

GERIATRICS

Lifespan May Double in Next Ten Years

► THE Fountain of Youth may be just as unattainable as the mythical pot of gold at the rainbow's end, but given a pot of \$3,000,000, man's lifespan might be doubled within the next 10 years, in one scientist's opinion.

He is Dr. Thomas S. Gardner of Hoffmann-LaRoche, Inc., Nutley, N.J. He would use the money for research in a new branch of science, gerontotherapeutics. The long word means treatment for slowing down the aging rate or preventing the development of many or most of the ailments of the aged and aging.

Dr. Gardner reports increasing the life-span of fruit flies by 46% through a combination of the vitamins, pantothenic acid and pyridoxine and another chemical, sodium yeast nucleate. At an American Chemical Society meeting in Passaic, N.J. he urged further testing on animals of known favorable discoveries in the biology of aging.

Science News Letter, May 27, 1950

MEDICINE

Aureomycin and Terramycin Fight War Wound Germs

► IF the cold war turns hot and bombs start dropping on our cities, aureomycin, the golden yellow drug from a mold, and the newer antibiotic, terramycin, may prove valuable for treating gas gangrene and other serious wound infections.

In preliminary trials with mice, these mold drugs gave "excellent" results in infections with one war wound germ, *Clostridium septicum*, Drs. Eleanor A. Bliss and Patricia Todd Warth of the Johns Hopkins Medical School reported to the Society of American Bacteriologists meeting. Treatment could be delayed as long as four hours after infection and still give these excellent results.

Chloromycetin, on the other hand, was not effective.

Work is now under way to learn whether the two mold remedies will be equally effective in gas gangrene and tetanus, which are caused by related germs.

Science News Letter, May 27, 1950

MEDICINE

Newer Antibiotics May Conquer Fungus Diseases

► FOUR of the newer antibiotic drugs hold promise of conquering fungus diseases of the body for which no other specific remedies have yet been found, three scientists from the Army Medical Department Research and Graduate School reported at

the meeting of the Society of American Bacteriologists in Baltimore.

The diseases are: blastomycosis, also called Gilchrist's disease, in which lungs, bones, liver, spleen and kidneys are affected; histoplasmosis, characterized by enlargement of the liver and spleen with fever, anemia and reduced number of white blood cells; and coccidioidomycosis, better known as San Joaquin Valley fever or simply valley fever, which affects the lungs and in its beginning stages resembles tuberculosis.

The fungi causing these diseases are stopped by polymyxin B, aureomycin, chloromycetin and neomycin. Penicillin and streptomycin have not been successful as remedies for the diseases and streptomycin in test tube experiments stimulated growth of the fungi.

The Army scientists reporting this work are Drs. C. C. Campbell, S. Saslaw, and S. K. Strong.

Science News Letter, May 27, 1950

PHYSIOLOGY

"Ma-Ma" Sound Is an Accident

► WHEN baby first starts to say "ma-ma" it is nothing but a physiological accident, having something to do with digestion and feeding processes, Dr. Harold Westlake, director of the speech and hearing clinic of Northwestern University, stated at a conference of the Child Research Clinic of the Woods Schools in Langhorne, Pa.

As a further blow to maternal pride, he said that baby says "ma-ma" before "da-da" because in the early stages "mouthing, biting and babbling are related."

Science News Letter, May 27, 1950

MEDICINE

TB Danger Greater For Germ Handlers

► A NEW tuberculosis hazard is seriously worrying public health authorities, it was revealed at the meeting of the Society of American Bacteriologists in Baltimore by Dr. A. G. Wedum, chief of the Safety Division of the Defense Department's Biological Warfare Center, Camp Detrick, Md.

The problem arises partly from the number of bacteriologists and other scientists working with tuberculosis germs in the search for better remedies such as streptomycin, and also from the fact that a new culture medium for growing the organisms outside the body allows growth of many more of them in each test tube.

In one laboratory six out of nine workers have come down with TB, Dr. Wedum said. He stressed that no work with tuberculosis is going on at Camp Detrick. His interest in the problem is in teaching fellow bacteriologists the new safety method developed at Detrick for their protection.

Science News Letter, May 27, 1950



EMBRYOLOGY

Earliest Human Life Observed 60 Hours Old

► THE earliest beginning of human life yet observed is a two-cell fertilized human egg, termed a morula, aged 60 hours.

This youngest fertilized human egg was reported to the International and Fourth American Congress on Obstetrics and Gynecology in New York, by Drs. Arthur T. Hertig and John Rock of the Free Hospital for Women, Brookline, Mass., Harvard Medical School, Boston, and the Carnegie Institution of Washington department of embryology at Baltimore.

It measures 178.5 micra, or about seven-thousandths of an inch, in diameter when flushed out of the Fallopian tube from ovary to uterus in a woman whose uterus had to be removed surgically.

Next youngest fertilized human egg was one about four and one-half days old, also observed by Drs. Hertig and Rock.

Science News Letter, May 27, 1950

MEDICINE

Find Why Uterine Tissue Invades Other Tissue

► DISCOVERY of one cause of a painful disease which has been increasing rapidly among American women during the past 20 years was announced by Dr. Richard W. TeLinde and Roger B. Scott of Johns Hopkins Medical School at the meeting in White Sulphur Springs, W. Va., of the American Gynecological Society.

The disease is endometriosis. It is not cancer, but is an invasive disease in which the tissue which lines the inside of the uterus, or womb, invades surrounding tissue. It is the only known human condition in which non-cancerous tissue has this ability to invade surrounding tissue.

One cause, the Hopkins scientists reported, is the retention within the abdominal cavity of uterine lining tissue normally sloughed off during menstruation.

Discovery of this cause was made after the scientists found a way of inducing the disease in monkeys. Success in producing it in the monkeys followed years of fruitless efforts to induce it in laboratory animals so that its cause and treatment could be studied.

The disease is especially prevalent among women in higher income brackets. Pregnancy is believed to cause at least temporary regression and normal or X-ray-caused menopause will arrest it. Male hormone treatment sometimes gives temporary relief but as a rule surgical removal of the involved organs is necessary.

Science News Letter, May 27, 1950

ICE FIELDS

PSYCHOLOGY

Affection Needed by Child for Normal Growth

➤ **MENTAL** and physical development may be slowed in a normal child to the point of backwardness if he is denied affection.

Respect for the child's abilities, however limited, helps to supplement his own efforts, Dr. Ethel B. Waring of New York State College of Home Economics, Cornell University, told a conference in Langhorne, Pa., of the Child Research Clinic of the Woods Schools.

Science News Letter, May 27, 1950

VETERINARY MEDICINE

Scrub Typhus Vaccine To Be Tested

➤ A **NEW** kind of vaccine against scrub typhus, health menace to natives in the far west Pacific areas and to American troops operating in or occupying such areas, is on its way to Kuala Lumpur, Malaya, for testing.

The unnamed vaccine will also be tested against typhoid fever. An Army Medical Department team, which made the first successful use of chloromycetin as a remedy for scrub typhus and typhoid fevers in Kula Lumpur, will conduct the vaccine tests. Members of the team include Maj. Robert Traub, Capt. Herbert Ley, Jr., Capt. Lyman P. Frick, Lieut. Fred Diercks and Lieut. Vernon Tipton. They will report results to Dr. Joseph Smadel at the Army Medical Center in Washington.

Science News Letter, May 27, 1950

GEOLOGY

Gulf Stream Holds Own Against Icebergs

➤ **THE** Gulf Stream is holding its own against the largest number of icebergs in years.

Hundreds of bergs have been brought south to the Grand Banks of Newfoundland this year by the cold Labrador Current. So far, where they cross the "cold wall" into warmer waters of the Gulf Stream, they have melted before reaching U.S.-Europe spring shipping lanes, officials of the Navy's Hydrographic Office said.

A Coast Guard ice patrol vessel and search planes from Argentina, Newfoundland, have kept constant vigil. Twice daily the Ice Patrol commander broadcasts bulletins on the location of the bergs to Washington.

The danger area, marked on a daily Hydrographic Office chart by the words "Bergs north and west of this line," was closer to the southern steamer lanes in mid-May than it has been since the ice season began in late March.

But there was no indication as yet that ships would have to swing even further south to "Emergency Track A" of the North Atlantic Track Agreement, William G. Watt of the Navy's maritime security division said.

Science News Letter, May 27, 1950

PSYCHIATRY

Mental Patient Must Want to Be Helped

➤ **ONE** of the chief reasons for failure of psychiatric treatment is that the patient is taking the treatment with an ulterior motive. He may, for example, be trying to prove that his wife is responsible for all his emotional difficulties.

Or the patient may be going to a psychiatrist because his relatives urged it, or, as in the case of sex deviates or perverts, because of pressure by courts. Failure in such cases is due to insufficient desire on the part of the patient to take treatment and to get well.

Psychiatric treatment is not something that can be forced on anyone, Dr. Louis Koren and associates of the Wayne County Mental Health Clinic conclude from a survey of 268 patients accepted for treatment during the first year of the clinic. The findings were reported to the American Psychiatric Association.

Science News Letter, May 27, 1950

MEDICINE

Anti-Bread Mold Chemical Remedies Eye Infections

➤ A **CHEMICAL** used to check mold in bread and cake is proving useful in treatment of eye infections, Dr. Frederick H. Theodore of the Mount Sinai Hospital and the Manhattan Eye, Ear and Throat Hospital, New York, reports in the *JOURNAL OF THE AMERICAN MEDICAL ASSOCIATION* (May 20).

The chemical is sodium propionate. It is a salt of one of the fatty acids and is related to fatty acids found in human sweat. It stops some common bacteria, such as the staphylococci which is a very common cause of eye infections, and also some fungi that cause skin trouble.

Dr. Theodore has used it in some 1,200 cases of infections of the outer part of the eyes and eyelids, such as conjunctivitis, blepharitis and keratitis. The results in the average acute infection are as good, he says, as with any of the newer antibiotics and the chemical has the added advantages of being inexpensive, stable and not causing any allergic reaction.

Science News Letter, May 27, 1950

ANTHROPOLOGY

Teeth of South African Ape Man Little Like Man's

➤ **GETTING** the teeth into the question of whether modern man had ancestors or cousins in South Africa thousands of years ago, Dr. S. Zuckerman, anatomist of the Birmingham University Medical School in Birmingham, England, finds that the teeth of the South African fossil ape men resemble those of two human types far less than they do those of existing apes.

The large-toothed Australian aboriginal and the medium to small-toothed ancient Egyptians are less like the ancient Australopithecus fossils from South Africa than the teeth of the orang and gorilla.

Science News Letter, May 27, 1950

MEDICINE

New Drug May Be Tested Against Next Fall's 'Flu

➤ **BY** next fall or winter when influenza begins its seasonal increase, a new antibiotic drug may be ready for trial against it. The drug is called subtilin, because it comes from the germ, *Bacillus subtilis*. Mixed with influenza A and B viruses and injected into chick embryos it destroyed the virus in 100% of the specimens, Dr. A. J. Salle, of the University of California at Los Angeles reported to the Society of American Bacteriologists in Baltimore.

The material has not been tested on animals or on humans. It is not a new antibiotic, but only recently has a manufacturer (Commercial Solvents) been interested in making it in large enough quantity for animal tests. It is not yet on the market. It also is effective against the virus of the serious Newcastle disease of poultry.

Science News Letter, May 27, 1950

MEDICINE

Sugar Level in Blood Clue to Cancer Detection

➤ **THE** blood of cancer patients contains more of certain sugars, called polysaccharides, than the blood of normal persons, six scientists at the University of Oklahoma School of Medicine in Oklahoma City have found.

Finding this difference between the blood of cancer patients and that of normal persons may lead to a diagnostic test by a procedure which would take from eight to 24 hours, reports the American Cancer Society which financed the research.

The scientists are Drs. M. R. and C. L. Shetlar, Janeal Villet Foster, Keith H. Kelly, R. S. Bryan and Mark R. Everett.

The increased amount of polysaccharides in the blood was found in 96% of a series of 105 cancer patients.

Science News Letter, May 27, 1950