

TOUCHINGbase

● EMMA open for business

The European Mouse Mutant Archive (EMMA) has finally thrown open its doors (and freezers) and, as of 1 April, is accepting and distributing mutant mouse strains. EMMA's core facility, located at the CNR Adriano Buzzati-Traverso Campus, Monterotondo, Italy, is responsible for the archiving, recovery and distribution of strains. It is supported by four additional nodes scattered throughout Europe, each embedded within an active research campus. The CNRS Centre for Advance Techniques (Orleans, France) maintains live mouse colonies, the MRC Mammalian Genetics Unit (Harwell, UK) and the Karolinska Institute (Stockholm, Sweden) serve as 'feeders' to bolster the mutant collection, and the Gulbenkian Institute of Science (Lisbon, Portugal) will operate a facility for analysis of immunologically deprived strains. Although



EMMA now accepts mice, its development is hindered by inadequate and short-term funding resources. EMMA is currently maintained by a conglomeration of three-year grants from the European Commission, with additional costs being met by local government agencies sponsoring the nodes. It is not recognized as a 'legal entity' and, as a consequence, is unable to sign material transfer agreements (MTA), creating an obstacle for the distribution of strains covered by patents. The facility has also been unable to offer a sufficiently lucrative package to attract a full-time Director. Peter Rigby, who, together with Peter Gruss, co-chairs the Scientific Policy Committee that coordinates EMMA, emphasizes the difficulty in planning the long-term future of the repository based on short-term funding promise—a sentiment that will be familiar to many.

● The end of the unknowns

Technology has caught up with tradition in the United States Armed Forces. Following each war in which the US has participated since World War I, the body of an unidentified soldier killed in action has been placed in the Tomb of the Unknowns at Arlington National Cemetery, near Washington, D.C.. At the request of the family of Michael Blassie, a fighter pilot shot down during the Vietnam War and officially listed as missing in action, the remains interred in the tomb in 1984 were subjected to DNA testing. These were identified as those of Blassie, who is now reburied with full military honours. The US currently takes DNA samples of all inductees into the armed forces, and DNA analytical techniques have advanced to the point where identification is routine. In light of these developments, the US Secretary of Defense, William Cohen, stated last February that no new remains will be placed in the tomb in the future, as it is unlikely that future conflicts will produce remains which cannot be identified. This does not, however, solve the issue of how to honour a victim from the Vietnam War alongside the unknown soldiers from earlier conflicts. One organization of relatives of soldiers missing in action from Vietnam has proposed, quite fittingly, that a plaque be installed near the Tomb of the Unknowns which states simply: "In honour of those still missing, this crypt remains forever empty."

“There are only two lasting bequests we can hope to give our children. One of these is roots, the other, wings.”

—Hodding Carter

● Chlamydia and heart disease

Chlamydia infections cause pneumonia and female infertility, but are they bad for your heart? Several indirect lines of evidence have linked bacterial infections in general and *Chlamydia* in particular to atherosclerosis. How such peripheral infections would affect the

heart, however, has left researchers and clinicians wondering. A study presented by Kurt Bachmaier and colleagues in a recent issue of *Science* (283, 1335–1339 (1999)) provides strong evidence that peripheral injection of an epitope of *Chlamydia* cysteine-rich protein (CRP) which is similar to the muscle-specific α myosin heavy chain, can cause inflammatory heart disease in mice and evoke an autoimmune response against the endogenous mouse α myosin. CRP is a structural protein that undergoes post-translational modification which removes some of the residues of the pre-protein. One problem is that the peptide sequences examined by Bachmaier *et al.* that show homology to mammalian α myosin would be expected to be cleaved off and thus absent from the mature CRP in most *Chlamydia* strains analysed to date. The gene encoding CRP is present in *C. pneumoniae* (confirmed by Richard Stephens and colleagues, who report the genomic sequence on page 385 of this issue), the species which has been associated with human atherosclerosis.

How the *C. pneumoniae* protein is processed—and thus whether the peptide in question is relevant to the heart-disease link—is unknown. On a more general note, having a second fully sequenced species of *Chlamydia* will help to resolve whether species-specific genes explain the different pathogenic potentials of the two species and/or whether subtle differences between shared genes encoding, for example, similar but not identical outer membrane proteins, affect tissue tropisms and host immune response. Additional sequences will provide a finer degree of comparison, but only extensive biochemical—and eventually mutational—investigations will provide conclusive answers. As *Chlamydia* expert Thomas Hatch of the University of Tennessee notes, “having the genes is great, but now we need genetics!”.

● TIME will eventually tell . . .

. . . us who it considers to be the “person of the century”. In the meantime, it has decided upon the twenty most influential “Scientists and Thinkers”—after a symposium to discuss the matter at the Rockefeller University, in New York on 3 March. Amongst the panel, led in discussion by talk-show host Charlie Rose, were Maxine Singer (director of the Carnegie Institute), Robert Gallo (U. Maryland), Bruce Sterling (author of science fiction) and cognitive-neuroscientist Steve Pinker (of the Massachusetts Institute of Technology and recently voted one of the ten most sexy scientists by the British newspaper, *The Independent*). The discussion, some of which appeared on *The Charlie Rose Show* on 22 March, was lively and wide-ranging—with panelists discussing criteria for recognition and whether, as proposed by Maxine Singer, morality should be considered. In contrast, Sterling proposed that “actively malevolent” thinkers, such as Trofim Lysenko, are “effective, important [and] made the twentieth century different from other centuries”. It seems doubtful that Arnie Levine (president of Rockefeller University) had folks like Lysenko in mind when he posited, in his introductory address, that the investigators of the current century have made this a “terrific time to be a scientist”. Among those that *TIME* has elected are Alexander Fleming, Rachel Carson, Francis Crick and James Watson.



Maxine Singer holds forth at the *TIME* 100 Symposium on “Scientists and Thinkers”.