



# TOUCHING BASE

QUESTIONS? THOUGHTS? IDEAS?  
e-mail us at [ngfeedback@natureny.com](mailto:ngfeedback@natureny.com)

© 2007 Nature Publishing Group <http://www.nature.com/naturegenetics>

## Mutant of the Month

This rotund mutant, dubbed **tubby**, arose spontaneously in 1977 at The Jackson Laboratory. In addition to maturity-onset obesity, homozygous mutant mice show retinal degeneration and progressive hearing loss, reflecting the pleiotropic nature of the mutation. In 1996, two groups (*Nature* 380, 534–538; 1996 and *Cell* 85, 281–290; 1996) reported that the **tubby** mutant carries a splicing mutation in a previously uncharacterized gene which they called *Tub*. Several years later, through a genome-wide RNA interference–based screen in *Caenorhabditis elegans* for genes involved in fat regulation, Gary Ruvkun and colleagues (*Nature* 421, 268–272; 2003) showed that a *Tub* homolog has a conserved role in regulating fat storage in worms. More recent work from the Ruvkun laboratory (*Nat. Genet.* 38, 363–368; 2006) suggests that *Tub* homologs may act in concert with Bardet-Biedl syndrome (BBS) gene products in ciliated neurons to regulate fat storage as part of a conserved neuroendocrine axis.

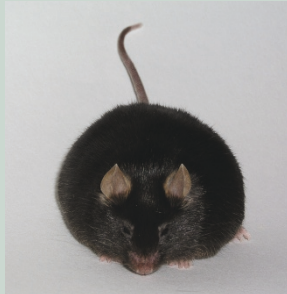


Image courtesy of Jürgen Naggett and Patsy Nishina

KV

## Calit2@UCSD/UCI

The University of California, San Diego (UCSD) and the University of California, Irvine (UCI), in partnering to form the new California Institute for Telecommunications and Information Technology (Calit2), have provided their own response to the growing interest in integrating biological sciences with related disciplines to encourage collaborative research. The Calit2 initiative was first proposed in December 2000 as one of four institutes sponsored by the California Institutes for Science and Innovation. The institute is home to many projects, bringing together faculty across disciplines, and notes particular strengths within nanotechnology, information technology, telecommunications and digitally enabled genomic medicine. The joint UCSD/UCI Calit2 program is led by Director Larry Smarr, with Ramesh Rao leading the UCSD division and Albert Lee leading the UCI division. Two new buildings at UCSD and UCI provide the optimal setting for the institute's innovative and integrative goals, offering new design principles that have already won several notable architectural awards. For example, the roof of the UCSD building has built in an 'antenna garden' for wireless support and boasts over 2 million feet of network cables that provide exceptionally high bandwidth. These buildings are home to a number of new programs. One of these, the Center for Algorithmic and Systems Biology (CASB), brings together algorithmic and systems biology at

UCSD, the Burnham Institute and Scripps. The CASB, led by director Pavel Pevzner of UCSD, held its inauguration on November 30th, 2006, as part of a day-long conference on algorithmic biology, held in conjunction with a RECOMB satellite conference on Systems Biology and Computational Proteomics. The UCSD Calit2 buildings also host the new Community Cyberinfrastructure for Advanced Marine Microbial Ecology Research and Analysis (CAMERA) project, a joint venture with the J. Craig Venter Institute, which aims to provide infrastructure, resources and bioinformatics support for accelerating the understanding of metagenomics data.

OB

## UK PubMed Central launched

Following up on announcements made in 2005, the British Library has launched UK PubMed Central (UKPMC) in collaboration with the University of Manchester and the European Bioinformatics Institute. Like the US version, the UK site will be a free digital archive of literature in biomedicine and the life sciences. Initially it will mirror the US database, but it also has a manuscript submission system that will enable researchers in the UK to submit their work directly for inclusion in the UK archive. The UKPMC launch is part of what may eventually be a network of digital archives organized by PMC International, a collaborative effort between the US National Library of Medicine, publishers and other interested parties to promote access and searchability of the biomedical literature. The British Library has taken the lead in establishing UKPMC, as well as handling author submissions and marketing. The University of Manchester will host the site on its servers and provide bioinformatic and bibliographic support. The European Bioinformatics Institute will provide bioinformatic support, text-mining tools and links to a variety of biological databases. UKPMC can be accessed at <http://www.ukpmc.ac.uk>.

AP

## Database of genotype and phenotype

A new database to host genome-wide association data, including genotype, phenotype and clinical information, was launched by the US National Library of Medicine and the National Institutes of Health in December 2006. The database of genotype and phenotype, or dbGaP, will provide a repository for the range of genotypic and phenotypic data involved in individual genome-wide association studies, offering formats to ease their interpretation and comparison to other studies in the database. The initial release of dbGaP contains data from two studies. One is the Age-Related Eye Diseases Study (AREDS), supported by the National Eye Institute, which includes 600 cases and controls in a multicenter, prospective study on the clinical course of age-related macular degeneration. The second is the Parkinsonism Study sponsored by the National Institute of Neurological Disorders and Stroke, a case-controlled study of over 2,500 individuals. The data from both of these studies are now freely accessible through dbGaP. Protecting participants' privacy is a concern; to do so, dbGaP has set two levels of access for all studies, open and controlled. The open areas will be accessible without prior registration and will include general information on the study design and summary analyses. The closed areas will require registration and preauthorization to gain access and will include individual-level phenotype and genotype data. The dbGaP is expecting many more studies to participate, including the Framingham Heart Study. The Genetic Association Information Network (GAIN) has also agreed to include their sponsored studies (six initially) within dbGaP.

OB

*Touching Base* written by Orli Bahcall, Alan Packer and Kyle Vogan.