SCIENCE NEWS OF THE WEEK

Laetrile Report Under Fire From Within

The statement of Memorial Sloan-Kettering scientists that they found no evidence that Laetrile is beneficial in cancer $treatment \, (SN: 8/6/77, p.\,92) \, has \, stirred \, up \,$ more controversy for the institute than it has quelled. A group of Sloan-Kettering employees, who call themselves Second Opinion, has put out a special report challenging the completeness and accuracy of the official report, which will be published early this year. Ralph Moss, who was assistant director of public affairs, was fired by the institute after he acknowledged being a co-author of the critique. The public affairs director said that Moss had acted in a manner that conflicted with his most basic job responsibilities

As one of its many points, the critique challenged a statement that Laetrile had failed in a particular set of experiments where conventional cancer drugs had, in previous experiments, succeeded. Second Opinion charged that no known anti-cancer drug is active against tumors in that experimental situation. The drugs only work after the tumors have been transplanted.

Chester Stock, the institute's vice-president for chemotherapy research, agrees that the original statement in the Sloan-Kettering Institute report is incorrect. That paragraph has been deleted from new copies of the report. The author of the paragraph, Daniel Martin of Catholic Medical Center in New York, also admits the statement is in error. He says he put it in to convince people that the experimental tumor system is relevant to human cancer. Second Opinion says that by testing Laetrile in a system in which no other agent is effective, "it is almost as if they wanted it to fail."

Early experiments of Sloan-Kettering researcher Kanematsu Sugiura suggested that Laetrile inhibited the growth of secondary tumors, but did not destroy primary tumors. Although his opinion was not reflected in the ski report, Sugiura says he sticks with his belief that Laetrile may have a "palliative," although not curative, effect on cancers. The ski report discredited Sugiura's experiments as being unintentionally biased and said later "blind" experiments failed to confirm the beneficial Laetrile effects. Members of Second Opinion called the later experiments flawed.

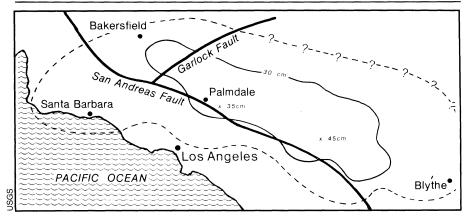
Another serious charge is that SKI omitted results favorable to Laetrile. The report did not mention preliminary experiments of Elisabeth Stockert showing an anti-cancer effect. In addition, one out of a group of three experiments by another Sloan-Kettering researcher, Franz Schmid, showed an anti-tumor effect for Laetrile.

Although that experiment was included, the report summary states, "All experiments of three independent observers ... have failed to confirm Sugiura's initial results."

Sloan-Kettering spokesmen say that the "minor inconsistencies" reported by Second Opinion do not change the basic conclusion of their report. Alec Pruchnicki, a

member of Second Opinion, says "Second Opinion makes no claims as to Laetrile's efficacy.... We feel however that an objective study of our paper and the SKI report yields that 'shred of evidence' of amygdalin's [Laetrile's] efficacy which government officials have said is necessary for them to begin chemical tests in humans."

Palmdale Bulge gets \$1.4 million survey



The Palmdale Bulge: Dashes denote zero elevation change from 1959 to 1974; solid contour encloses area uplifted 30 cm or more; x's show peak elevations attained.

California has long been a major focus of U.S. concern about earthquakes, but in the last couple of years it has become even more so. Ever since the early 1976 discovery of the anomalously uplifted region known as the Palmdale Bulge, says Robert Hamilton, chief of the U.S. Geological Survey's Office of Earthquake Studies, "about one-third of the national research effort in earthquake prediction has been focused on southern California."

Now the focus is getting tighter still. For the next three months, the bulge will be the exclusive subject of a detailed survey costing more than \$1.4 million and involving a small army of personnel and equipment. The usgs and the National Geodetic Survey will marshall 18 teams charged with measuring ground levels and five more to report on gravitational variations. Another 18 leveling teams will be provided by Imperial, Los Angeles, Orange, Riverside, San Bernardino, San Diego and Ventura counties, Los Angeles City, the Los Angeles Water and Power Department, and the Metropolitan Water District of Southern California.

The uplift at present extends from near Point Arguello about 575 kilometers eastward to the Arizona border, centered in the Mojave Desert north of Los Angeles. It covers nearly 84,000 sq. km, across which the leveling teams will establish about 4,000 km of carefully measured survey

lines as baselines against which to measure any future changes.

The changes that are the objects of concern are not the gradual variety that can take thousands or millions of years, but much more rapid ones already known to be characteristic of the area. Although the bulge was identified only two years ago, a search of uses records showed that "a regional episode of major uplift" began sometime after May 1959," according to the Survey's Robert O. Castle. "About mid-1961," he says, "an area including Palmdale, Barstow and Mojave rose abruptly as much as 25 centimeters, then gradually increased another 10 cm during the following decade. Between late 1972 and early 1974, the uplift expanded in area to the southeast, where a maximum elevation increase of 45 cm occurred near Yucca Valley." In the two years leading up to the bulge's discovery, much of the uplift subsided, so that the region just north and east of Los Angeles is now about 10 cm lower than it was in 1955, while the region around Palmdale is about 20 cm higher.

The bulge does not necessarily presage a major quake, Hamilton points out. The implied stresses could result in several smaller quakes, or even no quake at all. The broad survey, replacing earlier efforts that were either too localized or too diverse in their specifications, could be a key aid in finding out.

SCIENCE NEWS, VOL. 113, NO. 1