Double trouble
Human cloning worries for Japanese prime minister
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Smugglers!
Greece steps up vigilance for nuclear contraband
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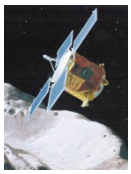

Photo opportunity
Eros waits for its close-up as NEAR prepares to land
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Medical misuse
Organ scandal causes drop in tissue donations
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Japan's ape sequencing effort set to unravel the brain's secrets

David Cyranoski, Tokyo

A workshop planned for next month on the genetics and neurology of apes could pave the way to a better understanding of the relationship between the human genome and the brain, its organizers say.

The Genes and Minds Initiative (GEMINI) workshop will try to improve coordination of existing ape-genome sequencing efforts and of related research in neurological gene expression and gene-based evolutionary study of apes. It could also serve as a springboard for a major international effort in the sequencing of ape genomes.

The meeting is being jointly organized by the National Institute of Genetics (NIG) and the Institute of Physical and Chemical Research (RIKEN) in Japan, and will take place in Tokyo. "The aim is to provide a place to discuss possible international and interdisciplinary cooperation on understanding what makes us human," says Yoshiyuki Sakaki of RIKEN's Genomic Sciences Center.

MAKOTO SHIMADA

Close relative: as ape genomes are similar to our own, comparative analysis could pay dividends.

The ape genome is thought to be around 99% equivalent to the human genome. "By examining the subtle genetic differences relating to the nervous system and brain function, it will be possible to shed light on language, the ageing process, and on sensitivity to disease," says Hans Lehrach of the Max Planck Institute for Molecular Genetics in Berlin. For example, researchers might be able to establish what makes apes resistant to Alzheimer's disease and AIDS.

Sakaki and Lehrach hope to use the experience they gained sequencing chromosomes 21 and 22 for the human genome project in assembling ape genomes. Because of the great similarity, Lehrach thinks that they will be able to assemble many of the corresponding ape DNA fragments right on top of the human sequence. "This could reduce sequencing needs and make it a very cheap project, perhaps costing less than US$100 million," says Lehrach.

Last year, RIKEN announced a project to compare chimpanzee and human genomic sequences, but commitment to the human genome and lack of funding have held back its progress (see *Nature* **406,** 4; 2000). Now the NIG is involved, details of the plan are being firmed up — although funding is still elusive.

RIKEN's Brain Science Institute will provide the project with candidate genes, such as those related to language and brain development, from human brain research projects. These will be used to correlate genes to their function in the brain, using microarrays.

RIKEN's Genomic Sciences Center is ▶

Science 'in crisis' says commission

Irwin Goodwin, Washington

Spending on science and technology in the United States should be doubled in the name of national security, says a report by a high-powered bipartisan panel.

The report, "Road Map for National Security: Imperative for Change", was prepared by the US Commission on National Security/21st Century. The commission, a 14-strong body established by Congress in 1998, is led by former senators Warren Rudman (Republican, New Hampshire) and Gary Hart (Democrat, Colorado).

Although the report contains scant evidence to support its assertion that US science and technology are "in crisis", its bombastic tone is likely to help drum up support in Washington for extra funding.

The commission's main thrust is to call for a complete overhaul of the defence department and civilian agencies such as the Federal Emergency Management Agency. But it also urges President George W. Bush and Congress to double the funding of basic research and technology development — from the government's current annual investment of $90 billion — by 2010.

It recommends that the president should give his science adviser more authority to set research objectives, and to coordinate the budgets of the 20 or so research agencies. The commission further suggests that Congress should pass a National Security Science and Technology Education Act, which would fund a programme to train more scientists and engineers and to produce better-qualified science and maths teachers for schools.

Rita Colwell, director of the National Science Foundation, which funds most non-biomedical research at US universities, described the report as "absolutely correct". ■

http://www.nssg.gov/phaseIIIwoc.pdf

expected to handle sequencing and initial analysis, starting with the chimpanzee equivalent of chromosome 21 and other genes suggested by the Brain Science Institute. The NIG will run a comparative study of chimpanzees, orang-utans, macaques and gorillas in an attempt to determine the way in which the various different species have evolved.

So far money for the project has not been forthcoming, with each group using funds from some of their other projects to allow the to do the planning. But Naruya Saito, a geneticist at the NIG, hopes that Japan is poised to take the leading role in an international ape sequencing project. He sees it as an opportunity for Japan to "show the world its sequencing capacity".

The project is also notable because it marks the first collaboration between two of Japan's premier research institutes under the auspices of the newly formed Ministry of Education, Culture, Sports, Science and Technology (see *Nature* **408,** 757; 2000). In the past, rivalry between the various agencies has made such a collaboration difficult. Gemini — the astrological sign of the twins — could therefore represent not only the relationship of genes and the mind, says Saito, but also a new match-up between the NIG and RIKEN. ■

http://sayer.lab.nig.ac.jp/GEMINI

Japanese premier underlines opposition to human cloning

David Cyranoski, Tokyo

Japan's prime minister, Yoshiro Mori, has warned Japanese researchers to steer clear of a proposed international project to clone humans.

The project, led by Italian *in vitro* fertilization specialist Severino Antinori and University of Kentucky reproductive physiologist Panos Zavos, aims to help infertile couples have children using the same technology that has been used in animal cloning. The mother's egg would be injected with the father's genetic material and then implanted into her womb.

One project member has predicted that a baby will be born within two years using the technique. But, apart from strong ethical concerns, critics say that the technique's low expected success rate makes it unsuitable for human cloning.

Although many researchers and politicians have chosen to ignore the latest claims being made for the project, reports that a Japanese researcher is involved led to the prime minister's intervention.

A law passed last December, which comes into effect this June, outlaws human cloning in Japan. Mori said he was charging the Ministry of Education, Culture, Sports, Science and Technology, and Takashi Sasagawa, the science minister, to take steps to keep Japanese researchers out of the project.

AP

Seeing double: human cloning is a headache for Prime Minister Yoshiro Mori.

"We will try to persuade researchers that what they are doing is wrong and explain that it is a violation of Japanese law," says an official in Sasagawa's office. But participating in such a research project abroad would not directly violate Japanese law — although researchers might be reluctant to defy the government's wishes, and research agencies may cut their funding if they do. ■

Italian biologists left out in the cold

Alison Abbott

Italian research minister Ortensio Zecchino has sown discontent among biologists by excluding them from a key academic committee that he appointed just before resigning from the government last week.

AP

Zecchino's parting gift to life sciences was to snub them.

Zecchino did not include any life scientists in the new eight-strong 'warrant' committee, which will distribute annual grant money of around L250 billion (US$120 million) to university researchers.

The committee includes two lawyers, a historian and an economist, as well as a chemist, an engineer, a mathematician and a paediatrician. Biologists feel Zecchino has abused his privilege of making the appointments directly, a privilege conferred only recently on the research minister.

In a letter to the newspaper *La Repubblica*, 14 Italian heads of scientific societies in the life sciences complained that their discipline was not represented on the committee, although biology accounts for more than a fifth of all grant applications.

"Italian universities require highly qualified evaluators of proposals in biological sciences," says the letter. It asks the prime minister, Giuliano Amato, who is acting as caretaker to the research ministry until the general election this spring, to add an appropriate expert to the committee.

Zecchino left the government to join a new political party, which is positioning itself to take part in the centre-right coalition that is expected to form the next government.

In a separate pre-election development, health minister Umberto Veronesi nominated biochemist Enrico Garaci to become president of the Istituto Superiore di Sanitá, the national health institute, once the statute enabling the position is approved. Garaci is a previous president of the CNR, Italy's national research agency. ■

Germany targets international talent

Quirin Schiermeier, Munich

Germany is to offer a small number of élite overseas researchers grant support of DM4.5 million (US$2.1 million) over three years to work in the country at an institution of their choice.

The Alexander von Humboldt Foundation, an independently administered body financed by the government, will offer between 15 and 20 awards to scientists with international reputations.

Although the main goal of these 'Wolfgang Paul' awards is to attract non-German scientists, native Germans are also eligible if they have been working abroad for more than five years.

Recipients will receive up to DM250,000 per year — considerably more than the salary of a full professor in Germany — for 'living costs'. The rest of the money can be used to finance research.

In addition, the foundation will offer 20 or 30 young scientists up to DM2.25 million each over three years. ■

http://www.avh.de/en/programme/neu.htm