investigators from work with new drugs since 1966, when procedures were devised to deal with violations of the regulations for the administration of new drugs to patients. There have been 20 disqualifications since 1977, when a more formal "BioResearch Monitoring Program" was set up. At NIH, Dr Raub said that rules covering the grounds on which a research scientist can be barred from receiving further funding had recently been tightened, and that, although no individual had been disbarred in the history of the institutes, at present five instances were on record where a scientist would have questions raised about his or her past conduct if a further research grant application was received.

The committee seemed to accept that known cases of falsification are the tip of only a small iceberg. The suggestion by Dr Philip Handler, president of the National Academy of Sciences, that in the circumstances the committee should turn its attention to more important problems was not, however, well calculated to win friends. The chairman of the committee put Dr Handler firmly in his place with a declaration that falsification entailed the waste of public money and damaged the public reputation of science; and that if the committee was not satisfied that the research community could police itself, it might have to recommend external regulation.

The committee found its position strengthened by testimony from Dr Alexander Capron, executive director of

the President's Commission for the Study of Ethical Problems in Medicine and Biomedical and Behavioral Research, who recounted the difficulties that the commission was having in obtaining details from the Department of Health and Human Services on the procedures followed in cases of suspected misdeemeanour, especially in the treatment of human subjects.

Witnesses differed last week on the motives for falsification. Most of the scientific witnesses held that the pressure of competition for research grants is not an important spur to falsification, but the committee seized on Dr Long's admission that to have shared with his colleagues doubts about the authenticity of his cell cultures would have jeopardized his application for a \$500,000 research grant as evidence to the contrary.

Dr Philip Felig, professor of medicine at Yale University, was closely questioned about the relationship between senior scientists and their colleagues. A case of plagiarism in his own laboratory eventually cost him appointment as dean of the medical school at Columbia University (see *Nature* 285, 429; 1980). He acknowledged that there may be occasions when a collaborator sets out to "please" his senior colleagues, and that the dangers are especially great when the senior person has not himself developed the techniques his collaborators are using. Yale, Felig explained, has now introduced a formal procedure for the independent internal investigation of disputed research results.

Known misdemeanours

Apart from the cases mentioned in the accompanying text, the following is a list of the misdemeanours cited at last week's inquiry by the congressional oversight subcommittee.

University of Kansas (1977). Allegations by two women graduate students that a grant awarded by the National Institutes of Health for anthropological research had been wrongly used for work with human subjects, including the collection of blood samples and genetic counselling. The university established (in 1978) that the work with human subjects had not been cleared with the Institutional Review Board. The investigations (and a civil slander suit by the investigator) continue.

Boston University (1978). Allegations of the falsification of medical records of patients and certain research reports, part of a cooperative study of new cancer treatment financed by the National Institutes of Health (NIH), were substantiated by an internal investigation. The leader of the unit (Dr Marc Straus) resigned on 24 June 1978, followed by his more senior associates, and the Boston University records were expunged from the cumulative records of

the Eastern Collaborative Oncology Group. The investigation continues, but Dr Straus, then at the New York Medical College, Valhalla, was awarded an NIH grant of \$1.3 million over three years in January 1980.

University of California, Los Angeles (1979). Allegations of experimental bone marrow transplants without proper approval from the institutional review board (known as the Human Subjects Protection Committee). The investigations continue.

New York (1978). Inspection by Food and Drug Administration (FDA) revealed "persistent violation" of rules for the administration of novel drugs to human patients by the independent psychiatrist Dr Nathan Kline. Formally debarred by FDA on 13 November 1980.

FDA (various) (1966-81). Total of 42 disqualifications from access to "investigational" drugs, with 18 further cases under investigation. So far, four such investigators have been prosecuted (and one gaoled). Roughly 6 per cent of routine investigations "have led to a more in-depth review". Most violations involve lack of patient consent, inadequate accounting for drugs, violation of protocols and inaccurate (or missing) records.

UK hydraulics research

Deep water ahead

The British government's policy of "privatization" — the sale of public assets — which has already led to the sale of all but a minority stake in the British Aerospace Corporation, now threatens several research laboratories run by the Department of the Environment. The Hydraulics Research Station at Wallingford is the most immediately in danger.

The proposal to make the Hydraulics Research Station self-supporting follows a three-month market survey commissioned by the department and completed last October, in which it was suggested that a potential £1.15 million is available from the private sector. Of this, £0.2 million comes from UK markets, £0.28 million from contracts usually covered by European companies, £0.5 million from offshore projects and the remainder from increasing prices by an arbitrary 10 per cent. The present income is made up of 85 per cent from government and 15 per cent from private contracts.

The market survey suggests that although the UK market is fairly static, the potential for contracts in offshore projects and in the developing countries is considerable. However, a recent survey by the National Maritime Institute foresees a decline in offshore contracts over the next five years. There is also formidable European competition for contracts in developing countries.

The experience of private companies is not encouraging for those at Wallingford. Both the Wimpey Laboratories and the British Hovercraft Corporation have suffered severe financial difficulties. The Water Research Centre, which underwent some sort of privatization following the amalgamation of the Water Pollution Research Laboratory, parts of the Water Resources Board and the Water Research Association, is experiencing similar problems. When it was formed in 1974, the centre was seen by central government as a way of keeping small municipal water undertakings up to the mark. The civil servants involved at first rejected the plan but finally agreed on a package deal. The future of the joint enterprise seemed secure — the centre was financed by its members, with all local and municipal water authorities contributing. In the past year, however, there have been almost 100 redundancies.

Employees at Wallingford now fear that the reputation of the laboratory will be damaged. They also fear that the withdrawal of public funding will inevitably lead to a reduction of background research. However, they see advantages in some sort of halfway "privatization" which would free them from government constraints, particularly on staffing levels, and enable them to take on more contract work. The Government is now

not, however, prepared to consider such a proposal although a meeting has now been arranged for 14 April between the Central trade union and the Department of the Environment. A shadow board is to be set up on behalf of the prospective private company to explore the viability of the enterprise and to prepare employees for privatization — the target being 1 September 1981.

Sara Nash

Europe's directive on drugs

Lords back industry

Proposals from the European Commission to make it easier for entrepreneurs to buy drugs in one country of the European Community and sell them at a profit in another have met with strong opposition. The UK pharmaceutical industry and the House of Lords Select Committee on the European Communities

are at one in condemning the idea as unfair to the companies and unlikely to improve the health services in member states.

The opportunity for this "parallel importing" arises because at the moment price controls for drugs are widely different in the various member states. The European Court of Justice ruled that attempts by big pharmaceutical companies to stop parallel importing were restrictive and in breach of the Treaty of Rome.

Drug manufacturers and importers must obtain marketing authorization from national health services. To make things easier for the parallel importer in the name of free trade, the commission's directive requires the original manufacturer to make available to the importer any necessary documents relating to the specification of the batch of drug being re-sold. This type of freedom of information is anathema to drug companies which may have spent thousands of pounds in obtaining the information in the first place.

In putting the case for the industry, the Association of the British Pharmaceutical Industry (ABPI) argued that moves to bring down the general level of drug prices would not be in the long-term interest of the consumer. And the practice of parallel importing raises problems because importers may change the name and packaging of the drug, with risks that the consumer might not get the correct information about the product.

In the United Kingdom the pricing structure for drugs has kept prices relatively low. In the past few years companies have been allowed to increase prices in line with inflation but for some time "product licences" were given on condition that price increases were kept at about half that rate. As always the industry is keen to stress how expensive it is to develop new drugs and that this should be considered in pricing. So the prospect that the low-price UK market might be opened up to bulk buyers wanting to sell in countries where UK manufacturers are allowed to sell at higher prices is seen as a cause for alarm by both ABPI and the Lords Committee.

The United Kingdom is the most successful exporter in the Community, and last year the British pharmaceutical industry achieved a record £522.9 million surplus of exports over drug imports despite the problems caused by a strong pound. The Lords report sees little reason to jeopardize the well-being of a healthy industry only to give more profits to the middle-men.

The general question of bringing prices into line across the European Community will need more thought than a simple attempt to promote free trade. Both continental and UK manufacturers would favour a uniform system that is subtle enough to take account of both national and international pressures on the companies, and the particular needs and preferences of health services in the member states.

Charles Wenz

Opening up Siberia

Research in steppes

More than 400 scientific research institutes are to be involved in the Soviet Union's new "Siberia" programme which is part of a plan to give this relatively backward area an economic growth rate 30 per cent higher than that of the rest of the country.

Projects will concentrate on the energy sector, according to Academician Valentin Kaptug, chairman of the Siberian section of the Soviet Academy, with "work of world class" on methods of obtaining synthetic liquid fuel from coal and natural gas. The Baikal-Amur Mainline railway has opened up a new zone for potential development and much of the investment will be in that area. Later more industrialization will take place around the Arctic coast, and in zones around new water resources created by the diversion southward of water from the Siberian rivers.

A food development programme includes proposals from 27 biological and research institutes for the development of new varieties of crops and livestock adapted to Siberian conditions.

Siberia, here we come

"hormonal" methods for increasing crop yields, and pest control methods aimed at leaving minimum toxic residues.

Siberia already produces 50 per cent of the oil and 33 per cent of the natural gas extracted in the Soviet Union. The extraction of fossil fuels in Siberia is expected to go on increasing up to the end of the century, so not surprisingly the new "Siberia" programme also contains work on new prospecting and surveying methods, industrial catalysts and forestry management.

Any practical benefits obtained through the new research programme will be concentrated around "technical production complexes" linking several scores of industrial enterprises. One such complex has already been established, based on the giant power stations on the Angara and Yenisei rivers.

Vera Rich

Tangled policy on drugs

Brussels

The European Court of Justice ruled in 1976 that Hoffman-La Roche were impeding free trade in refusing to give product information to parallel importers. The Italian company Centrafarm had been buying Valium in the United Kingdom and repackaging it for resale under the trivial (not registered) name "diazepam".

The latest proposals from the European Commission are another attempt to limit the monopoly power of large drug companies. Opposition to the Commission comes from most members states, and the European Proprietary Association, representing pharmaceutical companies producing drugs for general sale rather than medical prescription, spoke against the proposals at the Lords committee.

Germany, Italy and the Netherlands are considered high-price countries — on several occasions the European Commission has caught out Italy for supporting unrealistically high prices and court actions have brought down prices in Italy by about 20 per cent.

One effort by the Commission to simplify procedures was the Committee for Proprietary Medicinal Products set up five years ago. The committee can be called upon if a producer wants to put a product on the market in at least six member states, or if there are disparities in the judgements of national licensing authorities. But since it was set up the committee has examined only eight cases.

The adverse comments from the House of Lords seem certain to put another nail in the coffin of the Commission's proposal which has already been languishing for a year in Coreper, the committee of the member states' permanent representatives to the European Community.

Jasper Becker