ITEP has close links with CERN, the European particle physics center in Geneva.

ITEP director Mikhail Danilov told *Science* that, in his view, transition into a joint-stock company would ruin the institute. It will come under the authority of the Ministry for State Property Management. "As a result, the institute will be managed by people who are incompetent in science and who are not worried about carrying out basic research," he says. And poor management may be the least of Danilov's worries. Because the ministry "sees its task as getting maximum possible profit from the real estate, I am afraid that many of the buildings will be sold off or let to commercial companies that have nothing to do with science."

The institute does already run several commercial programs, the largest of which is a center for proton beam therapy for cancer. But ITEP's proton accelerator is old and of no commercial interest, says Boris Saltykov, former science minister: "They can only use it for medical purposes." Last year, commercial projects earned ITEP just $5 million, while its debts far exceed this sum.

However, Yuri Lebedev, head of the department within the science ministry responsible for institutional reform and intellectual property, considers this reform to be important and timely. The majority shareholder of the new joint-stock companies will continue to be the state, he notes, and their new status will make it simpler for them to run commercial projects with investors as well as to deal with the state itself. Lebedev thinks the institutes' directors are opposing the change because it threatens to diminish their own positions. "In a joint-stock company, [the director] will be merely a manager, with his powers as master considerably reduced," Lebedev says.

Saltykov, on the other hand, says Danilov's fears are reasonable. "ITEP is not the right institution to be chosen as a top priority for the new approach," Saltykov says. "It is close to academic research, and they have very few commercial contracts." Danilov's hope is that the vague wording of Yeltsin's decree, which does not specify a timetable, will be their salvation and the changes will either not happen soon or will not happen at all.

–Andrey Allakhverdov and Vladimir Pokrovsky

Allakhverdov and Pokrovsky are writers in Moscow.

BIOPROSPECTING

Lawsuit Targets Yellowstone Bug Deal

The National Park Service (NPS) was accused last week of allowing a company to exploit a unique natural wonder it is supposed to protect. Three nonprofit organizations sued to stop an agreement under which a biotech firm would collect microbes from Yellowstone National Park's hot springs in exchange for giving the park service a share of profits from any products derived from the bugs. Yellowstone managers defend the agreement, arguing that it could raise needed cash for safeguarding the park's rich biodiversity.

In August 1997, the park service announced that it would let Diversa, a San Diego–based biotech company, take samples of soil, water, and plants over the next 4 years in return for a one-time fee of $175,000 and royalties of up to 10% on any future sales (*Science*, 22 August 1997, p. 1027). Park managers see the deal—a cooperative research and development agreement (CRADA), under which the federal government allows a company to commercialize an idea or a product in exchange for a financial stake—as an extension of an existing permit system that allows researchers to collect samples.

But that's not how critics view it. It's "a major change in public policy," asserts Beth Burrows, director of The Edmonds Institute, an environmental organization based in Edmonds, Washington. Last August, the institute and the International Center for Technology Assessment (CTA), a Washington, D.C.–based information clearinghouse, petitioned the park service and its overseer, the Department of Interior, to halt the signing of the Yellowstone-Diversa CRADA, arguing that the government had failed to conduct an environmental assessment, as required by the National Environmental Protection Act. Their petition was rejected last January.

Now the two nonprofits have taken off the gloves. They and a regional organization called the Alliance for the Wild Rockies have filed a lawsuit against NPS and Interior in U.S. District Court in Washington, D.C. The organizations contend that the CRADA violates the Federal Technology Transfer Act, which states that such agreements are designed solely for companies to work with government labs. There are no government labs located in Yellowstone National Park, notes CTA's Joseph Mendelson III. The lawsuit also alleges that the CRADA violates laws that require national parks to be preserved in an unspoiled state and that call for environmental impact assessments on any proposed projects within park boundaries.

MICHAEL MILSTEIN

Bubble, bubble. Researchers toil, but commercial collecting agreements at Yellowstone are in trouble.

NPS officials defend the CRADA, arguing that this type of agreement is the best way to ensure that some profits from park resources are put toward conservation. Park officials are still sore over Taq polymerase, an enzyme found in a Yellowstone hot spring microbe. The enzyme, which helps drive the polymerase chain reaction, has earned hundreds of millions of dollars for the Swiss drug company Hoffmann-La Roche. Yellowstone has seen none of this windfall—and doesn't want to be shut out when the next hot commodity hits the market, says wildlife biologist John Varley, director of Yellowstone Park's Center for Resources. The park now grants about 25 permits a year to microbe hunters, and beginning this year, permit holders must agree to negotiate a CRADA with NPS should they wish to profit from their finds. The CRADA with Diversa is slightly different, because it was negotiated prior to any collection. Varley says an environmental assessment is being done, but insists that the impact from such CRADAs would be minimal because companies would collect only cupfuls of water or algae by the hot springs and would not be allowed to sample an area more than once.

But the CRADA allows Diversa to collect microbes, soil, water, rocks, minerals, and plants, without specifying how much or how often. And Varley admits it is unclear how the park will enforce the CRADA's terms, particularly as several more such agreements are expected. "We're not prepared to deal with it," he says. Libby Fayad, counsel for the National Parks and Conservation Association, a Washington-based independent watchdog group for national parks, also worries that the parks are ill prepared to track royalty payments.

One thing for sure is that the days of benign scientific exploration in the parks are over. "If you go to Smokey Mountain National Park and take a teaspoonful of soil, [will] you need a CRADA?" asks Ira Schildkraut, a microbiologist with New England BioLabs in Beverly, Massachusetts. The answer may depend on the outcome of the lawsuit, which could go to trial in the next several months.

–Elizabeth Pennisi