

MEDICINE

# Radio-Strontium Tested as Treatment for Bone Cancer

Radioactive Metal, Made in Atom-Smashing Cyclotron, Carried Directly to Affected Bones; Relieves Pain

**P**ATIENTS hopelessly sick with cancer which has spread to the bones from its original location in the breast or prostate gland are now being treated with radio-strontium, made by the atom-smashing cyclotron, its inventor, Prof. E. O. Lawrence, of the University of California, announced at the Natural Science Symposium celebrating the 175th anniversary of Rutgers University.

It is too early to know what the results of this treatment will be, although favorable signs including control of pain have been observed.

The cyclotron attack on cancer and other serious diseases now includes use of neutron rays, made by bombarding a beryllium target with high speed deuterons, to treat cancer; use of radio-phosphorus for treatment of the blood dis-

eases leukemia and polycythemia vera; and use of radio-iodine for treatment of tumors and enlargement of the thyroid gland.

The idea of using radio-strontium for treating bone cancer arose from studies of the late Dr. Charles Pecher at the University of California, who found through harmless tracer doses of radio-calcium and radio-strontium that strontium, like calcium, after it is taken into the body goes immediately to the bones, particularly to new-forming bone tissue and cancerous growths in bones, practically none of it being deposited elsewhere. Either strontium or calcium, therefore, could be used to carry cancer-killing radiation straight to cancerous bones. Radio-strontium is being used, because it can be made more easily in the

cyclotron than can the radio-calcium.

The small, harmless tracer doses of radio-calcium and radio-strontium also are giving information about the action of vitamin D in rickets, Prof. Lawrence reported.

Vitamin D, these studies have shown, both promotes the absorption of calcium and in other ways promotes mineralization of bone.

*Science News Letter, October 18, 1941*

ANTHROPOLOGY

## Gestures Not Inherited—They Are Imitated

**Y**OUR gestures with hand or head as you talk are not inherited from your dead ancestors—despite Nazi racial and political views that gestures are part of each human being's racial descent. Gestures are picked up from people around you, and living in a different land you might be a different person, so far as gesture mannerisms go, so Dr. David Efron of Sarah Lawrence College concludes in a scientific study of New Yorkers, *Gesture and Environment*. (*Reviewed, SNL, this issue.*)

Dr. Efron has analyzed gestures of two sample groups — southern Italians and eastern Jews in the city.

Each group, he learned, has distinct mannerisms which disappear as an individual becomes assimilated into American life. The more complete the assimilation, the fewer arm-sweeping Italian gestures or hand-waving Jewish gestures an individual will use. In fact, as Americanization advances, these types use fewer gestures. Like people with two languages, they may acquire hybrid gestures, part American and part foreign. They also take on Americanisms, which run to such mannerisms as emphatic fist movements and slicing.

To study these New Yorkers, Dr. Efron observed gestures in homes, restaurants, at race tracks, in summer resorts and schools.

The claim by "the high priests of political anthropology in the Third Reich" that the amount and manner of gesticulating of an individual are determined by racial descent is not upheld by scientific analytic study, Dr. Efron declares.

Stating that these authors have nothing to go on but vague impressions and a few "selected" photographs, Dr. Efron says emphatically:

"Their theories of 'race' are plagued with conceptual fictions that have no place in scientific reasoning."

*Science News Letter, October 18, 1941*



### IN THE ARMY NOW

*Originally intended for the airlines, this new 20-ton Curtiss transport plane has been taken over by the U. S. Army for use as a transport and cargo plane. It is said to be America's largest twin-engined airliner and was designed to carry 36 passengers, a crew of five, and 5,000 pounds of baggage at top speed of 3½ miles a minute.*