

## IN brief

## China's GM rice first

Chinese officials have approved a strain of genetically engineered rice, placing the country in position to be first in the world to produce biotech rice on a commercial scale. China's Ministry of Agriculture in December said it had issued safety certificates for the rice but that additional production trials are required before full commercialization can begin. The trials may take two to three years. The rice variety, engineered to fend off pests with toxins from the bacterium *Bacillus thuringiensis* (Bt) was developed by scientists at Huazhong Agricultural University in Wuhan, China. News of the approval came in November, only a week after Chinese officials had announced approval of the country's first transgenic maize. The feed crop is engineered to produce phytase, an enzyme that helps animals better utilize phosphorus in maize. China's most widely grown transgenic crop, Bt cotton, was approved in 1997. China isn't the first nation to approve biotech rice, but it may be the first to commercialize it. US regulatory officials in 1999 approved, or deregulated, Bayer CropScience's transgenic herbicide-tolerant rice, but the North Carolina-based company never commercialized it. "Farmers are concerned that it will hurt their export markets," in countries that don't allow transgenic rice, says Doug Gurian-Sherman, a senior scientist at Cambridge, Massachusetts-based Union of Concerned Scientists. Farmers' fears were realized in 2006 when an unapproved transgenic rice variety contaminated US commercial rice, resulting in lost exports. *Emily Waltz*

## Pea trials flee to US

Field trials of transgenic peas developed by a European university may relocate overseas to ensure a biotech-friendly environment. The University of Hannover in Germany is eyeing North Dakota as a safe place to evaluate several genetically modified (GM) pea lines intended as animal feed, under field conditions, marking the first time that EU-funded plant research has been forced to emigrate. "Vandals are seen as heroes by some media. [Field trial] locations have to be disclosed precisely so that the eco-terrorists can program their GPS," says Hans-Jörg Jacobsen, whose laboratory engineered the GM peas to express one or more antifungal genes. The relocation will be part of a scientific collaboration still under negotiation with the North Dakota State University (NDSU). Pollen flow is not a problem because peas are self-fertilizing plants, but in Germany, field testing could get into trouble anyway, and Jacobsen predicts there is an 80% chance the fields would be destroyed. "We face a militant resistance, which is extremely difficult to handle by a scientist which usually has only a small budget and limited personnel," sympathizes Jens Katzek from BIO Mitteldeutschland, a cluster promoting biotech. US trials are not expected to begin before 2011 for logistical reasons and will be performed ensuring "the highest level of containment and separation from commercial pea production channels," says Kevin McPhee a plant geneticist at NDSU. *Anna Meldolesi*

Mayo Clinic, Fairview and Park Nicollet. In turn, pharmaceutical companies have trimmed their local sales forces and several would rather not do business in Minnesota—they are gone from the state," Gonzalez-Campoy said.

Gonzalez-Campoy testified, he did not, however, offer any information about patient outcomes. In fact, there are no studies that address how patients are affected by COI issues. The activist group PharmedOut has submitted an open letter to Francis Collins, director of the NIH, signed by a large group of scientists, physicians and ethicists, asking that the NIH fund studies on medical ethics, COI in medicine and research and prescribing behavior (<http://www.pharmedout.org/NIHLetter.pdf>)

The issue has ruffled the feathers of many academics who work in translational research. Some feel under attack for their interactions with industry and characterize regulators and ethicists as a group of pencil pushers out of touch with the realities of science and patient care. "Conflict of interest is a meaningless term. It implies malignancy... If I have an interest in a company, I want that company to succeed, and that company is interested in me because of my objectivity and reputation and scientific integrity. If I compromise that, I'm of no use to anybody," says Thomas Stossel, professor of medicine at Harvard Medical School. According to Stossel, attempts made by universities to eliminate or reduce COI tend to stifle beneficial relationships. For example, Harvard's current policy prohibits a researcher from owning equity interest in a company and at the same time receiving money from the company. Stossel, who has equity interests in ZymeQuest of Beverly, Massachusetts, and Critical Biologics Corporation (CBC) of Cambridge, Massachusetts, believes that equity is a positive incentive for scientists. "So here we have a rule that's predicated on the assumption that [...] the inventor intends to cheat, lie or steal. That's really disrespectful."

Harvard University is undergoing a compre-

hensive review of its COI policy, and it declined to comment for this article. At other universities, similar policies seek to protect the integrity of education of graduate and postdoctoral students—essentially, to prevent the university from becoming a branch of the research and development department of grant-funding companies. However, for an early-stage biotech company, offering stocks in lieu of cash for consulting is an easy way to stretch a startup budget. If such liaison makes later sponsorship of the same scientist's research difficult or impossible, it could become an obstacle to product commercialization.

Taking the industry's perspective, Paul Pomerantz, of the Drug Information Association, based in Horsham, Pennsylvania, notes, "No doubt the current scrutiny of the drug industry-academic relations has had a chilling effect on the dollars that are available to academia." He adds that strong ties are desirable to ensure clinical studies benefit from academic rigor.

There could be a completely different explanation for the findings reported in *Health Affairs*: a drop in industry funding associated with the economy. Lila Feisee, who is the resident expert on these issues at BIO, believes this is unlikely because academic-industry licensing activity is holding steady. "We do hear that maybe sometimes, when companies work with universities, it could be a smoother process. Some tech transfer offices are more savvy than others."

A consensus on the subject is unlikely, at least until more data are made available. Until then, Eric G. Campbell, the lead author of the *Health Affairs* paper and director of research at the Institute for Health Policy, Harvard Medical School, thinks that relationships with drug makers will continue to shrink. "Industry is less viable as a long-term funding source," he says. Its funding "tends to be small in amount and short in duration—and it's getting smaller."

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## SELECTED research collaborations

Partner 1	Partner 2	\$ (millions)
Incyte (Wilmington, Delaware)	Novartis (Basel, Switzerland)	1,310
Nabi Biopharmaceuticals (Rockville, Maryland)	GlaxoSmithKline (GSK; London)	540
PanGenetics (Utrecht, The Netherlands)	Abbott Laboratories (Abbott Park, Illinois)	360
Trellis Bioscience (South San Francisco, California)	MedImmune (Gaithersburg, Maryland)	338