LEAD STORY 194

Trouble at the Smithsonian



Greenhouse uncertainties





Computing the cosmos with a GRAPE

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(R-PA) has introduced a bill in the Senate that would allow NIH to fund derivation of new ES cell lines, and a companion bill has been introduced in the House of Representatives. On 8 July Specter said on CBS's *Face the Nation* that he had counted 70 votes in favor of his bill—enough to pass it even over a presidential veto.

"The president is very aware that there is a balance on this issue where there is so much potential for health and for breakthroughs," White House spokesperson Ari Fleischer said on 9 July. "The president ... is listening to all sides of the debate." Many believe he will announce his decision before a 23 July meeting with Pope John Paul II.

-GRETCHEN VOGEL

PH.D. TRAINING

Spain Cuts Off Aid to Foreign Ph.D. Students

BARCELONA-Eduardo Agatângelo came to the Autonomous University of Barcelona (UAB) from his native Angola last year under a new program to help promising students from the developing world earn Ph.D. degrees. But last month the Spanish government pulled the plug on its 3-year commitment to Agatângelo and hundreds of other students from around the world, shifting the money to target links with Latin America. The move has left many students angry at their host country and anxious about their chances of becoming scientists. "This worries me greatly," says Agatângelo, who is seeking a degree in food science. "I have no prospects to continue my Ph.D. training in Angola."

In 1998 Spain's Agency of International

Collaboration (AECI) expanded a program, begun at the end of World War II, that awards competitive 3-year training grants to deserving graduate students from the developing world. The program now supports more than 1200 students from 40 countries. But last month the AECI announced that it would transfer \$3.6 million from the grants program into a new entity, the Carolina Foundation, to support cultural and education programs in Latin America, including science courses for biomedical postdocs. An AECI official says the foreign grants program was too expensive and that the students, instead of returning to their home countries, were using the training as a kind of work placement program to land jobs in Spain—a characterization that the students deny.

The AECI's decision means that some 900 foreign students may soon be homeward bound. Last month the agency informed first- and second-year students like Agatângelo that their training grants would be extended by 1 year. The roughly 350 students who were completing a third year without earning a Ph.D. were told that their support would end on 30 June, the last day of the academic year. The AECI said it would no longer grant extensions to allow such students to finish their degrees.

The news left students up in arms, leading to demonstrations in Barcelona and Madrid. "This situation places hundreds of researchers in a situation of economic precariousness," says Silvina van der Molen, an Argentinean who has just completed her third year of studies in ichthyology at UAB and was hoping to finish her Ph.D. next year.

Faculty members have also condemned the AECI's hard line. The Spanish Council of University Rectors, representing 64 universities, criticized the disruption to the students' lives and work. Echoing that theme, officials at 11 universities in Catalonia say the decision "is harming not only the Ph.D. students but also the research institutions where they are developing their training grants and their corresponding countries."

The backlash has sent AECI officials backpedaling. Jesús Silva, the Foreign Office's director of cultural and science relations, says that the agency will now give "a few extra months" of support to third-year students on

BECARIOS AFCI CATALUNIA VPIESENIE

Taking action. Barcelona students protest the Spanish government's decision to curtail grants program.

the verge of completing degrees and may give selected foreign students a few months of grant support for study in Spain. But university officials remain upset. The AECI, fumes UAB research vice chancellor Joan Antón Carbonell, is "not taking this matter seriously."

A spokesperson for the students says AECI bylaws mandate that these grants run for 3 years. But the students may have little legal recourse: Class-action lawsuits are prohibited in Spain, and individual lawsuits would be costly. Unless the AECI changes its stance, scores of embittered students will be packing their bags for home next year.

-XAVIER BOSCH

Xavier Bosch is a science writer in Barcelona.

HUMAN EVOLUTION

Another Emissary From The Dawn of Humanity

Fossils unearthed in Ethiopia offer a glimpse of the time when humans and chimps first went their separate evolutionary ways—and may represent the earliest known human ancestor. The remains—a jawbone with teeth as well as arm, hand, and foot bones—have been dated at between 5.2 million and 5.8 mil-



Roots. Tooth of oldest known hominid?

lion years old. From the shape of one nearly complete foot bone, the discoverers conclude that their specimen walked upright, a hallmark of all hominids.

The find comes hot on the heels of the report of 6-million-year-old bones found in Kenya's Tugen Hills, also hailed by their discoverers as belonging to the earliest known hominid (Science, 23 February, p. 1460). The two creatures share a crucial feature: Both appear to have lived in relatively wet woodlands. If either is indeed a hominid, that could overturn a long-held theory that bipedalism evolved when forest-dwelling apes moved out into open savannas, possibly as a result of climate change. "The recent findings ... challenge some long-cherished ideas about the mode and timing of hominid evolution," says Brigitte Senut of the National Museum of Natural History in Paris, co-leader of the

The Ethiopian fossils were found between 1997 and early this year by an Ethiopian-American team led by Yohannes Haile-Selassie and Tim White of the University of California, Berkeley. The dates—determined by argon-argon dating and confirmed by paleomagnetic measurements and analysis of animal bones found in the same sedimentsplace the teeth and bones around the time when most geneticists believe that humans and chimpanzees split from a common ancestor, between 6 million and 9 million years ago. "But the closer you get to the branching point, the harder it is to say what the characters are that define hominids," says Rick Potts of the Smithsonian Institution in Washington, D.C.

Describing their find in two papers in this week's issue of Nature, the team has named its specimen Ardipithecus ramidus kaddaba, as it may represent a subspecies of 4.4million-year-old Ardipithecus ramidus fossils first reported from Ethiopia in 1994. The researchers argue for hominid status for Ardipithecus ramidus kaddaba partly because of its lower canine teeth, which in cross section are diamond-shaped like those of later hominids rather than V-shaped like those of apes. They also note that the foot bone has features—such as a joint's orientation—similar to those of later hominids, including the famous 3.5-million-year-old Lucy. This orientation "suggests bipedality," says Juan Luis Arsuaga of the University of Madrid, although "the evidence is still weak" because so far it is based primarily on a single bone. Fred Spoor of University College, London, agrees that the jury is still out on hominid status: "Neither this nor the Orrorin paper make a really watertight case," he says.

The *Orrorin* and *Ardipithecus* teams assert that each other's fossils could represent an ancestor of chimps or other apes, rather than one of our early human ancestors or cousins. Figuring out who's right is hard: Although numerous hominid species have been unearthed over the years, no fossils representing the chimp evolutionary line have ever been discovered. "Our obsession over the earliest hominids is a bad habit," says Daniel Lieberman of Harvard University. "Finding the earliest known chimpanzee would be just as exciting." To help resolve the debate, Haile-Selassie says the team will go back into the field in November to search for more fossils.

Whatever they dig up could offer an important piece to the evolutionary puzzle. "It is a mistake to feel that one has to squeeze this [find] into the category of human or chimp ancestor," says Bernard Wood of George Washington University in Washington, D.C. "Just to have a fleeting glimpse of these creatures is exciting."

-MICHAEL BALTER AND ANN GIBBONS

SCIENTIFIC PUBLISHING

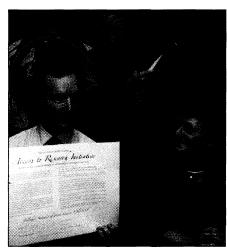
Journals Offered Free To Poorest Nations

Researchers and doctors in poorer nations will get free or low-priced electronic access to nearly 1000 biomedical journals. The six largest commercial journal publishers agreed this week to open their Internet vaults to universities, laboratories, and health agencies in nearly 100 nations under an initiative led by the World Health Organization (WHO).

Scientists and health workers in the developing world have long struggled to obtain timely, affordable access to information on new findings and therapies. Many journals are too expensive or arrive months after publication. The 3-year pilot project, set to begin early next year, "is perhaps the biggest step ever taken towards reducing the health information gap between rich and poor countries," WHO director Gro Harlem Brundtland said at a 9 July press conference in London announcing the deal.

The six publishers—which publish 80% of the world's top 1240 biomedical journals—have agreed to let WHO set up an Internet portal through which approved institutions can retrieve papers. Initially, says Barbara Aronson, a librarian at WHO's Geneva headquarters, the portal will be free to more than 600 institutions in 63 of the world's poorest nations, mostly in Africa, with per capita incomes of less than \$755 annually. Later, WHO hopes to arrange deeply discounted subscriptions for institutions in about 40 nations, including some in Eastern Europe, with per capita annual incomes of up to \$3000.

Health InterNetwork, a United Nations program led by WHO, will help institutions get the necessary hardware, Internet connections, and training. Participants declined to put a price tag on the project, estimated by



Free deal. WHO's Brundtland, right, and Blackwell's Jon Conibear, left, unveil the plan.

ScienceSc⊕pe

Data-Quality Jitters A federal proposal that would allow citizens to critique data disbursed by government agencies is troubling some researchers. Its backers in Congress and industry make no bones about wanting to use the rules to pick apart reports and Web sites (below) on hot-button topics such as global warming and toxic chemicals.

The guidelines, proposed by the White House Office of Management and Budget (OMB) in the 28 June Federal Register, call for agencies to ensure the "quality, objectivity, utility, and integrity" of information they disseminate, including

"opinions." Agencies would have to set up "mechanisms" for "citizen review" so the public can "obtain correction of information." OMB crafted the plan in response to language tucked into a funding bill by Representative Jo Ann Emerson (R–MO) and other lawmakers last fall.



Researchers are particularly alarmed by a requirement that any scientific results "be substantially reproducible upon independent analysis of the underlying data." That could force academics to turn over their data to anyone who asks, worries Wendy Baldwin, extramural grants chief at the National Institutes of Health. Adds one academic lobbyist: "It's an open invitation to industry to come in and trash" the work of scientists. Comments are due by 13 August.

Planet Finders The ongoing battle over whether to send a spacecraft to Pluto (*Science*, 17 November 2000, p. 1270) is the most obvious sign that U.S. planetary scientists are at odds over how to spend limited dollars. Next week, senior researchers will kick off a sweeping 10-month review of solar system exploration aimed at deciding which missions are most needed.

The two dozen planetary scientists want to come up with "a plan written by the community" rather than NASA or White House officials, says retired astronomer Michael Belton, who will lead the panel. Modeled on the astronomy decadal survey, the National Research Council study is funded by NASA and due next May. The results could replace NASA's current planetary science plan, which researchers criticized last year for lacking a clear set of science goals.