annually, whereas by 1980 the figure had risen to $430 and in 1981 it skyrocketed to $720. The rate of inflation has far exceeded rising production costs. As journal prices have climbed, library budgets have been strained to the breaking point.

The overall problem, according to Richard De Gennaro, the director of the University of Pennsylvania libraries and a knowledgeable critic who has written widely on the subject of pricing policies, stems from the psychological makeup of librarians and the greed of publishers. "Librarians have a weakness for journals and numbered series of all kinds," he says. "Once they get volume 1, number 1 of a series, they are hooked until the end." Seeing a golden opportunity, a handful of large publishers over the course of almost two decades created literally thousands of new scientific journals.

The multiplying journals provide a handy outlet for the steady stream of "publish or perish" articles that scientists sometimes feel obligated to pen. De Gennaro quotes the verdict of two economists who studied the problem: "The fact is that a growing proportion of scientific journals have virtually no individual subscribers, but are sold almost exclusively to libraries, and that a very high proportion of those journals are rarely, if ever, requested by readers. This suggests that many journals provide services primarily not to readers but to the authors of the articles for whom publication brings professional certification, career advancement, and personal gratification."

It is here, in the economics of publication, that Plotkin feels his electronic journals will have the edge. His methods, he says, can more easily respond to the market forces of supply and demand. Rather than a researcher paying page charges (which are sometimes used by traditional journals to subsidize publication and are written off against government grants), Plotkin pays the researcher an honorarium if the work is judged worthwhile. Further, Plotkin's journals will succeed only if readers are interested in paying for access to the information. "Scientific publishers," he says, "operate many of their journals as vanity presses, but under the cloak of supreme respectability."

What perhaps makes the attack on vanity operations and rising prices significant is that it is starting to come not just from entrepreneurs such as Plotkin but from librarians and even from scientists. An example of the librarians' onslaught was recently seen at a medical collection

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Poland, United States Exchange Expulsions

In response to the expulsion from Poland of the U.S. science attaché and another American diplomat, the State Department on 13 May ordered two Polish diplomats to leave the United States and suspended a Polish-U.S. program of scientific cooperation.

U.S. science attaché John W. Zerolis and cultural affairs officer James D. Davis were expelled after being charged with receiving documents "harmful to Poland" on 9 May from a Polish scientist. The scientist, Ryszard Herczynski, was arrested and is believed to still be in custody. Zerolis and Davis were given until 15 May to leave the country.

The State Department made clear that its 13 May actions were in direct retaliation to the Polish government's handling of the case; the U.S. statement repeated a complaint made by the American ambassador in Warsaw to Polish officials that the U.S. diplomats had been "manhandled" in "clear violation of diplomatic practice." The statement also took issue with comments by Polish authorities accusing visiting American scientists of "promoting destabilizing acts."

Embassy sources in Warsaw said that Zerolis and Davis were roughly treated by men who burst into Herczynski's apartment as the two were leaving. According to an embassy spokesman, the papers taken from the Americans at the time of the incident were "three standard Solidarity pamphlets"—Solidarity is the independent Polish trade union—and two copies of proposals for scientific exchanges. U.S. officials say Zerolis and Davis were visiting Herczynski to make arrangements for the visit of an official of the National Science Foundation, which administers the Polish-U.S. scientific programs.

The NSF official in question is Deborah Wince, program officer for Eastern European programs in the NSF Directorate for Scientific, Technological, and International Affairs, who was planning a routine visit to Eastern European countries that have cooperative science programs with the United States. NSF currently has 35 active research projects in effect in Poland. These projects are financed with Polish currency derived from the sale of American agricultural commodities to Poland; the funds are not convertible to foreign currency.

The Polish-U.S. program for cooperation in science dates from 1974. The agreement was allowed to expire on 1 January 1982 after the declaration of martial law in Poland 3 weeks previously caused the United States to suspend the talks in which both sides had earlier indicated they favored extension of the science program. A clause of the agreement provides that projects approved under the agreement be completed even if it expires. The State Department action, however, appears to prohibit travel by scientists in either direction to work on the projects. The order applies only to government-to-government programs and not to the private exchanges administered for this country by the U.S. National Academy of Sciences.

NSF officials say that Herczynski is co-principal investigator in a Polish-U.S. study of particle motion in viscous fluids. Herczynski works at the Polish Academy of Science's Institute for Basic Problems of Technology. He is well known professionally in the West as an expert on fluid dynamics.

According to a *New York Times* story, Herczynski was arrested at the time martial law was declared but released after signing a "loyalty" statement. Other U.S. sources say that Herczynski has been a controversial figure because he adopted a dissenting position on some issues, but that he has retained some influence in Polish science affairs. Recently, he had been identified with efforts to restructure the Polish academy to shift authority from its scientific secretary, a government appointee, to its president, who is elected by the members.

Also visiting Herczynski's apartment when he was arrested was a well-known Polish senior scientist, Professor Waldyslaw Fiszdon, a former deputy rector of Warsaw University, who was not arrested.

Zerolis is believed to be the first U.S. science attaché to be involved in an incident leading to expulsion such as this one. Zerolis, 38, is a regular foreign service officer serving his first assignment as a science attaché. Of the 25 science attachés currently assigned to U.S. embassies around the world, five are foreign service officers;

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the rest are recruited from outside government or from government technical agencies.

The Polish government action came at a time of increased tension over protest activities by Solidarity and of increased reports in the Polish press of government accusations that Western countries were interfering in Poland's internal affairs.

—John Walsh

Wyngaarden Meets the Press

James B. Wyngaarden, who was sworn in at the end of April as the 12th director of the National Institutes of Health (NIH), held his first official meeting with the press on 11 May. He took the occasion to reaffirm the view that NIH's primary mission is basic research (as opposed, for instance, to regulation) and emphasized his commitment to a program of stabilization in the number of new investigator-initiated research grants. His predecessor, Donald S. Fredrickson, had elicited a promise of 5000 new grants a year, but that was before the Reagan Administration's new budget limitations were in place. Under the proposed budget for next year, there will be only 4100 new starts. Says Wyngaarden, "The important thing is the stabilization concept which is more important than the numbers themselves. The message NIH is sending to medical students and postdocs is that there will be a continued commitment to new research. Already that message is having a small but perceptible effect. I could see it as chairman at Duke." He also reiterated his belief in the importance of training grants for young researchers, although there, too, budgetary constraints will keep the numbers to 8900, substantially below the optimal figure of 10,750 that was set by the National Academy of Sciences biomedical manpower committee of which Wyngaarden is a member.

In response to a question about moves that are afoot to create new institutes (NIH currently has 11), Wyngaarden voiced opposition, especially since the political purpose of new disease-oriented institutes is to enhance visibility and funding. "In a period of constrained resources, the creation of new institutes is illogical," he declared. Questions about superstar status of the National Cancer Institute, which legally has a direct channel to the White House, elicited a laissez-faire reaction. "As a practical matter, it doesn't matter," Wyngaarden said. "I have more pressing concerns."

James B. Wyngaarden

Emphasizes concept of grant stabilization and support of training

Although Wyngaarden's traditionalist views are of greatest interest to NIH's research constituency, his position on abortion was what brought headlines in the daily papers. In answer to a reporter's question, he noted that NIH does not do research on methods of abortion but does do basic research in human genetics on which prenatal diagnosis is based. "I believe in freedom of choice," he said, "and that the NIH should provide the maximum scientific basis on which intelligent choices can be made." He also answered a question about in vitro fertilization, saying that he thinks it a legitimate area of research which may alleviate infertility in some couples.

Within hours, he got a call from the office of Health and Human Services Secretary Richard S. Schweiker who, like many other HHS officials has taken an antiabortion stance as a matter of policy. Schweiker subsequently issued a statement saying, "Dr. Wyngaarden has told me that he was responding to a reporter's question about his personal belief, which differs from mine, and he has assured me he intends to fully support the President's position on this matter as well as all other administration positions."

Although HHS officials were hardly pleased by the first news accounts of the press conference, they apparently are content to let it lie as the minor incident it is.***—Barbara J. Culliton***

More on Yellow Rain

On 13 May the State Department released the third in a series of reports this year on toxic chemical attacks in Southeast Asia. (The arsenals were presumably supplied by the Soviet Union, according to a paper released in March by Secretary of State Alexander Haig.) In an effort to win over those skeptical of earlier reports, says Frederick Celec of the Politico-Military Affairs branch of State, the authors of the recent press release tried to present the data without offering much of an interpretation.

According to the State Department, U.S. officials obtained blood and urine samples from several people in Tuol Chrey, Kampuchea, shortly after the village was hit with a chemical-laden Vietnamese artillery shell in February 1982.

Blood samples from two of the victims, taken within 24 hours of the attack, were found to contain 18 and 11 parts per billion of the trichothecene toxin T2. The poison is derived from a fungus most commonly found on grain. An American physician not connected with the U.S. government, Amos Townsend, also took blood samples 18 days after the attack. Blood from two of the six victims in Townsend's sampling contained 7 and 3 parts per billion of the toxin T2. Samples were also collected from four controls, people of similar age and background who had not been exposed to the chemical attack. These samples proved to be free of the toxin.

The blood analysis, done on a coded, blind basis by Chester Mirocha of the University of Minnesota, provides "conclusive evidence that these trichothecene mycotoxins are components of the chemical agents known in Laos and Kampuchea as 'Yellow Rain' ", the State Department concludes.***—Eliot Marshall***