NMI SCIENTISTS
ISOLATE VIRUSES
IN TEXAS STUDY

NMI scientists have succeeded in isolating viruses from 25 patients who suffered attacks of "Devil's Grip" during the recent epidemic in Fannin County, Tex.

The isolated virus strains were grown in suckling mice one to three days old. As yet, it is not known whether the type of virus isolated is a "new" virus or one that has been described before. Despite some similarity to the Coxsackie viruses grown in suckling mice, the Devil's Grip strain appears to be distinct from viruses of this type that are under study at the Microbiological Institute.

In collaboration with state health officials, Drs. R. J. Huebner, J. A. Bell, E. A. Beeman, and Paul Beigelman of NMI have been studying cases of this highly contagious and painful disease since early August, when they were alerted to the outbreak by Texas health authorities. Although the epidemic appears to be past its peak, sporadic cases are still occurring in Fannin County, which is north of Fort Worth near the Oklahoma line. Attacks usually last from four to seven days. Temperatures rise as high as 104 degrees, and severe chest and abdominal pains develop. The disease strikes all ages.

Dr. Huebner, who is Chief of LID's Section on Virus Diseases, returned to Fannin County this month to continue his studies in an effort to identify definitely the causative agent of the disease. Once this is accomplished, it may be possible to devise means to prevent future outbreaks.

NIH EMPLOYEES DONATE BLOOD

John W. Owens (left) and Julian W. Holland, Laboratory Aids Branch, have their temperatures taken by Red Cross nurses' aides preparatory to giving blood. With 172 employees participating, October 17 collections showed a thumping 75 percent increase over the June figure. See page 4 for other pictures.

'PROC SOC' TOPS LIST OF NIH FAVORITES

Here are the top 20 journals.
2. J. Biol. Chem.
5. Science
12. Am. J. S. G. & V.D.
13. Cancer Research
15. Endocrinology
16. J. Bact.
18. J. Pharm. & Exper. Therap.
20. J.A.M.A.
With the discovery of such drugs as penicillin and cortisone, science in recent years has looked with increasing interest to the natural products of soil and animal as a source for treating the diseases of man.

In line with this trend, NIH established in the past year its Section on Chemistry of Natural Products. Headed by Dr. Evan C. Horning, whose staff numbers ten, the Section includes laboratory research units and an instrumental research laboratory, with a microchemical unit and an isolation unit now in the process of organization.

The work of the Section concerns a variety of organic chemical problems important because of their relationship to physiological processes or to compounds with physiological activity. Much of this at present centers on syntheses and reactions of specialized groups of compounds.

As a joint problem with the Section on Chemical Pharmacology, Dr. Horning and his associates are investigating the structure of drug metabolites in an effort to learn more about the metabolic pathways followed by certain drugs. The Section is also studying the reactions of polyphosphoric acid, a reagent whose structure is best represented as a linear polymeric phosphoric anhydride. In progress is a study of aromatization reactions involving indazoles, benzotriazoles, and other heterocyclic systems.

A search for the hypotensive (low blood pressure) principle reported to be present in extracts of the fruit of the hawthorn has recently been initiated by the Section. This investigation is the first in a general review of plant materials which have been described in folklore or early medical use as exerting influence upon the cardiovascular system.

A study of oxidation reactions of indoles and related compounds, under the direction of Dr. Bernhard Witkop, looks toward a better understanding of oxidative mechanisms and of metabolic changes involved in indole transformations in biological processes.

Because organic chemical work usually requires close coordination of laboratory research with new instrumental techniques, the Section's instrumental unit works closely with each investigator in studies of chemical structure or reactions. Infrared and ultraviolet absorption methods are particularly helpful and are in constant use.
HEART, CANCER NOW
BIG KILLERS OF CHILDREN

Cardiovascular disease and cancer -- conditions commonly associated with middle and old age -- now kill more children of school age in this country than all the infectious and parasitic diseases combined.

Deaths from these so-called degenerative diseases in 1948 totaled 4,514 in the 5 to 19 age group, as compared with 3,990 deaths from infectious and parasitic diseases in the same age group. Fifteen years earlier the infectious and parasitic diseases killed about two and a half times as many children as cardiovascular disease and cancer -- 17,449 as against 7,153.

The figures are from a report by Harold A. Kahn, NHI statistician, published in the September 28 issue of Public Health Reports.

Comparisons here are relative and do not reflect an increase in deaths from cardiovascular disease and cancer. Actually, there has been an over-all decline in the number of all deaths from diseases in childhood.

A breakdown of the two categories for 1948 show chronic rheumatic heart disease heading the list of deaths from cardiovascular conditions, with leukemia and aleukemia first on the cancer list. Among the infectious diseases, tuberculosis led all others by a substantial margin.

The report is based on figures compiled by PHS's National Office of Vital Statistics.

Paramecia Given Rough
Time, Thrive on It

Adversity, say the scientists, may do more to insure a long-lived and healthy population than the soft life to which most people aspire. This hypothesis was advanced at the 2d International Gerontological Congress, held last month in St. Louis.

In experiments described by Dr. R. R. Spencer of NCI, one-celled animals (paramecia) were rhythmically exposed to unfavorable environments. Though some animals died, others mutated to fit the environment and not only survived but were healthier and lived beyond their normal lifespan.

DOUBT CAST ON LINKING
OF CANCER WITH AGING

Cancer specialists at the St. Louis meeting of the 2d International Gerontological Congress expressed skepticism about the belief that there is a definite relationship between cancer and aging.

The Congress' Section on Cancer and Aging, of which Dr. R. R. Spencer of NCI was co-chairman, reported that "most observations indicate that the relationship may be more coincidental than actual. The scientists believe that a clear-cut connection between cancer and aging cannot be set forth until more is known about the complexities of both processes. For the most part, they agree on these points: that cancer as a rule is less malignant in older than in younger people; that some types of cancer may be due in part to changed factors of the internal environment associated with the aging process; and that cancer can be induced experimentally in young animals -- the older the animal, the more difficult is induction.
READY FOR NEEDLE

S. A. Duvall, Purchase and Supply Branch, takes relaxed view of things as nurse prepares to tap him for pint of blood.

LANGUAGE COURSES MAY BE OFFERED TO STAFF

Foreign language refresher classes will be offered at NIH if enough employees show an interest in the project.

Institutes and branches have been asked by the Personnel Office to survey their employees regarding their language interests and their preferences as to time and day of week for classes.

A review class in German has already been tentatively scheduled to begin on November 1. Dr. Erich Mosettig of NIAMD has offered his services as instructor.

The Personnel Office said that if enough interest is shown in other foreign languages, review classes in French, Spanish, and Russian may be arranged at a later date.

SEND COUPONS TO T-6

Due to a printer's error, the office address of Mrs. Rebecca Voltik, NCI, was listed in the last issue of the Record as Room 2116, Bldg. 6. The correct address is Bldg. T-6. The Recreation and Welfare Association has asked employees to save the coupons attached to cigarettes from NIH vending machines and send them to Mrs. Voltik. (The printer has been admonished to watch his t's and q's.)

DONOR SCENE IN WILSON HALL

Doctors and nurses from Regional Blood Center interview donors as aides take blood specimens and pass out fruit juice. The blood these donors gave helps patients in 60 civilian and military hospitals in the Washington Region.

Business Women Set the Pace, Take the Pledge

A seven-point pledge in the interest of job efficiency in the critical days ahead was sponsored by the District of Columbia Business and Professional Women's Club as part of its recent observance of Business Women's Week.

Mindful of nutrition's role in promoting pleasant dispositions, the Club declared in Point One that all business women should start the day off with a nourishing, nonsense breakfast -- something substantial enough to ward off ten o'clock fatigue.

Punctuality in arriving at work rated Point Two, with careful grooming next on the list. Attention to planning the day's work and observance of good housekeeping practices on the job represented Points Four and Five.

Rounding out the pledge were two points adjuring business women to take the positive approach to daily problems (welcoming all responsibilities) and to practice the Golden Rule.

Cancer Pamphlet

"Facing the Facts About Cancer," a 32-page revised pamphlet prepared for NCI and the American Cancer Society, has just been released.

NMI SENDS TWO ON COSTA RICA MISSION

Dr. Carl M. Eklund of NMI's Rocky Mountain Laboratory and Mr. W. H. W. Komp of the Laboratory of Tropical Diseases left this month for Costa Rica, where they are serving as consultants in yellow fever investigations for the Pan American Sanitary Bureau.

Costa Rica reported an outbreak of jungle yellow fever in June -- the first occurrence in many years of this type of yellow fever in that country.

Jungle yellow fever exists as an animal and human disease in the jungles. Persons going into the jungle can be protected by immunization. But an unprotected person coming out of the jungle with yellow fever virus in his blood can be the starting point of a dangerous outbreak any place where the Aedes aegypti mosquito, carrier of yellow fever in urban areas, is found.

The outbreak in Costa Rica is being watched very carefully as it could develop into a serious situation. The health department of Costa Rica, the Pan American Sanitary Bureau, and the Institute of Inter-American Affairs have been doing everything possible to limit the spread of the disease in this outbreak.

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