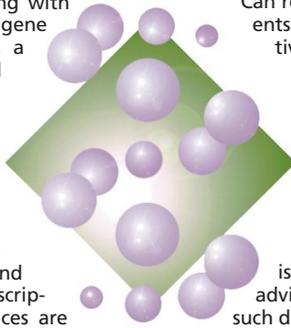


TOUCHINGbase

● Methylation and post-transcriptional silencing

First there was homology-dependent gene silencing with methylation. Then there was homology-dependent gene silencing without methylation, or co-suppression, a phenomenon first seen in transgenic plants and more recently documented in *Drosophila* and fungi. Now it seems methylation is back in the picture, with the recent characterization by Hervé Vaucheret of INRA Versailles, France, and colleagues of *Arabidopsis* mutants impaired in cosuppression (*Plant Cell* **10**, 1747-1757, 1998). Both *sgs1* and *sgs2* (suppressor of gene silencing) mutants have lost methylation within the coding region of silenced transgenes and have relaxed post-transcriptional silencing. Transcriptional silencing and methylation of other sequences are not, however, affected in these mutants. These surprising results implicate methylation in a silencing process distinct from its role in general control of genome silencing, and provide clues (and ammunition) to fuel the ongoing debate.

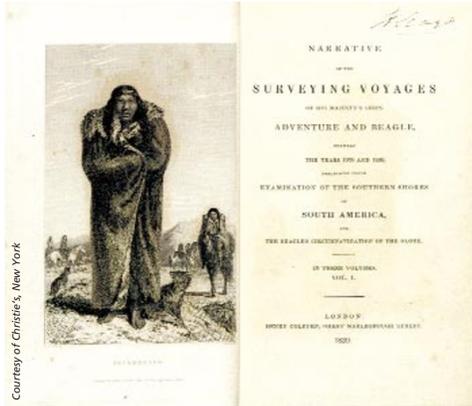


● Seasonal science and censorship

"Can reindeer fly?" is only one of many questions that parents (and sometimes scientists) have to answer as the festive season draws near. They now get help from a book of the same title by Roger Highfield, the science editor of the *Daily Telegraph* (London). In addition to delightful facts and hypotheses on the physics of snowflakes and warp-drive sleighs, the book discusses seasonal twists to the double helix, such as the cloning of Christmas trees and in a chapter entitled "Gluttony: Santa's genetics", the possibility of a genetic predisposition to an expanded waistline. A full chapter is devoted to "The Virgin Birth", and, having taken advice from prominent geneticists, Highfield goes into such details as imprinting and parthenogenesis to conclude that, without a miracle, virgin humans simply do not have babies. (Incidentally, the highest organism in which parthenogenesis has generated viable male offspring is a turkey.) "*Can Reindeer Fly?*" is now available in the United Kingdom. In the United States, however, a different version, under the title "*The Physics of Christmas: From the Aerodynamics of Reindeer to the Thermodynamics of Turkey*" will appear in December. Discussion of the 'virgin' birth will not be included.

● Survival of the fittest bidder

Darwinia went under the hammer at Christie's, New York, on 29th October, with the sale of the last part of the Haskell F. Norman Library of Science and Medicine, which included several first edi-



Courtesy of Christie's, New York

tions of Charles Darwin's books detailing the flora, fauna and geology encountered during his *Beagle* voyages. A rare copy of *On the Origin of Species by Means of Natural Selection* was quickly snapped up. So, too, was an unauthorized pamphlet containing letters written by Darwin while aboard the *Beagle* to his friend, The Rev. John Stevens Henslow, a professor at Cambridge University, which was initially distributed without Darwin's knowledge—and to his subsequent dismay—among Cambridge philosophers. A copy of Gregory Mendel's paper, presenting ten years' work on peas that led to his laws of trait inheritance, proved more popular today than when it was first published, with a sale price of \$51,750. Although disseminated in journal form amongst the scientific community, Mendel's findings fell into obscurity before being rediscovered in 1900—a rare copy of the first edition in English, translated by William Bateson in 1901, went for \$5,175. Other gems include a copy of Marie Curie's doctoral thesis (\$130,000), with an inscription to Ernest Rutherford, and a rare privately printed first edition of Robert Brown's paper (\$90,500) describing the molecular phenomenon later known as 'Brownian motion'. Brown had the means to indulge in the unusual practice (even in the 1800s) of having his papers printed at his own cost for his personal distribution before publication in scientific journals.

We are what we are. We are all different, the products both of our genes and our experiences. Members of Parliament are no different from the rest of society.

—Ron Davies, ex-Member of Parliament, in a statement to the House of Commons

● Jolly powerful fellows

Seven 'indices of power', including direct control over others, access to information, specific expertise and ability to reward others and four 'measures of influence' (such as how easily one could be replaced and the relevance of one's message to society) were assessed when compiling a recently published list of the most powerful people in Britain. Politicians (led by Tony Blair, no. 1) feature prominently, but the influence of science and technology was clearly recognized. Bill Gates is ranked second for his dominance in shaping Britain's electronic future, George Radda, the head of the Medical Research Council, holds sixth place (well ahead of media tycoon Rupert Murdoch), and Richard Dawkins at no. 25, is directly followed by Sir Richard Doll, the director of the Imperial Cancer Research Fund. Ian Wilmut, scientist at Roslin Institute and one of Dolly's creators, is no. 37, behind ex-Beatle Sir Paul McCartney (33) but well ahead of any religious leaders such as the Pope (44), Lord Sainsbury (the richest man in Britain, 88) and the Queen who, despite being the country's richest woman, slides in at no. 100.



Photo: ©firstVIEW Collections Online

● Lab fashion

Sashaying down the street in your lab coat is the height of fashion, according to the gurus of *haute couture*. The antiseptic laboratory look strides the catwalk this fall with leading fashion designers, including Helmut Lang (see insert), providing various renditions of lab chic. Stumped for ideas for Christmas presents? Share the fashion statement with your friends and families by recycling your lab coat, putting together an ensemble of petri dishes, or substituting the Geiger counter for a handbag as the ultimate fashion accessory.