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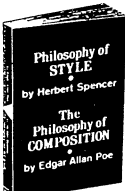


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PHARMACOLOGY

Action of Two Drugs Causes Deformities

➤ THE COMBINATION of two potentially deforming, or teratogenic, drugs, even in amounts that would be harmless if given alone, can produce severe malformations, animal experiments have shown.

Following the discovery that thalidomide can cause grossly deformed infants, experiments in laboratories all over the world have been carried on in efforts to forestall any such future tragedies.

The drug combination, called synergism, was tried on embryonic chicks at the University of Connecticut, Storrs, by Drs. Walter Landauer and Ellen M. Clark, who reported their findings in *Nature*, 203:527, 1964.

The two drugs used together were sulfanilamide and 6-aminonicotinamide. Nervous abnormalities resulting were a kind of St. Vitus' dance and ataxia, or inability to coordinate movements. This is the first time that these nervous abnormalities have been observed in sulfanilamide experiments.

The researchers pointed out that malformations can be made worse or better by unrelated external conditions, but that the mechanisms are largely unknown. More is being learned through drug experiments than through environmental conditions, the scientists pointed out.

A particular chain of "metabolic events" produces abnormalities, they said. Different "steps" within the chain are affected by the two compounds, they believe.

The implication for humans is being studied, but in the meantime "the cautionary consequences of these facts should not require emphasis," the investigators warned.

• Science News Letter, 86:100 Aug. 15, 1964

BACTERIOLOGY

Heated Air Keeps Microscope Warm

➤ A WALL of warm air flowing downward over a microscopic stage can keep tissue cultures at normal temperatures.

Fashioned from inexpensive equipment, this air wall incubator eliminates the need for customary bulky enclosures to keep the culture at necessary warm temperatures, reported Herbert P. Gordon, University of Pennsylvania Dental School in Philadelphia, Pa.

The equipment is independent of and easily adaptable to any microscope, Mr. Gordon reported in *Nature*, 202:1035, 1964. Temperatures of about 98.6 degrees Fahrenheit have been maintained on the stage level for as long as six hours, and he believes such temperatures could be maintained "indefinitely."

In order to obtain and maintain the desired temperatures on the stage and prevent creeping overheating, Mr. Gordon suggested that the unit be preheated for one hour before placing cultures on the stage for observation.

• Science News Letter, 86:100 Aug. 15, 1964

Questions

ARCHAEOLOGY—How could changing river courses have brought the economic decline of the Roman Empire? p. 104.

ASTRONOMY—What could account for the tremendous energies radiated by quasars? p. 106.

BIOCHEMISTRY—How are researchers determining which chemical "triplet" specifies a certain amino acid? p. 103.

DENTISTRY—What ability of the laser makes it superior to the drill method of removing dental caries? p. 105.

PHYSICS—What is the experimental evidence that time is not always symmetrical? p. 99.

SPACE—What device will enable the LEM to distribute its weight over a large surface area of the moon? p. 101.

SCIENCE NEWS LETTER

VOL. 86 AUGUST 15, 1964 NO. 7

Edited by WATSON DAVIS

The Weekly Summary of Current Science, published every Saturday by SCIENCE SERVICE, Inc., 1719 N St., N.W., Washington, D. C. 20036. NOrth 7-2255. Cable Address: SCIENSERV.

Subscription rates: 1 yr., \$5.50; 2 yrs., \$10.00; 3 yrs., \$14.50; ten or more copies in one package to one address, 7½ cents per copy per week; single copy, 15 cents, more than six months old, 25 cents. No charge for foreign postage. Change of address: Three weeks notice is required. Please state exactly how magazine is addressed. Include zip code.

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Printed in U.S.A. Second class postage paid at Washington, D. C. Established in mimeograph form March 13, 1922. Title registered as trademark, U. S. and Canadian Patent Offices. Indexed in Reader's Guide to Periodical Literature, Abridged Guide, and the Engineering Index. Member of Audit Bureau of Circulation.

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