

## MEDICINE

## Peace Corpsmen Adjust

Although most Peace Corps volunteers adjusted to the hardships of overseas living, a number did return because they could not adapt themselves.

➤ MOST PEACE CORPSMEN appear to be adjusting to the rigors of overseas service, a team of physicians has determined.

During a 17-month test period in which the Corps placed 3,805 volunteers in 43 countries, only 115 had to be returned to the United States before their stints were up. They came back from 28 nations, half of them Latin American.

The survey group, reporting in Public Health Reports, said that failure to adjust accounted for 71 returnees who began to come back during the first and fourth months overseas.

Among these adjustment failures were 19 persons with poor motivation for going in the first place, such as a threatening involvement at home, avoiding responsibility or for personal gain.

Only six of the poor adjusters had problems with the host country nationals. Five had some conflict with Peace Corps authorities and two with fellow volunteers. Seventeen failed to adapt themselves, nine were too rigid and inflexible, three were too passive, three had a weakness for alcohol and two had troubles in their marriages.

"Compassionate" reasons in which family or personal problems were unrelated to Peace Corps responsibilities brought 21 volunteers home. Only eight returned for

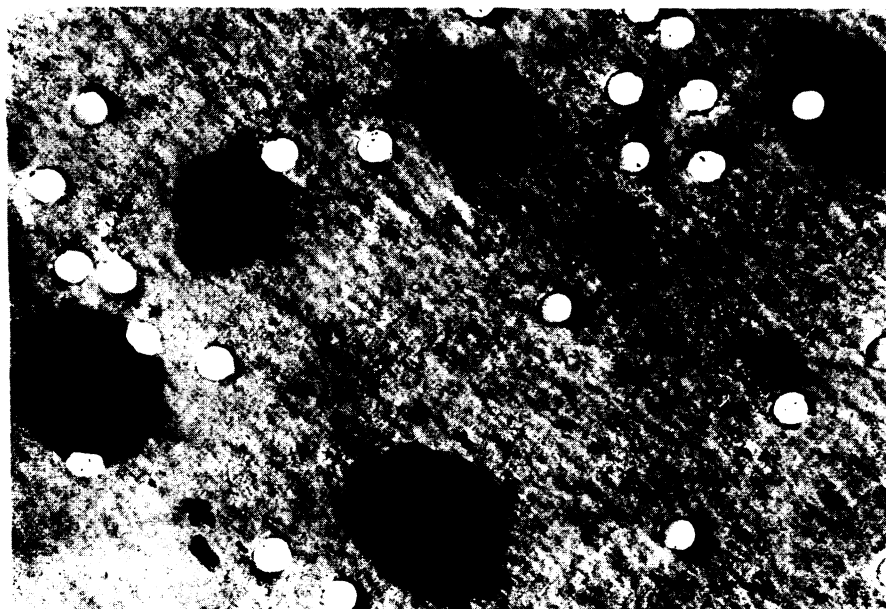
physical illnesses and injuries and 12 came back for psychiatric reasons, including six with serious depressions.

Four deaths occurred. Two volunteers died in a plane crash in Colombia, one died in an automobile accident in Brazil and one died of amoebic hepatitis in the Philippines.

Reasons for returning from Latin America are related to the fact that less educated volunteers often go there, and that many take up jobs not related to their skills. The demands in South America are often for work in rural or urban community development, probably the most difficult of all the Peace Corps assignments because precedent is lacking.

Dr. Captane P. Thomson, now of the University of Edinburgh, Scotland, and formerly on Peace Corps assignment in Boston while at the Massachusetts General Hospital, was a co-author of the report. Dr. Joseph T. English of George Washington University, Washington, D.C., who is chief psychiatrist, Medical Programs Division, Peace Corps, collaborated. Also assisting in the preparation of the paper before going overseas were Dr. Victor Kovner, Peace Corps physician in Venezuela and Dr. Mark Beaubien, Peace Corps physician in Malaysia.

• Science News Letter, 87:5 January 2, 1965



General Electric

**DELICATE FILTER**—The large dark blobs above, which are cancer cells, are shown on a new plastic filter with cylindrical holes (small white circles) having uniform diameters. Since these holes do not clog easily, delicate particles like cancer cells can be non-destructively filtered by gravitational action, rather than by an applied pressure. This section of filter, developed by the General Electric Research Laboratory, has been highly magnified.

## MEDICINE

## Unplugging Arteries Can Prevent Heart Attacks

➤ PREVENTION of heart attacks and strokes is expected to result from a new method which cleans out fats that often clog arteries.

Preliminary work on unplugging blocked leg arteries could easily have wider application, Dr. Charles T. Dotter of the University of Oregon, Portland, told the convention of the Radiological Society of North America in Chicago.

Four older persons avoided leg amputations after having their arteries cleaned out. Dr. Dotter used a wire and catheter to force or enlarge an opening through the blocked area of the artery after first injecting a radiopaque liquid that found its way to the area.

The wire was passed entirely through the fatty deposit that forms on the artery wall and finally blocks the flow of blood through it. A small bore catheter was passed over the wire to enlarge the opening, and where possible, a second, larger catheter was used to return the artery nearly to its original size.

Another report by Dr. John N. Wolfe of Woman's Hospital, Detroit, revealed that X-ray had correctly diagnosed breast cancer in a group of women who were found to have lumps as small as eight to 10 millimeters.

Sixteen of a group of 4,000 Detroit women over 45 years of age had biopsies, or examination of tissue, solely on the basis of X-ray findings, as the lumps were too small to find in an ordinary physical examination. The biopsies confirmed the X-ray diagnoses.

X-ray is thus helping in the early detection of breast cancer, which is a vital factor in its cure.

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## Smallpox Prevented in India by New Drug

➤ A DRUG produced in London has prevented smallpox in India among unvaccinated persons who have been in contact with the disease.

The drug, called Marboran, is one of a group of closely related chemicals known as thiosemicarbazones.

Dr. D. J. Bauer of the Wellcome Laboratories of Tropical Medicine, London, played an important role in the development of Marboran. He suggested after experiments on mice that the parent drug, isatin 3 thiosemicarbazone, might prevent smallpox.

Chemical changes in this drug resulted in development of the more potent Marboran, which was selected for trial on humans. The preparation chosen for trial was a flavored suspension in sugar syrup. Viruses entering body cells that contain sufficient amounts of the drug are virtually falling into a death trap.

Dr. Bauer received the \$500 A. Cressy Morrison Award for his report to the New York Academy of Sciences, which sponsored a conference on antiviral substances.

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