

SOUTHWEST CENTER FOR ADVANCED STUDIES

POST OFFICE BOX 30365
DALLAS, TEXAS 75230

(214) ADAMS 1-1471

RELEASE ON RECEIPT
March 7, 1969

Al Mitchell, Director of
Public Affairs - Ext 215

MEDICAL SCIENCES INSTITUTE MAKES GRANT FOR ULTRAVIOLET EFFECTS STUDY

National Institute of General Medical Sciences has granted fifth-year funding of \$56,137 to the Southwest Center for Advanced Studies for further investigation into effects of ultraviolet radiation on genetic material in bacteria and bacteriophage.

The continued research is directed by Prof. Walter F. Harm of the SCAS' Biology Division. The total program is expected to continue for eight years; fifth-year funding brings the NIGMS support thus far to \$263,489.

In addition, Professor Harm's work is supported by a Career Development Award made by NIGMS. Now in the third year of a five-year period, the career award provides \$31,500 annually.

Ultraviolet radiation, explains Professor Harm, causes damage to the genetic material (DNA, deoxyribonucleic acid) of bacterial and phage, or bacterial virus, organisms. The damage results eventually in killing or mutation, besides some other effects.

In his research, special emphasis is given to various kinds of "very effective cell repair processes by which the UV damage is abolished.

"The natural basis for these micro-organisms being endowed with such protective mechanisms is most likely the environmental sunlight, whose short wavelengths component cause similar kinds of damage to micro-organisms as commercial 'germicidal' lamps used on food counters; and, which are equally well repaired.

"There are now good indications that repair processes of the kind being investigated in micro-organisms also play an important role in the health of many higher organisms, possibly including man," says Professor Harm.