RANDOM SAMPLES

edited by CONSTANCE HOLDEN

Russians Support Humanities

Over the last 75 years, the humanities and social sciences have suffered badly from the Orwellian distortions and misrepresentations of postrevolutionary Russia. Now the government is making formal amends by creating a separate funding body, called the Russian Humanitarian Sciences Foundation (HSF). The new foundation is a spin-off from Russia's first Western-style grant agency, the Foundation for Basic Research (FBR) (*Science*, 19 November 1993, p. 1200).

Russian science minister Boris Saltykov acknowledges that in the current dismal climate—a recent rise in the dollar has ground the ruble down even further, leading to domestic price hikes—no one can promise much in the way of money. But Saltykov believes that it's time for Russia's new government to attempt to restore scholarly respectability to the humanities.

The chair of the HSF is Nikita Tolstoy, descendant of Leo and a member of the Russian Academy of Sciences. The foundation is beginning by taking over the non–natural science sections of the FBR. It will offer support in a wide range of fields including history, anthropology, archaeology, psychology, sociology, philosophy, linguistics, and orientalism. The HSF program is patterned after the FBR, which includes the funding of peer-reviewed proposals from individual researchers and small groups of scientists, the creation of information systems and databases, and publication of research materials. The chair, vice chairs, and 24-member council are appointed for 3-year terms. To insulate the foundation from political pressures, these officials are not allowed to take part in the evaluation of funding proposals, which will be done by four discipline-based boards.

The foundation, funded by government and private contributions, will be getting about 0.5% of the annual Russian science budget—which this year was about 5 trillion rubles ($1.7 billion). And even that is not guaranteed—Saltykov points out that so far the FBR, slated for 4% of the national science budget, has only received 30% of this year's allocation.

PMC SPECIALTIES GROUP INC.

Engine fodder. Birds compete with jet for airspace.

Grape Aid

When the U.S. Fish and Wildlife Service announced earlier this month that duck populations were rebounding after a decade-long decline, operators of golf courses, airports, and landfills began quacking in dismay. Such enterprises quail at an overabundance of birds, which dig up putting greens, get sucked into aircraft engines, and eat garbage laden with pathogens, some of which can be spread to humans. But a novel form of relief is on the way: The Environmental Protection Agency (EPA) approved a bird repellent last month that originated as a chemical in Concord grapes.

Many birds, as vintners know, avoid eating Concord grapes because they don't like the taste of methyl anthranilate, a chemical also found in orange, jasmine, and acacia blossoms. And as it happens, a synthetic version of the compound is used to flavor grape-flavored bubble gum. In 1987, chemists at PMC Specialties Group Inc. of Cincinnati set out to take advantage of this fortunate coincidence. As the synthetic is approved by the Food and Drug Administration, PMC guessed that it would easily gain EPA approval as a bird repellent.

They were right. EPA has approved PMC's spray-on bird-aversion agent, called ReJeX-iT, for use at landfills and golf courses. And with a safety test at JFK Airport in New York City just completed, the spray could soon be available as a gentler alternative to past airport solutions: In 1991, officials had 15,000 seagulls shot there.

Lorenzo's Oil Shows Clinical Promise

In last year's docu-movie *Lorenzo's Oil*, Augusto and Michaela Odone (played by Nick Nolte and Susan Sarandon) save their son Lorenzo from certain death from adrenoleukodystrophy (ALD) with a therapy they create themselves, dubbed Lorenzo's Oil.

At the time, Hugo Moser, a neurologist at the Kennedy Krieger Institute in Baltimore, insisted on ruining a good story with some facts. He pointed out that early results of clinical trials—some of which he had organized—suggested that Lorenzo's Oil was ineffective. Now, Moser has collected more data that—in a surprise turnabout—show Lorenzo's Oil may benefit some ALD sufferers, although it's far from the dramatic cure hinted at in the cinematic rendition of the story.

In ALD, a disorder that affects only males, an enzyme deficiency causes the buildup of saturated very-long-chain fatty acids (VLCFAs), which are thought to destroy the myelin sheaths that insulate nerves. The resulting neurological deterioration culminates in death, often in childhood.

The Odones developed Lorenzo's Oil, a concentrated mix of two unsaturated fatty acids, in accordance with their theory that the unsaturated compounds might prevent saturated fatty acids from linking together to form saturated VLCFAs. Daily doses of the oil, combined with a diet low in saturated VLCFAs, caused blood levels of the toxic VLCFAs to plummet, as the Odones predicted, and Lorenzo, although very sick, is still alive.

At last month's 32nd Annual Symposium of the Society for the Study of Inborn Errors of Metabolism in Edinburgh, Moser reported that the therapy might indeed help slow the disease: Of 32 boys who took Lorenzo's Oil, 73% survived for 5 years from the time of their first symptom, compared to 40% of 29 in a control group.

Moser warns that those results "may not be clinically significant, [because] the boys still [appear] to go down this miserable pathway." But he says the results from another group, who started therapy before developing any symptoms, look more hopeful, suggesting that the severity of the subsequent neurological damage may be reduced.

Metabolic disease expert Neil Buist of Oregon Health Sciences University in Portland says the results suggest "that ALD may not inevitably be progressive, that it may be possible to develop aggressive new therapies—perhaps some type of combined therapy" to combat it.

India Rockets Into the Big League

After an unsuccessful try last year that failed because of a software error, India launched its Polar Satellite Launch Vehicle (PSLV)-D2 on 15 October, hoisting an 804-

kilogram remote-sensing satellite into a polar orbit circling Earth 19 times a day. The mission marks an important milestone in India's push to launch heavier and more sophisticated spacecraft; India is now the sixth nation with the capability to lift satellites in the 1000-kg range into polar orbit.

Until this month's launch, the heaviest payload Indian rockets could carry was only 150 kg. Now, says U. R. Rao, former head of the Indian Space Research Organization (ISRO), after a decade of work on developing rocket technology, "we have ... joined the big league."

The satellite, placed in a low Earth orbit about 825 kilometers up, is already sending good images to the station at Shadnagar in Andhra Pradesh, officials say. To ISRO head K. Kasturirangan, who also heads the government's Space Commission, "this has been the culmination of years of hard work. This will have vital implications for the country's resource mapping program."

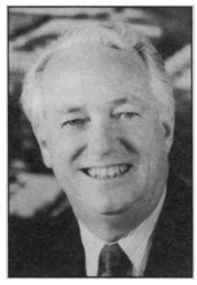
Among the satellite's tasks will be estimating ground water, helping with agricultural forecasting, and mapping India's mineral resources. It is India's third remote-sensing satellite. The first two were launched using rented vehicles, at up to $50 million a pop. Now, for $138 million, India can use its own launch vehicles.

Kasturirangan says the PSLV rocket can be ready for regular operations in 2 years, opening up possibilities of selling launch services. ISRO wants to cash in on the low Earth orbit satellite market being generated by communications companies. He says that the PSLV could be launched every 12 to 18 months.

Next, India hopes to develop more powerful launchers capable of lofting heavier satellites into geostationary orbit 22,000 miles above Earth, where most communications satellites are placed. "We should be ready with the Geostationary Satellite Launch Vehicle before the end of this decade," predicts Kasturirangan.

Salk Head Quits

Once again, the Salk Institute for Biological Studies in La Jolla, California, is hunting for a new leader. Salk president and chief executive officer Brian Henderson resigned as of 17 October to pursue his research at the University of Southern California (USC).



Brian Henderson

The decision was no surprise to many at Salk. Says Francis Crick, who is filling in the president's spot: "There was a general feeling that Brian never left Los Angeles." Henderson, a cancer epidemiologist, took over the institute in February 1993 following a cumbersome search that took 4 years and saw two lead candidates back out (*Science*, 27 July 1990, p. 360). He did not want to discuss the particulars of his sudden departure beyond saying that the decision was mutual. "It's a difficult and challenging job to try to do science and administration at the same time," explains Henderson, who never interrupted his work at USC.

Nobelist Crick will be interim president while a committee searches for a new leader to head the 34-year-old biomedical research powerhouse, which currently is going through a major expansion. Charles Massey, former president of the March of Dimes Birth Defects Foundation, is serving as interim chief executive officer.

Science and the Masses

Have you ever had to explain your research to a journalist? If so, did the resulting product leave you impressed, nonplussed, or downright mad? How about media coverage of science in general: good? so-so? awful? If you've been longing to speak your mind about science and the media, now's your chance.

As part of the second European Week for Scientific Culture—an exercise in the public understanding of science, backed by the European Union and beginning 21 November—an Italian science communications agency called Hypothesis and the press office of CERN, the European Laboratory for Particle Physics in Geneva, are sending out questionnaires to find out what scientists and journalists think of each other.

Sylvie Coyaud of Hypothesis explains that the idea came from her own organization's difficult experiences: Hypothesis was formed in 1989 as a scientific news agency, but it switched to organizing meetings and media events when it found the Italian press wasn't interested enough in science to make much use of its services. CERN press officer Neil Calder adds that when he organized a meeting between journalists and scientists at CERN last December, it quickly became clear that while most participants had strong views about how science is presented to the public, there wasn't much hard information on the subject.

The survey features separate questionnaires for scientists and journalists.* The scientists' version, for instance, asks respondents to identify the most irritating aspects of media coverage by checking boxes labeled, among other things, "ignorance," "hype," and "your name not quoted." It then asks what action respondents take if they are annoyed by an article. It also asks what's good about media coverage. Survey results will be discussed at a meeting of scientists, journalists, and others to be held at CERN on 26 November.

* Scientists can access the questionnaire on the CERN Home Page of the World Wide Web. Journalists can fax Hypothesis at +39 2 7200 1900.

WHO Favors HIV Vaccine Tests

The National Institutes of Health (NIH) decided last June that leading AIDS vaccines are not yet promising enough for large-scale efficacy tests in the United States. But consultants to the World Health Organization (WHO) say such trials shouldn't be ruled out in countries harder hit by the epidemic.

In Geneva earlier this month, 27 consultants met with WHO AIDS officials and commercial vaccine developers to debate the scientific and public-health rationales for launching efficacy trials of vaccines made from genetically engineered portions of HIV's surface proteins. These vaccines have been tested in more than 1000 people but have yet to be subjected to a large, placebo-controlled study.

NIH decided not to stage efficacy trials in the United States with two such vaccines—being developed by Genentech and Biocine (a joint venture of Chiron and Ciba-Geigy)—because of scientific doubts about their promise. It was the NIH decision that triggered the WHO meeting.

The participants concluded that trials in countries with high rates of infection would be the best way to "obtain definitive information" on the products. The reason: Even a partially effective vaccine may provide clear-cut results in populations where HIV is spreading rapidly. "It's a decision to be a little more empirical," says meeting participant Donald Burke, head of the U.S. military's AIDS research program.

The most immediate effect of the WHO consultants' decision may be to speed efforts by both Genentech and Biocine to conduct efficacy trials in Thailand, the country that has shown the most interest in testing the vaccines.

It's unclear who will subsidize the trials, but WHO's AIDS vaccine chief Jose Esparza says "if we had to do things with money up front at WHO we'd never act on anything."