

US election

Heads you win, tails you win

Prospects good for science

Washington

SCIENCE policy will not play a role in the presidential election campaign this year, if the two parties' platforms are any guide. Last week at the Republican National Convention in Dallas, President Ronald Reagan's party adopted a platform which devoted just four sentences to the subject, calling for a continuation of present policies and noting the 50 per cent increase in support for basic research that Reagan's Administration has brought about. The only specific proposals in the platform are for an extension of the research and development tax credit (which, according to the latest data, has actually done little to stimulate private investment in research; see *Nature* 23 August, p.615) and for an easing of anti-trust laws to allow companies to collaborate on research.

The Democrats, who, as a rule, have tended to make public support for science *their* issue — albeit a minor one — find themselves at a loss for ammunition with which to launch an attack.

The Democratic platform calls among other things for an unspecified increase in "commercially rated" research and development, apparently a reference to the one area in which the Reagan Administration has cut back applied research. It also includes some vague language about establishing a programme to train scientists and engineers modelled on the Land Grant Act that created the state agricultural colleges and continues to provide them with an automatic annual handout; and some much vaguer language about fostering cooperation between academic and industrial researchers.

The problem that the Democrats and their nominee Walter Mondale face is that the Reagan Administration has actually been very good to science. After faltering the first year (cutting the National Science Foundation budget and sending shivers down the spines of scientists who feared that David Stockman's axe would be turned on them), Reagan has been unfailingly generous to research — basic research, that is.

Federal support for basic research was running at \$5,000 million a year in 1981 when Reagan became President; his proposed budget for 1985 provides for \$7,900 million. The National Science Foundation has fared particularly well, receiving a 17 per cent increase last year and a 15 per cent increase this year.

These gains for basic research have however, come at the expense of civilian applied research — overall, civilian

research and development has not grown under Reagan. The major victims have been the large energy demonstration and engineering projects that the Carter Administration favoured. The absolute gains have been reserved for defence, which has seen an enormous growth in its research and development budget, from \$16,500 million in 1981 to the \$33,900 million proposed for 1985. Still, by refocusing civilian spending on basic research, Reagan has apparently neutralized those in the research community who might otherwise be complaining that civilian research and development has been sacrificed for a defence build-up.

Dr Frank Press, science adviser to President Carter and now president of the National Academy of Sciences, agrees that science is not going to be an issue this year: "Both candidates are going to be extremely supportive of science", he says.

Mondale has picked up on several related issues that may show greater sympathy with the scientific community, however. In addition to pledging a real

growth of at least 3 per cent per year for civilian research and development and a \$4,500 million fund for a five-year modernization of university laboratories and research libraries, Mondale has in several recent statements rejected the Reagan Administration's efforts to clamp down on scientific communication.

Mondale says that the administration, "in its exuberance to restrict technical products and information to the East", has hurt the competitive position of US companies seeking to trade in the West. And he has called for the minimum controls on open scientific discussion necessary for national security. Although the Department of Defense (DoD) recently dropped plans to restrict publication of "sensitive", though unclassified, research — plans that were strongly opposed by the research universities — the administration is continuing to close certain scientific meetings under DoD sponsorship to non-US nationals; and Washington representatives of the universities are convinced that a second Reagan term will bring about a redoubling of similar efforts to clamp down on the free flow of information.

And of course sharp differences between the candidates emerge on science-in-society issues: space weapons, arms control, federal support for elementary and secondary education and environmental regulation.

Stephen Budiansky

Databases

Limited access to BIONET

THE rules for allowing access to the accommodation of nucleic acid sequence data sponsored by the US National Institutes of Health (NIH) have now been made public by Dr Joshua Lederberg, president of the Rockefeller University, New York, and chairman of the National Advisory Committee of BIONET.

The database consists chiefly of two streams — data accumulated by the NIH project, which is managed by Intelligenetics Inc. and Los Alamos Scientific Laboratory, and data accumulating on the parallel database at the European Molecular Biology Laboratory in Heidelberg, West Germany.

According to a statement by the BIONET committee, access to the NIH database will be open without charge to users at government and non-profit establishments, but access by overseas users and scientific investigators working for commercial organizations will be considered on a case by case basis by the advisory committee.

The plan is that applications for access (on a special form) will be accepted from qualified applicants until the system is full, "at which time... steps will be taken to remedy the situation". The database can be reached through the CompuServe data

network, which links the database with most major cities in the United States. Users will have access not merely to nucleotide sequences but to libraries of computer programs developed for analysis and other purposes.

As well as ordinary users of the data, applications will also be considered from people whose chief interest is collaboration in the development of the databank, chiefly through the design of computer programs.

Just now, it seems, the Heidelberg databank is something like one million nucleotides behind the accumulation in the United States, chiefly because of the need to incorporate a mass of material recently obtained from the NIH system. According to Dr G. Hamm, in charge of the Heidelberg database, these are still early days in the use of sequence data — even though more than 2.5 million nucleotides are included in the store at present. By his account, while most investigators still use the database as a means of comparing new sequences with those already known, and for searching for common elements in a variety of genetic data, there is increasingly an interest in using the database as a means of identifying interesting problems still to be solved. □