HUMAN GENOME PROJECT

The honeymoon is over

Washington

AFTER an infancy of accolades from politicians and scientists alike, the Human Genome Project is finding that growing up is hard. The House of Representatives Appropriations Committee last week cut the project's 1991 funding to $66 million — nearly $34 million less than the president's request, which was itself $24 million less than genome project officials had originally asked for. Overall, the House figure is about one-half of what genome project planners had hoped for next year and reflects a substantial erosion of confidence in the project among legislators.

House Appropriations Committee staff say they are concerned that the project, which is orientated toward centres rather than individual grants, would contribute to the trend at the National Institutes of Health (NIH) away from support of single investigators. They also say that project officials have made a poor case for their budget request, by providing detailed numbers only when asked and by lifting much of the request from the recommendations of a 1988 National Academy of Sciences report.

Staff say that although a letter-writing campaign by scientists opposing the project was not a major factor in the House decision, appeals from other researchers in support of more individual-investigator grants were persuasive.

NIH genome centre director James Watson says the House has missed the point. "I think they've misunderstood the role of centres in the project", he says. Much of the sequencing and mapping of the project is routine work best suited to a small number of well equipped laboratories. Although fundamental research is often well suited to small laboratories and single researchers, the genome project requires something closer to factories. "Congress needs to make the distinction between exploratory research and getting the job done", Watson says.

Legislators on the Senate Appropriations Committee side with Watson on the initiative. But although they say they will try to vote the president's full $108 million request, the vagaries of the budget process have left the committee with nearly $2,300 million less for NIH as a whole, and it may be forced to make cuts as well.

Once the Senate has arrived at a figure, the two arms of Congress will negotiate a compromise budget in conference. Short of a catastrophic across-the-board cut to satisfy the Gramm–Rudman deficit-reduction provisions, the genome project is likely to get something between the House and Senate figures and far less than the president's request.

Officials at the genome project's NIH headquarters are not counting on a substantial reprieve. Three new projects that were about to be announced — a new pilot sequencing programme, a mapping database and a project to locate index markers on the genome — are now in abeyance until the picture clears, says genome office budget officer Erin Burgess. NIH had also planned to start nine new centres at about $4 million each in 1991; the House cuts could lower that to as little as three centres at $2–$2.5 million each.

Funding for the three projects now in limbo was to have amounted to about $19 million next year — just a little more than the $18 million that Congress has placed tantalizingly out of reach in a special discretionary fund for the director of the NIH. This fund can be made available to the genome project at the discretion of the NIH director, once a director has been appointed. There has already been a delay of nearly a year in filling the position, which has caused increasing tension between NIH and Congress. House staff say that they want a new director soon, and they want that director to take a new look at the progress and management of the genome project.

Genome centre officials fear that linking the genome centre's fortunes to the arrival of a new NIH director places the project's growth in jeopardy. "We're not feeling very positive about the money. We're hoping the Senate will say you can't hold the genome project hostage for a new director", says Burgess.

The Department of Energy (DOE), which runs about one-third of the project, has so far done much better in the appropriations sweepstakes. DOE funding from the House is $46 million, just what the president requested.

G. Christopher Anderson

ABORTION PILL

French pill for Britain?

Paris & London

RU-486, the abortifacient pill, could be marketed in Britain by next year if its manufacturer, the French company Roussel-Uclaf, goes ahead with its decision to apply for a product licence. At present, says the company's head of marketing, Ariel Mouttet, Roussel-Uclaf is making enquiries to ensure that the strict controls surrounding distribution of RU-486 in France can be maintained in Britain. If so, the company will send its application to the Department of Health.

At present, RU-486 is only available in France. Even there, it took state intervention to put the drug back on the market after it was withdrawn following threats to company executives from anti-abortion groups (see *Nature* **340**, 6; 1989). Only now, after successful clinical trials in Britain and over two years of use in France, is Roussel-Uclaf preparing its first major attempt to market the drug abroad.

The drug already has some supporters in British medical circles and, according to Mouttet, Kenneth Clarke, the health secretary, has written to encourage Roussel-Uclaf to apply for British registration. Naren Patel, honorary secretary of the Royal College of Obstetricians and Gynaecologists, says that "preliminary reports seem very favourable", although he stresses that he has not yet seen all the data on clinical trials. Patel believes that the drug may be more appropriate for certain terminations than existing techniques. A spokeswoman for the British Medical Association was also supportive. "We do not see any immediate medical problems", she said. But she pointed out that abortions still require the consent of two doctors, under the terms of both the old Abortion Act and the Human Fertilization and Embryology Bill, currently before parliament.

Roussel-Uclaf is also keen to dispel any ideas that RU-486 will be available over the counter as a 'morning after' pill or for 'do-it-yourself' abortions. In France the drug is available only within approved clinics and hospitals and must be taken in the presence of a doctor, in association with synthetic prostaglandins.

Mouttet explained that the company will not proceed with its application unless tight distribution controls are respected. In France the drug is treated in the same way as are opiates and controlled narcotics. At pharmacies it must be kept in a locked cupboard and a complex system of numbered order books, consent forms and sticky labels ensures that every box of the drug can be accounted for.

An estimated 40,000 women have now aborted using RU-486 and Roussel-Uclaf has full records on 20,000 of them. A study of the first 2,000 cases has been published and a report on a further 10,000 women is available within Roussel-Uclaf. Until March this year, the drug was issued free and, says Mouttet, orders were running at "about 4,000 boxes per month". Now there is a charge, demand has dropped to "about 3,000 a month".

If RU-486 is marketed in Britain, the manufacturers will next consider approaching Scandinavian countries. But Mouttet confirmed that the company still has no plans to market RU-486 in the United States or to carry out clinical trials there. If the drug is easily available in Britain, however, a black market for the drug might easily develop in the United States.

Peter Coles & Peter Aldhous