Addis Ababa. During the opening session of the summit, Indian Prime Minister Manmohan Singh announced that India will offer to Africa a record US\$ 5 billion (€ 3.4 billion) loan grant for the next three years to help the continent achieve its development goals. India has also offered an additional US\$ 700 million (€ 482 million) for the establishment of new institutions and training programs in Africa and US\$ 300 million (€ 207 million) support for the new Ethiopia – Djibouti railway line project. The Indian Prime Minister also suggested the establishment of several clusters including an India – Africa Food Processing Cluster and an India – Africa Institute of Agriculture and Rural Development. He finally proposed the creation of an India – Africa Virtual University, which will provide 10 000 new scholarships for African students.

► Energy

►► Germany moves towards closing its nuclear power plants by 2021

A committee appointed by Chancellor Angela Merkel proposed that Germany should close all of its nuclear power plants by 2021. Nuclear energy currently meets nearly a quarter of Germany's electricity needs, according to the Energy Ministry. The rest comes from coal supplies (42%), renewable sources like wind and solar energy (17%) and natural gas (14%). Interestingly, not even Japan, where a major nuclear scare occurred in March following an earthquake and tsunami, plans to abandon its reliance on nuclear power. Japan currently derives 30% of its electricity from nuclear power plants. Germany's move away from nuclear energy, which partly reflects the strong influence of environmentalist groups in this country, is being closely watched by other European governments. Contrary to Germany, many nations in Central and Eastern Europe plan to develop or expand nuclear power production.

►► IPCC projects that renewable sources could provide 77% of world's energy by 2050

The experts from UN's Intergovernmental Panel on Climate Change (IPCC) said that renewable sources could provide a majority of the world's energy supplies by 2050 in their recent report. However, this projection is conditional on global governments' dramatic increase of financial and political support for technologies such as wind and solar power. The report also stressed that the availability of renewable sources, like the wind and the sun, was virtually unlimited and could provide up to 77% of the world's energy needs within the next 40 years. The report also pointed that all renewable sources used today, such as wind, solar, geothermal, hydropower, bioenergy and ocean energy, currently accounted for only about 13% of global energy supply. To scale this up to three quarters, large investments by governments and the private sector would be needed, amounting to US\$ 5.1 trillion (€ 3.5 trillion) through 2020 and nearly US\$ 7.2 trillion (€ 5 trillion) between 2021 and 2030.

►► Bright prospects for wind power scale-up in the United States

Wind power is one of the fastest-growing sources of energy around the world. It is popular because it is abundant and clean, providing communities with their local source of electricity. In the United States, which has passed Germany and become the country producing the most wind power,

the Department of Energy estimated that wind power could account for 20% of the nation's electricity supply by 2030. Despite a prolonged recession and restricted credit markets, the wind power industry grew very strongly in the United States in 2009, adding 39% more capacity in comparison to a year earlier. The country is now very close to meeting 2% of its electricity needs from wind turbines. The American Wind Energy Association said the growth of wind power was helped by the federal stimulus package. The package extended a tax credit and provided other investment incentives for the industry.

►► Winners of the annual Goldman Prizes announced

The annual Goldman Prizes, presented at a ceremony in San Francisco Opera House to six recipients this year, are awarded to activists who challenge those in power while either enhancing, or defending the environment. Each winner receives a stipend of US\$ 150 000 (€ 103 305) stipend. The Goldman juries have been particularly prone to awarding those whose activities involve considerable risks. As an example, Wangari Maathai, the Kenyan founder of the Greenbelt Movement, has spurred the planting of tens of millions of trees across Africa. He won a Nobel Prize in 2004 – which was 13 years after receiving a Goldman Prize. This year's winners include Ursula Sladek from Schönau, Germany, who created a small local power company, EWS, that rivalled the previous provider and which now provides electricity from renewable energy sources to her entire town and 110 000 other customers across Germany. Other recipients range from a Zimbabwe-based conservationist who worked to save the endangered black rhino, to a Texas man who fought refinery pollution in Port Arthur.

►► Germany's energy company among many to back out of India

Enercon of Germany is one of the world's biggest makers of wind turbines. Recently, they announced a loss of its entire Indian subsidiary with annual sales of more than US\$ 566 million (€ 390 million) after a dispute with a local partner and an encounter with Mumbai law enforcement authorities. They also claim that they have lost control of its patents in India, and fear that technology could be appropriated by their competitors in this big and growing market. The case has caused diplomatic tensions and clouded the image of India in Germany as a desirable investment market. Enercon is among many foreign companies and

investors which have started to grow weary of the country's widespread corruption, weak infrastructure and government limits on foreign investment in certain industries. Be-

cause of this and similar experiences, direct investment in India by foreign companies and investors fell by more than 31% in 2010, in comparison with the previous year.

► Peace and Human Rights

►► United Nations declare internet access a basic human right

The UN declared that internet access should now be considered a human right. The Special Report states that the Internet is one of the most powerful instruments of the 21st century, because it helps increasing transparency, accessing information and facilitating active citizen participation in building democratic societies. However, given that access to basic necessities such as electricity remains difficult in many developing countries, the report states that universal access to the internet for all individuals worldwide cannot be achieved instantly, but it stretches the obligation for all countries to promote or facilitate the right to freedom of expression and the means necessary to exercise this, including the internet.

►► UN reports on serious human rights breaches in more than 50 countries

A report, presented in early June 2011 to the UN Human Rights Council (UNHRC), documented serious violations of human rights in more than 50 countries. According to the UNHRC, some clear examples of these violations were the killings of demonstrators in Syria, Yemen and some other Arab countries. In addition, the report contains new evidence on alleged atrocities committed in the final stages of Sri Lanka's civil war. The report concluded that there is a great need for transparent independent investigations into the human rights violations that have taken place in more than 50 countries.

►► India and Pakistan agree to keep pushing for peace over Kashmir

According to the Associated Press, India's foreign secretary and the next Ambassador to the United States, Nirupama Rao, said in June 2011 that her country would remain concerned about the threat of terrorism, but is committed to peace talks with Pakistan. Those talks have stalled since the 2008 terrorist attacks in Mumbai. Her comments came following a two-day gathering of the delegations of the two nations in Islamabad. The two countries, both with nuclear weapons, held their first formal talks on the disputed region of Kashmir since the Mumbai attacks. They have already fought three wars since their independence in 1947, two of

them over Kashmir, which both nations claim in its entirety. The attacks in Mumbai left between 100 and 200 people dead and they have been blamed on Pakistani militants, who are suspected of building paramilitary forces and developing strongholds in Kashmir. Pakistan has denied that any state institutions were involved in any way with the attacks on Mumbai. The home secretaries met in New Delhi in March 2011 and agreed to set up a terrorism hotline and to cooperate on the Mumbai attack investigation, while the secretaries for commerce from both sides met in April 2011.

►► US to pull out from Afghanistan, Europeans to follow swiftly

The President of the United States, Barack Obama, announced in June 2011 that a phased pullout of troops from Afghanistan will be set in motion, seeking to end this costly engagement. He currently plans to withdraw 10000 troops by the end of 2011 and a further 23000 by the end of the summer 2012. His announcement won immediate support from France's President Nicolas Sarkozy, who promised to follow swiftly. After nearly a decade of fighting in Afghanistan, Obama's withdrawal plan was welcomed by NATO allies. A number of other European nations which have contributed troops to the military operation against the Afghan Taliban insurgency said they would also initiate phased reductions. This mission has burdened state budgets and has been entirely against public opinion across much of Europe.

►► US commission to watch over human rights in clinical trials

The United States Presidential Commission is a special commission, set up by President Barack Obama in 2009, which considers how best to protect the human rights of people who take part in clinical trials. This Commission was set up after the discovery that the US Public Health Service had conducted unethical research in Guatemala from 1946 to 1948, in which nearly 700 people were deliberately infected with syphilis and other sexually transmitted diseases. The trials were trying to show that penicillin could be used immediately after sex to prevent infection. Although an unethical experiment like the Guatemala trial is thought to be considerably less likely today, transparency, strict regulations and clearer guidelines are still necessary.

► Food, Water and Sanitation

►► Rising food prices could threaten economic growth in Asia

In April 2011, the Asian Development Bank released a report in which it stated that sharp rises in food prices are a threat to economic growth in Asia. The bank made a gloomy prediction that this trend could soon push millions of people into extreme poverty. Food prices in Asia have increased at an average of about 10% in the first half of 2011, which could force more than 60 million people below the poverty income threshold of US\$ 1.3 (€ 0.9) per person a day. Changyong Rhee, the chief economist of the bank, reminded that "...Asia is (still) home to two-thirds of the world's poor." Economic growth in China and India is blamed for pushing up prices, while the region's population density and uneven income distribution make the lower social classes especially vulnerable to food prices growth. The poor in Asia typically spend nearly two-thirds of their income on food alone. The rise in prices of food and fuel leave Asia's consumers with less income for other goods, while inflation could also prompt central banks to further raise interest rates. These factors would all work together to slow down economic growth.

►► European Commission marks World Water Day by launching a new funding mechanism

The focus of World Water Day 2011, which is celebrated on 22 March each year, is 'Water for cities – responding to the urban challenge'. The European Commission marked this day by announcing the launch of a pooling mechanism in the framework of the African, Caribbean, Pacific and European Union (ACP – EU) water facilities. Under this mechanism, the European Commission will provide 40 million Euros for grants from the European Development Fund (EDF) with further loans from the EU multilateral and bilateral finance institutions. The scheme is expected to finance projects for access to water and sanitation services in African, Caribbean and Pacific countries. In most of the industrialized countries, nearly everyone has access to abundant supplies of safe and clean drinking water. However, in most low and middle income countries it is still not advisable to drink water from the tap.

►► Sanitation Millennium Development Goal is badly off track

Despite all the progress in human development, 2.6 billion people, or about 40% of the total World's population, still

do not have access to proper sanitation. It is estimated that each year 1.5 million children of pre-school age die of diarrhoea caused by unsanitary conditions and poor hygiene. The UN's Millennium Development Goal on expanding access to water and sanitation services by 2015 is very likely to be missed. Donors have increasingly avoided funding projects relevant to water and sanitation, and focused on health and education-related initiatives instead, according to research by the World Bank and Water Aid. The Guardian reports that women and girls will be among the hardest hit by this failure, quoting the World Bank's report released in May 2011. Water Aid is also due to publish its new report this year, showing that water and sanitation programs accounted for about 8% of global financial aid in 1990, while between 2007 and 2009 they accounted for just over 5%. Julia Bucknall, the World Bank's water chief, said that issues such as sanitation simply do not seem to be as attractive to donors as some other areas, particularly tackling specific diseases.

►► A community-led approach to sanitation for low resource settings

Community-led total sanitation (CLTS) is gaining increasing attention as the Millennium Development Goal on sanitation is being missed. The traditional approach to hygiene has been education and subsidy. But in rural areas of low and middle income countries there have been many failed programmes, with toilets not being used or put to other purposes, or dismantled and materials used for other purposes. The cost of these failed development programmes runs into billions of dollars. CLTS does not use any standard design, hardware subsidy, teaching or any special measures. Communities are mobilised into analysing their own sanitation and waste behaviour, making their own participatory defecation and social maps, inspecting the areas of open defecation and analysing pathways to the mouth. The CLTS approach was pioneered in Bangladesh in 2000 by Kamal Kar, a development consultant from India. Since then he has been joined by many others to promote it, including Plan International, UNICEF, the Water and Sanitation Programme of the World Bank and Water Aid. The approach has now been adopted in more than 40 countries. It is usually driven by passionate champions, as many become committed once they experience the enhancement of their community's human wellbeing. For women and girls it has helped to promote menstrual hygiene, self-respect, and the bodily wellbeing brought about by being able to defecate during daylight and in private.

►► **Fears over contamination of Japanese food exports**

The United States' Food and Drug Administration blocked imports from Japan's radiation zone. It announced that it would avoid milk, vegetables and fruit from areas near the tsunami-smashed nuclear plant because of contamination fears. Other nations may follow with formal bans, while some private importers have stopped any shipments from

Japan. Earlier, Japan had reported that above-safety radiation levels had been discovered in 11 types of vegetables from the area, in addition to milk and water. But the officials insisted that there was no danger to humans, and urged the world not to over-react. Tokyo authorities said water at a purification plant for the Japanese capital, with 13 million residents, had 210 becquerels of radioactive iodine, which was more than twice the level of safety for infants.

► Science and Technology

►► **Malaria vaccine trials move to Phase III with next generation vaccine already planned**

It has been estimated that malaria still kills up to 800 000 people each year. GlaxoSmithKline and the PATH Malaria Vaccine Initiative recently started Phase III clinical trials on a developmental vaccine against malaria after Phase II testing proved effective. In the experiments completed in previous stages, the incidence of malaria was decreased by 53%. The potential to reduce episodes further was even larger if infants and young children were primarily targeted. Reuters reported further that even as the world's first malaria vaccine moves closer to the market, GSK, PATH and Crucell have joined forces to test a next-generation vaccine against malaria. The new vaccine will be an amended version of the currently tested GSK vaccine. It will try to add an engineered common cold virus developed by Crucell to 'prime' the immune system to get a stronger response.

►► **Scientific publishers controversially tried to deprive poor countries from free access to journals**

Lack of access to knowledge is widely accepted to be one of the main limitations to human development. In 2002, the World Health Organization launched the Health Inter-Net Network Access to Research Initiative (HINARI) project. Within this initiative, 137 publishers have provided content from 7000 journals free to local non-profit institutions in 105 eligible countries. Kimberly Parker, WHO's HINARI programme manager, stated that 400 new journals were added to the network in 2010 alone. HINARI offers the opportunity of access to knowledge for the most resource-poor countries in the world. However, this programme seemed to be falling apart at one point during 2011, because big publishers began to withdraw from the scheme. Their decision has caused much debate and controversy.

The HINARI program has recently been reviewed and an agreement seems to have been reached, in which publishers would continue to provide access until at least 2015.

►► **Researchers test needle-free, inhalable vaccine against measles**

Sustained high vaccination coverage is critical to preventing deaths from measles. Despite the availability of a vaccine and its very high level of implementation globally, measles remains an important killer of children worldwide. The areas under most danger are deprived, less-developed regions where vaccination coverage is limited. A team of researchers, led by scientists from the Johns Hopkins Bloomberg School of Public Health and the University of Colorado, developed and successfully tested a dry powder containing live-attenuated measles vaccine that can be inhaled. The novel vaccine against measles was studied in rhesus macaques, and the results were published in January 2011 in the journal *PNAS*.

►► **The growing case for 'open science' and online raw data sharing**

The value of routinely sharing the results of all clinical trials would be immense. Meta-analyses of the raw data from many clinical trials would have a potential to provide definitive answers on the effects of health interventions. The increasing use of electronic medical records in an anonymised format could provide high quality pharmacovigilance at unprecedented scale. However, a regime of open access to scientific data also poses many problematic questions. Because of the importance and timeliness of the issues, the UK's Royal Society has established a Working Group to explore these questions, issues and challenges in great depth and to make recommendations about how they might be addressed. The Working Group is currently seeking evidence from scientists and from the public alike.

►► **China looking forward to becoming the new world leader in science and technology**

Chinese Premier Wen Jiabao said in May 2011 that China “must develop powerful strength in science and technology and foster a large number of talented individuals in order to ‘gain the upper hand’ in international competition.” Addressing a plenary session of the National Congress of the China Association for Science and Technology (CAST), he stressed that the future of China relies on science and technology. He also said that China should improve the quality, performance and competitiveness of traditional industries through scientific and technological

progress, suggesting that China should develop its own basic research and frontier research. The premier pledged that the government will provide long-term, stable financial assistance for basic and frontier research and set up a number of research centres, which will be based at high-level national research institutions and research-centred universities. He concluded that China should also gradually reform the systems of management, decision-making, appraisal, and personnel in the field of science and technology, so as to form a modern system in this sector that fits the country’s socialist market economy. He also pledged to firmly carry out the national strategy on intellectual rights, by stepping up efforts to protect them.