

\$200 MILLION A YEAR FOR HUMAN GENOME

WASHINGTON, D.C.—A National Academy of Sciences (NAS) panel is recommending that the federal government devote \$200 million per year in new funds toward a large-scale effort to map and eventually sequence the 3 billion nucleotides within the human genome. Although the committee says the program should be managed under a single federal agency, it shies away from recommending which of several contenders should take responsibility, insisting only that a scientific board guide the effort and “take it out of the political process.” The entire project will require about 15 years and thus will cost a total of about \$3 billion, according to the “Report of the Committee on Mapping and Sequencing the Human Genome,” which was released in February (*Bio/Technology* 5:1016 Oct.'87).

According to Bruce Alberts, a biochemist from the University of California (San Francisco), a “special project is advisable in this case; it makes sense.” The NAS committee says a comprehensive map of the human genome will help bring greater order to the many mapping and sequencing

research projects now being done by individual labs, and it will be of “tremendous medical importance.”

New facilities and technologies will be needed to exchange, store, and analyze the biological materials and data that the project will generate, the NAS committee report notes. During the early stage, however, the emphasis should be on decentralized small and mid-size projects because technology development is “still badly needed,” Alberts says. Thus, the committee strongly recommends that much of the effort be funded under grants and contracts subject to peer review.

Although there was no consensus, a majority of panel members suggested designating a lead federal agency with “ultimate responsibility for funding and policy decisions” for the program rather than setting up an interagency committee. But which agency should lead? The NAS report avoids recommending either NIH, the Department of Energy (DOE), or the National Science Foundation, all of which are now involved in genetic research pertinent to the human

genome program. Implicitly, the committee seems to favor NIH, whose style and programs are familiar to most members of the NAS panel. However, if several agencies can participate in a “peer-reviewed spirit,” says Alberts, their contributions “will be welcomed.”

Currently, Congress and the Administration are encouraging both NIH and DOE to expand their human genome efforts—providing them in fiscal year (FY) 1988 with about \$17 million and \$12 million, respectively, in new funds for such research. The President's budget request for FY 1989 recommends boosting this component of the NIH budget to about \$29 million and, of the DOE budget to \$18 million.

Meanwhile, the Congressional Office of Technology Assessment (OTA) also has been compiling a broad-based human genome report, scheduled for release in April. Said to be “complementary” to the NAS effort, the OTA report promises to more fully explore the ethical, social, and commercial implications of this research. —Jeffrey L. Fox

REORGANIZATION

ALLELIX'S CANADIAN PIE SLICED THREE WAYS

MISSISSAUGA, Ont., Canada—Despite today's trend toward consolidation in biotech, Allelix is dividing. In fact, if the shareholders of Canada's leading biotechnology company approve the plan, the privately held firm will soon split into *three* separate operating entities, tentatively to be named Allelix Diagnostics Inc., Allelix Agriculture Inc., and Allelix Biopharmaceuticals Inc. (previously Allelix Biochemicals).

“We didn't find people who wanted to invest in both agriculture and healthcare,” explains Allelix vice president of finance and administration Ian Reece. “And splitting up diagnostics from biochemicals was the same sort of idea.” Allelix chairman John Evans will start out as chairman of all three of the affiliated offspring; Allelix's founding shareholders—Polysar Energy and Chemical Corp. (formerly Canada Development Corp.), John Labatt Ltd., and Ontario Development Corp.—will own each of the three new ventures as separate investments.

According to Reece, Allelix Diagnostics will address two main markets with its immunological technology: over-the-counter kits (including tests for pregnancy, strep throat, and ovu-

lation) and doctor's office tests (also for pregnancy and strep throat, as well as for sexually transmitted diseases). Allelix is currently negotiating for some \$8 million (Canadian) in funding for the venture, and it has leased a manufacturing facility in Toronto. Reece, who expects kits to

IMAGE UNAVAILABLE FOR COPYRIGHT REASONS

reach the market this summer, says the company is at the letter-of-intent stage with two or three organizations concerning distribution rights in various regions of the world.

Allelix's agricultural spin-off will continue the company's work on hybrid canola and soil inoculants to increase yield and provide herbicide resistance. Reece reports that the firm's hybrid spring canola has been in Canadian field trials for two years and could be licensed for sale in 1989.

Labatt and Ontario Development are considering providing two years of additional funding for this venture.

In Allelix's third and newest area, biopharmaceuticals, the company is seeking strategic alliances totaling \$10–15 million (Canadian) and is looking to raise another \$5 million (Canadian) in a private placement. Prudential-Bache is working with Allelix toward these ends. Allelix's pharmaceutical program is a result of the firm's shift from producing industrial enzymes to developing drugs that act on the central nervous system, achieve tissue repair, and combat cancer. Allelix expects to take advantage of its proprietary expression systems as well as rational drug design.

Pru-Bache biotech analyst Stuart Weisbrod praises Allelix's research capability and describes the split as a wise strategic move. “Allelix had some of the same problems that Cetus had a while ago,” he says. “They were going in 10 different directions at once.” For now, all three ventures will remain headquartered in Allelix's current facilities, although Reece envisions the diagnostic and agricultural operations eventually moving out.

—Arthur Klausner