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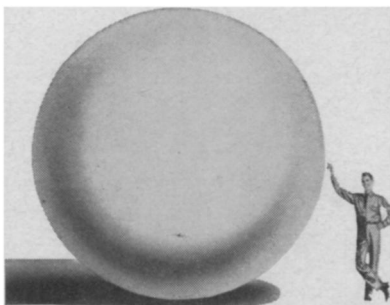
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FROM WEST AFRICA

# Tale of Two Nations

## Nigeria and Ghana work to recreate their basic science organizations.

by Charles Weiss Jr.

The two most important English-speaking countries of West Africa have each taken important steps toward up-to-date organization of science policy.

A decree of the Nigerian Federal Military Government has, for the first time, established research councils for medical and scientific research; Nigeria's political turmoil, however, may inhibit their effectiveness.

The military government of Ghana, on the other hand, has suspended the secretary-general of its Russian-style Academy of Sciences and is considering a move toward a typically Western division of labor between Ghana's National Academy and National Research Council.

The Ghanaian development is part of the dismantling of institutions established by the recently deposed President, Dr. Kwame Nkrumah. Nkrumah vested considerable power in his National Academy of Sciences. This body was modeled basically on the monolithic Russian academy. It combined the advisory function of the U.S. National Academy with the management functions of the Soviet Academy. Its members were elected by virtue of their scientific accomplishments, much as in the U.S. Academy. Once elected, they sat on governmental committees charged with management of research.

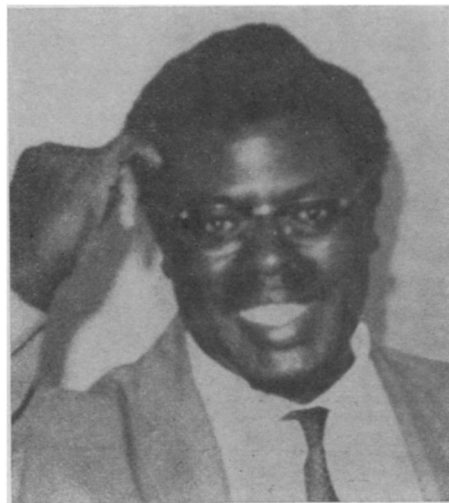
With strong presidential backing, the Ghana Academy was able to establish its authority over the decentralized national research institutes. Dr. J. Yannie-Ewusie was appointed secretary-general, and pressured the institutes to bring their research into line with priorities set by academy committees.

The academy further requested that the University of Ghana report on its agricultural researches, a request that the university steadfastly refused to satisfy. The academy then transferred much of the agricultural research budget to one of its own institutes.

University of Ghana scientists suffer from a common African combination of a heavy teaching load plus long delays in obtaining equipment. Like researchers at universities everywhere, however, they feel that the university, —and not the national institutes—is the natural home of research.

With Nkrumah out of the picture, directors of the institutes have argued for greater autonomy on the grounds

that the academy lacks the staff and skill to supervise a \$4.5 million research effort. The university is fighting to keep control of a number of its independent research programs which are free from teaching pressures.



Dr. J. Yannie-Ewusie

Many Ghanaian scientists feel that restricting the policy-making role to academy members results in a disproportionate representation of fields that happen to have an academy member, and makes non-academy scientists feel powerless to bring their views to the attention of the government.

Pending reports of investigating committees on science set up by the military government have not yet been formally approved or released; no final decision has been reached on the future of Ghana's scientific organization. Dr. Yannie-Ewusie has been suspended as secretary general, and it appears likely that Ghana will move toward a decentralized organization, with a largely honorary Academy of Sciences advising a governmental research council which would manage the research.

Since most council members will probably still be in the academy, however, this change may be more apparent than real.

Nigeria, on the other hand, has no official science organizations to remold. Although the University of Ibadan in Western Nigeria boasts the best equipped research laboratories in West Africa, there is still no official organization by which the weight of scientific

opinion can make itself felt within the government.

The most immediate problem of the fledgling Nigerian research councils is political rather than scientific. Eastern Nigeria, which includes much of the country's leading scientific talent, has recalled its citizens from other regions and virtually cut off communication with the rest of the country.

The East's military governor, Lt. Col. Emeka Ojukwu, has declared that it will not recognize acts of the Federal Military Government unless they conform to the East's desires. Given this state of virtual insurrection, it is doubtful that Eastern scientists would accept appointment to the councils, or attend any of their meetings outside the East.

The Science Association of Nigeria, a nongovernmental group, has in the past provided the government with some contact with the scientific community. Its president, Dr. Eni Njoku, vice chancellor of the University of Nigeria at Nsukka, in the East, is an internationally renowned scientist.

Recently, however, he was prevented from attending a meeting of the association held in the West. Unless the association can meet somewhere outside of Nigeria, its incipient role as a unifying force is likely to be denied it.

FROM GENEVA

## Comparative Oncology

The World Health Organization has launched a new international drive in comparative oncology, to find clues in animals to human cancer.

Dr. Martin Kaplan, WHO veterinary unit chief, says the move links the Organization's animal health program and intensified work in comparative medicine.

The UN professional agency has established an international reference center for animal cancers at the Armed Forces Institute of Pathology, Washington.

To date, at least six other institutions have agreed to work with the new center:

Department of Experimental Veterinary Medicine, University of Glasgow, for leukosis; the University of Zurich's Veterinary Pathology Institute, for lung tumors; the University of Bern's Ambulatory Veterinary Clinic, for tumors of the nervous system; the Netherlands Cancer Institute, Amsterdam, for tumors of the mammary glands and reproductive tract; The Royal Veterinary College's Pathology Department, London, for leukosis and tumors of the alimentary tract and liver; and the Munich University Institute for Animal Pathology, for skin tumors.

These and other centers will collect

tumors of the six most common domestic animals—the horse, ox, sheep, pig, dog-and-cat and of nonhuman primates.

"Then, says Dr. Kaplan, "we'll all work out a system of classification and nomenclature, conforming as closely as possible with the system WHO sponsors for human tumors."

The centers will also gather epidemiological data on the occurrence of various tumors in domestic animals and take part in advanced research.

WHO doctors expect to gain knowledge that will ultimately contribute to control of cancer in man. But "a more immediate result should be the discovery of promising opportunities for etiological studies and of suitable animal models for therapeutic trials in man," says Dr. Kaplan. "Neoplasms are common biological phenomena."

The worldwide waves of influenza are now believed to be linked to animal infections and some beasts' strange ability to harbor dormant viruses. Dr. Kaplan has implicated Chinese pigs and Asian flu, for example.

WHO is sponsoring an international symposium on comparative leukemia research in Paris, July 11-13.

—David Alan Ehrlich

## Standard Marijuana

While its defenders insist marijuana is harmless, United Nations doctors fight for more control over the traffic in "pot," "tea," "hashish," or "kif," as it may be called.

One first step is to learn just what it is. Experiments on its effects around the world are not comparable because there is no standard "pot." Its active principles vary widely.

Made from the female cannabis plant that grows wild as well as under cultivation in many parts of the globe, marijuana is, according to the U.N. Narcotics Commission in Geneva, the most widely abused natural hallucinogen.

The Commission is attempting to develop an international standard against which all marijuana can be measured for potency.

Samples have been collected from around the world and mixed. Now the result is under study by thin layer chromatography and ultraviolet and infrared spectroscopy at the Commission's laboratory to work out a standard reference sample.

This will allow experimenters everywhere to collate their findings with those of their colleagues in different countries. Both human and animal experimentation is now going forward, with particular interest reported from Greece.

D.A.E.



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