

says Cornetta. It's not yet clear how outsiders will use center facilities, but all three directors say their doors will be open to any and all proposals, to be selected and funded in part by the program.

To spread the cost of supporting these new labs, NIH has asked four of its institutes to contribute. They include the National Center for Research Resources, which provides assistance to clinical centers throughout the country, the National Cancer Institute, the National Heart Lung and Blood

Institute, and the National Institute of Diabetes and Digestive and Kidney Diseases.

Even as the new centers get underway, however, they will face the scrutiny of a special committee on gene therapy chaired by genetics experts Arno Motulsky of the University of Washington, Seattle, and Stuart Orkin of Harvard University. In May, after NIH had invited applicants to apply for center grants, NIH Director Harold Varmus established the committee to conduct a major review of NIH's gene therapy programs

(*Science*, 5 May, p. 627). While Varmus says he supports the concept of national vector labs, he is asking the Motulsky-Orkin panel to take a closer look. "There's no doubt that there's a great deal of interest among those who do gene therapy to have [national vector labs]," says Varmus. But before the investment grows any further, "I would like to hear from an independent group whether that is a good way for us to be spending money." The panel will offer its answer in December.

—Eliot Marshall

## INTELLECTUAL PROPERTY

### Who Owns Results of Russian Science?

MOSCOW—The Russian government has drafted a decree intended to bring some clarity to Russia's confusing intellectual property system for state-funded research. Instead, it has stirred up parts of the country's scientific establishment. At the heart of the new decree is the establishment of a new nonprofit State Contract Agency for R&D, dubbed Goskontrakt, which would own the rights to the results of all state-funded research and control its further use and implementation by issuing contracts for commercialization. But even before the draft decree was circulated for comments, it came under fire from the Russian Academy of Sciences (RAS) and the Russian Foundation for Basic Research (RFBR), a 3-year-old Western-style granting agency funded by the Ministry of Science. Vladimir Pavlov, director of the RFBR's department of mathematics, mechanics and informatics, says the decree would give the state an unacceptable degree of control over basic research.

Russia's existing intellectual property laws are vague declarations of principles. The Duma, the lower house of Russia's parliament, wants to clarify the situation, but so far has only managed to muddy the water further. The few laws that it has already adopted contradict each other: One gives intellectual property rights to the body that finances the research, the other awards them to the institution that conducts it.

The new decree considers "all the results obtained in the course of the research funded either directly from the budget or through federal non-budget foundations" (such as the RFBR and RAS, in which the proportion of direct state funding does not exceed 40%) to be state property and therefore subject to the control of Goskontrakt. Although funding agencies such as the RFBR and RAS will still manage their own programs, their officials believe that the government's control of property rights through Goskontrakt will give it *de facto* control over all state-funded research. This, argues Pavlov, contradicts the principles of openness and diversity of funding sources for research declared by sci-

ence minister Boris Saltykov.

Other scientists, including RAS representatives, are unnerved by the vague wording of the decree, which says little about how Goskontrakt will operate. The decree's aim is to create a "market for the results of R&D" and protect the state's interests in this market. But critics argue that all it does is set up a new body in charge of guarding state property without specifying how this should be done. The new agency will be overseen by the Ministry of Science and staffed by employees of the ministry. Pavlov says that the whole document is vague and unclear, and will require much more work before the plan

**A new agency would own rights to "all the results obtained [from] research funded ... directly from the budget or through federal foundations."**

is in any way practical. This, he adds, will most likely be done by bureaucrats, without any input from the scientific community.

Vladimir Disson, one of the Ministry of Science officials who drafted the decree, told *Science* that, as Goskontrakt was originally devised, only applied research would fall under its aegis. However, he says, Saltykov later insisted that the new agency also control some basic research projects such as fusion research and particle physics, because they yield not only purely scientific results but also new technologies, "know-how," and facilities.

That does not placate critics like Alexander Konoshenko, head of the Finance and Economics Department of the RAS, who points out that distinguishing fundamental and applied research can be difficult. The draft has a list of the types of research results that are considered to be state prop-

erty, such as those coming from a state scientific program or out of a state scientific center, both of which are directly funded by the science ministry. But at the same time, RFBR officials say the vague terms in which the draft is written make it possible to include all research run by the RAS (and the former USSR Academy of Sciences) in its institutes, research in universities and colleges, and all R&D carried out with the support of RFBR and other foundations.

Critics also point to other holes in the decree. Pavlov says it lacks detail about Goskontrakt's strategy for managing intellectual property and what arbitration systems it will use to settle possible conflicts over rights ownership. He also noted that the decree allocates 1% of the science budget for the running of the new agency, but does not say how the money would be spent. The RAS has sent an official letter to the ministry, insisting that these points be clarified.

Still, the decree is clear enough about one thing: Goskontrakt would have complete control over the transfer of research results to a third party—another state agency or commercial body. "Suppose that the State Committee for Emergency Situations commissioned a seismic research project at an RAS institute," says Konoshenko. "If some other organization wanted to use the results it would have to apply to the contract agency who would be the owner of all the rights." He and other RAS officials say that arrangement is unacceptable.

Ministry officials say they plan to take the criticisms into account when they revise the decree, a task they expect to finish by the fall. And they add that Goskontrakt could draw up individual research contracts to allay researchers' concerns about intellectual property rights. Depending on the agreement between the agency and the scientific institution, Goskontrakt might hold onto the rights, or give them to the institution running the research, or share them with the scientists. As Saltykov puts it, "There are various kinds of contracts, used all over the world."

—Andrey Allakhverdov

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