#### **EMBO**

# **Another Step Forward for the Laboratory**

Last week the reality of a European Molecular Biology Laboratory in Heidelberg came closer with the signing in Geneva of the agreement to establish it.

Now that the agreement to set up a European Molecular Biology Laboratory at Heidelberg is signed and sealed, molecular biologists can look forward to the emergence during the next five years or so of a centre which should have a place in Europe similar to that held by the famous Cold Spring Harbor Laboratory in the United States.

## Early Days

The idea of a laboratory on a European scale was first put forward a little more than ten years ago at a meeting at CERN—that shining example of European cooperation in science—where the signature ceremony took place last week. Later, in 1964, the European Molecular Biology Organization (EMBO) came into existence with the object not only of founding a laboratory but also of financing fellowships and summer courses. To begin with EMBO received \$750,000 from the Volkswagen Foundation for a period of three years starting in 1966—the object was that the organization should prove itself and in the meantime seek more permanent support from European governments.

The first EMBO proposal for a laboratory (in 1968) envisaged something larger than the one that is now to be built. But the governments involved did not approve, to some extent at least because EMBO itself had not thought out in sufficient detail what the purposes of the laboratory were to be and what functions it was supposed to perform.

Then out of a meeting in Konstanz in 1969 came proposals that formed the basis of the plans for the laboratory that

have finally won acceptance from ten European governments. It is intended that part of the function of the laboratory shall be to provide a service to national institutes in, for example, the development of advanced instrumentation. It will also carry out advanced training and will, like Cold Spring Harbor, be a centre for meetings both formal and informal.

#### Heidelberg

The site provided by Germany for the laboratory is deep in the forest at Heidelberg next to the Max-Planck Institut für Kernphysik, which together with the Deutsches Krebsforschungszentrum has offered temporary office and laboratory accommodation so that scientific work can begin quite soon, before the laboratory proper is completed.

As far as staff is concerned, the total number of personnel is expected to reach 130 in 1976 and the full complement of about 300 in 1978. Of this number nearly sixty will be qualified scientists and engineers (QSEs), including about sixteen post-doctoral fellows, and there will be about 167 technicians, fifty-five administrative staff and thirty to thirty-five visiting scientists (at any one time).

There are also plans afoot for establishing an outstation of the laboratory at the electron synchrotron (DESY) in Hamburg and one at the high flux reactor in Grenoble. This will make possible experiments with intense X-ray and neutron beams.

## Expenditure

Table 1 shows the expenditure envisaged in the years until the laboratory is fully operational. It includes an estimate of the way in which a special contribution to capital costs made by the German government may be spent. Ratification by the participating governments is unlikely to take less than a year, but during that time sufficient money will be available for architects to be engaged and other aspects of advanced planning to be completed.

| Table 1 Global Costs of the Laboratory to Contributing Governments                                       |                         |                             |                          |                     |                     |                     |       |       |                              |
|--|-------------------------|-----------------------------|--------------------------|---------------------|---------------------|---------------------|-------|-------|------------------------------|
| Estimated ceiling of   | 1973<br>May-<br>Decembe | 1974<br>January–<br>r April | 1974<br>May-<br>December | 1975                | 1976                | 1977                | 1978  | 1979  | Totals                       |
| non-recurrent costs  | Before ratification     |                             | After ratification       |                     |                     |                     |       |       |                              |
| Preliminary studies<br>Central laboratory<br>Outstation at DESY, Hamburg<br>Outstation at Grenoble       | 71<br>568<br>96         | 63.5<br>140<br>447          | 2,406<br>213<br>78       | 2,704<br>77<br>46   | 2,385               | 1,291               | 630   | 176   | 134.5<br>9,592<br>998<br>267 |
| Total A  | 735                     | 250.5                       | 2,697                    | 2,827               | 2,385               | 1,291               | 630   | 176   | 10,991.5                     |
| Possible application of German special contribution (DM 12,000,000)                                      | il<br>537               | 113                         | 1,100                    | 950                 | 579                 |                     |       |       | 3,279                        |
| Net non-recurrent costs B  | 198                     | 137.5                       | 1,597                    | 1,877               | 1,806               | 1,291               | 630   | 176   | 7,712.5                      |
| Recurrent costs (estimated budget) Central laboratory Outstation at DESY, Hamburg Outstation at Grenoble | 124<br>39               | 72<br>56                    | 558<br>169<br>139        | 1,431<br>299<br>259 | 2,564<br>324<br>284 | 3,743<br>324<br>294 |       |       |                              |
| Total recurrent costs C  | 163                     | 128                         | 866                      | 1,989               | 3,172               | 4,361               | 5,066 | 5,595 |                              |
| Global costs to governments $(B+C)$  | 361                     | 265.5                       | 2,463                    | 3,866               | 4,978               | 5,652               |       |       |                              |
|  |                         |                             |                          |                     |                     |                     |       |       |                              |

Costs are in thousands of accounting units at 1972 prices (1 AU=\$1.2).