

Contents

Magdon, E.: Introduction	7
------------------------------------	---

Fundamentals of DNA repair

DRÁŠIL, V., JURÁŠKOVÁ, V.: Single and double strand breaks in the cellular DNA.	15
BENEŠ, L., MAGDON, E., ROTREKLOVÁ, E., VELČOVSKÝ, V.: Some aspects of unscheduled DNA synthesis in irradiated cells.	27
ZHESTYANIKOV, V. D.: Comparative evaluation of the DNA repair contribution to the recovery of the viability of bacteria and the eukaryotic cells after irradiation.	33
SCHROEDER, C.: The biological specificity of DNA synthesis.	53

DNA repair after UV-irradiation and alkylating agents

STÖRL, K.: Rejoining of incision breaks in the DNA of Ultra-violet-irradiated <i>Proteus mirabilis</i> wildtype and UV-sensitive mutants.	67
WALICKA, M., BEER, J. Z.: UV-light sensitivity and split-dose effects in two strains of murine leukaemic cells L5178Y.	73
VELEMÍNSKÝ, J., POKORNÝ, V., GICHNER, T., ŠATAVA, J., ŠVA-CHULOVÁ, J.: DNA repair in barley after the action of methyl nitrosourea and sulphonic acid esters.	85

Modification of DNA repair by exogenous factors

SCHRÖDER, E., MAGDON, E.: Studies on alterations of DNA repair processes.	95
JACOB, H.-E.: Photodynamically induced DNA damage, their repair and the influence of different chemicals on the repair process.	111
JURÁŠKOVÁ, V., DRÁŠIL, V.: An influence of freezing the cells on the formation of single-strand breaks in DNA after irradiation.	117

Diseases associated with defective DNA repair

HAUSTEIN, U.-F., KLUGE, K., MEFFERT, H.: <i>Xeroderma pigmentosum</i> — report of three cases and ultrastructural investigation of sun-unexposed tumour-free skin.	125
--	-----

HORKAY, I., VARGA, L., TAMÁSI, P., GUNDY, S., NAGY, E.: Effects of UV-light on DNA synthesis in Photodermatoses. . .	151
MIKHELSON, V. M.: Defective repair of γ -irradiated DNA in a case of Xeroderma pigmentosum.	157

Clinical aspects of DNA repair

PRESBER, W., KRÜGER, D. H.: The importance of frame-shift mutations in carcinogenesis.	175
WILKINS, R. J.: Clinical aspects of DNA repair.	181
List of Authors	197
Index	199