

## European Molecular Biology Laboratory

# Crucial decisions ahead

### Heidelberg

This month is crucial for the European Molecular Biology Laboratory, supported since 1974 by eleven European governmental research agencies, a subset of the seventeen members of the European Molecular Biology Organization. Next week the governing council of the laboratory will decide whether it can match with deutchmarks its acceptance of a new scientific programme at its meeting last June. The director of the laboratory since 1 April, Dr Lennart Philipson, is dismayed by suggestions such as that in the report of the British Advisory Board for the Research Councils (see *Nature* 4 November, p.1) that the Medical Research Council should 'review' its membership of the laboratory.

The Medical Research Council refuses to comment on this recommendation. It is however known that its secretary, Sir James Gowans, paid an unofficial visit to the laboratory in September, since when there have been two visits by parties of officials to the laboratory and its two outstations at Hamburg and Grenoble.

Whatever the UK research council's attitude next week, the council meeting is certain to be uncomfortable. Philipson is asking for budget contributions of DM36.7 million (£8.5 million) for 1983, a substantial increase on the total contribution of DM 30.2 million in the present year. Philipson emphasizes, however, that a direct comparison of these figures is misleading. In past years, the laboratory has consistently failed to recruit up to its planned strength, with the result that there has usually been a cushion of unspent appropriations to help with the succeeding year's budget. During the present year, members' contributions have been augmented by more than DM6 million from this source, but for next year there will be a cushion of only DM2 million.

The perplexing question now is whether next week's council will accept that the planned increase in expenditure amounts only to 6 per cent, or whether it will take fright at being asked for a 20 per cent increase in members' contributions.

The more distant but more important question of what the laboratory is for has, however, been settled by the scientific plan agreed in June. The laboratory now accepts that there is no means by which its existence can be justified on grounds comparable with those applicable to international laboratories such as CERN in Geneva. While the synchrotron radiation and neutron diffraction facilities (at Hamburg and Grenoble respectively) are much used, especially by workers from smaller countries, they are not unique. And the prospect that the low-temperature electron microscope developed at the laboratory might be a focus for inter-

national collaboration has receded as the predicted resolution of that instrument has decreased (see *Nature* 30 September, p.386).

The new programme entails that the instrumentation division at the laboratory will become a source of new technology in molecular biology for the laboratory and member organizations. The development of the low-temperature electron microscopes will continue, but the excellent workshops will be increasingly used for building prototypes of instruments for which there is a known need.

In molecular biology proper, the laboratory is best known for its work on membrane proteins. On the basis of workshops held earlier this year, it is now planned also to concentrate on two new fields — protein-DNA interactions (as in the functioning of regulatory nuclear proteins) and differentiation (as typified by the haematopoietic system. Dr Thomas Graf has been recruited from the nearby German Centre for Cancer Research (on a five-year rolling contract) to help develop the second line of inquiry. Meanwhile, the structural group at the laboratory will concentrate on emerging opportunities for

### Industrial sponsorship

## Fewer payrolled students

Industrial sponsorship schemes, under which a favoured proportion of Britain's 251,000 undergraduates receive a substantial financial boost from industry, seems to be on the decline. A better understanding of the trend is likely to come from a new research project to be conducted by the Institute of Manpower Studies (IMS) at the University of Sussex.

In some subject areas, notably electrical engineering, as many as 50 per cent of all undergraduates may be sponsored, according to Richard Pearson, head of the IMS Labour Market Studies Group and director of the study. Yet despite the obvious importance of the practice for graduate recruitment patterns in general, there is a striking absence of hard information about figures and trends. Sponsorship may mean up to an extra £800 per year to an undergraduate, and some employers, such as British Telecom, actually reward their favoured potential recruits with a salary while they are still at college. In return, there is a gentleman's agreement that the student will accept any offer of employment from the sponsoring company after graduating. Of undergraduates who started their courses in 1980, 2,000 at universities and nearly 1,000 at polytechnics found an industrial sponsor, mainly in the fields of electrical and mechanical engineering. The IMS study, which is supported by a £55,000 grant from

the structural analysis of membrane proteins.

The long-term objective is thus to create a recognized centre of excellence, but also more fully to implement the laboratory's brief as a training centre. There will be one summer course next year, and a series of courses between June and September in 1984. Meanwhile, the laboratory is arranging with European universities to recruit up to ten graduate students a year.

The development of the scientific programme is the source of Philipson's immediate difficulties. The laboratory's target payroll of 267 people (excluding visitors) has never been filled, but next year's budget allows for 255 people, a substantial increase on this year. There is also to be a system of external reviews of scientific programmes at intervals of three years.

It seems to be accepted that in its new form the laboratory will be of more immediate value to member organizations too small to sustain substantial molecular biology laboratories of their own. But Philipson says that there is one sense in which Heidelberg is likely to become unique — it has been laid down that scientists on the payroll should not have external links with commercial organizations, although they may work as consultants during vacation time. ●

the Leverhulme Trust, will concentrate on sponsorship by individual companies in both public and private sectors.

Most of the sponsorship schemes now operating started in the late 1970s and apply to the general area of engineering, where there was until recently a severe shortage of suitably trained graduates. Up to 50 per cent of all students taking sandwich courses (which include one or more periods of training in industry) are thought to receive some form of sponsorship. Dr Clive Purkiss, director of IMS, has drawn attention to the lack of clear information on which employers can base sponsorship decisions. Although industrial sponsorship may be regarded as being partly a public relations gesture by the sponsoring companies, it does enable them to get an inside track in their graduate recruitment programmes. It may also be the cheapest way of ensuring an adequate training in a specialist discipline, which according to one estimate may otherwise cost up to £75,000 to the age of 25.

The past two years, however, have seen a drop in the number of sponsored places available: British Telecom's total is down slightly this year to 32, and BP Ltd has just axed its scheme altogether. According to Professor Ray Wild, of Brunel University's Special Engineering Programme, this is partly because companies have become more selective, preferring now to identify

potential recruits before they start a degree course rather than to pick them out part of the way through. The number of students on National Engineering Scholarships (financed jointly by the Department of Education and Science and the Department of Industry) has also been reduced this year, from 300 to around 100. At the same time, educational institutions are trying to increase sponsorship for their students. Some colleges actually specify industrial sponsorship as a requirement for some of their courses, as at London's Imperial College. Students are simply issued with a list of potential sponsors and told to make their own arrangements; the value of the sponsorships on offer varies considerably.

At the moment few small firms sponsor undergraduates, so major employers who run generous schemes can take their pick of the best potential engineers and managers. Less well known firms have to compete against household names in the minds of school sixth-formers who have little knowledge of the industry: Brunel University, whose engineering students are all fully sponsored, is organizing a consortium of several groups of small companies to help overcome this difficulty. The IMS research should receive widespread attention, not least from the students themselves. **Tim Beardsley**

### UK graduate employment

## No jobs for the boys (or girls)

About 15 per cent of this year's crop of first degree graduates from British universities will still be looking for jobs at the end of the year. This gloomy estimate was made by Mr B.E. Steptoe, chairman of the statistics subcommittee of the Association of Graduate Careers Advisory Services; 11.3 per cent of that year's graduates had not found jobs by the end of December. Among polytechnic graduates, the figure is likely to be even worse.

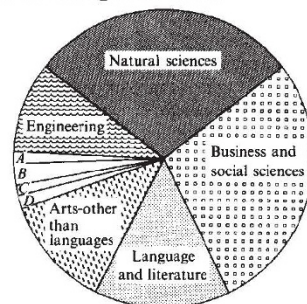
The position of this year's 105,300 new graduates is, of course, made worse by the fact that they are now competing for jobs with those of the 1981 crop still unemployed. As a result, many companies that previously recruited graduates straight from college are now looking for people with some useful work experience. There are also increasing numbers of "under-employed" graduates doing jobs that previously would not have required a degree; some of these will undoubtedly find more suitable employment in time, but a large proportion are likely to remain under-employed.

The trend is described by Mr Brian Putt, director of the Central Services Unit (an advisory body to graduate careers services) as a "disastrous social iceberg". The number of graduates entering the job market will continue to rise by about 2-3 per cent each year at least until 1984, when the effects of last year's cutbacks in higher education places will become apparent.

Unemployment continues to be highest amongst those reading arts subjects, and of the sciences biology clearly has the largest proportion unemployed. However, factors

such as falling oil prices have had an effect on recruitment even in traditionally "safe" subject areas; some university careers offices have reported problems among civil and mechanical engineers, for example. The number of companies that recruit on the "milk-round" of universities has decreased this year (although the decrease

Per cent home first graduates unemployed, shown according to discipline

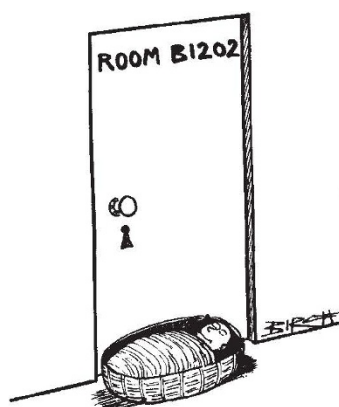


- A Architecture and other professional and vocational studies
- B Agriculture, forestry and veterinary science
- C Medicine, dentistry and health
- D Education

is not large), and there are other indications that the number of advertised vacancies for graduates has fallen over the past two years. The sudden growth in the number of sponsorship schemes since 1979 (see accompanying figure) accounts for a part of this decrease, and it seems that the number of vacancies has probably reached a plateau. It is unlikely to increase significantly for at least 18 months, even if there were to be a major reflation of the economy next year. **Tim Beardsley**

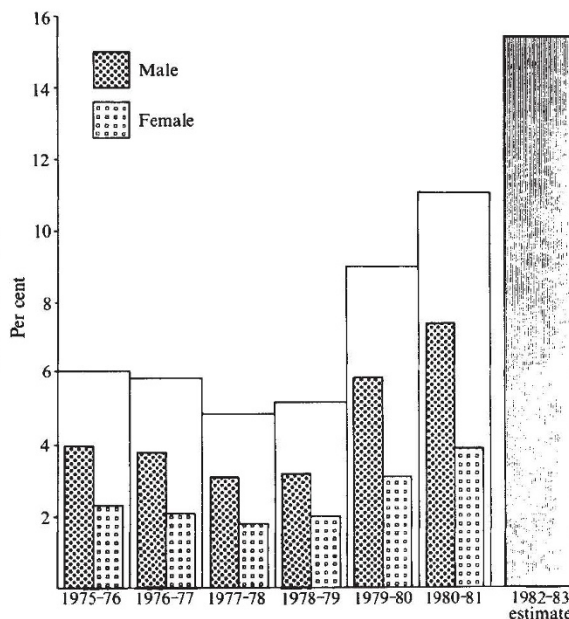
### Warnock seeks evidence

The chairman of the British government's inquiry into human fertilization, Mrs Mary Warnock, has asked for all interested bodies and individuals to submit evidence before the deadline of 1 March 1983. The enquiry, due to report in 1984 has a broad brief — covering social, ethical,



legal and medical aspects of developments in human fertilization including *in vitro* fertilization techniques. Evidence should be submitted to: The Secretary, Inquiry into Human Fertilization and Embryology, Room B1202, Department of Health and Social Security, Alexander Fleming House, London SE1.

### Home first degree graduates believed unemployed at 31 December



All values are expressed as percentages of the total number of graduates of known destinations. About 10 per cent of graduates did not reply to survey questionnaires. The 1982 figure is an informed estimate.