firmed that it will be headed by Steven Briggs, a former biotech researcher at Pioneer Hi-Bred International in Johnston, Iowa, and will focus on plant genomics.

Observers are expecting a big payoff from both ventures. Somerville, who has seen the St. Louis group's business plan, notes that each of the 15 principal investigators will get 370 square meters of lab space: "That's pretty big." Indeed, he suggests the center could one day rival the John Innes Center in the United Kingdom, at 100 research groups the heavyweight among plant science institutes worldwide. Says Somerville, "I would call this stage one." –JOCELYN KAISER

PUBLIC HEALTH

Epidemiologist Named CDC Director

Jeffrey Koplan, an epidemiologist now working with a private company, has been chosen to head the U.S. Centers for Disease Control and Prevention (CDC). Donna Shalala, secretary of the Department of Health and Human Services, announced the choice 10 July at CDC's headquarters in Atlanta. The event was "something of a homecoming celebration," says attendee James Curran, public health school dean at Emory University, because Koplan has spent most of his career at CDC.

Full circle. Koplan spent 2 decades at CDC.

The CDC directorship has been vacant since February when the previous chief, David Satcher, left to become the U.S. Surgeon General under Shalala. Koplan will take charge of both CDC and the Agency for Toxic Substances and Disease Registry on 5 October and is declining comment until then. No Senate confirmation is required.

Koplan, 53, is currently president of Prudential Insurance Co.'s center for health care research in Atlanta, which studies the costs and outcomes of health services. Before taking this private-sector job, he spent 2 decades rising through the ranks at CDC—from field researcher in the Epidemic Intelligence Service to assistant surgeon general, becoming in 1989 the first director of CDC's national center for chronic disease prevention and health promotion. According to health researchers, Koplan played a key role in devising an AIDS monitoring network in 1982 to 1984 and led an initiative to prevent breast and cervical cancer in the 1980s.

"He's a terrific choice," says Curran, who admires Koplan's professionalism and "scientific depth." Mohammad Akhter, director of the American Public Health Association in Washington, D.C., also says he's "delighted" with the selection, calling Koplan a practical leader who knows how to advance ideas through the bureaucracy.

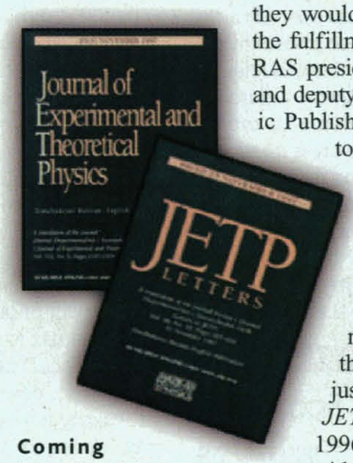
Others are more cautious. Public health leader D. A. Henderson of Johns Hopkins University notes that, although Koplan has a great record and is "very capable," he will also need great leadership skills to reinvigorate CDC. Henderson believes CDC has become "parochial" and needs nudging to "open up" to outside ideas. Infectious diseases researcher Barry Bloom, recently named dean of Harvard University's School of Public Health, also notes that CDC has been slighted in recent federal budgets and needs a strong political champion. Koplan's ability in this area is untested, Bloom says.

–ELIOT MARSHALL

PHYSICS PUBLISHING

Russian Academy to End AIP Journals Deal?

MOSCOW—The socialist principles of the Soviet era long forgotten, the Russian Academy of Sciences (RAS) is rapidly learning to play hardball in its dealings with the West. Over the past few months, the RAS has threatened to end an agreement with the American Institute of Physics (AIP), which currently translates and distributes English-language versions of several RAS physics journals, and instead produce the two most profitable journals in its own publishing company. During negotiations in Moscow at the end of last month, the academy told the AIP it could continue publishing the journals for just one more year if it increases the royalties it pays to RAS by 50%. Russian journal staff claim that an agreement was reached on those terms; AIP officials, when contacted by *Science*, declined to comment.



Coming home? English versions may soon be published in Moscow.

The move has dismayed some Russian researchers, who fear that without the international profile and publishing and distribution expertise of the AIP, these prestigious journals will soon wither. "As soon as AIP disappears from the Russian publishing market, competitiveness will disappear as well and the situation might grow much worse," says Alexei Starobinsky, an expert on gravitational theory and a corresponding member of the RAS. "Physicists will be extremely upset by this move," says Roald Sagdeev, a former head of Moscow's Institute of Space Research who is now a physics professor at the University of Maryland, College Park.

RAS officials say they are simply carrying out a resolution passed by the academy's presidium in 1992. The resolution created a new publishing company, dubbed MAIK Nauka, jointly owned by RAS and U.S.–based Pleades Publishing, and it stipulated that the translation and publication of all RAS scientific periodicals in English should be concentrated at MAIK Nauka. By this year, MAIK Nauka was publishing all but six of more than 80 RAS journals that are translated into English. Those six—the *Journal of Experimental and Theoretical Physics* (*JETP*), *JETP Letters*, *Physics of the Solid State*, *Semiconductors*, *Technical Physics*, and *Technical Physics Letters*—are all being published by AIP. An umbrella organization for a number of learned societies in the physical sciences and astronomy in the United States, AIP has been publishing English-language versions of Russian physics journals since 1955.

RAS officials apparently saw a chance to bring these remaining journals into the MAIK Nauka fold because the contracts for *JETP* and *JETP Letters* come up for renewal later this year, and the other four are due next year. As the renewal deadlines approached, RAS declared in a letter to AIP that they would not be renewed. "This is the fulfillment of the decision of the RAS presidium," RAS vice president and deputy head of the RAS Scientific Publishing Council, Rem Petrov, told *Science* in an interview prior to last month's negotiations.

RAS officials have also accused AIP of making excessive profits from the current arrangements. Petrov claims that the income from the sales of just one of the six journals—*JETP*—was $1.69 million in 1996, of which $303,000 was paid as royalties to authors and $70,000, or 4% of sales, was transferred to RAS. If AIP insists on the contracts being renewed on the same terms, Petrov argues, AIP would continue to profit "at the expense of Russian intellectual property." AIP declined to comment on the negotiations, but AIP chief Marc Brodsky said before the Moscow talks that "we at AIP are proud of our productive and mutually beneficial relations with all our [Russian] colleagues, in-

cluding authors, editors, and academicians." Brodsky notes that AIP—unlike most of its competitors—is a not-for-profit, noncommercial organization.

Some of the journals' Russian staff also appear to be upset by the move to publish the English versions from Moscow. *JETP* Editor Vsevolod Gantmacher told *Science* that the journal survived Russia's current financial crisis only because of the support of AIP, and it has now become one of the most popular journals among both Western and Russian scientists—a popularity boosted by its appearance on the AIP Web site in 1997. "Scientists turn to our journal only two times less frequently than to *Physical Review Letters*," Gantmacher says. To terminate the contracts with AIP, he says, "would mean that the journal would be deprived of all the existing advantages and doomed to become a second-rate journal." Says Starobinsky: "If all the journals are given to MAIK Nauka, then it will become a total monopolist." **–ANDREY ALLAKHVERDOV**

Andrey Allakhverdov is a writer in Moscow. With additional reporting by Richard Stone.

RUSSIA

Relief From Finance Farce?

MOSCOW—Russian scientists got another painful lesson in the vagaries of the country's bureaucracy earlier this year, when the government installed a new system for distributing grants awarded by the Russian Foundation for Basic Research (RFBR) and its offspring, the Russian Humanitarian Scientific Foundation—the country's fledgling competitive grants agencies. Many scientists' grants failed to appear, others got only a fraction of their awards, and nobody at the foundations could track what had happened to the money. Now, the government is trying again. A new distribution system was installed this month, and researchers are keeping their fingers crossed.

The trouble began when the government decided to free the two foundations from the hassles of handling their own grant money. The foundations would simply choose their grantees and inform a section of the Finance Ministry called the Central Treasury. The ministry and a network of local treasuries around the country would then take care of disbursing the funds.

The system soon ran into problems, says Mikhail Alfimov, head of RFBR. Because of the weak and irregular flow of finance from the budget, he says, grantees would often receive no money or only a fraction of what they were due. The funds were also not marked as foundation money, so if it was not a sum that the institution was expecting, it would often be used to pay electricity or heating bills and the grantee would be unaware of its fate. Similarly, the foundations received no information on what was getting through. When money did arrive, the Central Treasury put strict limits on how grantees could spend it, says Alfimov. "Suppose a grantee urgently needs to go to a conference, but he receives money for equipment. ... The finance ministry does not allow [him to swap] it."

The problems came to a head at a meeting of RFBR funding managers in June. "We agreed that if we cannot effectively distribute grants, it would probably be honest to just resign," says Alexei Reskov of the RFBR's department of biological and medical research. And at a heated meeting of the RFBR's Scientific Council early this month, earth scientist Felix Letnikov from Irkutsk strongly criticized the system, saying that "the foundation's initiative has been hijacked by bookkeepers."

Last week, Alfimov says the finance ministry bowed to pressure and established a new system of grant distribution. The Treasury will now send a lump sum to the grantee, who will liaise directly with RFBR on how it should be spent. The funding will also be marked as an RFBR grant, and no institute will be able to use it for any other purpose. Although the new system can do nothing about erratic amounts of funding arriving from the budget, at least now the RFBR and its grantees will know where their money is. "We have managed to educate the Finance Ministry," says Alfimov. "They are used to operating the big volumes. But we have explained to them the specific needs of the foundations."

–ANDREY ALLAKHVERDOV AND VLADIMIR POKROVSKY

Allakhverdov and Pokrovsky are based in Moscow.

PALEOBIOLOGY

A Fruitful Scoop for Ancient DNA

In the movie *Jurassic Park*, a collector snapped up hundreds of thousands of mosquitoes preserved in amber for DNA they had sucked from dinosaurs. In the real world, however, amber has been a disappointment, yielding no reproducible traces of ancient genetic material. Now researchers report that the treasure of ancient DNA can instead be gleaned from a less glamorous material: fossil feces.

On page 402, a team led by molecular biologist Hendrik Poinar and geneticist Svante Pääbo of the University of Munich demonstrates a way to unlock DNA trapped inside ancient feces. The dung they studied, a firm lump left by an extinct ground sloth about 20,000 years ago, offers clues to that species' ecology. Applied to other droppings, the method may be able to provide a wealth of clues about the ecology and relationships of extinct animals—and perhaps even about early humans. "This adds several new dimensions to the study of ancient animals," says Bob Wayne, an evolutionary biologist at the University of California, Los Angeles.

The Pääbo lab is one of the few to have successfully extracted DNA from ancient bones (*Science*, 11 July 1997, p. 176). But

POINAR *ET AL.*

Data dump. This 10-centimeter fossil dropping preserves DNA from the sloth's diet of greens.

the team wasn't having any luck with the well-preserved samples of fossilized dung, called coprolites, collected from Gypsum Cave near Las Vegas, Nevada, a gathering place for ice age animals. Then the researchers chemically analyzed the samples and found several compounds that indicated the presence of Maillard products—sugar-rich tangles of proteins and nucleic acids that prevent DNA amplification. "Everyone looks at the Maillard product as evil," says Poinar. But he realized that the tight cross-links might protect DNA by keeping out damaging water and microbes. The question was how to crack open that coat.

In 1996, the team spotted a possible answer in a *Nature* paper on a chemical called *N*-phenacylthiazolium bromide (PTB), which when given to diabetic rats cleaves the bonds between sugars and proteins—the same kind of bonds that may entangle DNA in the Maillard products. "We thought: 'Wouldn't it be great if PTB would release DNA?' But it was still a complete shot in the dark," recalls Poinar.

The shot hit home. Extracts from the sloth coprolite treated with PTB yielded sequences of mitochondrial DNA, presumably from intestinal cells shed into the feces. It probably came from an extinct ground sloth, *Nothrotheriops shastensis*, because the bones of that animal are scattered throughout the cave and because the DNA is a good match to that of a related extinct ground sloth, *Mylodon darwinii*, whose DNA was derived from bone and soft tissue.

The team was also able to extract a wide variety of plant DNA from the coprolite—clues to the vegetarian sloth's diet. They