

Germany backs genome networks to tackle diseases

Quirin Schiermeier, Munich

Germany has confirmed funding for more than 300 post-genomic research projects aimed at finding therapeutic targets for common diseases, including cancer and neurological disorders.

Germany's National Genome Research Network (NGFN) will receive €135 million (US\$163 million) from the science ministry for its second phase, which runs from 2004 to 2007. This includes funding of six large disease-related 'genome networks', each involving molecular geneticists and clinical researchers, and new genomics infrastructures, including a 'mouse clinic' for analysing mutant mice and screening animal models of human diseases.

But some basic researchers are unhappy with the programme's insistence that they collaborate with clinicians, as genomics-based drugs are not even on the horizon. They claim that collaborations involve too much bureaucracy.

"All this networking is really an obsession of politicians," a neuroscientist at one of Germany's leading research hospitals told *Nature*. "You end up feigning how well you collaborate with everybody, just to get funded. But it is actually disadvantaging the best groups."

Other researchers support the approach. "Germany's genome initiative has greatly improved collaboration between clinicians and research facilities," says Martin Hrabé de Angelis, who runs the German Mouse Clinic at the GSF national research centre in Munich.

Research will now focus on identifying candidate genes that might be linked to complex genetic disorders such as cancer or Alzheimer's disease. €10 million has been earmarked for small, high-risk projects.

Announcing the funding, research minister Edelgard Bulmahn pledged that significant funding for genome research will continue until at least 2010.

"Programme-oriented research is the current buzzword," says Friedrich Luft, head of nephrology and hypertension at Charité, the medical faculty at Humboldt University in Berlin. "My intellectual activities are forced into 'networks'. If I do not participate, my chances for funding are greatly diminished, if not zero."

Hrabé de Angelis dismisses such gripes as "small-minded". "Research à la 'one gene, one postdoc' also still exists," he says. "But in a bigger context it is necessary to work together." ■



Fast track to merger? In lieu of cash, Russia could give ESA increased access to its Soyuz rockets.

Talks pave way for docking between Russia and ESA

Tony Reichhardt

Russian and European space officials are discussing the possibility of Russia joining the 15-member European Space Agency (ESA) — a move that would put ESA on a par with NASA in terms of spaceflight experience and access to orbit.

Although no formal offer has been tendered, a flurry of meetings and public statements in the past few months suggest that both sides are exploring the idea. At the Berlin Air Show last week, the new head of the Russian Aviation and Space Agency (PKA), Anatoly Perminov, told the Russian news agency Itar-Tass that he supports a merger in principle, but that Russia would want full membership of ESA. Perminov, who formerly headed the Russian military space programme, said he has been discussing the details with Jean-Jacques Dordain, who took over as director-general of ESA last July.

Dordain proposed, in a document called Agenda 2007 released last October, that Russia be admitted as an associate member of ESA, with a status similar to that of Canada. Associate members can participate in some agency projects and decisions, but do not have to adhere fully to agency rules. These include the 'juste retour' policy, whereby members receive ESA contracts in direct proportion to how much money they put into agency projects.

Money is precisely Russia's problem.

Although the country has extensive experience in human space flight and some of the most reliable rockets in the world, it is chronically short of funding, and might have difficulty paying its contribution as a full ESA member. But "where there's a will, there's a way", says Giovanni Bignami, director of CESR, the laboratory of space astrophysics in Toulouse, France, and chair of ESA's Space Science Advisory Committee. ESA, for example, could rewrite its rules to allow member states to pay in kind, with services instead of cash.

ESA has been building steadily closer ties with Russia, and is constructing a launch pad at its site in Kourou, French Guiana, for the Russian Soyuz rocket, with launches to begin in 2007. The European agency currently has 15 member states, with Greece and Luxembourg signed on to become full members by the end of next year.

If the *juste retour* policy and other details can be worked out so that Russia can join, Bignami says that it would be "an enormous success for

ESA". And Russia would get a steady customer for its space industry. Cooperation with the United States has been complicated in recent years by US national security regulations, which include a law that prohibits NASA from buying Russian space hardware outright, because of concerns that Russia is supplying nuclear technology to Iran. ■



Jean-Jacques Dordain: holding talks with Russia.



Keen: Anatoly Perminov wants full membership.