IN brief Irish bioethics council axed

Stem cell research in Ireland has been thrown into a state of confusion, after a recent government decision to cut all funding for the Irish Council for bioethics at the end of the year. Paradoxically, the move coincides with a recent Supreme Court decision that removes some of the legal uncertainties surrounding human embryonic stem cell research in the country. The judges denied a woman the right to proceed with in vitro fertilization without the consent of her estranged husband. In doing so, the court ruled that embryos outside the womb are not protected by the country's constitutional protection of the unborn. Although this ruling affects human embryonic stem cell (hESC) research by providing clarification on the status of pre-implanted embryos, scientists remain wary of proceeding until a supporting framework is in place. "I'm going to behave responsibly. It's going to be done by the book," says Tom Moore at University College Cork (UCC), who has already received clearance to carry out hESC research from UCC's research ethics committee. Ireland has no laws governing human stem cell research and scientists have been operating in a legal limbo. "The lack of an independent bioethics board will have serious repercussions for how Ireland is seen as a hub for medical research, and that will have to be addressed as a matter of urgency." says scientific director Stephen Sullivan of the newly formed Irish Stem Cell Foundation, which is calling on the government to reinstate the council. Cormac Sheridan Corrected after print 7 June 2010.

Amgen trumps Roche

A 5-year patent dispute between Roche and Amgen over the anti-anemia drug Mircera (methoxy polyethylene glycolepoetin beta) has ended. Roche of Basel acknowledged in court that Mircera, its pegylated-erythropoietin, infringed on Amgen's erythropoietin patent and would drop its challenges. The ruling ensures that Mircera sales are barred and Roche is kept out of the US market until mid-2014, when Amgen's patents expire. Amgen currently dominates the US market with erythropoiesisstimulating agents (ESAs)—Epogen (epoetin alfa) and Aranesp (darbepoetin alfa)—which together generated \$5.6 billion in sales last year. However, Thousand Oaks, California-based Amgen may now have to contend with US Food and Drug Administration (FDA) regulations, as a panel of outside experts expected to meet in 2010 will re-examine safety concerns over ESAs (Nat. Biotechnol. 25, 607-608, 2007). Writing in January in the New England Journal of Medicine (doi:10.1056/NEJMp0912328), FDA officials are urging proper dosing of ESAs in individuals with chronic kidney disease, as certain regimens appear to increase the risk of cardiovascular events and death. The panel may impose regulations on the ESA market or decide that additional clinical trials are needed. The outcome of this meeting, says Eric Schmidt, a biotech analyst at Cowen and Company in New York, is that it may bring down sales, as drug companies may no longer be allowed to push high-dose regimens. Nazlie Latefi

Report blames GM crops for herbicide spike, downplays pesticide reductions

A recent report published by the Organic Center, an organic farming advocacy organization headquartered in Foster, Rhode Island, claims that the use of herbicides in weed control has risen sharply since transgenic crops' commercial introduction in 1996. Increasing cultivation of glyphosate (N-phosphonomethyl glycine)-tolerant transgenic crops, particularly soybean, has led to an aggregate increase in herbicide use of 383 million pounds over the past 13 years, on top of what the Organic Center's chief scientist Charles Benbrook models suggest would have been applied had the technology never been deployed (http://www.organic-center.org/science.pest.php?action=view&report_id=159). The report also downplayed that transgenic corn and cotton have delivered reductions in insecticide use totaling 64.2 million pounds over the same time period.

The report's findings on herbicides are in stark contrast to the standard agrochemical industry line that transgenic crops have reduced the chemical load on the environment. Several critics have questioned the assumptions underlying the analysis and any significance that can be drawn from it, particularly as the report comes from an advocacy group seeking to "communicate the verifiable benefits of organic farming and products to society."

Rising glyphosate resistance is a plausible explanation for the increasing use of herbicides, however. Among plant scientists, there is little disagreement on the problem of glyphosate-resistant weeds. "It certainly is fair to point out the failure in glyphosate stewardship, that the threat of resistance wasn't appreciated, that more diverse management wasn't used to try to prevent or delay resistance emerging," says Chris Boerboom, extension weed scientist at the University of Wisconsin in Madison.

The issue of herbicide resistance has already become acute in some US states. Report author Benbrook claims that the cotton and soy industries in the Southeast are on "the brink of collapse" because of the cost of dealing with glyphosate-resistant weeds. Benbrook goes on to argue that increasing reliance on herbicides paired with more expensive, engineered tolerance traits will erode farmers' profitability, while compounding environmental and public health risks (through increased chemical exposure).

The report's other main finding-that insect-resistant transgenic crops have helped cut pesticide use-was downplayed by Benbrook, who claims the increase in the volume of herbicides applied "swamps" the



Crop spraying on the up. Glyphosate-resistant weeds may be driving an increased reliance on herbicide use.

Erratum: The cancer vaccine roller coaster

Bruce Goldman & Laura DeFrancesco

Nat. Biotechnol. 27, 129–139 (2009); published online 7 February 2009; corrected after print 7 June 2010

In the version of this article initially published, the Mologen product description in Table 5, page 139, was incomplete and its status incorrectly stated to be compassionate use in India. The product description should have read: Genetically modified allogeneic (human) tumor cells for the expression of IL-7, GM-CSF, CD80 and CD154, in fixed combination with a DNA-based double stem loop immunomodulator (dSLIM). The status should have read: Orphan drug status granted by EMEA in 2006. The error has been corrected in the HTML and PDF versions of the article.

Erratum: Irish bioethics council axed

Cormac Sheridan

Nat. Biotechnol. 28, 112 (2010); published online 5 February 2010; corrected after print 7 June 2010

In the version of this article initially published, a researcher at University College Cork was incorrectly named. His name is Tom (not Barry) Moore. The error has been corrected in the HTML and PDF versions of the article.

Erratum: Never again

Chris Scott

Nat. Biotechnol. 28, 131 (2010); published online 5 February 2010; corrected after print 7 June 2010

In the version of this article initially published, Art Levinson is incorrectly described as a founder of Genentech, Sandra Horning as senior vice president of global clinical development and Richard Scheller as chief of operations. Their titles should have read: CEO Arthur Levinson moved up to the board of directors.... Sandra Horning...took over as senior vice president, global head, clinical development, hematology/oncology. Executive vice president, research, Richard Scheller.... The errors have been corrected in the HTML and PDF versions of the article.

Erratum: Resuscitated deCODE refocuses on diagnostics

Mark Ratner

Nat. Biotechnol. 28, 192 (2010); published online 8 March 2010; corrected after print 7 June 2010

In the version of this article initially published, it was reported that deCODE had "shuttered its Emerald Biosciences and Emerald Biostructures drug discovery operations"; in fact, the companies were sold to investors. In addition, the correct name of Emerald Biosciences is Emerald BioSystems. The error has been corrected in the HTML and PDF versions of the article.

Erratum: Biotech in a blink

Ken Garber

Nat. Biotechnol. 28, 311–314 (2010); published online 8 April 2010; corrected after print 15 April 2010

In the version of the article originally published, Michael Tolentino was misquoted to the effect that bevasiranib had been shown to persist indefinitely in post-mitotic cells. Tolentino actually stated that the RNA-induced signaling complex persists. The error has been corrected in the HMTL and PDF versions of the article.