

MEDICINE

Mice Get Cancer Immunity From Tumors in Skin

A WAY to produce immunity to cancer has been reported to the French Academy of Sciences by Prof. Alexandre Besredka and Dr. Ludwik Gross of the Pasteur Institute (*Comptes Rendus*, Feb. 25)

The method applies to mice, not men. Human application of this method is not now possible and may never be. The study, however, advances knowledge of cancer and its ways. It may perhaps prove to be an important forward step in the fight against this great killer of man.

The cancers in this study were artificially produced in the mice by inoculating the animals with a certain kind of cancer cells. In the course of their study, Prof. Besredka and Dr. Gross found that inoculation within the skin of the mice

gives vastly different results from inoculation under the skin.

The latter method, inoculation under the skin, has been common practice and invariably the tumor which followed has ended in the death of the mouse, often with a tumor the size of a large nut. Inoculation into but not under the skin, however, produces a tumor which grows to about the size of a pea and then disappears gradually leaving the mouse healthy.

Further tests on these mice which had completely recovered revealed the fact that they could not be given another cancer, even by inoculation under the skin. They had acquired cancer immunity, a long-sought goal which would be a priceless boon to humanity.

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enthusiastically the possibilities of using radiosodium, although it is recognized that immediate use of this new substance may be delayed by high cost of production.

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PALEONTOLOGY

Baluchitherium Bones Built Into Synthetic Giant

HUGEST of all mammals that ever walked on land, *Baluchitherium* must have been an awesome figure in the dim forests of 40 or 50 million years ago. This enormous beast, distant relative of the modern rhinoceroses, stood 17 feet 3 inches high at his shoulders, according to new estimates prepared at the American Museum of Natural History in New York. Drs. Walter Granger and William K. Gregory assembled all available bones, representing several individuals, filled in parts that were still absent, and prepared the restoration sketch of the presumptive fleshy outline over the restored skeleton which is reproduced below.

Baluchitherium was a member of the great animal group called the titanotheres, which rose, flourished, declined and disappeared in the earlier days of the Age of Mammals. Prof. Henry Fairfield Osborn, formerly president of the American Museum of Natural History, is author of a notable monograph on these "Titan-beasts."

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PHYSICS

Radium Substitute Made In Greater Quantities

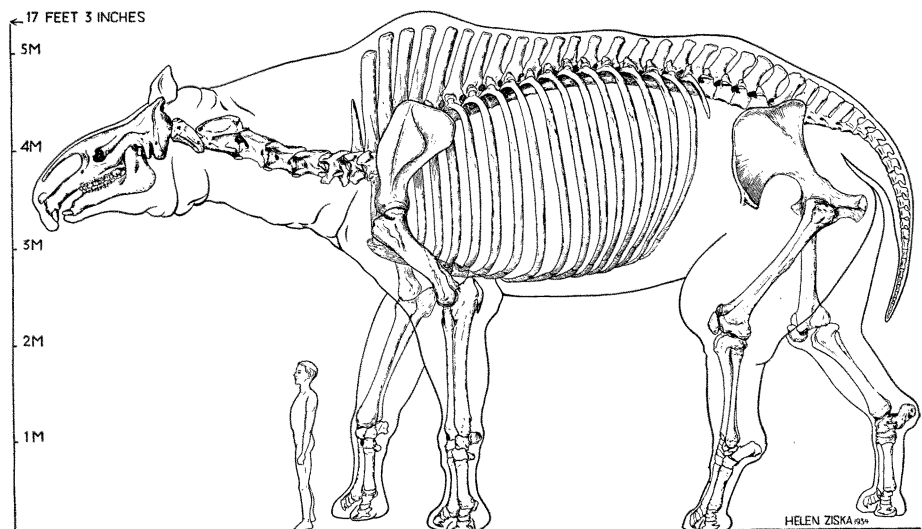
RADIOSODIUM, hailed as a possible substitute for natural radium in yielding radiation useful in cancer treatment and industry, is now being produced "in somewhat greater quantities than reported several months ago" when Prof. Ernest O. Lawrence of the University of California made known his discovery. (*SNL*, Oct. 27, 1934.)

Because sodium as a constituent of common salt is one of the most common things in our daily life and because salt solution can easily be injected into the blood stream, scientists expect the new radiosodium to have practical applications in the future.

Prof. Lawrence makes radiosodium by bombarding sodium with the charged hearts of double weight or heavy hydrogen, called deuterons. When the deuterons are flung with an energy of 1,750,000 electron volts, sodium gamma rays are given off from the new radiosodium formed with energies of 5,500,000 electron volts. These are the world's most penetrating gamma rays. Even more im-

portant, the radiations continue to be given off for 15 hours.

British scientists have just discussed



HUGEST MAMMAL THAT EVER WALKED

Dwarfing even the gigantic Ice Age mammoths, Baluchitherium was the biggest mammal that ever lived on land. This new restoration sketch, with a six-foot man drawn in for comparison, was prepared at the American Museum of Natural History.