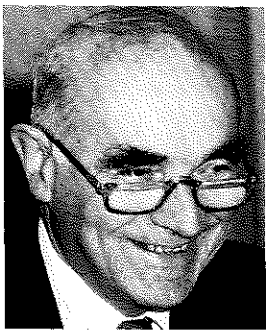
Genome News



Hubert Curien
Minister of Research
and Technology

# France Launches Human Genome Program

Genome-related research in France today involves more than 67 laboratories and some 500 researchers, engineers, and technicians working for public research agencies and universities, according to Hubert Curien, Minister of Research and Technology.

In outlining the French Human Genome Research Program to the Council of Ministers at its October 17, 1990, meeting, Curien said that to date the government has appropriated 150 million francs ($30 million) for human genome research; in 1990 funding by the Research and Technology Fund (Fonds de la Recherche et de la Technologie) included the following allocations:

- 7 million francs ($1.4 million) for research on methodologies adapted to genome research. These awards were based on competitive bids solicited in 1988.
- 16 million francs ($3.2 million) to the Centre d'Etude du Polymorphisme Humain (CEPH).
- 30 million francs ($6 million) to the 4-year European Eureka Program to design and produce a series of robots that will increase the speed of molecular biology operations such as nucleic acid extraction, circular DNA preparation ("Miniprep"), molecular hybridization, cloning, cloned-DNA fragment mapping, and DNA sequencing. The Miniprep robot should be marketed in 1991.

**Formal Program – GIP**

To spur research efforts on human gene analysis, France is launching this month a formal national human genome research program, piloted by a special committee called a Groupement d'Interet Public (GIP). In addition to the funds already allocated, the committee will have at its disposal 50 million francs ($10 million) in 1991 and 100 million francs ($20 million) annually, beginning in 1992. In total, France has pledged 200 million francs ($40 million) for human genome research in 1991 and 250 million francs ($50 million) in 1992.

Presided over by a leading scientist, GIP will be an autonomous body that will coordinate planning and execution of laboratory research projects and organize international cooperation, notably with other European countries and the United States. Its executive board will be composed of participating industrialists and representatives of concerned research agencies and involved ministries, such as Research, Health, National Education, and Industry. The executive board will be assisted by a scientific board charged with defining programs and evaluating research projects and their results. A GIP subcommittee will oversee the program's medical, technological, and economic applications.

France will concentrate research activity on the genome's coding regions, only 5 to 10% of the genome. To this end, authorities plan to:

- speed up development of automated mapping methods used in molecular biology;
- expand computer capabilities (hardware and software for data processing and analysis);
- train highly qualified personnel; and
- distribute biological specimens to laboratories for analysis, reproduction, and storage.

In parallel with human DNA research, genomes of model organisms such as bacteria and yeast will be analyzed in an effort to understand the mechanisms of gene expression and species evolution.

Because of the program's ethical, legal, and social implications, the French National Ethics committee (Comite National d'Ethique) has already been consulted and will be kept informed regarding new data arising from human genome research. ◇

*Reported by Michele Durand*
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**French Public Research Agencies Involved in Genome Research:**

- Centre National de la Recherche Scientifique (CNRS)
- Institut National de la Sante et de la Recherche Medicale (INSERM)
- Institut National de la Recherche Agronomique (INRA)
- Commissariat a l'Energie Atomique (CEA)
- Institut Pasteur de Paris
- Institut National de la Recherche en Informatique et en Automatique (INRIA)