Sharing the results of research critical to advancement of biological sciences

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Sharing the fruits of research in the biomedical sciences is critical for the advance of knowledge, yet with the advent of large-scale data gathering following the completion of the genome projects this is becoming harder to facilitate and more difficult to monitor, as reported in *Nature* today.

Dr Paul Schofield of the Department of Physiology Development and Neuroscience at the University of Cambridge chaired an influential meeting on this issue in Rome in May of this year, supported by the European Commission-funded CASIMIR project. CASIMIR is tasked to look at the factors inhibiting the free exchange of data and materials between investigators using the mouse as a model system to study human disease.

The meeting was attended by senior representatives of major international research sponsors, leading scientific journals, intellectual property and technology transfer specialists and sociologists. It endorsed the need for global coordination and effective policies to reduce barriers to the free exchange of data and materials between scientists to ensure the sharing of research results and materials to maximize research benefit, optimize the use of research sponsorship and more effectively manage and optimize the dissemination of biological research results through academic or commercial channels.

Significant consensus was achieved, and the results of this important meeting are published in *Nature* this week. Research on mice as models

for human diseases is of major current international importance and is essential until better alternatives are found if the full societal benefits of the elucidation of the human genome are to be achieved. Better sharing of data and existing mice will reduce the need to generate new model organisms and avoid unnecessary duplication.

One of the key findings of this study is the negative impact of over-restrictive licensing by some Universities and research agencies of genetically engineered mice and embryonic stem cells - the outputs of this research - and the failure of researchers to efficiently share their research results and materials by depositing their mice and ES cells in the major public repositories now in place in Europe, North America, Japan and Australia.

The meeting set an agenda for community discussion - The Rome Agenda - also free to access online, which outlines guidelines to enable sharing of biomaterials under the least restrictive terms, avoiding restrictive material transfer agreements (MTAs) where possible. The meeting also recommended increased investment in public databases and mouse repositories to keep pace with the rapid acceleration of research in this area.

Dr Schofield said: "Sharing of data and biological resources in the post-genomic age has become crucial to the advancement of the biomedical sciences. The agreements reached in Rome will help to coordinate the development of policies and infrastructure in international science resulting in huge advantages to the research community and better value for money to the public agencies and charities who fund the majority of this research."

More information: The commentary piece "Post-publication sharing of data and tools" is scheduled for publication in the journal *Nature* on 09 September 2009.

Further recent discussions of some of these issues can be found on the *Nature* website: www.nature.com/news/2009/090603/full/459620a.html www.nature.com/nature/journal/ … 48/full/459752a.html

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