BUSINESS AND REULATORY NEWS

GM roundup

- Genetic ID (GID; Fairfield, IA), the provisional arm of the Yogic Fliers, is now trying to paint itself as the potential savior of the US corn trade. Over the past few years, the company, some of whose management opposes genetic engineering on the basis that it is incompatible with "natural law," has developed tests that are being used by food manufacturers, importers, and "concerned" protest groups to detect in food and grains the presence of genes from GM plants. Leaping on the back of the recently agreed upon Biosafety Protocol, GID now is offering US corn exporters a test that will detect the presence of GM varieties that have not been approved for importation into, say, Europe or Japan. GID CEO Bill Witherspoon says his company "can help exporters eliminate risks and reverse the trend of diminishing US export."
- If you want to get ahead, get LTP1. Or rather, if you want to get a head on your beer, put the gene for lipid transfer protein from barley into brewing yeast. That is what Ulf Stahl and colleagues at the Technical University of Berlin did to counteract the problems of barley quality that brewers face. Barley produced in wet climates has relatively little LTP1 protein, and consequently its use in brewing beer results in a short-lived froth. The use of LTP1producing yeast would nullify the variability in barley. However, even though beers typically already contain 3-9% by volume of the toxic psychomodulator ethanol (or perhaps because of it), drinkers are very concerned about genetic modification, the big brewing companies believe.
- The formation of CropGen, a UK public information initiative funded by, but not beholden to, industry, created a new source of information on public attitudes to biotechnology. CropGen's first survey (at the beginning of March), conducted by professional polling organization NOP, revealed that 46% of people said they "would personally eat food if they knew it was genetically modified or contained GM ingredients," as compared with 50% who said they would not. Unsurprisingly, the numbers contrast sharply with those produced by polls run by environmental groups or "for entertainment purposes only" by periodicals; 75-85% of those samples are against GM food. JΗ

Business and Regulatory News Briefs written by Emma Dorey, Jeffrey L. Fox, Julie Grisham, John Hodgson, Sabine Louët, and Eric Niiler.

Genome debate continues

Another round of debate occurred last month between the two groups working to complete the sequence of the human genome (Nat. Biotechnol. 18, 365, 2000). It began on April 6 when Celera Genomics (Rockville, MD) announced it had completed the sequencing of one person's genome. At a congressional hearing that morning, Celera President Craig Venter said he expected that the sequence would take three to six weeks to assemble and that his company would publish the assembled genome before year's end. The announcement sent Celera's stock up about 19%, to \$137. Celera's party was short-lived, however. Speaking at a conference of the Human Genome Organization in Vancouver, Canada, three days later, Francis Collins, director of the public consortium Human Genome Project, said he questioned the company's definition of "complete." Collins, who announced in late March that the Human Genome Project was two-thirds done with its sequencing, was quoted by the Associated Press as saying, "What we all need to recognize is that for the sequencing of the human genome, there is not going to be a finish line for any group for at least the next couple of years." In the past, he has criticized Celera's "shotgun" approach to gene sequencing, saying that the finished sequence will probably be incomplete. Shares of Celera dropped about 20% on April 10, to \$103 per share. IG

Therapeutic cloning OK

The Nuffield Council on Bioethics, an influential London-based think tank, has released a report stating that research on human embryonic stem cells for the treatment of disease should be allowed to go forward. In addition, the council says that research on somatic cell nuclear transfer for derivation of stem cells (therapeutic cloning) "may potentially offer very significant medical benefits" and therefore should be licensed. Current UK law permits research on human embryos only for purposes related to reproduction and disease diagnosis, but the council says "the removal and cultivation of cells from a donated embryo does not indicate a lack of respect for the embryo" and that stem cells offer "the possibility of major advances in health care."

As Nature Biotechnology was going to press, the UK's chief medical officer's Expert Advisory Group on Therapeutic Cloning was expected to release its own report, which was widely reported in the UK press to favor therapeutic cloning.

JG

Two SNP deals for Gemini

At the beginning of April, Gemini Genomics (Cambridge, UK) entered SNP-centered collaborations with both CuraGen (New Haven, CT) and Sequenom (San Diego, CA, and Hamburg, Germany). Although the deals are separate, they bring CuraGen's extensive database of cSNPs and Sequenom's rapid mass spectroscopy-based resequencing technology together with Gemini's extensive knowledge base in the association of genetic and clinical traits. The aim of the CuraGen-Gemini collaboration is to provide population geneticsbased validation for some of the 500,000 single-base variations in human genes that CuraGen has documented. In parallel, Sequenom will check the validity of 240,000 public domain SNPs using, among other resources, DNA samples and clinical information gathered by Gemini from its various populations. Gemini's early work was in twins and disease-associated gene discovery, butthrough its acquisition of Eurona Medical (Uppsala, Sweden) and the establishment of Newfound Genomics in Newfoundland (Nat. Biotechnol. 18, 366, 2000)—it is now also working in drug trial populations and founder groups. Paul Kelly, Gemini's CEO, points out that the latest arrangements are part of a broader set of technology collaborations. All of the deals are on a nonexclusive and relatively short-term basis, something that Kelly believes is important in allowing genomics enterprises to remain at the cutting edge. JH



about 1,500 people marched in front of the convention center at the opening of the BIO2000 industry meeting held in late March in Boston. Banners included slogans such as "Terminate Monsanto" and "No Patent on Life." Carl Feldbaum, president of the Biotechnology Industry Organization (Washington, DC), which sponsored the meeting, said in a statement that biotechnology provides hope for treatment of many diseases and creation of more nutritious food, adding "I really wonder whether many of these people understand the real-life benefits of biotechnology."