program. "Now it's up to us to figure out how to split up this money," says DOE's Steven Black, who oversees both programs.

Congress rejected the Administration's plan to prune DOE's $173 million Material Protection Control and Accounting (MPCA) program, which helps Russia safeguard its nuclear materials. But House and Senate negotiators rejected an effort by Representative Chet Edwards (D–TX) to add $131 million to it. Calling the decision "irresponsible and dangerous," Edwards and others hope to snare some money for MPCA from the $40 billion antiterrorism package that Congress approved last month but has not yet decided how to spend.

–DAVID MALAKOFF AND ROBERT KOENIG

RUSSIAN SCIENCE

Government Spurns Human Genome Effort

MOSCOW—As most nations rush to mine the riches of the human genome, Russia is moving to eviscerate its 12-year-old National Human Genome Program (NHGP). *Science* has learned that the science ministry plans to strip the NHGP of its special funding status and fold the money into a general pot for basic research. Beyond imposing a 50% cut in direct spending on genome research, the move will affect millions of dollars in other research activities that the genome program helped to manage.

The NHGP was the brainchild of Alexander Bayev, a molecular biologist at the Engelhardt Institute of Molecular Biology in Moscow who persuaded Mikhail Gorbachev to establish a national genome program in 1988. The fledgling effort received about $20 million a year over the next 2 years, on par with the U.S. program. Funding ebbed, however, after the Soviet Union's dissolution, a decline that accelerated with Bayev's death in 1994. Still, NHGP researchers pioneered hybridization sequencing. And dozens of Russians are involved in genome-related U.S. bioinformatics projects, says an official at the National Institutes of Health in Bethesda, Maryland. "Despite a shortage of resources, they have made use of their financing very effectively," says Valery Soyfer, a molecular biologist at George Mason University in Fairfax, Virginia, and an expert on the history of Russian genetics.

The new cuts, which end a block grant to the NHGP, threaten to derail projects involving approximately 400 researchers. The NHGP's funds will now be part of a "special purpose" program at the science ministry covering 120 basic research areas. However, only a handful of topics—including tumor genomics and genome software development—cover core areas within the genome program. Each topic will be supported by a single project, with total spending on genome-related research not to exceed $180,000 in 2002. The ministry will appoint its own panel to choose meritorious projects.

"No one formally closed the NHGP or dismissed the council," says the Engelhardt's Lev Kisselev, NHGP council head. "But we will no longer choose grantees, and we cannot decide whether the funding will go to a worthwhile project or not." Ministry officials did not respond to requests for comment.

Scientists rue what they see as the imminent demise of a program that maintained a sense of community for Russian genome researchers, sponsored workshops, and supported projects in key areas such as bioinformatics and population genetics. If the program were to die, says Evgeny Sverdlov of the Institute of Molecular Genetics in Moscow, "the infrastructure will die, and that will be very bad."

–VLADIMIR POKROVSKY AND ANDREY ALLAKHVERDOV

Vladimir Pokrovsky and Andrey Allakhverdov are writers in Moscow. With reporting by Richard Stone.

GENOMICS RESEARCH FUNDING
(SELECTED PROGRAMS; $ MILLIONS)

Program	1998	1999	2000
National Human Genome Research Institute (U.S.)	210.9	270.7	326.4
Wellcome Trust (U.K.)	61.3	103.5	121.4
Science and Technology Agency (Japan)	38.9	77.9	115.4
European Commission	23.5	104.6	108.5
U.S. Department of Energy	85.0	89.8	88.9
German Human Genome Project	19.0	20.2	79.0
Knut and Alice Wallenberg Foundation (Sweden)	5.0	11.0	35.0
Centre National de Séquençage, Genoscope (France)	4.5	7.4	9.0
Russian National Human Genome Program	2.8	5.4	8.3
Ministry of Science and Technology (China)	3.6	8.5	6.6

GENOME SEQUENCING

Insects Rank Low Among Genome Priorities

ARLINGTON, VIRGINIA—Insects get no respect, at least from the U.S. agencies that support genome sequencing. That was the grim news here last week at the Comparative Insect Genomics Workshop, sponsored by the U.S. Department of Agriculture (USDA), where entomologists interested in genomics argued for deciphering the genomes of several insect groups. Not only are insects the most diverse creatures on Earth, but they also cause more than $26 billion in damage annually to crops and livestock.

Funding buzz. Currently, there's little support for sequencing insect genomes.

The USDA, however, can't afford to do anything about this. "Animal genomes are on the radar screen, but insect genomes are not," says entomologist Mary Purcell-Miramontes of the USDA Cooperative State Research, Education and Extension Service. And that seems to be the case throughout the federal government.

Only two insects, both biomedically important, have gotten the nod. The genome of the fruit fly *Drosophila melanogaster*, long studied by geneticists, was deciphered in March 2000 (*Science*, 24 March 2000, p. 2181). This year, work began on the malaria mosquito *Anopheles gambiae*. But proposals to study the genetic makeup of other insect species have yet to get funding, even though entomologists say such research could lead to new ways to fight pests and protect pollinators.

For instance, Gene Robinson of the University of Illinois, Urbana-Champaign, has marshaled support among insect researchers to sequence the honeybee genome. Honeybees are critical for the pollination of many crops, he explains, and some of its relatives are useful in biocontrol. The entomologists think the project warrants the estimated $6 million price tag. But no one is biting, yet.

The same is true for the 530-million-base

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