

## MEDICINE

# Cancer-Producing Chemical Made From Bile Acid

Synthesis of Methylcholanthrene at Harvard May Bring Quest for Cancer Cause Closer to Success

**B**ECAUSE Harvard scientists have produced synthetically a cancer-producing chemical, the quest of cancer's cause may now be closer to success.

Production of synthetic methylcholanthrene, cancer-producing chemical previously obtained from bile acid, has been announced at Converse Memorial Laboratory at Harvard by Prof. Louis F. Fieser. Easy manufacture of this chemical is expected greatly to facilitate experiments with mice, attacking the perplexing question of the mechanism whereby hydrocarbons of a particular molecular pattern are able to start malignant growth or cancer.

Acquisition by the organism of certain hydrocarbons related to anthracene of coal tar has previously been defined as a condition which can lead to cancer.

Already the ability of the newly produced chemical and five others to produce cancer in mice is being studied.

Another line of attack is the investigation of chemical transformations of bile acids, sterols, and sex hormones normally present in the body to determine whether any of these can be converted into cancer-producing substances like methylcholanthrene by processes akin to those metabolic processes that normally go on in the body.

Further attempts are being made to synthesize hydrocarbons likely to possess a still higher degree of cancer-producing activity, for this would still further facilitate animal studies and might reveal the nature of the cancer-producing activity.

*Science News Letter, March 9, 1935*

From that daring exploit, the young archaeologist brought away nothing very spectacular to capture a public's fancy. The objects she risked her life to salvage are chiefly pottery vessels of plain brown color. The pieces lay buried in the Beach of the Dead with the bones of an ancient people whose manner of living was simpler, and, it seems, earlier than the spectacular glories of Mayan, Aztec, and other Middle American civilizations.

Surviving her first struggle with the river, Mrs. Popenoe returned again when the capricious Ulua permitted. Then, December 30, 1932, she died of a sudden illness.

Now, her discoveries are presented to science in the journal *Maya Research*, and are pronounced of basic value in American prehistory.

The plain colored pottery that she dug from fifteen graves makes an array of spouted vessels, bowls, effigy-shaped vessels, and water jars. They are sufficiently numerous and prevalent to represent a distinct group of people with a culture of their own.

Assigning to them this distinction, Dr. George Vaillant, of the American Museum of Natural History, authority on problems of the dawn era of Middle American civilizations, places the clay wares as "affiliated to other pre-Mayan culture groups in Central America, though probably not the product of the same tribe or people."

This stage of Central American archaeology, he adds, probably contains the seeds of the various civilizations which took growth in Middle America.

And of Dorothy Popenoe, whose interest in ancient America was so intense that she endured hardships repeatedly to study it, he writes:

"It is a tragedy for all her co-workers in the Central American field that Mrs. Popenoe could not have been spared to complete a work with so promising an inception."

*Science News Letter, March 9, 1935*

## ARCHAEOLOGY

# Young Woman Scientist Leaves Record of Daring

**N**OT ALL the archaeological adventures and achievements fall to men.

Down in Honduras, Dorothy Popenoe, young wife of a botanist, obtained important information about the fore-runners of America's great tropical civilizations of the prehistoric world.

Choosing to dig at the Beach of the

Dead, in a sodden, cracking shelf of land overhanging the swift current of the Ulua River, Mrs. Popenoe tied a rope round her waist and set to work. Twice without warning the treacherous shelf cracked and dissolved beneath her feet. But the safety rope held, and she survived the adventure.

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**GLAND FACTORS IN PERSONALITY,**  
by Dr. R. G. Hoskins, Memorial Foundation for Neuro-Endocrine Research, Harvard University.

Tuesday, March 19, 4:30 p. m.

**THE STORY OF MAN,** by Henry Field, Field Museum of Natural History.

In the Science Service series of radio addresses given by eminent scientists over the Columbia Broadcasting System.