Prof. Zavadster sporce about Dr.

IN

MAS

untage ough

> orman public

cialist under p im-

letter

cialist the

emerect a ade-

e its

and plute

d to le a

adeg of been

ness

onal prld

eat e a rk-

of hes s." rly uld

te

ht er

nd th id

of

70 nd

ed.

Preparation Highly Poisonous to Tumors but Harmless to Patients Is Sought.

### ANIMALS USED IN STUDY

Wood of Crocker Institute, in Annual Report, Stresses Work of Dr. O. F. Krehbiel.

An attempt to combat cancer medicinally by the injection of a lead preparation which would be highly poisonous to the cancerous tumor but harmless to the patient was announced yesterday by Dr. Francis Carter Wood, director of the Crocker Institute of Cancer Research of Columbia University, in his annual report to President Nicholas Murray Butler.

Dr. Wood indicated that the research, as conducted by Dr. Otto F. Krehbiel, has not yet led to the discovery of the correct preparation, but that the experiments will be continued with a view to future success.

"It may be recalled," Dr. Wood said, "that Dr. Paul Ehrlich tested 606 compounds before he discovered salvarsan. While the problem is more difficult with cancer because the disease is not a parasitic one, it is far

difficult with cancer because the disease is not a parasitic one, it is far too soon to discontinue such investigation. It is perfectly possible that a lead compound will be discovered which is highly toxic to the tumor and not so toxic to the animal which bears it. Should this be accomplished, the treatment of cancer by medicine will be in sight."

Dr. Krehbiel's methods, according to the report, have included tests of a large series of lead preparations produced by a group of chemists working especially on the subject. The technique consists of injecting into the veins of an animal bearing a tumor increasing doses of the particular chemical. A day or two later the animal is killed. A cross-section of the tumor is compared with an untreated "control" tumor of the same strain, and with another one treated with an original lead preparation devised by Professor W. Blair Bell of Liverpool, with a view to the damage produced in the growth by the injection.

Proof that purified mineral oils widely used in medical practice cannot cause cancer was established at the institute during the year, Dr. Wood revealed. Fear had arisen from publication listing a long series of cancer cases among workers in certain types of lubricating oils. The harmlessness of the oils was reported ascertained by experiments on mice and rats.

Experiments by Dr. Jacob Heiman, the report went on, investigated the

ascertained by experiments on mice and rats.

Experiments by Dr. Jacob Heiman, the report went on, investigated the possible production of skin cancer by ultra-violet light. Rabbits were subjected to large "doses" of ultra-violet light, such as is commonly given to human patients. Dr. Wood admitted that the results, which were negative, did not necessarily contradict English experiments which used mice be-

cause the skin of the mouse is more sensitive than that of the larger

sensitive than that of animal.

Dr. Wood cited the increasing popular interest in the subject of cancer since the disease shifted into second place on the mortality list, with only heart disease above it. At the same time, he deplored a "considerable amount of printed matter" appearing as news, but which, he said, should be "in the advertising columns, and paid for as such."

"An unfortunate illustration," he

paid for as such."

"An unfortunate illustration," he explained, "has been the stampeding to the west coast of a large number of cancer patients in order to obtain injections of a fluid which even the originators did not claim would cure cancer. The delusion was not limited to the so-called lower classes. Even highly intelligent people were led by lurid press reports into believing that at last something wonderful had been discovered.

discovered.

discovered.

"But the only cancer cures which have survived in the hands of the profession for more than a year have been surgery and radiation."

Dr. Wood added that this publicity "has a side which will ultimately benefit the human race, for it has interested the people who are generous and see with sufficient clarity that the only way in which cancer ever is to be cured is by exhaustive and time consuming researsh as to the nature of the dise, se." search as disease."

search as to the nature of the dise. se."

It will be time to look for a cure when that fundamental problem is solved, he asserted, but "nothing will be gained by rambling, guesswork investigation by imcompetent students. If the money which was wasted by those who journeyed to California this year had been devoted to research, it would almost certainly have shortened the period which must elapse before we know that the varieties of cancer which are not curable at present may ultimately yield to our attack."

Dar. Wood declared that only \$400,000 is spent on cancer research during a year by the entire world, while many corporations spend five times that much in commercial research.

### AMERICA'S FIRST ACTOR.

fir

of

si pi er

### Low Pressures 1 **Improve Cancer** Cure of Rats

Altitudes of 20,000 Feet Are Beneficial to Large Group of Test Rodents

Treatment Is Gradual

Better Results Experienced on Internal Disease Trial

BERKELEY, Galif., May 24.—Another avenue of approach to the cancer problem has just been brought to the attention of the medical profession by Dr. E. S. Sundstroem, associate professor of blo-chemistry at the University of California Medicar-of California Medicar-intz, research Medical School, and G. research associate.

of Camorina and a control of Camorina and a control of the Professor Sundstroem, in a report for the Proceedings of the Society for Experimental Biology and Medicine, reveals that he has been able to cause reveals that he has been able to cause the disappearance of a fair percentage of both general types of cancer in rats by treatment in low pressure tanks simulating low pressure conditions prevailing at altitudes of 20,000 to 25,000 feet, such as are found in the Andes, and mountains of Alaska and India.

Andes, and mountains of Alaska and India.

Treatment Must Bei Gradual.

The report states that when rats suffering from cancer of either the skin or internal tissue were gradually subjected to a low oxygen tension environment in specially bulk tanks partially exhausted by vacuum pumps, from 24 to 83 per cent of the rats were definitely freed of their allment, and from 12 to 22 per cent showed apparent recovery.

It is pointed out that this evidence is only experimental, that it has only been tried on rats, and that the effect of such treatment on human beings cannot be prophesied. Whether low oxygen tension would have the same effect on malignant growths in humans can be determined only by trial.

Lack of Care Causes Death

# Tests Show High Altitude Cures Some Cancer Cases

no

Sa

wi

sh

at

Qi

tw

rie

sh

ho

res

fu

of

Jo

wa

ye:

W

Na

pr

BERKELEY, Cal., April 7 (AP)—Results of treatment of cancer-infected rats, in tanks containing atmospheric pressures equivalent to high mountain areas, was described by Dr. Edward S. Sunstroem, of the University of California, to the American College of Physicians today as 'very encouraging."

Dr. Sundstroem said it had been found the peoples of Thibet and other high countries were comparatively free of cancer.

In a tank containing an atmospheric pressure equivalent to 25,000 feet above sea level, thirty-two rats were kept. He said 34 per cent were definitely cured, 22 per cent apparently cured and 44 per cent uneffected by the treatment.

Markie Talle H

After

IN NORMAL TISSUES Institute Indicate Substance

Inhibiting Certain Types.

ancing Action Suggested, Tend-ing to Check Growth Beyond Definite Limit,

to Split Awards ears.

SITES

Thursday Win

nto concheduled ing" by erests of

r. Wallay, that nilar to nich reppellate arment ars ago s said, ely the ord of o con-

> other pertytherem the aking wyers fered ner a and that

> > also fact eedıluacity by

### DENIES CHINESE BAR ALL SCIENTIFIC WORK

Lamb Says Andrews Case Has No Effect on His Expedition to Study Medicine of Lamas.

Gene Lamb, organizer of an pedition to Northern Tibet to study the medicine of the Lamas, under whom the country remains remarkably free from illness and disease, announced here yesterday that his plans would be in no way affected by the controversy between the Cultural Society of Peiping and the Central Asiatic Expedition which Roy Chapman Andrews has headed during the last ten years for the American Museum of Natural His-

American Museum of Natural Instance tory.

Mr. Lamb said the announcement of the museum on July 3, that it had ceased its efforts to get permission for further work by the Andrews expedition, became an "interpretation" when the museum gave as a reason, "that the Cultural Society with the backing of the Nanking Government has determined to stop all scientific work in China."

"The museum appears to have adjudged the status of all expeditions by its own unfortunate experiences," said Mr. Lamb, commenting on the published correspondence in which the Chinese society accused Mr. Andrews of "arrogance" and he in turn charged the society with "obstruction."

"In aking this charge," Mr. Lamb

"In aking this charge," Mr. Lamb continued, "the museum has overlooked a number of scientific investigations and expeditions which are being conducted in China. The Rockefeller Foudation in Peiping ap-Rockefeller Foudation in Peiping appears to have encountered no such opposition. Plant explorers from the United States Department of Agriculture are accomplishing their work without becoming involved with the authorities. The Germans have conducted several expeditions throughout the Chinese interior. Yale University recently announced a forth-coming expedition to Western Tibet. "It is very difficult to gauge the adequacy of the reports of difficulities between the Chinese authorities and the museum's representatives."

[From Late Editions of Yesterday's TIMES.]

I

is

SIX DIE AS PLANE HITS

### Reports of Progress in War on Cancer Made at Congress of Surgeons

# CHEATLE DECLARES

British Surgeon Asserts in Talk on Radio There Is 'No Reason for Panic Among Public.'

DETECTION CHIEF WEAPON

Patient Is in Position to Find the Symptoms First, He Says, Listing Early Indications.

MANY FACTS NOW KNOWN sons

But Dr. G. A. Carlucci Notes Cause is Mystery—New Treatment in Head injuries Explained.

CANCER FIGHT EVEN, Second, we have proved that this FINDS CIVILIZATION from the results, engineers is a local one and can be readily, engineered if properly

LLIOTT C. CUTLER. Professor of CANCER CURE NEAR

PREDICTS MORE SERUMS one by Dr. William Dardean of the College of Holds They Will Tend to Supplant

## IS OUTRACING MAN

PILCHER BELIEVES

Beginning to Be Known.

### objective examor the Control of Cancer, in combinothing wrong. In the medical profession ANESTHETIST HOPES of cancer and in-oer of five-year and In-

Prof. V. E. Henderson Says It Would Combine Qualities of Three Now in Use.

HONORED AT A DINNER

Tests Show Cigarettes Send Carbon