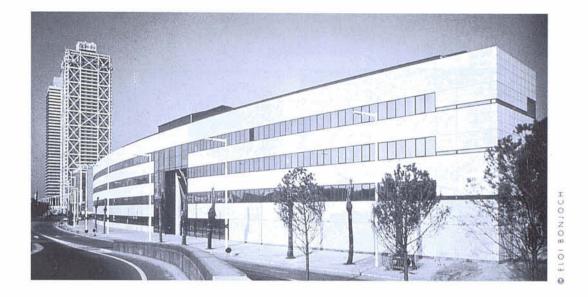
## INSTITUTIONS



## THE MUNICIPAL INSTITUTE OF MEDICAL INVESTIGATION

AS WELL AS ITS MEDICAL RESEARCH, THE IMIM ALSO COLLABORATES WITH THE WHO'S EUROPEAN REGIONAL OFFICE IN THE FIELD OF DRUG ABUSE, AND SINCE 1985 IT HAS BEEN OFFICIALLY APPROVED BY THE INTERNATIONAL OLYMPIC COMMITTEE FOR ANTI-DOPING CONTROLS.

JAUME MARRUGAT DOCTOR AND MEMBER OF THE IMIM RESEARCH TEAM

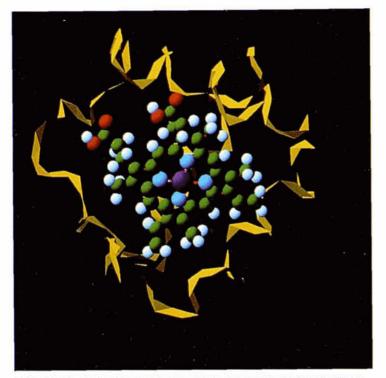
he IMIM is a research centre which for more than forty years has been supporting, promoting, co-ordinating and managing research in the sphere of Barcelona's municipal hospitals. The IMIM promotes research in the medical sciences and organises specialist teaching directed at the third cycle of further education and in-service training for health professionals.

The Institute was originally set up by Barcelona City Council in 1947, at the suggestion of Professor Nauck, head of the Tropeninstitut in Hamburg, to Dr Trias de Bes, director of the former Hospital for Infectious Diseases, now the Hospital Universitari del Mar. The initiative received support from García Tornel, then Deputy Mayor for Health, who made its creation possible. This process was, in fact, the result of a talk on "Slow Endocarditis" which Dr Trias was invited to give to the Congress on Cardiology to be held in Barcelona in 1947. Dr Trias asked Dr J.Gras and Dr A.Foz to do the experimental side of the work. This scientific contribution was amply recognized later, providing the final stimulus for the creation of the Institute of Investigation.

Finally, in 1948, the centre was opened by Sir Alexander Fleming, and by 1950 it was fully operational. As an example of the top-level research activity carried out there, in 1960 J.Gras described the "phenomenon of circulating antibody inhibition by hyperimmunization". For his part, A.Foz, a member of the WHO's Board of Experts on Brucellosis since 1958, was following lines of research into infectious diseases, in particular studying the cholera outbreak of 1971, the description, as an antibody, of the RA factor and the study of a new method of diagnosing brucellosis by ELISA.

Later on, coinciding with the shake-up in the health system as a result of the political transition to democracy begun in Spain in 1975, which culminated in 1986 with the introduction of the General Health law, the IMIM underwent its share of renovation. During the first vears of this period, local authorities embarked on a number of health initiatives such as those directed at transforming medical attendance. At the end of 1984, the establishment of the Municipal Institute for Medical Attention (IMAS) as an autonomous municipal institution (which now depends on the Barcelona Health Consortium) favoured the adoption of a research policy in

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HAEMOGLOBIN, FOCUSING ON THE HAEM GROUP, WITH THE BACKBONE REPRESENTED AS A RIBBON



HAEMOGLOBIN OCTAMER FROM SICKLE CELLS MODELLED USING CHEMICAL PROTEIN. THE BACKBONE HELICES ARE REPRESENTED AS CYLINDERS

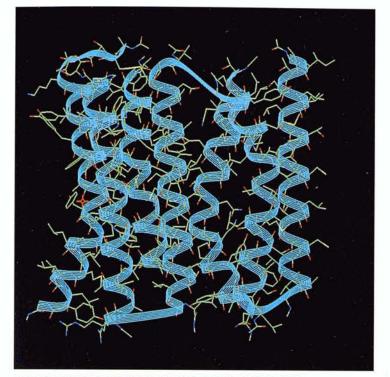
the municipal hospitals. This process facilitated the reorientation of the functions of the IMIM, which was joined by the Clinical Pharmacology Group at the Hospital del Mar and a new Medical Informatics Group from the Autonomous University of Barcelona (UAB), and the establishment of a specific budget for the running of the Institute. The incorporation during 1987 and 1988 of other groups of researchers in the spheres of immunology, epidemiology and public health completed the present structure of the Institute, which, as I say, is responsible for research in the municipal hospitals (Hospital Universitari del Mar and Hospital de l'Esperanca).

The IMIM at present consists of the four research departments already mentioned and the Research Co-ordination and Support Department (DECSI), which has five research units under the direction of medical staff at the municipal hospitals (surgical research, microbiology, bone metabolism, pneumology and anaesthesiology). The DECSI has a stable infrastructure which covers the basic needs of the Institute researchers and staff at the municipal hospitals involved in research work. The main elements of this infrastructure are the local information network, a modern bibliographic service, housing for small animals, the category two radioactive installation, a laboratory for chemical analyses applied to drugs and medicines, and the permanent support of methodological and biostatic assessment. Backing up the research activity, the administration department is in charge of accounting and budgets for the research projects, purchases and stores, maintenance of equipment and installations, and industrial relations and staff management. Its structure has been gradually adapted to allow for faster and more efficient management,

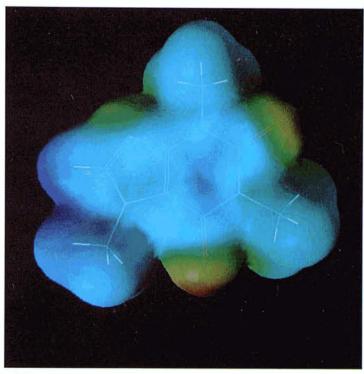
introducing the commoner techniques of private companies. In the field of biomedical teaching, IMIM researchers are responsible for classes in immunology, microbiology, pharmacology, clinical pharmacology, preventive medicine and public health for the UAB's degree course in medicine at the IMAS Teaching Unit, and for various doctorate programmes and postgraduate courses.

The IMIM was one of the first medical research centres to be officially recognized as a Mixed Unit of the Health Research Resources of the Ministry of Health and Consumer Affairs, which according to this Institution qualifies it as a multithematic research centre. It is also a collaborating centre of the WHO's European Regional Office in the field of drug abuse, and since 1985 it has been approved by the International Olympic Committee for anti-doping controls.

## INSTITUTIONS



MODEL OF THE TRANSMEMBRANE HELICES OF AN AEROTONIN RECEPTOR



MOLECULAR ELECTROSTATIC POTENTIAL OF THE CAFFEINE MOLECULE

Its lines of research have been organised in programmes, a system that allows individualized administrative follow-up and regular scientific assessment of progress in its research projects. Each year it publishes and distributes a report on its scientific activities. The number of national and international publications has grown steadily since 1986, which speaks for the Institute's intense research activity.

The IMIM's approach in recent years has concentrated on renewing a large part of the research staff, incorporating personnel with a recognized professional background and in many cases with years of training at prestigious foreign institutions. The staff budget has been strengthened by the introduction into the Institute's organisation of the figure of the pre-and post-doctoral grantee, a fundamental element of research and education. The changes in the Institute's workforce have been accompanied by the development of an extensive network of external relations from each of the research groups, with institutions both in Barcelona and all over Spain, Europe and the United States. The whole of the research activity has joined the transnational interaction that characterizes the scientific advances of the last ten years.

The construction of the new building in 1992, at Carrer del Dr. Aiguader, 80, in Barcelona, represented the consolidation of the Institute. Built to the West of the Hospital Universitari del Mar and along the Avinguda del Litoral, it covers a total of 8,000 square metres, of which more than 4,000 square metres are occupied by the IMIM. One of the most emblematic facilities of the new building is the assembly hall, with room for more than 200 hundred people. It will be extensively used not only by the IMIM but also by the Hospital Universitari del Mar and the IMAS Teaching Unit (U.D.-IMAS, a centre of the Faculty of Medicine of the UAB). The cost of the investment has been covered by the IMAS and the Barcelona Health Consortium, in which Barcelona City Council and the Generalitat de Catalunya take part. The IMIM began to move into its new premises in May 1992.

Amongst the most important future challenges are the promotion of interaction between the present groups, the concentration of research lines in macro-programmes and the obtention of a critical mass of human resources sufficient to make research competitive. The increase in the interactions with the hospital staff is a crucial point for achieving these objectives. International relations with researchers interested in the centre's lines of research are another point of interest. In this respect, contacts initiated by foreign colleagues are especially welcome.