



TOUCHING BASE

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Mutant of the Month

From the mold responsible for cultural innovations from miso to molecular genetics comes a humid August tale of sex and fratricide. Of eight brothers, only the four who bear the mark of their spore-killer *Sk2^K* father survive. The four who take after their susceptible *Sk2^S* mother are extinguished. *Neurospora crassa* (pictured), *N. sitophila* and *N. intermedia* are heterothallic fungi, whose sexual crosses occur between opposite *matA* and *matA* mating types to produce a zygote that goes straight into meiosis, segregating four haploid nuclei later doubled to eight by a postmeiotic mitosis. Each of the resulting eight haploid ascospores carries the descendant of one of the eight original DNA strands at each locus that entered the first meiotic division. Their linear order reflects the history of these three nuclear divisions and has been used to study mechanisms of recombination, gene conversion and segregation (<http://www.stanford.edu/group/neurospora/Photos.html>). The gene *het-s* in another ascomycete, *Podospora anserina*, encodes a prion responsible for spore killing and the consequent meiotic drive that promotes the prion locus in the population (*Proc. Natl. Acad. Sci. USA* 100, 6616–6621; 2003). **MA**



Namboori B. Raju

Farm team

The Howard Hughes Medical Institute has announced the first 7 appointments to the position of group leader at its Janelia Farm campus, with the aim of filling 24 such slots before the research facility opens in late 2006. The group leaders will be working in two general areas identified by the institute: elucidating the general principles of information processing by neuronal circuits, and developing imaging technologies and computational methods for image analysis. The newly appointed group leaders, all of whom have interdisciplinary backgrounds, are Dmitri Chklovskii (Cold Spring Harbor), Sean Eddy (Washington University), Nikolaus Grigorieff (Brandeis University), Eugene Myers (University of California Berkeley), Julie Simpson (Wisconsin), Roland Straus (Würzburg) and Karel Svoboda (Cold Spring Harbor). In a laboratory structure modeled on highly regarded and productive centers such as the Medical Research Council's

Laboratory of Molecular Biology in Cambridge, UK, and AT&T's Bell Labs, these group leaders will work in small groups and will be free to devote all their time to research.

AP

Beyond long-tailed resource units

An impressive new study by the Nuffield Council on Bioethics (<http://www.nuffieldbioethics.org>) looks at all aspects of research involving animals from various historical, philosophical, behavioral, legal, commercial, medical, veterinary and scientific points of view. The study (*The Ethics of Research Involving Animals*; Nuffield Council on Bioethics, London, 2005) is funded by the Nuffield Foundation, the UK Medical Research Council and the Wellcome Trust with the intention of promoting informed discussion. The working party's recommendations—refinement, reduction and replacement of animal research—exceed existing regulatory requirements and contrast with the reality that 300,000 new genetic lines of mice could be created in the next two decades. The study proposes that phenotypic information deposited in databases such as the Mouse Genome Informatics database (<http://www.informatics.jax.org/>) should include welfare implications of the genotype and recommends that a specific ontology be developed for these descriptions. We agree, in so far as this aim promotes the sharing of ethical standards, research results and materials (*Nat. Genet.* 36, 1025; 2004) and provides rigorous phenotyping for future research.

MA

"Firstly, we will learn a lot about the Neanderthals. Secondly, we will learn a lot about the uniqueness of human beings. And thirdly, it's simply cool."

—Eddy Rubin, on a proposed initiative by German and US scientists to reconstruct the sequence of the Neanderthal genome (as quoted by the German weekly *Die Zeit*)

Amber waves unseated

Listen up, Wonder Bread fans! Interested in enjoying the health benefits of whole grains but loathe to give up the distinctive taste and mushy texture of traditional Wonder Bread? Good news. Wonder Bread is launching a whole-grain version of their signature product made from albino wheat. Like whole-wheat breads made from traditional red wheat flour, the product retains the bran and germ portions of the kernel and thus offers the same nutritional benefits as regular whole-wheat, minus the tannins and phenolic acid that endow red-wheat flour with its distinctively bitter taste. Achieving that mushy texture, alas, remains outside the realm of genetics (at least for now). Profit motives aside, exploiting natural variation to enhance market appeal and thereby improve the dietary habits of white-bread consumers seems like a laudable public health goal. Perhaps it's time for national funding agencies to become more proactive in supporting such 'stealth health' initiatives.

KV

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