

Factors affecting cellular photosensitivity

PROCEEDINGS OF THE PHOTOBIOLOGY MEETING (*)
HELD AT THE ISTITUTO SUPERIORE DI SANITÀ - ROME, ITALY
8th May, 1969

EDITOR:

A. CASTELLANI (**)

- P. C. HANAWALT (U.S.A.) – The *in vivo* demonstration of repair replication.
- L. GROSSMAN, J. KAPLAN, S. KUSHNER and I. MAHLER (U.S.A.) – Enzymatic mechanisms for the repair of UV irradiated DNA.
- P. VAN DE PUTTE and C. A. VAN SLUIS (The Netherlands) – Repair from UV damage in *E. coli* and *M. luteus*.
- P. T. EMMERSON (France) – DNA repair processes in *Escherichia coli*: studies with mutants defective in genetic recombination.
- J. D. REGAN (U.S.A.) – On the two mechanisms of repair of ultraviolet-damaged DNA in vertebrate cells.
- J. E. CLEAVER (U.S.A.) – Repair of mammalian cell DNA: effects of drugs and mutations.
- C. F. ARLETT (Great Britain) – The influence of metabolic inhibitors on the response of Chinese hamster cells to ultra-violet light.
- L. MUSAJO (Italy) – Biological consequences of the photobinding of furocoumarin molecules with nucleic acids.

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The Meeting on «Factors affecting cellular photosensitivity» — the first one held in Italy on this topic — was organized by the Italian Group of Photobiology under the sponsorship of the «Comité International de Photobiologie». It was held at the Istituto Superiore di Sanità in conjunction with the Second International Symposium on Radiosensitizing and Radioprotective Drugs. In this way the simultaneous presence of highly qualified photo- and radiobiologists was made possible.

The meeting was mainly centered on the relationships between photosensitivity and the mechanisms of repair of radiation damage at the cellular level. Such mechanisms, which are one of the exciting achievements of modern biology, imply the enzymatic repair of the potentially lethal damage caused by ultraviolet radiation to cellular DNA. Similar mechanisms are probably involved in the repair of DNA damage by ionizing radiation.

The meeting was planned to discuss the latest informations on the subject with special attention to the relationships between repair processes and radio- and photosensitivity. Another important topic was the discussion of the photosensitization of nucleic acids by furocoumarins.

The Editorial Board is glad to devote a special issue of the «Annali dell'Istituto Superiore di Sanità» to the Proceedings of this meeting. Dr. A. Castellani deserves special acknowledgments for the work done in organizing the meeting and editing the Proceedings.

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