ers John Irvine and Ben Martin at the University of Sussex's Science Policy Research Unit, paints an equally gloomy picture. According to this report, four out of the five other leading scientific nations studied—the United States, West Germany, France, and the Netherlands—spend more for academic research per capita than the United Kingdom.

Furthermore, in several areas of basic research, there appears to be an important gap between the United Kingdom and its European neighbors. Thus, in particle physics both France and West Germany spent almost twice as much as Britain in 1982, while in nuclear physics the gap was even larger. In chemistry, France spent 55% more than Britain on basic research, and West Germany 80% more.

The conclusions of the two reports have come as little surprise in London, since they largely confirm the widely held impression in the scientific community that constraints in public support, which have kept the research budget virtually constant since the mid-1970's, have eroded Britain's position in the world's scientific community.

In both cases, however, the reports claim to have used a refined methodology which places such arguments on a sounder footing than in the past. The Royal Society report, for example, involved the experimental use of new techniques of citation analysis for assessing national performance in basic research, concluding that "there are now promising techniques for doing this." DAVID DICKSON

## Britain to Create New Network of Science and Technology Schools

In one of the most significant educational innovations since the elimination of its twotier state school system 20 years ago, the British government has announced plans to create a network of 20 new schools specializing in science and technology.

The schools will each be able to accept up to 1000 students between the ages of 11 and 18, and will be jointly financed from both government and private funds. Unlike the present state schools, they will not be run by local education authorities but by independent "educational trusts."

Plans for the creation of what will be known as City Technical Colleges (CTC's) were announced by the secretary of state for education and science, Kenneth Baker, during the recent annual meeting of Britain's ruling Conservative Party. The move is intended both to meet rising concern in Britain about the standards of education offered by the publicly funded school system—an issue that is likely to be featured in the parliamentary elections which could take place next year—and to boost the country's technical and economic performance.

The government's plans have already generated strong opposition in parts of the teaching community. Many teachers argue that, by promising to attract the brightest students from the current state schools, the new schools threaten to re-create the social inequalities that the abolition of grammar schools in the 1960's was supposed to have eliminated. They also claim that they may draw resources away from the rest of the school system. **DAVID DICKSON** 

## Refusenik Geneticist Released

In one of the most precipitous of the current bewildering series of transactions with the Soviets, ailing refusenik geneticist David Goldfarb and his wife were allowed to leave Moscow on the private jet of industrialist Armand Hammer on 16 October.



David Goldfarb, now in U.S.

Goldfarb, hospitalized with complications from severe diabetes, had been trying to emigrate for 8 years. Two years ago his visa was withheld and he was accused of conspiring to take national security materials out of the country after he refused to participate in a frame-up of journalist Nicholas Daniloff.

Goldfarb's son Alex, an assistant professor of microbiology at the Armand Hammer Health Science Center at Columbia University, has been engaged in ceaseless efforts including a trip to the summit meeting in Reykjavik—to get his father released. Last July he sent a telex to Hammer, who has been active in bringing in American doctors in the wake of the Chernobyl disaster, pleading with him to intervene in the case. Daniloff also wrote Hammer on Goldfarb's behalf prior to his own arrest.

The U.S. government played no part in the sudden developments, although Goldfarb had replaced Yuri Orlov, recently freed from Siberian exile, at the top of the list of people whose release is being sought.

Hammer told the New York Times, during a refueling stop in Iceland, that Soviet General Secretary Gorbachev had personally approved the departure of Goldfarb and his wife Cecilia after Hammer had raised the issue with former Ambassador to the United States Anatoly Dobrynin. Hammer rushed to the hospital and the Goldfarbs' apartment to impart the news to the couple, and the party swept out of Moscow the following day.

Upon arrival in Newark, Goldfarb was taken by ambulance to Columbia Presbyterian Medical Center in New York.

**CONSTANCE HOLDEN** 

## Academic Pay Cap Could Result from California Initiative

If California voters approve it, a salary cap for California state employees on the 4 November ballot could mean a cut or freeze in salary for more than 5,000 of 12,000 University of California faculty members, say university officials. Hardest hit would be the state-operated professional schools, where the pay of an estimated 74% of faculty exceeds the projected cap.

Proposition 61, as it is known, limits compensation for all public employees except the governor to \$64,000 a year. University officials are interpreting the somewhat ambiguous language of the initiative to mean total compensation, including benefits, so that salaries would be limited to about \$48,000.

Stanford University president Donald Kennedy warned that UC could be "dismembered by the errant populist impulse." He said that if the measure passes, California could "say goodbye to its medical schools and most of its law professors." UC Berkeley chancellor Ira Michael Heyman said passage "would reduce the university overnight into a second-rate institution."

Lawyers for UC say there is a possibility

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