## Science Policy News

## European Molecular Biology Laboratory [EMBL]: Excerpts from the Annual Report 1989

There are numerous new projects for the organization of basic research in molecular biology in a united Europe which, according to EMBL Director-General L. Philipson, should be supported during the next 5-year period. The opening of the borders towards the East and the progressing unification of Western Europe might ultimately lead to a much stronger base for science provided that we can pool our resources and recognize scientific excellence irrespective of national borders or cultural background. The EMBO as well as the Laboratory might make a very significant contribution to this unification process which, if successful, might give Europe a leading role in the biological sciences.

Belgium has recently become the 15th Member State to join the EMBL, which is now also seeking the accession of Iceland and Ireland, the only EMBC Member States that have not yet joined. Both organizations might thus soon have the same Member States, perhaps calling for a fusion of EMBC and EMBL into a single international intergovernmental organization that will provide the budget for EMBO grants and fellowships, and funds for the Laboratory. Such a fusion of EMBC and EMBL Council into one organization representing basic molecular biology would facilitate attempts to solicit additional support for this research area from national governments, the European Community, EUREKA and the European Science Foundation.

Expansion of European collaboration in molecular biology: At present major programmes in molecular biology are sponsored not only by EMBO and EMBL and their governmental organizations, EMBC and EMBL Council, but also by the European Community, the EUREKA and other organizations. At the same time there is a strong urge to further integrate European science along with domestic markets and industrial enterprises. The recent plans to sequence the human genome also require international collaboration in molecular biology and the

scientists have, therefore, established the Human Genome Organization (HUGO) modeled on the EMBO. EMBO/EMBL expansion: Efforts should be aimed at removing some of the major obstacles that currently impede closer interaction between the European national states. First, the research funds available to the European Community and similar organizations are largely earmarked and targeted towards applied rather than basic research. Second, the traditional structure of the European universities raises great difficulties in adapting to the flexible and highly diversified research environment of current molecular biology. It has been particularly hard to establish support for postdoctoral positions which are open to young scientists on an international basis and which extend for more than two years at the post-doctoral level. Third, most European universities make it very difficult for young scientists to become truly independent since research grants are awarded to senior investigators. Finally, several emerging research fields such as neurobiology, developmental biology, plant molecular biology and protein engineering require coordinated investments on a supranational scale if Europe wants to improve its competitiveness in these important research areas.

The EMBO and EMBL together are therefore currently formulating plans for a substantial increase in support from Member States and also from the European Community, in order to provide European support for basic molecular biology and contribute to an integrated Europe before the end of the century.

Financial situation: Main items of income and expenditure during 1989: Total income for 1989, DM 59.0 million, of which DM 48.5 million came as Ordinary Contributions from the Member States. The total expenditure of DM 58.5 million consisted of personnel costs (DM 34.3 million), operating costs (DM 16.3 million) and capital expenditure (DM 8.0 million).

## United Kingdom – The Science and Engineering Research Council: New Biotechnology Research Programme under the LINK initiative into oligosaccharides

The Government is providing money under the LINK R & D scheme to help finance research which could help identify possible causes of diseases such as cancer and rheumatoid arthritis. The DTI and the Biotechnology Directorate of the Science and Engineering Research Council have contributed 50% of a £800,000 grant for Dundee University of carry out a four-year research pro-

gramme into complex carbohydrates, known as oligosaccharides.

Oligosaccharides consist of long, branching chains of sugar residues similar to glucose. They are found attached to other molecules throughout animals and plants, and until recently were thought to have no specific function. It is now recognised that oligosaccha-