property committee"—calls for a new global standard that would allow anyone seeking a patent to have a "grace period" of 1 year to prepare a patent application after announcing a discovery. U.S. law already permits such a grace period, and HUGO is asking other patent authorities to adopt the U.S. approach. The aim, the statement says, is to put "all participants in the international [genome-sequencing] network on an equal footing." But it might require a big concession from the United States in some other area of conflict, says an expert in the U.S. Patent and Trademark Office (PTO), to win Europe over to accepting such a change.

While HUGO is urging Europe to follow the U.S. approach on the timing of patent applications, it takes the PTO to task for what it views as an ominous development in U.S. patent policy. HUGO's intellectual-property committee points to the views of PTO deputy director Lawrence Goffney, who was quoted in *Science* (21 February, p. 1055) as saying he thinks patents should be granted on short stretches of genes known as "expressed

sequence tags." The HUGO group asks the PTO to "rescind" this stance, because it could result in giving priority to the person who first identifies a small stretch of DNA,

"HUGO regrets the decision of some patent offices ... to grant patents on ESTs. ..."

-HUGO statement

even if its biological function is not understood. It would be "untenable," HUGO argues, to give second place to "all subsequent innovation" just because it happens to include the same DNA.

HUGO's statement was drafted by an expert committee headed by Joseph Straus of the Max Planck Institute for Foreign and International Patent Copyright and Com-

petition Law in Munich. The other signatories include several other experts in international patent law as well as top genome scientists: David Cox and Richard Myers of Stanford University, Peter Goodfellow of SmithKline Beecham Pharmaceuticals, Tim Harris of Sequana Therapeutics Inc., Eric Lander of the Massachusetts Institute of Technology, and John Sulston of Britain's Sanger Center.

Sulston says he initially had qualms about one clause of the HUGO statement—a section saying that, by promoting early data release, HUGO does not want to damage anyone's property rights or discourage pharmaceutical companies from investing in genebased drugs. Sulston explains that "I do not want people to infer that I am in favor of patenting human genes as such." He is not, but "I am in favor of patenting particular applications of them." He says he and his colleagues in the genome community are still hotly debating "what should and should not be patented."

-Eliot Marshall

HIGH-ENERGY PHYSICS

Revised LHC Deal Quiets Congress

The roughest part of the ride may be over for U.S. physicists who want to participate in the Large Hadron Collider (LHC), the \$5 billion accelerator planned for CERN in Geneva. They have found themselves on a political roller coaster for the past few months. This week, U.S. and European negotiators were putting the final touches on a revamped agreement that should pave the way for the United States to help pay for construction of the accelerator and its two main detectors, and guarantee U.S. scientists a role in research on the machine.

The trouble began in March, when Representative Joe Barton (R-TX) declared war on a proposed \$530 million U.S. contribution to the new facility, slated for completion in 2005. Barton and many other members of Congress were still smarting from what they said was a lack of European support for the canceled Superconducting Super Collider that was being built in Barton's backyard. Representative James Sensenbrenner (R-WI), who chairs the House Science Committee, led the charge to alter a draft agreement initialed this winter by Department of Energy (DOE) and CERN officials that spelled out the details of U.S. participation. After hurried negotiations, both sides have sharpened the agreement to address the lawmakers' concerns. The new deal, says Energy Secretary Federico Peña, "has made that project even better."

The original agreement, according to opponents, did not protect U.S. taxpayers

from potential LHC overruns, fudged the issue of U.S. physicists' access to CERN, and did not give the country an appropriately formal role in CERN's management.

Sensenbrenner also wanted assurances that Europe would help build the next physics machine, regardless of the site.

The new agreement is not substantively different, but it ties up most of the loose ends. It makes clear that the United States does not have to contribute more than \$530 million, explicitly mentions the machine's technical parameters, and requires that the United States must be consulted before these specifications are altered. It also strengthens language assuring U.S. researchers access to the LHC, and spells out the U.S.

role as an observer in the CERN council on matters relating to the LHC. The preamble was revised to mention CERN's role in any discussions of a future machine.

DOE and CERN officials also were working earlier this week on a letter from CERN Director-General Christopher Llewellyn Smith reaffirming its open-door policy for U.S. researchers on all facilities and the clear role for the U.S. government in LHC decisions. Luciano Maiani, CERN council chair and director of Rome's National Institute of Nuclear Physics, says that any revised agree-

ment must be reviewed by the council, probably at its next meeting on 20 June, but that approval is likely.

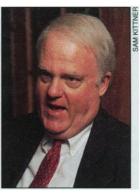
Barton remains skeptical of the LHC deal, although he told *Science* that "I'm not an automatic no" when it's time to vote on

the U.S. contribution. He said he wants a stronger statement of CERN support for a future accelerator than Llewellyn Smith is expected to provide. But Sensenbrenner says he intends to announce his support for the revised agreement this week. A pending House Science Committee bill authorizing DOE's programs contains no money for the LHC, but Sensenbrenner says he would support an amendment to fund the \$35 million DOE request. However, he says, "I won't sponsor it," and he warned that it may prove tough

to add funding for the LHC on the House floor unless it is taken from another program.

While that obstacle, coupled with a still-unhappy Texas delegation, could yet jeopardize the program's authorization, the legislators that actually dole out the money appear ready to go along with DOE's request when they meet next month to hammer out an appropriations bill. So, while there are no guarantees that the LHC's supporters are home free, the next few months promise a smoother ride than the stomach-churning trip this spring.





Easing up. Sensenbrenner says he'll go along with LHC deal.