

TABLE OF CONTENTS

EDITORIAL

TWENTY FIVE YEARS OF THE NATIONAL ACADEMY OF MEDICAL SCIENCES OF UKRAINE – PROGRESS AND PRIORITIES FOR FUTURE OF RADIATION MEDICINE AND BIOLOGY	10
Bazyka D.	

ACTIVITIES AND PROSPECTS

STATE INSTITUTION «NATIONAL RESEARCH CENTER FOR RADIATION MEDICINE OF THE NATIONAL ACADEMY OF MEDICAL SCIENCES OF UKRAINE» – RESEARCH ACTIVITIES AND SCIENTIFIC ADVANCE IN 2016	15
Bazyka D., Sushko V., Chumak A., Buzunov V., Talko V., Yanovych L.	

REVIEWS

EARLY AND LATE RADIATION EFFECTS IN HEALTHY TISSUES OF ONCOLOGIC PATIENTS UNDER THERAPEUTIC IRRADIATION	23
Domina E. A.	
EVOKED BIOELECTRICAL BRAIN ACTIVITY FOLLOWING EXPOSURE TO IONIZING RADIATION	38
Loganovsky K., Kuts K.	
A MODERN VIEW ON THE EFFECT OF RADIATION EXPOSURE OF PATIENTS DURING DIAGNOSTIC EVALUATION OF RENAL CELL CARCINOMA AND WAYS TO AVOID IT	69
Mytsyk Yu. O., Borys Yu. B., Datz I. V., Manyuk L. V., Ilchyshyn O. S., Soldatenko O. Ya., Danyleychenko I. V., Makogonov I. O., Skaletska N. M.	

EPIDEMIOLOGY AND DOSIMETRY

PSYCHOSOCIAL STATE OF THE ADULT EVACUEES AND RISK FACTORS OF NEGATIVE CHANGE	79
Buzunov V. O., Loganovsky K. M., Krasnikova L. I., Bomko M. O., Belyayev Yu. M., Yaroshenko Zh. S., Domashevska T. E.	
DOSES FROM RADON-222 IRRADIATION FOR WORKERS OF THE GRANITE MINING INDUSTRY	97
Crygorieva L., Tomilin Yu.	
INFORMATION AND STATISTICAL SUPPORT FOR RETROSPECTIVE STUDY OF MORTALITY AMONG PEOPLE EXPOSED IN CHILDHOOD AS A RESULT OF THE CHORNOBYL ACCIDENT AND LIVING IN CONTAMINATED AREAS OF UKRAINE: ASSESSMENT OF FEASIBILITY	108
Gunko N. V., Omelyanets N. I., Tereshenko C. A., Masiuk S. V., Korotkova N. V., Ivanova O. N.	
RECONSTRUCTION OF INDIVIDUALIZED DOSES OF SUBJECTS FROM THE UKRAINIAN STATE REGISTER – OF PERSONS THAT AFFECTED DUE TO CHORNOBYL ACCIDENT AND RESIDE IN KOROSTEN RAION OF ZHYTOMYR OBLAST	126
Ivanova O. M., Masiuk S. V., Boiko Z. N., Chepurny M. I., Gerasymenko V. B., Kovgan L. M., Zhadan N. S., Tereshchenko S. O., Kravchenko I. G., Kortushin G. I., Marcenjuk O. D., Kukush A. G.	
SOCIAL SAFETY AND MEDICAL MAINTENANCE OF THE LABOUR POOL IN SURVEILLANCE AREAS OF THE NUCLEAR POWER PLANTS	147
Prylipko V.A., Ozerova Yu. Yu., Kotsubinskij O. V., Morozova M. M., Petrychenko O. O., Bondarenko I. V.	
POPULATION MORBIDITY IN THE ZAPORIZHZHIA NUCLEAR POWER PLANT OBSERVATION ZONE AS AN INTEGRAL PART OF PUBLIC HEALTH	162
Khomenko I. M., Zakladna N. V., Orlova N. M.	

EXPERIMENTAL RESEARCH

FEATURES OF MORFOLOGICAL CHANGES IN PRIMARY THYROID GLAND CTLL CULTURES OF RATS DESCENDANTS PRENATALLY EXPOSED BY RADIOISOTOPES OF IODINE-131	172
Boiko O. A., Lavrenchuk H. Yo., Lypska A. I., Talko V. V., Asmolko V. S.	
PECULIARITIES OF ULTRASTRUCTURAL ORGANIZATION AND METABOLISM OF REACTIVE FORMS OF OXYGEN AND NITROGEN IN A CARDIOVASCULAR SYSTEM FOR PERMANENT EFFECTS OF IONIZING RADIATION IN LOW DOSES	184
Horot' I. V., Tkachenko M. M.	
PHOTODYNAMIC THERAPY EFFECT ON HEALING OF RADIATION SKIN ULCER INFECTED WITH <i>PSEUDOMONAS AERUGINOSA</i>	202
Krasnoselskiy N. V., Simonova L. I., Gertman V. Z., Pushkar E. S.	
STUDY THE IMPACT OF ASTAXANTHIN ON DEVELOPING OF GENOMIC INSTABILITY IN HUMAN PERIPHERAL BLOOD LYMPHOCYTES IRRADIATED <i>IN VITRO</i> ON G₂ PHASE OF CELL CYCLE	208
Kurinyi D. A., Rushkovsky S. R., Demchenko O. M., Pilinska M. A.	
TISSUE BREATHING AND TOPOLOGY OF RATS THYMOCYTES SURFACE UNDER ACUTE TOTAL γ-IRRADIATION	216
Nikitina I. A., Gritsuk A. I.	
MESENCHYMAL STEM AND PROGENITOR CELLS OF RATS' BONE MARROW UNDER CHRONIC ACTION OF IONIZING RADIATION	224
Russu I. Z., Rodionova N. K., Bilko D. I., Bilko N. M.	
COMPARATIVE ANALYSIS THE FREQUENCY AND SPECTRUM OF CHROMOSOME ABERRATIONS IN IRRADIATED <i>IN VITRO</i> PERIPHERAL BLOOD LYMPHOCYTES OF THE ELDERLY AND CENTENARIANS FROM KYIV	231
Talan O. O., Shemetun O. V., Demchenko O. M., Papuga M. S., Pilinska M. A.	
CEREBRAL IMPACT OF PRENATAL IRRADIATION BY ¹³¹I: AN EXPERIMENTAL MODEL OF CLINICAL NEURORADIOEMBRYOLOGICAL EFFECTS	238
Talko V. V., Loganovsky K. M., Drozd I. P., Tukalenko Ye. V., Loganovska T. K., Nechayev S. Yu., Masiuk S. V., Prokhorova Ye. M.	
TRANSGENERATION EFFECTS OF N-STEAROYLETHANOLAMINE IN IRRADIATED RATS	270
Chumak A. A., Talko V. V., Atamanyuk N. P., Derevyanko L. P., Rodionova N. K., Kosyakova G. V., Mehed A. F., Gorid'ko T. M., Berdyshev A. G., Gula N. M.	

CLINICAL RESEARCH

INFLUENCE OF POLYMORPHIC VARIANTS OF THE SLC6A4 GENE ON THE FREQUENCY OF DETECTION OF DEPRESSIVE STATES IN THE GROUP OF THE CLEAN-UP WORKERS OF CONSEQUENCES OF CHORNOBYL ACCIDENT IN THE REMOTE PERIOD AFTER THE CHORNOBYL CATASTROPHE	282
Abramenko I.V., Bilous N.I., Chumak S.A., Loganovsky K.M.	
CARDIOVASCULAR DISEASES AND SYSTOLIC FUNCTION OF LEFT VENTRICLE IN CLEAN-UP WORKERS OF CHORNOBYL ACCIDENT (BASED ON 30 YEARS FOLLOW-UP)	292
Bazyka O. D., Bilyi D. O.	
CORTISOL LEVEL AS RISK FACTOR FOR MALIGNANT HEMATOLOGIC PATHOLOGY IN CHILDREN EXPOSED TO IONIZING RADIATION AFTER CHORNOBYL ACCIDENT	306
Bebeshko V. G., Bruslova K. M., Pushkareva T. I., Tsvietkova N. M., Lyashenko L. O., Sergeeva A. S., Kuzmenko V. F., Iatsemyrskiy S. M., Samson Yu. M., Boyarsky V. G., Tryhlib I. V.	
CASES OF THE STAFF UNACCOUNTED EXPOSURE DURING THE CONSTRUCTION OF THE PROTECTIVE SHELL FOR A NEW CONFINEMENT AT THE CHNPP SITE	316
Bezdrobna L. K., Tarasenko L. V., Tsyganok T. V., Kurochkina V. A., Sushko V. O., Shvayko L. I.	

DISTRIBUTION OF rs2124594 GENOTYPES IN CHRONIC LYMPHOCYTIC LEUKEMIA PATIENTS DEPENDING ON RADIATION ANAMNESIS	323
Bilous N. I., Abramenko I. V., Chumak A. A., Diagil I. S., Martina Z.V.	
RADIATION INDUCED VIOLATIONS OF BLOOD CIRCULATION IN THE CILIARY BODY AND CHANGES OF THE ANTERIOR CHAMBER ANGLE IN THE PATHOGENESIS OF GLAUCOMA IN CLEAN-UP WORKERS OF THE CHORNOBYL NPP ACCIDENT AND RESIDENTS OF CONTAMINATED AREAS	332
Garkava N. A., Fedirko P. A., Babenko T. F., Dorichevska R. E.	
COMPARATIVE CHARACTERISTICS OF HEPATOPROTECTORS USED FOR THE TREATMENT OF NON-ALCOHOLIC STEATOHEPATITIS ASSOCIATED WITH HERPESVIRUS INFECTION IN SUFFERERS OF THE CHORNOBYL ACCIDENT	339
Gasanova O. V., Sarkisova E. O., Chumak A. A., Ovsyannikova L. M., Nosach O. V., Alohinia L. M., Gasanov V. A., Kryzhanivska V. V.	
SERUM CONTENT OF TOTAL ADIPONECTIN IN THE CHNPP ACCIDENT CLEAN-UP WORKERS OF THE «IODINE PERIOD» SUFFERING FROM TYPE 2 DIABETES MELLITUS (literature review and research data)	353
Dombrovska N. S., Pleskach O. Ya.	
IMPACT OF CHRONIC BLOOD VIRAL INFECTION ON LYMPHOCYTE TELOMERE LENGTH IN CHORNOBYL CLEAN-UP WORKERS IN A REMOTE PERIOD AFTER RADIATION EXPOSURE	372
Iliencko I. M., Lyaskivska O. V., Belayev O. A., Pleskach O. Y., Shinkarenko V. I., Bazyka D. A.	
PILOT STUDY OF PARATHYROID GLANDS IN ADULT AND PEDIATRIC SUBJECTS EXPOSED TO IONIZING RADIATION AFTER THE CHNPP ACCIDENT, METHODOLOGY OF PARATHYROID DIAGNOSTIC ULTRASOUND	382
Kaminskyi O. V., Kopylova O. V., Afanasyev D. Ye., Mazurenko O. V., Berezovskyi S. Ya.	
MYASTHENIA AND SMALL DOSES OF IONIZING RADIATION: EXPERIENCE OF SUCCESSFUL USE OF RITUXIMAB FOR TREATMENT OF AN IRRADIATED WITH <i>MYASTHENIA GRAVIS</i>	395
Kravchenko V. I., Chumak A. A., Loganovsky K. M., Diagil I. S., Kuzmenko V. F.	
PSYCHOPHYSIOLOGICAL CHARACTERISTICS IN THE CHNPP ACCIDENT CLEAN-UP WORKERS, EXCLUSION ZONE EVACUEES AND ANTI-TERRORIST OPERATION SERVICEMEN	406
Loganovsky K. M., Gresko M.V.	
THE INCIDENCE OF HEMATOLOGICAL NEOPLASMS MORBIDITY ON RADIATION-CONTAMINATED TERRITORIES IN CHERKASY REGION	428
Paramonov V. V.	
RESEARCH OF THE GENE POLYMORPHISM <i>TOX3/LOC643714</i> AND THE RISK OF BREAST CANCER DEVELOPMENT IN PERSONS EXPOSED TO IONIZING RADIATION AFTER CHORNOBYL DISASTER	450
Polinyk S. I., Rybchenko L. A., Klimyk B. T.	
EXPERIENCE OF CORRECTING ENDOTHELIAL DYSFUNCTION IN CHILDREN-RESIDENTS OF RADIOACTIVELY CONTAMINATED AREAS BY NITRIC OXIDE POTENTIAL DONATOR CITRULLINE	463
Stepanova Ye. I., Kolpakov I. Ye., Zygalo V. M., Vdovenko V. Yu., Kondrashova V. H., Leonovich O. S., Kryzhanivska V. V.	
THE ROLE OF THREE-PHASE BONE SCINTIGRAPHY IN ARTHROPLASTY OF HIP AND KNEE JOINTS OF CLEAN-UP WORKERS OF CHORNOBYL ACCIDENT	476
Tkachenko M. M., Korol P. O.	
IN MEMORIAM	484
INFORMATION ABOUT AUTHORS	499
INSTRUCTIONS FOR AUTHORS	511