



Bioprospectors: Tell the Russians We're Coming

Since the Cold War ended, job prospects for highly trained Russian scientists, including many microbiologists, often have been scarce. That situation, in turn, raises concerns among U.S. policymakers who focus on weapons nonproliferation issues. The fear is that idle Russian researchers could be directed to other risky projects. The interests of the world would, therefore, be better served if Russian scientists were gainfully engaged in open research efforts rather than in bioweapons development programs, as some of them once were.

To achieve this goal, the Center for Ecological Research and Bioresources Development (CERBD) was created in Russia in December 2000 with the assistance of the U.S. Department of Energy (DOE) and the World Foundation for Environment and Development (WFED). The Center will help team Russian researchers with participating U.S. firms to find useful nonmilitary applications for joint U.S.–Russian biological research projects.

“This is the first on-the-ground project using microbiological science as a way of beating swords into plowshares,” says Preston Scott, executive director of WFED. Redirecting the former bio-weapons facilities in Russia and other former Soviet States to “good purposes” represents a “tremendous opportunity” in terms of the research that will be done and also in serving broader, peacekeeping goals, he says.

WFED, an organization in Washington, D.C. that promotes international cooperation and conflict resolution initiatives, began working with DOE in 1998 to explore development of this new U.S.–Russian cooperative research program. The organization attracted DOE attention, according to Scott, because it also was involved in negotiating Yellowstone National Park’s first bioprospecting benefit-sharing agreement with Diversa Corp. (*ASM News*, March 1998, p. 147). [That agreement subsequently was challenged by a lawsuit (*ASM News*, May 1998, p. 260), but was upheld by a federal court in April 2000. Although an appeal was filed, the D.C. Circuit Court of Appeals dismissed the case in December 2000.]

Comprised of the Institute of Biochemistry and Physiology of Microorganisms, the State Research Center for Applied Microbiology, the Research Center of Toxicology and Hygienic Regulation of Biopreparations, and the All-Russian Research Institute of Phytopathology, the CERBD will receive startup funding of about \$1 million from DOE during its first two years of operation plus matching funds from participating U.S. research partners.

CERBD’s initial project will involve Russian and U.S. microbiologists from Diversa Corp. working together on joint research missions in Russia in search of potentially useful microbes—for instance, discovering molecules associated with contaminated industrial sites that could prove useful for bioremediation technologies.

This new U.S.–Russian cooperative arrangement with companies in the private sector plus the configuration at the Russian end of this new microbiologically based ecological center is “unique . . . because it involves four prominent institutes and is the first of its kind in Russia,” says Stephanie Ghetti of the DOE Chemical and Biological National Security Program.

The long-term goal of this DOE-WFED project is to assist the CERBD in becoming

a self-sustaining, fully functional Russian institution open to contracting with other leading research organizations to assist in the nonmilitary commercialization of Russian bioscience. “I am very proud for my country of this new venture because it has helped to establish new relations between the Institutes. It is perhaps the first time that such cooperation in our country has occurred,” says Vera Dmitrieva, CERBD executive director.

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Jeffrey L. Fox is the *ASM News* Current Topics and Features editor.

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Participating representatives of INEEL/DOE, Diversa, WFED, and the Research Center for Toxicology and Hygienic Regulation of Biopreparations



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