TOUCHING BASE

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Mutant of the Month

It's a rare mutation that affects the inner ear's vestibular system, which is required for the perception of gravity and motion, as well as for the maintenance of balance. November's MoM is the tilted mouse, one of three classical mouse mutants with a nonsyndromic vestibular disorder. The vestibular organs include three semicircular canals, the utricle and the saccule. Sensory transduction involves the small biomineral particles called otoconia, which are embedded in a membrane that overlies the saccule and utricle. Tilted mice get their name from the fact that homozygotes show head tilting behavior, owing to a lack of perception of gravity and spatial orientation. Sadly, they cannot swim and require immediate rescue in a swim test. The gene underlying the tilted mutation has been positionally cloned and is a new gene called *Otop1* (*Hum. Mol. Genet.* 12, 777–789; 2003). Otop1 is a membrane-bound protein expressed in the gelatinous membrane contiguous with the saccule and utricle. In the tilted mutant, Otop1 is no longer found in this membrane. The authors suggest that Otop1 may be an ion channel that regulates the ionic environment in the vestibular organs. ***AP***

NIH acquires knockout mice

A new joint initiative funded by 19 branches of the US National Institutes of Health (NIH) will give academic scientists worldwide unrestricted access to a collection of private mouse knockout lines generated by Deltagen and Lexicon Genetics. In the first year of the three-year contracts, the NIH will acquire ~250 independent lines along with detailed phenotypic information about each mutant. Officials estimate that it will take NIH-funded repositories roughly six months to expand the initial stocks of frozen embryos before distribution, though some lines should be available sooner. Complete phenotype information for each mutant line will be available in November as static reports, with searchable lists indexed by phenotype available by the end of the year. Ultimately, the NIH plans to make the raw phenotype data fully searchable and integrated with The Jackson Laboratory's Mouse Genome Informatics page (http://www.informatics.jax.org/). The acquisition of these private lines lays the groundwork for ongoing efforts by the NIH to develop a complete public repository of knockout lines for every mouse gene (the Knockout Mouse Project). Further information on the newly acquired mutant lines can be obtained through the NIH mouse page (http://www.nih.gov/science/models/mouse/index.html). *KV*

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Nobel cell phone tanka

Work stress eats your soul
On gastric mucosa dines
Helicobacter
Antipodean insight
Worth laurels and a fine meal

Safe science and publishing

This past month, several new studies on the genome of influenza virus have raised questions about both the safety of the research and the ethics of publishing these studies. The reconstruction of the 1918 strain, a supervirulent strain of influenza that no longer exists in nature, has raised concerns regarding safety procedures and biosecurity. These experiments were done by Terrence Tumpey at the Centers for Disease Control (CDC) and colleagues at Mount Sinai, in an enhanced Biosafety Level 3 laboratory, in accordance with recommendations of biosafety review boards. The publication of studies on the reconstructed virus (*Science* **310**, 77–80; 2005), as well as the finished genome sequence of the 1918 virus (*Nature* **437**, 889–892; 2005), raised questions about the security risks of making this information widely available. Scientists, editors and policymakers joined the discussion of whether the final genome sequence and reconstruction of the virus should be published. The US National Science Advisory Board for Biosecurity reviewed both papers before publication, as did CDC Director Julie Gerberding, US National Institute of Allergy and Infectious Diseases Director Anthony Fauci and US Secretary of Health and Human Services Michael Leavitt. The review boards gave the green light to publish both manuscripts, saying that the possible risks of misuse of this information were far outweighed by the possible benefits to scientific research and public health. *OB*

Genetic nondiscrimination in the news

I.B.M. recently announced a new company policy barring discriminatory uses of genetic information. This groundbreaking policy, in which I.B.M. pledges to not use genetic information in hiring or insurance benefit eligibility decisions, comes as the company has become increasingly involved in the business of genetic information technology and thus has a growing stake in the widespread use of genetic information. This announcement also comes at a time when the Genetic Information Nondiscrimination Act, which aims to make discriminatory uses of genetic information in health insurance and employment illegal, is languishing in the House, even though it was passed unanimously in the Senate and endorsed by the Bush administration. Objections to the Act have come from the US Chamber of Commerce, which follows regulations influencing business employment practices. If the Act is not passed by the time the House convenes this fall, the House will have a chance to pass it next year. But if it does not get passed by the end of the 109th session (probably sometime during the fall of 2006), it will die in the House and proponents of genetic nondiscrimination legislation will have to start all over again in the Senate in 2007. *EN*