

TOUCHINGbase

● Have a Cigar

For all the phenomenal success of Cigar as a thoroughbred racehorse — winning 16 consecutive races in 1995 and 1996 and \$10 million in the process — his retirement at age 6 has not gone as well as his owner would have liked. The



Cigar shows his stuff

press has labeled him a 'stud dud' after Cigar was declared infertile, failing to sire a foal with 34 different mares, although the declaration did net his owner, Allen Paulson, a \$25 million insurance settlement. Evidently Paulson has considered everything to help his prized racehorse — including cloning! Excitement swelled after an article appeared in the *New York Post*, prompting Paulson to comment, "Anyone would like to see if they could

duplicate a horse like Cigar. It would be exciting to see if it could be done." But a spokesman for the Jockey Club quickly scotched the idea, noting that the regulations of the American Stud Book clearly state that "to be eligible for registration a foal must be a result of a stallion's natural service with a broodmare." Apparently, this does not include artificial insemination, embryo transfer or cloning.

● The X-Files

'Scientists Take Big Stride in Human-Genome Mapping', proclaimed the headline on the front-page of the *New York Times* announcing the success of David Schlessinger's team at Washington University School of Medicine in St Louis, which has produced the first physical map of a human chromosome to the resolution laid out by the Human Genome Project. Schlessinger's 25-member team described its new X-chromosome map in the March issue of *Genome Research* (Nagaraja, R. et al. *Genome Res.* 7, 210-222; 1997). The map features 2,091 sequence tagged sites (STSs) spread across 160 megabases of the X chromosome, at an average spacing of 75 kilobases. (The Genome Project had called for a resolution of one STS per 100 kilobases). In addition, the St Louis group reports that the known genes are not spread evenly, but rather are clustered into five main areas along the chromosome.

● Boxing Clever

The 1997 March of Dimes Prize in Developmental Biology has been awarded jointly to David Hogness (Stanford University) and Walther Gehring (University of Basel) for their discovery of homeobox genes. The awards, worth a total of \$100,000, are being presented at a ceremony in Washington D.C. on May 5. In 1978, Hogness spent a sabbatical in Gehring's laboratory, where he discovered the TATA box. The following year, he isolated and characterized the DNA of a *Drosophila* homeotic gene, *ultrabithorax*, pioneering the technique of chromosome walking in the process. In the mid-1980s, Gehring defined the active homeobox domain within the *Antennapedia* gene, a member of the homeobox gene family. Hogness and Gehring both remain extremely active in related fields. Hogness is studying the steroid hormone regulation of *Drosophila* metamorphosis (see White, K.P. et al. *Science* 276, 114-117; 1997). Gehring is best known for his recent work on *Pax6* (eyeless) and eye development, showing the conservation of developmental pathways of the eye and olfactory system in species as diverse as the fruitfly and squid (see Tomarev, S. et al. *PNAS* 94, 2421-2426; 1997).



W. Gehring



D. Hogness

● Of Mice and Merck

One of the first functions of the Merck Genome Research Institute (MGRI), a not-for-profit research organization which was launched last month by the pharmaceutical giant, will be to support the creation and free distribution of 150 mouse models produced by homologous recombination technology. The mouse strains are to be generated at Lexicon Genetics, a company based near Houston, Texas, which is receiving \$8 million from MGRI over five years to support the effort. A special committee appointed by MGRI will select the 150 strains for distribution. Meanwhile, Lexicon Genetics is embarking on a five-year programme to generate 500,000 mouse clones representing targeted modifications of virtually every mouse gene.

● Off Base

'Give Dolly a rest', writes David Stipp in the March 31 issue of *Fortune* magazine. Stipp says that DNA chips, not cloned sheep, are the real biotechnological revolution. The feature article highlights the strategic approaches of companies like Affymetrix, Hyseq, Synteni, and in addition to a collection of artfully posed photographs of leading scientists at these companies, quotes several ringing endorsements of the technology from the likes of Francis Collins, Tom Caskey, and even *Nature Genetics* . . . The paper from Harrington and colleagues in last month's issue on the creation of human artificial chromosomes triggered a large amount of media coverage on both sides of the Atlantic. But a couple of European scientific correspondents, one from a distinguished television company, contacted the *Nature Genetics* editorial office to inquire whether the story was an April Fool's joke. . . More cutting-edge research in the pages of the *Journal of the American Medical Association*: A survey of more than 1,400 American men has led researchers at the University of Chicago to conclude that men have a similar likelihood of contracting sexually transmitted diseases regardless of whether they have been circumcised (Laumann, E.O. et al. *JAMA* 277, 1052-1057; 1997). However, circumcised men were more likely to 'engage in a more elaborated set of sexual practices', although the authors acknowledge that social factors probably also have role.



● Lupus Linkage

Researchers at the University of California, Los Angeles, have found evidence for a susceptibility gene on the long arm of chromosome 1 for the autoimmune rheumatic disease, systemic lupus erythematosus. Betty P. Tsao and colleagues were prompted to study the long arm of chromosome 1 based on previous positive findings for the homologous region on mouse chromosome 1 in mouse models of SLE. Writing in the February 15 issue of the *Journal of Clinical Investigation*, Tsao's team tested seven markers on chromosome 1q31-42 in 43 families with at least two affected sibs. Five out of seven markers tested showed positive associations with SLE, especially *D1S229*, regardless of ethnic background of the families. The data support an earlier finding of tentative linkage to chromosome 1q in four African-American families. The UCLA team's research was funded by the NIH and the actor Richard Dreyfus, whose ex-wife Jeramie has the disease.