



NBS

Branscomb: Heading standards lab.

can on the House Committee on Science and Astronautics, and Sen. Everett Dirksen (R-Ill.). Dirksen says he would approve Dr. McElroy. And Fulton, although not happy about Dr. McElroy's participation in Scientists and Engineers for Johnson and Humphrey in 1964, says he will not be against him. "He's a fine scientist, and he hasn't been involved in any controversial political matter as Long had." Nevertheless Fulton remains irritated that all the names he saw considered for the post were those of Democrats.

Dr. McElroy comes into the job with an impressive scientific record. He is a world authority on bioluminescence, the process some living organisms use to convert chemical energy to visible light. In the course of his studies, he solved the structure of the substance luciferin and determined the nature of the subtle role of the enzyme luciferase.

His work brought him election to the National Academy of Sciences in 1963. Ironically, as a member of the NAS council, he was one of the scientists who met with Nixon on the Long controversy on April 28, when the President publicly admitted his error in refusing to nominate Dr. Long on political grounds.

Associates say Dr. McElroy has great insight into the problems of science and Government, gained in part through membership on the President's Science Advisory Committee from 1962 to 1967, service on several NSF panels, and a term on the Academy's Committee on Science and Public Policy (COSPUP).

Biologists are elated that one of their colleagues was named for the top NSF post. Dr. McElroy's two predecessors were both physicists, and some scientists take this as another sign of the rising prestige of the life scientists and the decline in eminence of the World War II-nurtured physicists. Dr. McElroy, however, feels his scientific field was not a factor in his selection. ◇

THE PANALBA CASE

Antibiotics in court

The Food and Drug Administration's authority to remove from the market a host of combination antibiotics is being challenged in court. The Upjohn Company is moving to block FDA action prior to a full-scale hearing on the safety and effectiveness of Panalba, a combination product that brings in upwards of \$16 million a year.

The outcome of the case, now in Michigan courts, will have ramifications on the fate of some 49 other combination antibiotics FDA plans to ban on grounds that they are either unsafe or ineffective or both.

In action based on drug evaluations by a panel of scientists established by the National Academy of Sciences, FDA declared its intention of banning Panalba—a tetracycline-novobiocin combination—prior to a hearing on grounds that the drug is ineffective as a combination and that novobiocin presents a hazard to health (SN: 5/31, p. 523).

In mid-June, a circuit court granted the Kalamazoo, Mich., company a temporary restraining order against FDA which will be in effect until the beginning of July. The court will then rule on Upjohn's petition for an injunction that would prohibit FDA from banning

Panalba until a hearing is held on the antibiotic.

Officials of FDA say the present contest between industry and the agency is without precedent. Under law passed in 1962, FDA must grant a hearing before rescinding its approval of a new drug unless a clear threat to health is involved, in which case the Secretary of Health, Education and Welfare can remove a drug from the market by special order.

This regulation, however, does not apply to Panalba, which was approved prior to 1962 and which is subject to special provisions applying to antibiotics, including batch-by-batch certification by FDA. Nor, in some views, does Panalba involve an uncontested threat to health.

"Novobiocin," says a spokesman for the Pharmaceutical Manufacturer's Association, "is no more dangerous than it ever was." Side effects including rash, liver disorders and blood disorders are known to occur, but were known when the potent drug was first licensed.

The safety argument would, presumably, be resolved in a hearing. At issue now is the authority of FDA to act without giving the drug companies a chance to present their case.

TEKTITES

Moon source proven

Tektites are mysterious glassy pebbles. Their geographical distribution and their chemical composition, which differs from that of earthly minerals, have made many scientists suspect that they come from space. The moon has been suggested as a possible origin.

Now, a scientist with the National Aeronautics and Space Administration. Dr. Dean Chapman, who is chief of the thermal and gas dynamics division of the Ames Research Center at Moffett Field, Calif., presents evidence that, he says, builds an airtight case for the lunar origin of at least one group of tektites.

Dr. Chapman's samples are the so-called Australasian tektites found in Australia and Southeast Asia. These are about 700,000 years old and are the youngest of the tektites. There are two other age groups: 15 million years old and 35 million years old.

Dr. Chapman suggests that the Australasian tektites come from moon's crater Tycho. He believes they were formed when an asteroid hit, splashing droplets of molten rock so high that they escaped the moon's gravity and fell to earth.

Dr. Chapman has been collecting

and studying Australasian tektites for nine years, during which time he has collected hundreds of thousands from 200 locations in 10 countries. The chemical composition of the tektites divides them into 10 families. The families are found in long strips of the landscape, "elongated streets," as Dr. Chapman puts it.

Assuming an origin beyond the earth, Dr. Chapman set out to determine a trajectory that might have caused this kind of fall pattern. The argument is easiest to construct in reverse, so he started from the moon.

First he looked for a large young crater that would be about 700,000 years old. Tycho fits these specifications. The next step was to determine whether objects coming from Tycho could have landed on earth in the pattern of the Australasian tektites. For this he used the same computer analysis that is used to determine the splashdown points of returning lunar spacecraft. The result gave the observed pattern of tektite finds.

He also points out that chemical analyses showed minor variations among the members of the 10 families. He