TOUCHING**base**

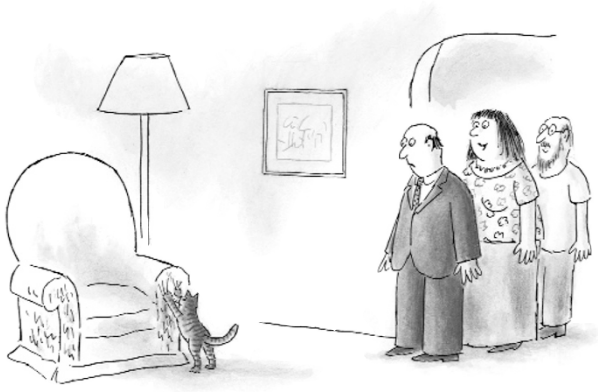
America's eugenic past online

More than 1,200 photographs and documents from the American eugenics movement, many of which have not been publicly available, will be released on an educational web site created by the DNA Learning Center, Cold Spring Harbor Laboratory (CSHL). CSHL, now a world-renowned research facility, was once the centre of American eugenics research during the early to mid 1900s. According to David Micklos, of the DNA Learning Center, James Watson during his directorship encouraged CSHL to recognize its past and educate the public about how genetic information can be misused; in this case, hijacked by those with a political and social agenda. Based on questionable scientific practice, much of which was later discredited, the American eugenics movement was widely popularized, influenced government policy, and led to endorsement of the sterilization of individuals deemed "genetically unfit" (which included the vaguely-defined characteristic "feeblemindedness") and restrictions on foreign immigration and marriage. Micklos emphasizes that the narration accompanying the images provides a social and political context, but lets the audience draw their own conclusions. The "Image Archive on the American Eugenics Movement" can be accessed from the DNA Learning Center's homepage (http://vector.cshl.org).

> *"Amply bestowed with rock star genes, Ashcroft is pale, short, painfully thin and an unrepentant chain-smoker. He has been close to death on at least one occasion when he became dehydrated in Kansas in 1994, and suffers from a malfunctioning lymph gland which makes him tired and causes him to sweat a lot. "Physically, I haven't felt 100 per cent fit for about ten years," he admitted."*
>
> —Profile in *The Times* of Richard Ashcroft, former lead singer with The Verve

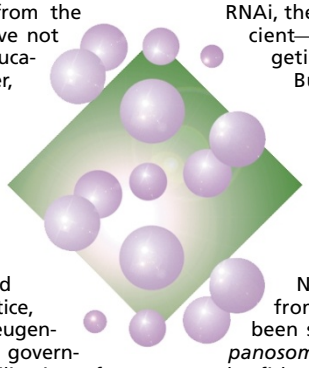
Le Jeantet, c'est gentil…

Two Swiss and one German will enjoy the glory and substantial monetary reward of this year's Louis Jeantet Prize for Medicine. As announced in Geneva last month, fly geneticist Konrad Basler (39), of the University of Zurich, will be the youngest recipient so far. He will share the Sfr 2.1 million ($1.3 million) with channel expert Thomas Jentsch of Hamburg University and fellow Swiss Ueli Schibler of the University of Geneva. Basler started his career in the laboratory of Charles Weissman—focusing on prion mechanism. He switched to signal transduction in the *Drosophila* eye for his doctoral work with Ernst Hafen, and went on to study the role of TGFβ signal transduction in the mouse with Thomas Jessell at Columbia University. Unable to forego the fly, however, he moonlighted in Gary Struhl's laboratory next door before returning, as Herr Professor, to his *alma mater*. Early in his career, Jensch concentrated on cow eyes, frog skin and electric fish; in more recent years, his interest has extended to ion channels in humans—channels that are relevant to a variety of inherited diseases, including epilepsy and myotonia congenita. Schibler, who studied the transcriptional regulation of albumin genes, turned his attention, in timely fashion, to another field—inspired by the fact that some of the regulators of these genes are expressed with circadian periodicity. He has contributed to our understanding of the control of circadian rhythm, and is now in search of target genes of the circadian master regulators that function in the sleep-wake cycle.



"We believe that in a former life she was an editor." S.GROSS

Interference in mammals



RNAi, the injection of dsRNA into early embryos, is an efficient—if somewhat 'quick and dirty'—tool for gene targeting; it was developed in *Caenorhabditis elegans*. But not all worm genes can be efficiently inactivated by RNAi; those acting late in development, in particular in the nervous system, are more likely to be refractory. To overcome this limitation, Monica Driscoll and colleagues have generated heritable inverted repeat transgenes. As they report on page 180, these genes confer potent and specific gene inactivation in situations where injection of dsRNAi would be either tedious or ineffective. Aside from *C. elegans*, targeted inactivation by RNAi has been shown to work in *Drosophila melanogaster*, *Trypanosoma brucei* and plants, and, with limited success, zebrafish. In mammals, accumulation of dsRNA—a hallmark of viral infection—triggers an interferon-mediated response that shuts down translation and eventually results in apoptosis. This discouraged some mouse geneticists from experimenting with the technology, but not Florence Wianny and Magdalena Zernicka-Goetz. As they report in February's issue of *Nature Cell Biology*, injection of dsRNA corresponding to two endogenous genes into mouse oocytes and early embryos resulted in defects that mimicked the phenotypes of null mutants. Moreover, by targeting a ubiquitously expressed reporter gene, they found that dsRNA does not interfere with normal development, and that its injection into zygotes eliminates protein expression of the marker for several days (or more than six rounds of cell division) after injection. Optimistic mouse manipulators now hope to devise ways to use inverted repeat transgenes to inactivate genes that function later in development or in the adult.

…and the early worm also gets a prize

H. Robert Horvitz will be the recipient of the 2000 March of Dimes Prize for Developmental Biology. The prize is awarded annually to investigators whose research has significantly advanced the understanding of human birth defects, and who have not previously received a major prize for their achievements. Horvitz was chosen for his groundbreaking work in cell fate determination and programmed cell death in *Caenorhabditis elegans*.