

MEDICINE

Inadequate Technologists

Insufficiently trained medical technologists, working in hospitals and medical laboratories, are a danger to the medical profession and the health of the population.

► THERE ARE medical technologists and there are medical technologists—and sometimes it is hard to tell the difference between those who are adequately trained to make the diagnostic tests in hospitals and medical laboratories and those who are not.

Professional organizations and hospitals are aroused at the danger.

This situation strikes at the safety of medical service because a wrong laboratory test may mean death of a patient or delay in essential treatment.

Information gathered by a national professional journal, *The Modern Hospital*, 97:98, 1961, shows that there are 16 commercial medical technology schools that do not have as high entrance requirements or rigorous examinations as more than 700 schools of medical technology approved by the American Medical Association.

The 16 commercial and private medical technology schools, through an organization known as the American Medical Technologists and an array of related groups, based mostly at Enid, Okla., are offering to assist hospitals, clinics and other employers of medical technologists. Hospital administrations are said to have difficulty differentiat-

ing between the MT awarded by this group and the MT (ASCP) registration insigne of those trained by an AMA approved school. ASCP indicates that the designation was issued by the Registry of Medical Technologists of the American Society of Clinical Pathologists with headquarters in Muncie, Ind.

The report tells "what hospitals may be getting when they hire graduates of some commercial medical technology schools." In some cases newspapers have carried descriptions of the practices of commercial medical technology schools in their cities. This happened in Cleveland; and in Minneapolis, schools have been investigated by a committee appointed by the Minnesota Department of Education.

These schools, although mainly in cities, draw students largely from rural areas. Tuition ranges from \$620 to \$1,395 cash, or in some cases more, if paid by the month.

Parents signing school contracts presented by salesmen called "registrars" are often liable for one-fourth of the total tuition in some cases even if the student never goes to school after making the down payment.

An estimated 1,500 to 3,000 graduate

from the commercial medical technologist schools each year and some individual schools claim as high as 5,000 and 6,000 graduates over a period of years.

The commercial schools mainly require high school graduation or its equivalent but in some schools the "equivalent" seems to mean that the student has enough money to meet the tuition, the article says.

Qualified medical technologists with the degree of MT (ASCP) must have three years of college plus a fourth year of clinical training in a hospital school of medical technology headed by a pathologist and approved by the American Medical Association. Board examinations are given semi-annually for this degree by the Registry in Muncie.

National interest in adequate training for medical technologists is fostered by the National Committee for Careers in Medical Technology, 1785 Mass. Ave., N.W., Washington 6, D. C., an organization sponsored by the American Society of Medical Technologists, the American Society of Clinical Pathologists and the College of American Pathologists.

In every state the committee has recruiting and scholarship representatives who cooperate with the medical and hospital professions. In addition, the committee gives certificates of merit at regional high school science fairs and at the National Science Fair-International. A major award that consists of a summer job at the Armed Forces Institute of Pathology will be given at the next national fair in Seattle in May.

• Science News Letter, 81:85 February 10, 1962

MEDICINE

TB Infection Airborne

► TUBERCULOSIS is primarily an airborne infection, physicians read in their official *Journal of the American Medical Association*, 179:284, 1961.

The once universally accepted belief that tuberculosis infection results from intimate contact with an open (active) case of tuberculosis is rapidly giving way to the new concept, an editorial commented.

Airborne transmission was suspected of playing a major role in a 1959 outbreak that occurred among 62 of 236 men aboard a U.S. Navy picket destroyer, Lt. Charles W. Ochs of the U.S. Navy Medical Corps reported in an article (p. 247) that sparked the editorial.

Resistant TB germs that settle on the floor or other surfaces can be killed with recently developed powerful detergents, and germs in the air can be killed with ultraviolet radiation, Dr. Ochs said.

The significance of airborne contagion is enhanced by the increasing pace of living with greater crowding and interchange among people, and also by a lower level of natural resistance among the population due to early isolation of TB victims and less contact with the disease, the editorial said. Those responsible for the health of persons in restricted areas, in particular,

schools, factories and military units, should be aware of this type of TB transmission.

Another AMA Journal report shows that methotrexate, the widely heralded drug shown to cure choriocarcinoma, the rare cancerous disease of pregnancy, has scored again. It produced "favorable response" in a patient with advanced cancer of the tongue.

The drug was injected into the carotid artery of the neck, which supplies the cancerous area, but other areas of the body were protected by intramuscular injections of an antidote. Drs. Robert D. Sullivan of Boston and Charles J. McPeak of New York reported the case but said that the treatment was still in the experimental stage (p. 293).

Lifting weights, if not overdone, might help to overcome the physical weakness of young people. Competitive weight lifting for the sake of developing muscles alone cannot be justified, however, the AMA Committee on Medical Aspects of Sports said.

Training in weight lifting under good supervision can strengthen underdeveloped persons, condition athletes and aid recovery following injuries and operations, the statement pointed out (p. 309).

• Science News Letter, 81:85 February 10, 1962



SPACE MIRROR — Inflatable structures made of metallized plastic laminate materials and developed by Geophysics Corporation of America, Bedford, Mass., may be used as solar collectors for satellite power.