

and feasibility of implementing such a project. With virtual unanimity, participants agreed that ordering and eventually sequencing DNA clones representing the human genome were desirable and feasible goals. With the receipt of this enthusiastic response, OHER initiated several pilot projects. Program guidance was further sought from the DOE Health Effects Research Advisory Committee (HERAC).

HERAC Recommendation

The April 1987 HERAC report recommended that DOE and the nation commit to a large, multidisciplinary scientific and technological undertaking to map and sequence the human genome. DOE was particularly well suited to focus on resource and technology development, the report noted; HERAC further recommended a leadership role for DOE because of its demonstrated expertise in managing complex and long-term multidisciplinary projects involving both the development of new technologies and the coordination of efforts in industries, universities, and its own laboratories.

Evolution of the nation's Human Genome Project further benefited from a 1988 study by the National Research Council (NRC) entitled *Mapping and Sequencing the Human Genome*, which recommended that the United States support this research effort and presented an outline for a multiphase plan.

DOE and NIH Coordination

The National Institutes of Health (NIH) was a necessary participant in the large-scale effort to map and sequence the human genome because of its long history of support for biomedical research and its vast community of scientists. This was confirmed by the NRC report, which recommended a major role for NIH. In 1987, under the leadership of Director James Wyngaarden, NIH established the Office of Genome Research in the Director's Office. In 1988, DOE and NIH signed a Memorandum of Understanding in which the agencies agreed to work together, coordinate technical research and activities, and share results. In 1990, DOE and NIH submitted a joint research plan outlining short- and long-term goals of the project.