

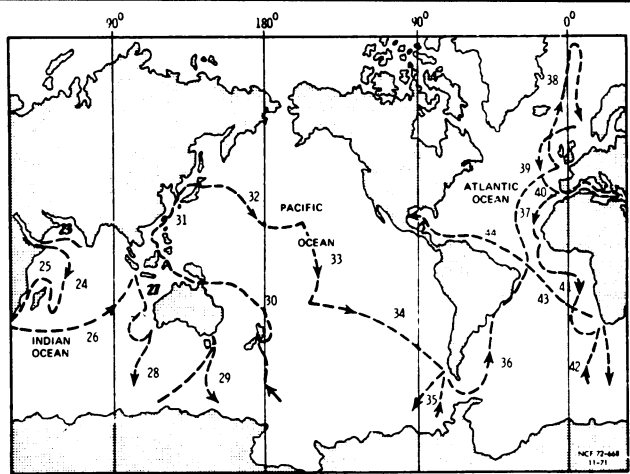
Three more years of deep sea drilling

All good things must pass, but it looks like the Deep Sea Drilling Project won't, at least for a while. Last June, the National Science Foundation, which funds the project, asked Scripps Institution of Oceanography, which manages it, to submit a proposal for a three-year extension of the project. Scripps complied, and this week NSF Director H. Guyford Stever announced that arrangements for the extension have been completed.

The project will be extended to August 1975, permitting 19 more two-month cruises. The estimated cost of the extension is \$33 million. This is the second extension of the project; the 18-month first phase which began in 1968 was followed by a 30-month second phase. This latest \$33-million extension will bring the total cost of the project to around \$68 million.

During the extension, DSDP scientists plan to drill up to 3,000 feet into the lava underlying ocean sediments to learn more about the composition of the crust. Most knowledge to date has come from magnetic observations and from measurements of the speed of sound waves traveling through the crust. The ocean floor beneath Arctic and Antarctic waters will also be probed for the first time. Future work will focus on processes occurring in the oceans—circulation, chemical reactions, formation of oil and metal-bearing sediments, and evolution of marine plants and animals.

So far, scientists on the *Glomar Challenger* have recovered some 60,000 feet of sediment core from 220 locations in the Atlantic, Pacific and Indian Oceans, the Mediterranean Sea and the Gulf of Mexico. They have



Proposed future paths for the *Glomar Challenger*.

elaborated past motions of the earth's crustal plates, accumulated data on past climates and ocean currents, confirmed that there have been large vertical movements of the earth's crust, discovered oil in salt domes in the Gulf of Mexico and found that the Mediterranean Sea had once dried up.

Said Stever: "The investigations conducted under the Deep Sea Drilling Project have provoked the interest and respect of scientists throughout the United States and abroad. The extension of this productive expedition reflects the fact that important work in these oceanic studies remains to be done."

bone of laboratory animals. The work will be difficult because the small teeth of laboratory animals are hard to get at. There is a chance, too, that bacteria found in the mouth do not produce destructive prostaglandins. Thus Goodson is also exploring an alternate possibility—that alveolar bone cells or gum cells produce their own destructive prostaglandins in response to the presence of bacteria. "There are good indications," Goodson points out, "that prostaglandins are produced in inflammatory responses in other parts of the body than the mouth. So if the bacteria were capable of stimulating the inflammatory response in the tissue around the teeth, then the tissue would produce its own prostaglandins."

Pending exact definition of prostaglandins' role and bacteria's role in dental disease, Goodson is conducting a double blind clinical study on patients with periodontal disease. He is treating them with several drugs known to inhibit the formation of prostaglandins. In using them, Goodson anticipated that the bacterial deposits on teeth and gums would not go away, but that the drugs would keep the gums from swelling and from leaking prostaglandins into the alveolar bone. Clinical results so far bear out his expectations. Study results, showing whether prostaglandin inhibitors might actually reverse the disease process, should be available in a month. □

Cancer legislation law, but convolutions continue

The legislative contortions to get a souped up cancer research thrust are now in the past (SN: 10/9/71, p. 243). The President signed the National Cancer Act of 1971 into law on Dec. 23. It keeps the National Cancer Institute intact, and gives it more wallop and funds. But the scientific contortions are not over by any means.

Since October, 250 scientists from various fields have been meeting in closed sessions to hash out directives for the new program. A preliminary report of their ideas is being drawn up, and should be made public some weeks

from now, a NCI spokesman told SCIENCE NEWS.

Pending modifications, these are the objectives the scientists have outlined: to reduce the effectiveness of external agents in increasing the probability of cancer; to find a cancer vaccine; to prevent cell conversion to the cancerous state; to prevent tumors from establishing themselves in cells that are already capable of forming cancers; to better diagnose cancer in individuals and in special risk groups; and to cure and rehabilitate as many cancer patients as possible. □

Venera 8 spacecraft launched toward Venus

The Soviet Union launched an unmanned spacecraft toward Venus this week. Venera 8 was launched March 27 and will arrive at the planet Venus in July after traveling some 312 million kilometers. "The program provides for the separation of the landing craft which must make a smooth descent in the Venusian atmosphere and take scientific measurements," Tass reported. The landing craft carries pennants showing a bas relief of Lenin and the coat-of-arms of the U.S.S.R.

Venera 7 descended to the surface of Venus in December 1970 and re-

corded a surface temperature of 747 degrees K. and pressures of 90 atmospheres (SN: 7/10/71, p. 25). The United States has never attempted a landing on the planet. Mariner 10, planned for launch in October 1973, will fly by both Venus and Mercury. Mariner 2, launched in 1962, and Mariner 5, launched in 1967, were both Venus fly-bys.

In addition to Venera 7, two other Soviet spacecraft, Venera 5 and 6, have penetrated the Venus atmosphere. They did not reach the surface of the planet intact. □