

A computer for your mouse

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A new international consortium aimed at linking together the world's databases of mouse genetics — the field of research which saw the Nobel Prize for Medicine awarded to Mario R. Capecchi, Martin J. Evans and Oliver Smithies — was launched this week.

The Cambridge University scientist leading the initiative says the project will ultimately support new medical advances and potentially reduce the number of animals used in research.

Because they are so genetically similar to humans, the mouse has become the animal of choice for studying human disease. Research on genetic mutations in laboratory mice has led to new models for diseases such as Type 2 diabetes, currently a growing epidemic in the developed world, rheumatoid arthritis and otitis media, an acutely painful condition which affects thousands of children and which can lead to permanent deafness.

The success of research programmes in the field, particularly following advances in genome sequencing and other high-throughput technologies means that the volume of data available has become enormous. The new consortium, funded by the Commission of the European Union, is essential if we are to make the best use of the data, both for discovery and for experimental design.

Dr Paul Schofield, Senior Lecturer at the University of Cambridge, said the existing information system was "currently a virtual Babel" and that unifying the global data systems would produce "a well-ordered network

in which all databases will be able to speak to each other fluently in the same language."

Maximising the availability and ease of use of the information "will allow discoveries to be made from existing data, and potentially reducing the use of animals in research", he added.

The Commission has awarded €1.3 million over three years for the new Coordination Action, CASIMIR, co-led by the University of Cambridge and the Medical Research Council's Mammalian Genetics Unit (MRC Harwell), that will make recommendations on the integration and funding of databases across the European Union that hold information on the biology and genetics of the laboratory mouse.

Source: University of Cambridge

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