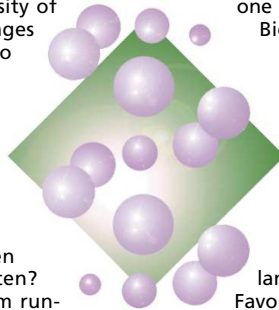


TOUCHINGbase

● A hooray for the hairy

A study in the February issue of the *American Journal of Epidemiology* delivers what might be good news for scabrous men. Shah Ebrahim and colleagues at the University of Bristol followed 2,438 Welsh men between the ages of 45 and 59 over 20 years and found that men who shaved at least once a day had a 70% lower risk of stroke than men who shaved less frequently. The less-frequent shavers were also more likely to be unmarried, smoke and have manual-labor jobs. Controlling for these factors still resulted in a significant risk for those that are less familiar with the business end of a Bic. This begs the questions, "Is this really good news for men who *need* to shave often or bad news for men who *choose* not to shave often? Is there some cathartic therapy to be gained from running cold steel against your face, or is it the lather?" Although we would like to believe that this is a nugget of good news for our hairy friends, the issue needs further sorting as the study suffered from the same shortcomings as many association studies—that it was correlative in only one population and thus could be an anomaly associated with the men in one small Welsh town. We at *Nature Genetics* have taken it upon ourselves to recommend that men shave daily until these issues can be sorted out.



● Cheers

We could fill several pages describing the fun everyone seems to be having with the double helix's anniversary. Here's just one example that we like, from the National Centre for Biotechnology Education at the University of Reading (UK). Their "DNA50" website (<http://www.ncbe.reading.ac.uk/DNA50/cocktail.html>), has a mock publication ("A cocktail of nucleic acids") that begins coyly, "We wish to suggest a recipe for a cocktail containing deoxyribose nucleic acid (D.N.A.). This drink has novel features which are of considerable biological interest." The authors, D. R. Madden and J. W. Schollar, list ingredients from Cambridge, London, and the Americas that should be combined just so. From England, they recommend frozen strawberries ('Cambridge Favourite') and London Dry Gin (chilled in advance so as to precipitate the D.N.A.). From the Americas, pineapple juice (must be fresh, as protease activity is needed to degrade the histones), blue curaçao, lime juice and sugar. After mixing the strawberries and pineapple juice in a blender (a Hershey-Chase Waring blender is specified), the fruit juice is added to the gin, inducing the precipitation of "wisps of strawberry D.N.A.," which is displayed in a figure on the site, although the authors note that it is "purely diagrammatic". Astonishingly, Madden and Schollar do not acknowledge Tom Collins and his seminal work in this area. The taste of the drink is also not described, although a full description will likely be published elsewhere soon.

● Mutant of the Month

We would like to introduce you to stargazer, our April MoM. Though he appears to be searching for Orion's belt, this cute little guy is actually having the mouse equivalent of a petit-mal seizure. The head-tossing phenotype for which he was named worsens with age and is accompanied by generalized spike wave discharges similar to those seen in humans with absence epilepsy. A spontaneous mutant, he first appeared in our pages in August 1998 when the mutation responsible for the phenotype was localized to *Cacng2*, encoding stargazin, a putative voltage-gated calcium-channel γ subunit. More recently, stargazin has been implicated in localization of AMPA receptors to synapses through its interaction with PSD-95. Resolution of the apparent dual role of the protein is forthcoming. We're sure our little friend will be happy to learn why it is that he looks to the heavens.

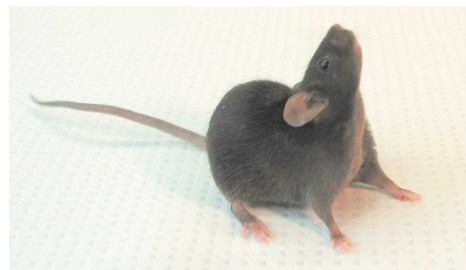


Photo courtesy of B. Beyer and V. Letts

● Attention Hollywood

When is Hollywood going to deliver a version of one of the twentieth century's greatest scientific achievements: The Sequencing of the Human Genome? (They divided a genome. They united biology.) Surely this story has all the features of a made-for-television movie. Opening scene: Watson and Crick, 1953, announcing in *The Eagle* that they had discovered the secret of life. Fast forward through the next 30 years (80 seconds of a camera shot twisting like a helix with images of RNA, Nobel prizes, flies, worms and recombinant technologies). The story picks up in the late 1980s with some lone voices (Jim Watson, played by Donald Sutherland; Sir John Sulston, played by George Lucas; and Bob Waterston, played also by Donald Sutherland [N.B.: no fight scenes possible between Watson and Waterston]). Momentum builds, alliances are formed and new players emerge (John Lithgow as the guitar-slinging Francis Collins, Judd Hirsch as Eric Lander and Ed Harris as Craig Venter). Then, trouble! A rift! Great lines abound—Watson, on hearing the news of Venter's break to form Celera, "This should not be Munich... Are you going to be Churchill or Chamberlain?" Capitalism seems to be vindicated, when doing something for money is shown to be more efficient than naive idealistic pursuits. And then, in a finish that is part "Chariots of Fire" and part "E.T.," the competing efforts cross the finish line at exactly the same time and stand triumphant next to the President of the United States (played, of course, by himselfness Bill Clinton). C'mon, Hollywood. Show us the money.

● Shattering superstitions

We're not saying you should start breaking mirrors or walking under ladders, but you may be able to stop fleeing black cats. Rather than being unlucky, these felines may actually be more resistant to certain diseases. Researchers from the National Cancer Institute report in the March 4 issue of *Current Biology* (13, 448–453) that black fur, or melanism, in cats has multiple independent genetic origins and high frequencies in some natural feline populations. The 'wild-type' black coat of the jaguarundi, for example, is actually a mutant phenotype that has replaced the ancestral reddish coat throughout the jaguarundi's continental range. This suggests that melanism confers some selective advantage. The most obvious advantage might be camouflage for hunting, the researchers told Reuters and *New Scientist*, but they suspect that a stronger selection might be at work and that melanism might be simply a side effect. The group identified three mutations in two different genes that cause melanism in domestic cats (*ASIP*) and in jaguars and jaguarundis (*MC1R*). Melanistic cats of five other species did not carry any of these mutations, implying that melanism has arisen at least four separate times in felines. *MC1R* encodes the melanocortin-1 receptor, a member of the family of seven-transmembrane receptors, which act as doorways through which bacteria and viruses can enter cells. Mutation of these receptors may inhibit the ability of potential pathogens to invade cells, so black cats may have survived and thrived because they are more resistant to infection. This resistance might be extended to redheads as well: mutations in *MC1R* result in red hair in some humans (lucky devils!).