oleyl amine. As the particles grew, the soap molecules glommed onto the metal particles and stopped them growing at 4 nanometers.

At this stage, the metal particles were weakly magnetic jumbles of iron and platinum atoms. To make an array, the IBM team simply poured the particles out of the beaker. As the solvent evaporated, the particles nestled down into a regular structure like oranges stacked in a box.

Next, the IBM researchers baked their array like a sheet of cookies, at 500°C for about 30 minutes. The heat fused the organic molecules into a hard carbon coat that locked the particles in place, and it caused the iron and platinum atoms to segregate into distinct atomic planes, a change that dramatically boosted the magnetic strength of the materials.

The IBM team showed that these materials can store data faithfully at a density equivalent to that of hard disks on the market today. The particles' small size may even allow researchers to boost that density 10-fold using current read and write heads. But if heads can be improved to manipulate magnetic fields on single particles—and that's a big if—then the films could potentially store orders of magnitude more data.

Sun and Murray are quick to point out that the new materials need more work. The biggest problem, Murray says, is that conventional recording heads work only if all the magnetic grains or particles on a disk have their crystalline axes aligned with the disk's surface. For now, however, the tiny iron-platinum particles can freeze in place facing any direction. Murray says the IBM team is working on aligning the particles by applying an external magnetic field to their films as they bake. If they succeed, the future of data storage may soon become a little less unnerving. **–ROBERT F. SERVICE**

GENOME SEQUENCING

Clinton and Blair Back Rapid Release of Data

It's not often that heads of state wade into a furious quarrel in the scientific community, but both President Clinton and British Prime Minister Tony Blair did so this week. On 14 March, the two leaders announced that they enthusiastically support the rapid release of human genome sequence data, a principle long advocated by Francis Collins, director of the National Human Genome Research Institute (NHGRI), and other scientists in the nonprofit sector.

Clinton released a joint statement with Blair at *Science*'s press time arguing for the rapid release of human genome data. Afterward, Clinton made some personal remarks that went even further. Speaking at the annual medal of science ceremony at the White House, Clinton urged private companies to "make raw [DNA] data publicly available" and make "responsible use of patents." The statements were carefully worded to support patents on "new gene-based health care products." But they seemed directed at the activities of some private data-marketing companies—such as Celera Genomics and Incyte—that have been engaged in high-

View from the top. Two leaders say raw gene data should be unencumbered by restrictions.

volume sequencing of human DNA and collecting genes and genetic variations.

Although the high-level attention to this debate is new, the debate itself is not. The largest DNA sequencing labs funded by the U.S. government and by the Wellcome Trust, a British charity, endorsed very similar principles for data release at a meeting of top genome sequencers in Bermuda in 1996. Typically, these big labs release new human DNA data within 24 hours of production, posting results on the Internet. But the labs' insistence on this practice has caused some friction with the private sector. Recently, for example, talks broke down between Celera and a group of nonprofit centers over how they might collaborate on completing the sequence of the human genome. They clashed specifically on public access to data (*Science,* 10 March, p. 1723).

In addition to giving Collins's side of the debate a boost, this high-level endorsement of the Bermuda rules may have an impact on discussions within the U.S. Patent and Trademark Office (PTO). For several years, Collins and former National Institutes of Health director Harold Varmus have tried to persuade PTO leaders that they should not grant patents on simple gene discoveries. In letters and speeches, both have argued that only inventors who clearly describe the "utility" of a gene, such as a plan to develop a medical product, deserve to win a patent. Although the PTO has proposed tighter policies, it hasn't gone as far as Collins would like (*Science*, 18 February, p. 1196).

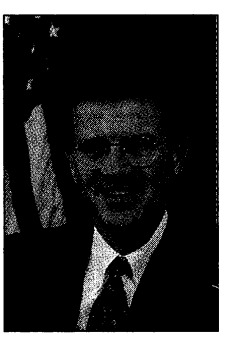
Collins calls the Clinton-Blair announcement a "very encouraging" and "gratifying endorsement" of NHGRI's strategy. But presidential enthusiasm may not carry much legal weight. PTO biotech section leader John Doll says: "It doesn't seem like this is going to affect biotech patenting at all." And Celera said in a statement that the company "welcomes" the Clinton-Blair policy, calling it "completely consistent" with Celera's plan to publish the human genome in a peer-reviewed journal and make the information "available to researchers for free." **–ELIOT MARSHALL**

BIOMEDICINE

Congress Investigates Fetal Tissue Sales

At a packed hearing on 9 March, members of a congressional committee vowed to investigate whether some companies are profiting from the sale of fetal tissue. One committee member said after the hearing that he would introduce a bill requiring researchers to report the source and cost of fetal tissue they use. But—much to the disappointment of antiabortion groups that had hoped the hearing would spark outrage over grisly tales of trade in body parts—the testimony itself turned up no persuasive evidence of wrongdoing.

Indeed, one key witness, a clinic technician who had made gruesome allegations in a video that an antiabortion group had been circulating on Capitol Hill, backed away from many of the claims he had made on the tape. That left for evidence a network news broadcast, aired the previous night, in which a Missouri pathologist on hidden camera seemed to admit selling fetal tissue for a profit—but committee members disagreed over whether that indicated widespread disregard for the law.



Keeping track. Representative Tom Coburn.

Under a law enacted in 1993, researchers can pay for the cost of procuring and shipping fetal tissue. However, buying or selling fetal tissue for a profit is strictly forbidden. At the hearing, both Republicans and Democrats voiced support for fetal tissue research while condemning any possible for-profit sales. "Full and vigorous enforcement of the law against the sale of fetal tissue is essential to prevent a negative impact on legitimate research," said Michael Bilirakis (R–FL), chair of the subcommittee.

The impetus for last week's hearing arose

CREDIT: (TOP) AP PHOTO/J. SCOTT APPLEWHITE