

dent Nixon also announced that he will be instituting a new programme of research and development prizes, but Dr David admitted that no details have yet been worked out.

A more explicit announcement in the message is that the Department of Commerce will now be the focal point in the executive branch of the federal government for policies concerning research and development. The idea is that the staff of the commerce department will keep an eye on the technological strengths and weaknesses of US industries, and identify barriers to applications of new technology. An important input into the department's deliberations will be the NSF's technological incentives project, and a potentially important factor in the department's handling of its new role is that Peter G. Peterson, the newly appointed Secretary of Commerce, was one of the key figures in the development of the technology incentives project that led to last week's message.

A final point is the announcement of several steps to promote international cooperation in research and development. A review of US participation in the scientific and technological programmes of international organizations has been set in train, to make United States participation in these activities more effective, with even stronger ties to our domestic programmes. And there was also even a formal invitation for scientists outside the United States to share some of the new wealth devoted to cancer research: "I am inviting other countries to join in efforts in the United States, including the effort to conquer cancer at the unique research facilities of our National Institutes of Health and at Fort Detrick, Maryland," President Nixon said.

Where does this leave Mr Magruder and the technology incentives programme? Mr Magruder has been conspicuous by his absence at press briefings on the federal government's science budget and the technology message, both of which were conducted exclusively by Dr David, and just as there was widespread speculation that Mr Magruder's appointment signalled a decline in Dr David's influence, there is now speculation that Mr Magruder himself may be on the way out. And those speculations have gained momentum from the fact that at one time the technology message was expected to include a recommendation for the setting up of a special office in the White House to oversee future developments in the technology incentives programme. Mr Magruder would, of course, have been an obvious candidate to head such an office.

It now seems, however, that Mr Magruder will be staying on in the White House as a special consultant in technology, and that his chief interest

will remain with the technology incentives project. Because the Administration is treading carefully by insisting on gaining more knowledge of the innovation process before taking decisive action, there will clearly be no shortage of evaluation to do.

CANCER

Watson's Predictions

IN his annual report as director of the Cold Spring Harbor Laboratory, James D. Watson has analysed the recently enacted National Cancer Act. His conclusion, an excerpt from which follows, is that much of the money earmarked for research will find its way into the provision of new treatment facilities. His appointment last week to the National Cancer Advisory Board will at least enable him to have a say in whether this prediction is carried through.

"The recent Congressional verdict to keep cancer research decentralized within the NIH framework strikes me as a wise decision. The administrative ball game thus is back where it started, with the NCI still the dominant agency controlling how cancer money is dispensed. And as before, the existence of scores of different advisory bodies will ensure that many fingers are in the pie. Admittedly it is so much a fatter one that its future distribution by the NCI administrators is very much in doubt. They could opt primarily for long-term results by allocating a significant portion of the money to learning the precise chemical details of human cells. Or they could blanket much more cancer therapy under the umbrella of 'clinical research' and construct a series of brand new hospitals, with emphasis on regions now lacking the hospital resources of major medical centres like Boston, New York, and Houston.

"Most likely the NCI (as would have the superagency if it had been created) will put their money largely on the short-term option. In doing so, they will optimistically argue that pre-existing methods of therapy might have to be only slightly modified to produce real dividends and that the best way to ensure that the right new protocols for treatment are devised is to create new hospital centres specifically designed to decide between alternative methods of therapy. But from cruel experience the leaders of NCI must inwardly fear that, barring the emergence of radically new ways to cure the major cancers, the chief effect of a massive new round of hospital building will be to provide more cheerful places to die. The main dilemma the clinician lives with is not his failure to keep abreast of new discoveries which could cure his patients but the essential absence, in even the

newest cancer hospitals, of effective ways to check virulent cancers like those of the breast and the lung. Setting up of speedy all-inclusive information exchanges to reshuffle current knowledge is likely to enrich only the stockholders of computer companies. But the average citizen, as well as his congressmen, will badly want some short-term result to show for his money and so will be reassured by the sight of a fine new edifice equating glimmer with more effective therapy. We must expect that much, if not most, of the new cancer money will buy patient care, not true research.

"Fortunately, the massive funds just voted by Congress mean that even a small share of the pie is a lot of money and most likely sufficient to create a large number of first-rate new research groups whose existence would be impossible without the new money. The real question thus becomes *will this happen or will the NCI leadership just pour out the money without any real plan of action?*"

A Home for the VLA

THE National Science Foundation has found a suitable home for the Very Large Array (VLA) system of antennae for radio astronomy. The proposed site is in the New Mexico desert south-west of Albuquerque, in a large valley called the Plains of San Augustin. The New Mexico site was chosen from a list of thirty-four possibilities screened by a site selection team from the National Radio Astronomy Observatory, which will manage the VLA for the National Science Foundation, and the choice was confirmed by a committee of the National Academy of Sciences.

The site has to meet several criteria, including proximity to the Equator to give good coverage of the sky, a high altitude to decrease atmospheric interference, remoteness to minimize interference from radio noise and ground vibration, and a gradient along the thirteen mile long legs of less than two per cent. The proposed site also has the advantage that it is near a small town, Socorro, where there are schooling, shopping and other facilities. The proposal to build the VLA was made in the National Science Foundation's Budget request (see *Nature*, 235, 244; 1972) and it will entail a total expenditure of some \$65 million. If Congress agrees to the proposal, the instrument may be partially operating in 1976, and fully operational by 1982.