

dissipate the "hard-won technology capability" already developed in the United States. The dissenters were ERAB chairman Louis Roddis, William S. Lee, president of Duke Power Company, Roland W. Schmitt, vice-president for corporate research at General Electric and John W. Simpson, a consultant previously with Westinghouse Electric. Described by critics as the "electric mafia" on ERAB, these same four are said to have been successful in toning down parts of the report which criticized the emphasis being given by the Reagan Administration to nuclear research as disproportionate to nuclear's role as an energy source.

The final report states merely that "although no correct balance among energy forms and resources can be defined *a priori*, research and development for electric supply technology is receiving a larger proportion of funding than the present and projected share of electricity in our national energy supplies". In addition to recommending that the Clinch River fast reactor should not be built, the panel suggests that high priority be given to research into nuclear waste disposal and into conventional light-water reactors, and a "little less" funding into both breeder reactor fuel cycle research and magnetic fusion.

David Dickson

## Data falsification Harvard acts

### Washington

Harvard Medical School announced last week that it was setting up a special committee of both faculty members and outside academics to recommend how the school should deal with future cases in which research workers are accused of producing falsified research data.

This announcement follows the resignation of a member of the medical school research staff, Dr John R. Darsee, who admitted that he had fabricated research data during an experiment last year which involved efforts to limit the damage caused by heart attacks in animals.

Dr Darsee also resigned his post as a research fellow at the Brigham and Women's Hospital in Boston. Before his resignation, according to reported comments from other members of the hospital staff, he had been under consideration to head a hospital laboratory.

As a result of allegations about Dr Darsee's work made last year by other research workers at the medical school, an investigation was carried out, in the course of which Dr Darsee admitted that he had falsified the research results in question.

A statement issued by the dean of the medical school, Dr Daniel C. Tosteson, last week stated that "none of the work which could not be verified has been presented to the scientific community". Earlier this year, Dr Darsee's supervisor, Dr Eugene Braunwald, decided that all

## Christmas present for Heidelberg laboratory

The European Molecular Biology Laboratory at Heidelberg has half the Christmas present it was promised a few months ago: a liquid-helium temperature transmission electron microscope lens from Siemens AG, Munich, but not the pictures that should follow from it.

Dr Arthur Jones, head of the electron microscopy group at the laboratory, had hoped the system would have been operational by Christmas. But the lens — only the second commercial such lens in existence (the other went to Berlin) — arrived only a week ago. The first pictures, probably of hydrated crystalline specimens at 4 K, are likely to follow in January. Biological specimens should be in view in the spring.

Excitement is intense in the group about what they see as the most important development in electron microscopy for more than a decade. The Siemens group, headed by Dr I. Dietrich, appears to have shown that specimen damage by the electron beam — which limits the available resolution of a microscope on sensitive, non-periodic biological specimens — may be reduced by orders of magnitude at 4 K.

And at the same time, Dr Jacques Dubochet, in charge of specimen preparation, claims now to produce hydrated biological specimens containing vitrified — non-crystalline — ice. (The formation of crystals would create artefacts and interfere with the imaging of specimens.)

At first, however, the resolution may be no better — or even worse — than with conventional electron microscopy, because the contrast available in hydrated specimens is much less than that possible with negative staining. The reduced beam damage, however, should compensate for this by allowing greater illumination, with the result that the microscope might reveal structures without the artefacts of the conventional stains. Ultimately the use of samples labelled with heavy atoms could make a greater, artefact-free resolution available says Dubochet.

After this "cryo-TEM" will come the scanning version, the "cryo-STEM". The first electron beam down the cryo-STEM is expected by mid-year, with the first images shortly after.

Robert Walgate

abstracts of Dr Darsee's work should be withheld from presentation at the annual meeting of the American Heart Association.

The National Institutes of Health (NIH) were also notified of the alleged falsification of data, since Dr Darsee was working on NIH-sponsored research and was in receipt of an NIH research fellowship, which he has since resigned together with his academic posts.

The advisory panel set up by Dean Tosteson is being chaired by Dr Richard Ross, dean of Johns Hopkins School of Medicine. According to last week's statement, the panel has been asked "to review the case in question, and to indicate whether or not any additional measures should be undertaken, and to recommend procedures for dealing with episodes of this kind in the future".

The committee has already started work, and its report is expected early in 1982.

David Dickson

## Molecular biology

### Limited progress

When the director-designate of the European Molecular Biology Laboratory (EMBL) in Heidelberg takes over from Sir John Kendrew in April, he will not find much room for movement in the budget. Last June, Sir John asked the ten-nation council for DM 32 million (£7.5 million) for 1982. In the event the council has now agreed to spend DM 30.2 million, roughly a 10 per cent increase on 1981 compared with a German inflation rate of about 6 per cent.

That allows for a small increase in staff this year — some 20–25 of whom 8–10 will be scientists, according to finance director Eckhart Weis. Thus the laboratory will edge ahead of local inflation, but will come nowhere near the "indicative scheme" prepared in 1980 which foresaw a budget increase of 20 per cent and a staff of 265 rather than the 220 now employed. The directorate, for "scientific reasons", did not fill the 265 posts which were available in 1980, and since then the recession has meant that the council would not agree to the budget which would be required to re-offer them.

Meanwhile, the new EMBL director, Professor Lennard Philipson of the University of Uppsala, refuses to define his policy for the laboratory until after he is in post. But he has been taking regular soundings, and, it seems, gaining everyone's confidence. He is said to recognize the important and unusual role that physicists play at the laboratory and the significance of the EMBL outstations at DESY, Hamburg (a synchrotron radiation source which has a long queue of applicants for beam time) and the Institut Laue Langevin, Grenoble (a neutron source).

It seems likely that the new regime will see a greater integration of the work at Heidelberg, and between Heidelberg and the outstations, with the selection of two or three principal areas of biology (cell membranes, for example) as broad foci of interest. But there will be nothing so block-busting as an attack on the whole human chromosome — "that's factory work" said one senior EMBL scientist. On the