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make
embryos
redundant?

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HUMAN RIGHTS

Academies Seek Release Of Egyptian Scientist

Leaders of the U.S. science academies are protesting an Egyptian court's decision to jail Saad Eddin Ibrahim, a longtime human rights activist and perhaps the most prominent social scientist in the Arab world. Ibrahim was convicted in Cairo on 21 May of misusing foreign funds and defaming the Egyptian government, drawing a prison sentence of 7 years. The presidents of the U.S. National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine sent a plea for mercy to Egyptian President Mohammed Hosni Mubarak on 31 May, saying that Ibrahim did not get a fair trial. They ask Mubarak to make a "magnanimous gesture" by "immediately and unconditionally" releasing him.

Human rights groups and scientists around the world have been stunned by the court's action, which also led to jail sentences for 27 of Ibrahim's colleagues at the Ibn Khaldoun Center for Development Studies in Cairo. This has been "absolutely a body blow to human rights activity in Egypt," says Morton Panish, formerly of AT&T Bell Labs and a member of the academies' Committee on Human Rights. The Ibn Khaldoun center, which Ibrahim founded 12 years ago, has been shut down.

The trial took place in Egypt's Supreme Security Court, a special court operating under "emergency" laws enacted in the 1970s to deal with Islamic extremists. Observers say the charges against Ibrahim appeared flimsy: For example, he was accused of mishandling a \$250,000 grant from the European Union for monitoring election procedures, even though the donor had found no misuse of funds. According to the academy committee's report on the affair,* released last week, the prosecutor called no witnesses, and the judges returned a guilty

verdict without reviewing volumes of defense material—just 90 minutes after the arguments had been completed. The Egyptian Embassy in Washington, D.C., however, defended the verdict in a letter to *The Washington Post*, saying that the trial was open, proper procedures were followed, and Ibrahim has the right to appeal.

The Committee on Human Rights has been following Ibrahim's case closely and in February dispatched representatives including Panish to attend part of the trial. Their report calls the treatment of Ibrahim "symptomatic of an increasingly less tolerant attitude toward those working to promote democracy and the growth of civil society." Says Panish: "Many Egyptians thought this would come out OK. Now they are in shock."

Some believe that Ibrahim's efforts to expose official misconduct got him in trouble. Although he has worked for the United Nations and the Egyptian government, the committee's report points out that since the mid-1990s, the Ibn Khaldoun Center has increasingly turned its attention to the government's sluggishness in introducing democratic reforms. Ibrahim has also been involved in studying touchy areas such as

human rights committee.

The Egyptian press has been hostile to Ibrahim—who is married to a U.S. citizen, sociologist Barbara Ibrahim, and has dual citizenship—characterizing him as a chronic troublemaker backed by anti-Egyptian supporters of Israel. Wiesel says the committee is working to counter the bad press by contacting about 50 science academies internationally. "We are asking them to write so there are more voices," he says.

Ibrahim and his family have steadfastly claimed to have faith in Egypt's system of justice. They now plan to appeal to Egypt's highest judicial authority, the Court of Cassation. That appeal may be heard in a few months.

—CONSTANCE HOLDEN

EMBRYONIC STEM CELLS

German Leaders Spar Over Bioethics

BERN—An intense debate over the ethics of embryo and genetic research is setting Germany's president against its chancellor, splitting traditional party allies, and stepping up the pressure on a new federal bioethics council that was scheduled to hold its first meeting on 8 June.

The dispute had been simmering for months, but it was energized by guidelines issued in May by Germany's main research funding agency, the Deutsche Forschungsgemeinschaft (DFG), that would open the door for researchers to import embryonic stem (ES) cells (*Science*, 11 May, p. 1037). The federal research ministry asked the DFG to postpone a decision on the first German proposal to use ES cells—submitted by Bonn University neuropathologist Oliver Brüstle—until political leaders and the new bioethics council had explored ethical concerns over such research.

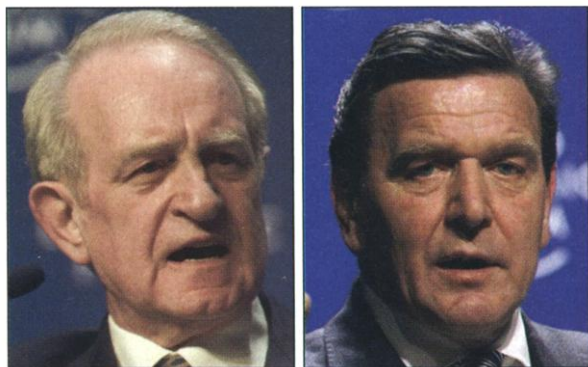
The council is stepping into a war zone. On 18 May, German President Johannes Rau—whose office is largely ceremonial, but whose opinions carry considerable weight—asserted in a major speech that "certain possibilities and plans of biotechnology and genetic engineering run contrary to fundamental values of human life." Concerned about research on ES cells and on preimplantation diagnosis—the testing of test tube-fertilized embryos for genetic defects before they are implanted into the mother—Rau demanded a strict demarcation of the ethical limits of research. "Questions



Sentenced. Ibrahim looks out from cage where he was put for the trial.

conflict between Copts and Muslims. Last summer, while out on bail, Ibrahim said in a speech at the American University in Cairo that he believed his uncovering of election fraud in parliamentary elections in 1995 and his plans to keep tabs on the fall 2000 elections prompted his arrest. Observers say Mubarak may have been ruffled by an article in which Ibrahim sniped at Arab leaders, including Mubarak himself, for grooming their sons to be their successors. "I think the government has been irritated with him for a while," says Torsten Wiesel of Rockefeller University in New York City, chair of the

* Available at www.nas.edu



Opposite views. Germany's president, Johannes Rau (left), and its chancellor, Gerhard Schröder, both Social Democrats, disagree on the ethics of embryo research.

about life and death affect us all. We therefore must not leave them to the experts," he said. "We must debate these issues and then decide on them together." He also conjured Nazi ghosts, warning that "no one should forget what happened in the academic and research fields" in Germany during World War II. "An uncontrolled scientific community did research for the sake of its scientific aims, without any moral scruples," Rau said.

In response, German Chancellor Gerhard Schröder—like Rau, a Social Democrat—led a freewheeling debate in the Bundestag (the lower house of Parliament) on 31 May by defending researchers seeking new treatments against diseases such as Alzheimer's and Parkinson's. "The ethics of healing and of helping deserve just as much respect as the ethics of creation," said Schröder, who does not want to ban limited stem cell research. He warned that German leaders must keep in mind the potential consequences of "the neglect of research and development" if rules are so strict as to deprive people with intractable diseases of possible treatments. Schröder said it was wrong for politicians to accuse ES cell researchers "of having dark and unethical motives."

But Schröder found limited support for his view in the Bundestag. Several fellow Social Democrats lined up against his position, and the leader of the opposition Christian Democrats, Angela Merkel, argued that even importing ES cells for research "violates the spirit," if not the letter, of Germany's Embryo Protection Law. Merkel plans to introduce legislation that would place a moratorium on such research until Parliament comes to a decision. Delegates of the Green Party—part of Schröder's coalition—also opposed both ES cell and preimplantation diagnosis research. "I've never seen any scientific topic in Germany as vividly debated," says Detlev Ganten, director of the Max Delbrück Center for Molecular Medicine in Berlin and a member of the bioethics panel, comprised of 24 scientists, theologians, legal experts, business executives, and philosophers. "I find it healthy."

Others question whether the panel has any chance of mending the political schism. The ethics council is bound to struggle with the issue of ES cell research, says panel member Christiane Nüsslein-Volhard, a director of the Max Planck Institute for Developmental Biology in Tübingen. "It's likely that such research will be done mainly in England and Israel, and not in Germany and the United States," predicts the Nobel laureate, who says she finds Rau's approach "too extreme" and generally agrees with Schröder's pragmatic attitude. Brüstle, who was in Israel last week discussing the possibility of importing ES cell lines for his research project, says he does not expect Germany to agree on a new policy on ES cell and preimplantation diagnosis research anytime soon, in part because of next year's federal elections.

—ROBERT KOENIG AND GRETCHEN VOGEL

SPACE SCIENCE

Canada Eyes Front-Row Seat in Mars Program

BOSTON—Canada's space efforts over the past 2 decades have focused largely on radar satellites and a robotic arm for the international space station. Now Canadian space officials are asking scientists to help them plan a Mars mission so outstanding that it can overcome tight budgets and leapfrog other research priorities to win government funding.

As a first step in that campaign, some 120 researchers met late last month in Montreal to kick around ideas ranging from drilling beneath the martian surface to returning samples from one of its moons. "We look at this as the next major space program for Canada," says Marc Garneau, recently named executive vice president of the Canadian Space Agency. "We want to be involved with Mars in more than peripheral ways."

Garneau thinks the timing is right to pump new funds into space science, which receives about 15% of the agency's \$234 million annual budget. Spending is winding down on the \$600 million robotic arm, which was installed on the space station this spring but is suffering from technical troubles. But even so, the estimated cost of a Mars mission—likely to top \$300 million even with the help of international partners—would require a bigger overall budget, says Garneau, who is hoping for an increase in the fiscal year that begins 1 April 2002.

The agency intends in the months ahead to develop a set of possible missions for

ScienceScope

Begging for Bioinformatics Two bioinformatics companies are hoping the Canadian government will join their bid to create a massive new public database on protein interactions. Computer giant IBM and MDS Proteomics, a Canadian company, last week announced that they will provide \$3 million each for the Biomolecular Interaction Network Database (BIND).

Blueprint Worldwide Inc., a nonprofit corporation organized to oversee BIND, hopes to persuade governments and other companies to put up \$50 million for what it sees as a global repository on protein, RNA, and DNA interactions. If successful, BIND will help promote bioinformatics in Canada and encourage researchers to standardize their data, says Tony Pawson, a researcher at the Samuel Lunenfeld Institute in Toronto, who co-founded Blueprint.

Mega-Ecosurvey What's billed as the largest study ever of the health of the world's ecosystems is now officially under way. The United Nations this week launched the Millennium Ecosystem Assessment, a 4-year, \$21 million effort sponsored mainly by the UN, World Bank, and foundations. The funds will allow an estimated 1500 scientists around the world to assess how well lands and waters are standing up to human impacts (*Science*, 8 September 2000, p. 1677).

R.I.P. *The Sciences*, the highbrow, art-laden magazine for laypeople produced by the New York Academy of Sciences (NYAS), has been given the ax after 40 years of publication. The NYAS board of governors voted to close down the award-winning magazine at a 31 May meeting, and the next day its six staffers were laid off.

The bimonthly magazine, with a circulation of 46,000, carries almost no advertising and has always been a drain on the academy's budget. But with membership stagnant and the NYAS changing course, executive officer Rodney Nichols said in a statement that the academy's mission "cannot include being publisher of a general science magazine." Spokesperson Fred Moreno says that the academy has been reshuffling its priorities and wants to devote more resources to issues such as science education and the role of technology.

"I'm sure it's a good thing that the NYAS is worrying about technology and society, but it seems a real shame to end something as unique and superb as *The Sciences*," says Stanford University biologist Robert Sapolsky, a contributing editor.