

Many scientists admit to misconduct

One in three scientists has committed some type of scientific misconduct, according to a study released in June. The survey, based on the responses of thousands of early- and mid-career scientists, was the first to consider overlooked examples of scientific misconduct (*Nature* **435**, 737–738; 2005).

Fewer than 1.5% of the scientists surveyed admitted to serious misdeeds, such as falsification of data and plagiarism, but 15.5% said they had altered the design or results of a study because of pressure from a funding source. More than 12% said they had overlooked others' use of flawed data. Overall, 33% percent admitted to one of ten types of misconduct. The study authors suggest that the high incidence reflects the increased pressure among scientists to compete for grants and publish papers.

Some experts say the small but pervasive problems are damaging to science. But others argue that the survey questions are too vague and the minor misdeeds don't signal an ethical collapse. The government currently only monitors fabrication or falsification of data and plagiarism. In 2002, the Federation of American Societies for Experimental Biology and the Association of American Medical Colleges fought a government proposal to monitor a broader range of ethical abuses (*Nature* **420**, 739–740; 2002).—ES

Grand Challenges names 43 global health projects

The Grand Challenges in Global Health initiative in June announced \$436.6 million in grants to fund dozens of projects across the globe. The goal of the program is to create cheap technologies that are easy to use and distribute in developing nations.

Launched in 2003, the initiative outlines 14 health goals that would help developing countries. After reviewing more than 1,500 proposals, the advisory board selected 43 projects from scientists in 33 countries, including vaccines that don't require refrigeration, bacterial parasites that kill mosquitoes before they transmit dengue fever and an HIV vaccine that stimulates immune responses in the lining of the vagina.

The program is supported by \$450 million from the Bill & Melinda Gates Foundation, \$27.1 million from the Wellcome Trust and \$4.5 million from the Canadian Institutes of Health Research.—ES

Millennium development goals remain out of reach

Many of the poorest countries in the world will fail to meet the millennium development goals, according to reports released in June by the United Nations and the World Health Organization (WHO). The situation is particularly dire in sub-Saharan Africa, where progress has slowed due to the AIDS epidemic.

In September 2000, 189 world leaders signed the Millennium Declaration, a blueprint for decreasing poverty and disease across the globe. Three of the eight goals address health problems: reducing child and maternal mortality, and combating HIV/AIDS, malaria and other diseases by 2015.

According to the report, more people are getting access to insecticide-treated bednets and treatments for tuberculosis. Some countries, such as Egypt and Bangladesh—one of the poorest countries in the world—have substantially reduced maternal mortality by improving access to medical care. But the rates have plateaued or increased in regions such as sub-Saharan Africa. No developing country is on target to reduce child mortality rates.

A follow-up report released in June by the WHO calculates that poorer countries will need \$135 billion in 2006, rising to \$195 billion in 2015, to meet the goals. World leaders will meet in September to outline the necessary steps to achieving goals over the next ten years.—ES

Low voter turnout routs Italy's fertility referendum

Italy's law on assisted reproduction remained in force after a referendum in mid-June failed because of low voter participation. Only 26% of voters, half of the required 50%, turned up to participate in the referendum.

Scientists and patient groups had hoped that a ballot would reverse parts of the law, which is the most restrictive in Europe. But Catholic bishops, backed by Pope Benedict XVI, urged people not to vote, saying the best strategy to defend the law would be a failed quorum.

First passed in February 2004, the law bans the use of spare embryos for stem cell research, freezing of fertilized embryos and preimplantation genetic diagnosis. The rules permit couples to fertilize three eggs, but require them to implant all three at the same time, regardless of the woman's age.

Arne Sunde, chair of the European Society of Human Reproduction & Embryology, says the regulations are "unethical, deplorable and a disaster for women." Since the law was approved, the rate of pregnancy in Italy has decreased by 15% on average, multiple pregnancies have increased by 10% and abortions by 10.6%, according to Luca Gianaroli, head of an *in vitro* fertilization center in Bologna. The data are based on numbers from six major *in vitro* fertilization centers in Italy.—AM

South Korean chalks up another stem cell victory

Advances in stem cell research on opposite sides of the globe have brought the potential therapy a few steps closer to reality.

South Korea's Woo-Suk Hwang (*Nat. Med.* **11**, 464; 2005) and his team at Seoul National University announced in May that they had created 11 stem cell lines that are genetically matched to individual patients (*Science* doi:10.1126/science.1112286; 2005). Such cells are more likely to be accepted by the patient's immune system. Hwang's team has also drastically improved the efficiency of their cloning technique. Earlier experiments required 242 eggs to make a single stem cell line, whereas the most recent lines were generated with 17 eggs on average.

In the US, where progress in stem cell research has lagged due to restricted public funding, the House of Representatives passed a bill permitting the use of federal funds for embryonic stem cell research. The bill would also allow new cell lines to be derived from discarded embryos in fertility clinics, if donors give consent (*Nature* **435**, 544; 2005).

Researchers hope the political victory signals that the US is ready to pursue stem cell research as avidly as other nations. In South Korea, Hwang is a national hero, but US President Bush has called his research morally troubling.

To become law, the US bill would need to pass a Senate vote and be signed off by President Bush. The president has repeatedly said that he will veto the bill, which would reverse his 2001 policy limiting federal funding to stem cell lines already in existence.—ES

