

1989, he switched resources to restriction enzymes. Finding new restriction enzymes, Janulaitis reasoned at the time, would require lots of ingenuity and hard work but little costly equipment. And if they could be successfully made, they could be sold in small quantities and easily shipped—just the product for a small state with aspirations of independence from Moscow.

Institute researchers on holiday in far corners of the Soviet Union, as far as Kamchatka and Siberia, were asked to collect soil samples from hot springs, high mountains, and other unusual environments in the hopes of finding unusual strains of bacteria that produced unique enzymes. Janulaitis also asked friends at other research institutions and hospitals to send samples they had collected from all over the Soviet Union. And extensive searches were made close to home—paying off nicely when his colleagues found two unique strains in a garden near the institute.

As early as 1976, Janulaitis recalls that his first restriction enzymes were ready to sell to Soviet laboratories. Then came his first bruising encounter with Soviet bureaucracy. For just one sale to one institute, “You needed a stack of paper this big,” says Janulaitis, holding his hands a foot and a half apart. But Janulaitis came up with a solution that still makes him smile—he gave his enzymes away. “This required no paperwork,” he says, laughing. “That is how we made friends all over the Soviet Union—within a few months, everyone knew my name.” Friends helped him put pressure on Moscow and 4 years later—fast progress in those days—he was able to get enough foreign exchange to buy fermenting equipment from Germany.

By 1983, Janulaitis says he was ready to ask Moscow for permission to contact Western companies to try selling them restriction enzymes in bulk that they could then resell under their own brand names. “My co-workers told me I was crazy. ‘Why create all that extra work?’ they said. ‘The money will all go to Moscow anyway,’” recounts Janulaitis. But he persisted—and soon found that his friends were right. He won orders from a Japanese company but, he says, “once we began sales, we never saw a penny of the profits.” Why continue? “I used to think of it as my hobby,” says Janulaitis. But there was one other reason. “I wanted to get experience in dealing with foreigners.”

The experience paid off a few years later, when perestroika arrived. By 1987, Janulaitis was able to register his institute’s production facility as a semi-independent company, now called “Institute of Biotechnology Fermentas,” and in 1988 the Politburo in Moscow gave the new company permission to sell directly to Western clients and keep the profits. Then came the breakup of the Soviet Union, with independence granted to Lithuania in September last year.

These developments—joyous though they were—didn’t immediately make business easy. Contacts he had built up with the West from his “hobby,” plus a newfound freedom to travel, paid off in orders for a list of enzymes that by then was larger and more diverse than any other in the world. But Janulaitis still had to contend with the Soviet banking system. “We had to use the one bank in the entire country that was allowed to make foreign transfers,” recalls Janulaitis. “But the bank was usually insolvent. Even though we had money in our account, we had to go to Moscow to get the payments made. But at the bank headquarters in Moscow, you couldn’t get in the door—the doorway was always filled with people trying to get access to their money. It got to the point where they would keep the doors locked all the time.”

Janulaitis tried to cross this final hurdle the old-fashioned way but found himself back in a situation straight out of a Russian fairy tale. “Our person had to find a back door to the bank and actually bribe somebody to get in. Then, he found the person responsible for our transaction. He was sitting in a large room filled to the ceiling with huge boxes of receipts. He offered to help us, but only if we could find our receipt in one of those boxes.” That was the end of the fairy tale, however—Janulaitis’ people couldn’t find their re-

ceipt and had to go away empty-handed.

The business environment has since improved—when independence came, Lithuania finally set up its own bank, which completes transactions for the company within hours or days. And after several years of frequent trips to the West, Janulaitis is selling his enzymes through 15 companies in 12 countries. Success achieved, this year Janulaitis will resign as director and his colleague, biochemist Viktoras Butkus, will take over. In 1991, according to Butkus, the company earned about \$340,000 in foreign sales.

The biggest problem Fermentas now faces is the terrible image of the former Soviet Union. “Nobody trusts us,” says Janulaitis. Potential distributors of Fermentas enzymes often ask if they can remove the “Made in Lithuania” tag from the label. “We realize that most products [from the former Soviet Union] are worse than bad,” says Janulaitis. But he insists, “Our quality control is better than [that of Western companies].” Janulaitis says he is going to keep his “Made in Lithuania” labels no matter what. That way, he says, he will have done his part to win Lithuania a reputation for inventiveness and high quality.

—Steven Dickman

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CRIME CONFERENCE

Back to the Drawing Board, Says NIH

The National Institutes of Health (NIH) has notified the University of Maryland that it will have to start all over with a new proposal if it wants to get funds for a controversial conference on “Genetic Factors in Crime.” The university, claiming that NIH has infringed its academic freedom, has indefinitely postponed the conference, which was to be held on 9 October.

In late July, NIH Director Bernadine Healy suspended a grant of \$78,000 that had been awarded the university for the conference after a number of critics, in particular a group that included Howard University political scientist Ronald Walters, complained that the topic of the conference was racist in its implications (*Science*, 7 August, p. 739). David Wasserman, a lawyer and researcher at the university’s Institute for Philosophy and Public Policy, who organized the original program, says he subsequently met with a group from the NIH Human Genome Center to try to modify the design of the conference. He told *Science* that he rewrote the conference brochure and added some nonacademics to the list of participants. Based on these changes, Jacob Goldhaber, acting vice president for academic affairs and provost at the university, wrote to John Diggs, deputy director for NIH intramural research, saying

Wasserman had addressed NIH concerns about the conference and asking that the funding freeze be lifted by 4 September.

Diggs replied on 4 September saying that Healy’s block on the funds was “fueled by legitimate concerns” that it would be “irresponsible” for NIH to ignore. He stated that NIH “will not” release funds for the conference “as currently constituted.” Diggs went on to say that the conference needed to be rethought because the original brochure advertising it “diverges radically from that approved by peer review....” He referred specifically to statements that genetic research offers “the prospect of identifying individuals who may be predisposed” to criminal behavior and of “treating some predispositions with drugs and unintrusive therapies.” Wasserman claims that these were contained “word for word” in the proposal that was approved.

Diggs hasn’t ruled out funding entirely, however. His letter says NIH “will accept a revised proposal for review by an ad hoc peer-review group.” Goldhaber, Wasserman, and university lawyers are now at work drafting a response, says Wasserman, who adds: “We’re optimistic, despite the rhetoric and smoke screen, that there’s a willingness to fund the conference at a later date.”

—Constance Holden