IN brief

UCLA and GSK reconcile

In May, the University of California, Los Angeles (UCLA) barred its scientists from taking part in GlaxoSmithKline's (GSK) Discovery Fast Track (DFT) competition just as the University of California, San Francisco (UCSF) proudly announced an expansion of its Centers for Therapeutic Innovation (CTI) drug discovery alliance with Pfizer of New York. Two months later, UCLA and GSK reconciled their differences and UCLA finally sanctioned its scientists taking part in the program. So why was one approach seen as good and the other not? The UCLA tech transfer office was concerned about the potential for disclosure of confidential information and conflict with rights to the researchers' discoveries, under the terms of participation in the GSK program. GSK's DFT competition builds on the Discovery Partnerships with Academia (DPAc) program. Launched in the UK in late 2010, DPAc invites academic partners with deep understanding of disease biology to become members of drug discovery teams. GSK brings its industrial approach to drug discovery and funds the activities. This is similar to Pfizer's CTI, which also involves joint discovery (*Nat. Biotechnol.* **29**, 3–4, 2011) and access to the pharma partner's expertise, compound libraries and biological assays. Pearl Huang, global head of DPAc, at King of Prussia, Pennsylvania, explains that collaborations through DPAc involve complicated contract negotiations that can take time to put in place. As a way to avoid this bottleneck, DFT was conceived, "as a means to rapidly identify the most promising hypotheses in academia," she says. It is, in other words, a giant fishing trip in which academics are invited to submit a one-page application describing a novel drug development concept. Ten winners will get access to GSK's screening facilities, and academics whose screens are successful will be offered DPAc contracts. Because UCLA requires that researchers refer potential inventions to its Office of Intellectual Property and Industry Sponsored Research before discussing them with companies, entering GSK's DFT could easily breach the rules. But Huang says there was no intention to bypass technology transfer offices. Under the amended terms, tech transfer offices will electronically monitor submissions to ensure nothing confidential is disclosed to pharma. "The main thing is to be good at balancing," says Susan Searle, formerly CEO of Imperial Innovations, the technology commercialization and investment group. "It's about getting the partnership right and sharing rewards," she says. *Nuala Moran*

was "served up with a narrative about human genes and diagnostics, there is nothing in the decision that limits it to only nucleic acids with human sequences," Sauer says. Relatively few gene patents are owned by diagnostic services companies like Myriad, he points out. "The majority don't have anything to do with human genes at all. That's something that troubles us that the Supreme Court didn't acknowledge."

Agbiotech companies may feel the impact most of all. A recent study on the changing landscape of gene patent ownership in the US as of October 2012 lists Dupont/Pioneer Hi-Bred of Johnston, Iowa, as the largest holder of such patents, both in terms of number and number in force (*Nat. Biotechnol.* **31**, 404, 2013).

In agbiotech, DNA isolated from nature is still essential in the R&D process, says Dominic Muyldermans, senior legal consultant for CropLife International in Brussels. "It confers a lot of useful and desired new plant products," he says.

Although companies that work in agriculture and bioenergy no longer patent every

Box 1 Cracking data monopolies

Myriad's defeat in the Supreme Court has already spurred several laboratories to launch their own BRCA testing: Ambry Genetics of Aliso Viejo, California; GeneDx of Gaithersburg, Maryland; Pathway Genomics of San Diego; the University of Washington in Seattle; Gene by Gene in Houston; and Quest Laboratories of Madison, New Jersey. In response, in July, Myriad filed infringement suits against at least two of these rival companies, Ambry and Gene by Gene.

Another strike at the patent monopoly held by Myriad's $3,000 BRCAnalysis test comes from outside the commercial setting. In April, Robert Nussbaum of the University of California, San Francisco, unveiled a Web site, http://www.sharingclinicalreports.org/, designed to collect information on *BRCA* variants and maake this information publicly available in the ClinVar database of the National Center for Biotechnology Information. Already, 6,000 reports have come in, Nussbaum says.

BRCA test results from any laboratory, including Myriad, are included in the public database. Its supporters argue that such transparency is necessary to understand, for example, the sequence calls Myriad makes to identify *BRCA* variants and the clinical actions it advises on that basis.

"The lack of access to the data was a hidden issue behind the gene patent," says Nussbaum. "Only by sharing data can others apply informatics tools and studies on Myriad's calls and what other people might be thinking, to figure out where Myriad might be wrong," says Peter Kolchinsky of RA Capital in Boston. Because patents do not assure disclosure of data, "merely saying you can sequence *BRCA* genes doesn't enable the public to do anything," he says. "The threat of competition encourages innovation."

At one time, Myriad contributed data on *BRCA* mutations to the Breast Cancer Information Core, an open access online mutation database for breast cancer susceptibility genes. It stopped the practice "as the information was supposed to be for research use only and the database was not validated for providing test results to patients in a clinical setting, which posed regulatory and quality system concerns," a company spokesperson said in an e-mail.

Nussbaum calls the Myriad statement facetious. "If these are clinical reports that they are standing by and sending to their doctors, and serious decisions are going to be made, of course they are going to be used for clinical purposes. What they are trying to say is they are trying to own the use of these data for clinical purposes. It's not that they think it's being misused for clinical purposes, it's being used by people who are not paying them."

Among those praising the Supreme Court decision was US Congresswoman Debbie Wasserman-Schultz, who tested positive for a *BRCA2* mutation. Because of Myriad's patents, "I was unable to get a second opinion on the test," she said in a statement following the decision. Wasserman-Schultz shepherded legislation requiring the US Patent and Trademark Office to conduct a study on ways to remove barriers for patients to get access to second opinions on genetic testing, the results of which should be released this summer. *MR*