

Posters

P01. Grażyna Adler (Pomeranian Medical University, Department of Studies in Antropogenetics and Biogerontology, Szczecin, Poland): RELATIONSHIP BETWEEN *H1* AND *H2* HAPLOTYPES OF THE 17q21 INVERSION AND PREGNANCY LOSS IN BOSNIAN POPULATION: A CASE-CONTROL STUDY

P02. Aida Ćatić (Institute for Gynecology, Perinatology and Infertility “Mehmedbašić”, Sarajevo, Bosnia and Herzegovina): DECLINING RATE OF INVASIVE PROCEDURES FOR PRENATAL DIAGNOSIS OBSERVED IN A PRIVATE PERINATAL CLINIC “MEHMEDBAŠIĆ”

P03. Branko Tomić (University of Belgrade, Institute of Molecular Genetics and Genetic Engineering, Belgrade, Serbia): FREQUENCY OF FV LEIDEN AND FII G20210A HOMOZYGOTES AND COMBINED CARRIERS IN LARGE COHORT OF PATIENTS FROM SERBIA

P04. Sajra Komić (University of Sarajevo, Faculty of Pharmacy, Department of Biochemistry and Clinical Analysis, Sarajevo, Bosnia and Herzegovina): MICRO RNA AS A NOVEL BIOMARKER FOR DIAGNOSIS, PROGNOSIS AND MANAGEMENT FOR PATIENTS WITH *DIABETES MELLITUS*

P05. Šaćira Mandal (University of Sarajevo, Faculty of Pharmacy, Department of Natural Sciences in Pharmacy, Sarajevo, Bosnia and Herzegovina): ASSOCIATION OF *FADS1* GENE POLYMORPHISM WITH DESATURASE ACTIVITY IN TYPE 2 DIABETES

P06. Irina Milovac (University of Banja Luka, Faculty of Medicine, Department of Human Genetics, Banja Luka, Bosnia and Herzegovina): *DAT* POLYMORPHISM AND ITS ASSOCIATION WITH IRRITABLE BOWEL SYNDROME

P07. Višnja Tomac (Osijek University Hospital, Department of neurology, genetic, metabolic disease and endocrinology Osijek, Croatia; University of Osijek, Faculty of Medicine, Osijek, Croatia): A RARE MICRODELETION OF CHROMOSOME 19q13.43 SYNDROME – PSYCHOMOTOR DELAYED, INTELLECTUAL DISABILITY, EPILEPSY - CASE REPORT TWO PATIENTS

P08. Višnja Tomac (Osijek University Hospital, Department of neurology, genetic, metabolic disease and endocrinology Osijek, Croatia; University of Osijek, Faculty of Medicine, Osijek, Croatia): A RARE DE NOVO DUPLICATION 21q22.3 SYNDROME - CASE REPORT

P09. Anita Skakić (University of Belgrade, Institute of Molecular Genetics and Genetic Engineering, Belgrade, Serbia): GENOMIC PROFILING OF GLYCOGEN STORAGE DISEASES

P10. Josip Brajković (Labena d.o.o, Zagreb, Croatia): ddPCR, SIMPLE, ACURATE AND RELIABLE TOOL FOR PRECISION DIAGNOSTICS

P11. Marina Anđelković (University of Belgrade, Institute of Molecular Genetics and Genetic Engineering, Belgrade, Serbia): DIFFERENTIAL DIAGNOSIS OF PATIENTS WITH PEDIATRIC LUNG DISEASES AND DISCOVERY OF NOVEL DISEASE-CAUSING GENES AND GENETIC VARIANTS BY USING NEXT GENERATION SEQUENCING TECHNOLOGY

P12. Marija Vuković (University Clinical Center of Republic of Srpska, Banja Luka, Bosnia and Herzegovina): THE INFLUENCE OF *UGT1A1* PROMOTER VARIANTS ON THE BILIRUBIN LEVEL IN SERUM OF PATIENTS WITH β -THALASSEMIA MINOR AND CHRONIC HEPATITIS C

P13. Mirjana Berić (University Clinical Center of the Republic of Srpska, Department of Medical Genetics, Banja Luka, Bosnia and Herzegovina): INFLUENCE OF PRENATAL CYTOGENETIC DIAGNOSTICS IN REDUCTION OF NUMBER OF NEWBORN CHILDREN WITH DOWN SYNDROME AT THE UNIVERSITY CLINICAL CENTER OF THE REPUBLIC OF SRPSKA FROM 2009-2019 YEAR

P14. Svjetlana Đajić Uletilović (University Clinical Center of Republic of Srpska, Department of Medical Genetics, Banja Luka, Bosnia and Herzegovina): TWO CASES REPORT OF UNBALANCED KARYOTYPE 45,XX,der(4)t(4;22)(p16;q11.2),-22

P15. Emina Kiseljaković (University of Sarajevo, Faculty of Medicine, Department of Medical Biochemistry): METHYLENETETRAHYDROFOLATE REDUCTASE GENE POLYMORPHISM (MTHFR) AS A NON-TRADITIONAL RISK FACTOR OF CARDIOVASCULAR DISEASES IN PATIENTS ON HEMODIALYSIS

P16. Adisa Ahmić (University of Tuzla, Faculty of Science, Department of Biology, Tuzla, Bosnia and Herzegovina): Y-CHROMOSOME HAPLOGROUP DIVERSITY OF THE ROMA POPULATION OF NORTH-EASTERN BOSNIA AND HERZEGOVINA

P17. Abdurahim Kalajdžić (University of Sarajevo, Institute for Genetic Engineering and Biotechnology, Sarajevo, B&H): PREDICTION OF Y HAPLOGROUP IN ANALYSIS OF HUMAN SKELETAL REMAINS FROM ARCHAEOLOGICAL SITES IN BOSNIA AND HERZEGOVINA

P18. Abdurahim Kalajdžić (University of Sarajevo, Institute for Genetic Engineering and Biotechnology, Sarajevo, B&H): DNA ANALYSIS OF SKELETAL REMAINS: CASE OF DISPUTABLE KINSHIP TESTING

P19. Amira Kekić (Ministry of Internal Affairs of Canton Sarajevo, Sarajevo, Bosnia and Herzegovina): DNA ANALYSIS OF BLOODSTAINS FROM CRIME SCENE: CASEWORKS EXPERIENCE

P20. Zsófia Szilágyi (National Public Health Center, Division of Radiobiology and Radiohygiene, Department of Non-ionizing Radiation): COMBINED EXPOSURE OF RADIOFREQUENCY AND UV RADIATION INDUCE ADAPTIVE RESPONSE IN KERATINOCYTE CELLS *IN VITRO*

P21. Anna Sáfár (National Public Health Center, Department of Non-ionizing Radiation, Budapest, Hungary): A HIGH-THROUGHPUT COMET ASSAY METHOD FOR THE JOINED PROCESSING OF SAMPLES TAKEN SEPARATELY

P22. Anja Haverić (University of Sarajevo, Institute for Genetic Engineering and Biotechnology, Sarajevo, Bosnia and Herzegovina): ANALYSIS OF DNA DAMAGE IN PERIPHERAL BLOOD CULTURES TREATED WITH CURCUMIN OR SUNSET YELLOW

P23. Nevenka Veličkova (University "Goce Delcev", Faculty of Medical Sciences, Stip, Republic of North Macedonia): THE IMPORTANCE OF NUCLEAR DIVISION INDEX IN BIOMONITORING HUMAN STUDIES USING THE MICRONUCLEUS ASSAY

P24. Nurşen Başaran (Hacettepe University, Faculty of Pharmacy, Department of Pharmaceutical Toxicology, Ankara, Turkey): GENOTOXICITY EVALUATION OF URSOLIC ACID ON MAMMALIAN CELL LINES BY MICRONUCLEUS ASSAY

P25. Edvina Ibradžić (The Public Institution Primary School "Harmani I", Bihać, Bosnia and Herzegovina): EVALUATION OF THE GENOTOXICITY POTENTIAL OF WATER FROM THE LAKE HAZNA FROM BOSNIA AND HERZEGOVINA BY MICRONUCLEUS ASSAY IN ERYTHROCYTES OF *CARASSIUS GIBELIO* AND *ALLIUM CEPA* L. ASSAY

P26. Ajla Smajlović (University of Sarajevo, Institute for Genetic Engineering and Biotechnology, Sarajevo, Bosnia and Herzegovina): THE INFLUENCE OF HALOGENATED BOROXYNE ON THE DEREGULATION OF THE GENES CAUSED BY IMIQUIMOD INDUCED INFLAMMATORY DERMATOSIS IN RATS

P27. Nikolina Elez-Burnjaković (University of East Sarajevo, Medical Faculty, Foča, Bosnia and Herzegovina): HALOGENATED BOROXYNE INFLUENCE ON BASAL LEVEL AUTOPHAGY IN HUMAN MELANOMA GR-M CELL LINE

P28. Maida Hadžić (University of Sarajevo, Institute for Genetic Engineering and Biotechnology, 71000 Sarajevo, Bosnia and Herzegovina): CYTOTOXICITY OF 1-SUBSTITUTED 1,2,3,4-TETRAHYDROISOQUINOLINES IN 5637 HUMAN BLADDER CARCINOMA CELL LINE

P29. Tamara Četković (University of Sarajevo, Institute for Genetic Engineering and Biotechnology, Sarajevo, Bosnia and Herzegovina): CYTOTOXICITY EVALUATION OF HIGHLY OXIDIZED GRAPHENE ON PERIPHERAL BLOOD MONONUCLEAR CELLS

P30. Dunja Rukavina (University of Sarajevo, Veterinary Faculty, Department of Biology, Sarajevo, Bosnia and Herzegovina): THE GENETIC STRUCTURE OF POTENTIAL BOSNIAN MOUNTAIN HORSES BASED ON MICROSATELLITE MARKERS

P31. Jasna Hanjalić (University of Sarajevo, Institute for Genetic Engineering and Biotechnology, Sarajevo, Bosnia and Herzegovina): DNA BARCODING OF FOUR BUTTERFLY SPECIES OF GENUS *ARGYNNIS* FABRICIUS, 1807 (NYMPHALIDAE: HELICONIINAE) FROM BOSNIA AND HERZEGOVINA

P32. Lejla Lasić (University of Sarajevo-Institute for Genetic Engineering and Biotechnology, Sarajevo, Bosnia and Herzegovina): OPTIMIZATION OF NESTED POLYMERASE CHAIN REACTION CONDITIONS FOR MOLECULAR-GENETIC DETECTION OF *BORRELIA BURGDOFFERI* SENSU LATO IN *IXODES RICINUS* TICKS

P33. Faruk Bogunić (University of Sarajevo, Faculty of Forestry, Sarajevo, Bosnia and Herzegovina; University of Sarajevo, Faculty of Science, Department of Biology, Laboratory for research and protection of endemic resources, Sarajevo, Bosnia and Herzegovina): DIVERSITY OF REPRODUCTIVE PATHWAYS IN *COTONEASTER INTEGERRIMUS* (ROSACEAE) IS DRIVEN BY HETEROPLOID CROSSES AND APOMIXES

P34. Marie Florence Sandrine Ngo Ngwe (National Herbarium of Cameroon, Institute of Agricultural Research for Development, Yaoundé, Cameroon): HETEROCHROMATIN AND rDNA PATTERN REVEALED HETEROMORPHIC SEX CHROMOSOMES IN *DIOSCOREA DUMETORUM*

P35. Mirzeta Memišević Hodžić (University of Sarajevo, Faculty of Forestry, Sarajevo, Bosnia and Herzegovina): HETEROZYGOSIS AS A MEASURE OF THE GENETIC VARIABILITY OF PEDUNCULATE OAK (*QUERCUS ROBUR*, L.) IN THE BOSNIAN-HERZEGOVINIAN PROVENANCE TEST

P36. Paulina Šaravanja (University of Mostar, Faculty of Agriculture and Food Technology, Mostar Bosnia and Herzegovina): INVESTIGATION OF THE GENETIC DIVERSITY OF POMEGRANATE IN HERZEGOVINA

P37. Jasmin Ramić (University of Sarajevo, Institute for Genetic Engineering and Biotechnology, Sarajevo, Bosnia and Herzegovina): BACTERIAL GENOME IDENTIFICATION FROM FECAL SAMPLES OF SUBJECTS WITH IRRITABLE BOWEL SYNDROME (IBS)

P38. Kamelija Madacki-Todorović (University Sarajevo School of Science and Technology, Sarajevo Medical School, Sarajevo, Bosnia and Herzegovina): DRUG-INDUCED MODULATORS OF *ESHERICHIA COLI* VIRULENCE GENE EXPRESSION

P39. Naida Mulahuseinović (General Hospital, Tešanj, Bosnia and Herzegovina): PREVALENCE OF *MYCOPLASMA HOMINIS*, *UREAPLASMA SPP.* AND *CHLAMYDIA TRACHOMATIS* IN ROUTINE GYNECOLOGICAL EXAMINATION IN TEŠANJ AREA

P40. Mujo Hasanović (University of Sarajevo, Institute for Genetic Engineering and Biotechnology, Sarajevo, Bosnia and Herzegovina): ANTIMICROBIAL SUSCEPTIBILITY OF BIOFILM-PRODUCING AND NON-PRODUCING *PSEUDOMONAS AERUGINOSA* ISOLATES IN THE NON-HOSPITAL ENVIRONMENT

PhD Students Session

PS01. Vanja Vidović (University of Banja Luka, Faculty of Medicine, Department of Human Genetics, Banja Luka, Bosnia and Herzegovina): FINDINGS FROM ACGH IN PATIENT WITH PSYCHOMOTOR DELAY-CASE REPORT

PS02. Maja Barbarić (University of Mostar, School of Medicine, Laboratory of Morphology, Department of Histology and Embryology, Mostar, Bosnia and Herzegovina; University Hospital in Mostar, Department of Pathology, Cytology and Forensic Medicine, Mostar, Bosnia and Herzegovina): IMP3 EXPRESSION IS DECREASED IN TROPHOBLAST CELLS FROM PREGNANCIES WITH SEVERE AND NON-SEVERE PREECLAMPSIA

PS03. Anita Kolobarić (University of Mostar, School of Medicine, Laboratory of Morphology, Department of Histology and Embryology, Mostar, Bosnia and Herzegovina; University Hospital in Mostar, Department of Pediatrics, Mostar, Bosnia and Herzegovina): EXPRESSION AND DISTRIBUTION OF FIBROBLAST GROWTH FACTOR RECEPTOR 1, 2 AND OTHER SIGNAL PROTEIN IN HUMAN FETAL LUNG

PS04. Anita Racetin (University of Split, School of Medicine, Department of Anatomy, Histology and Embryology, Split, Croatia; University of Mostar, School of Medicine, Mostar, Bosnia and Herzegovina): CRKL GENE EXPRESSION IN KIDNEYS OF *YOTARI* MICE

PS05. Marija Jurić (University of Split, School of Medicine, Department of Anatomy, Histology and Embryology, Split, Croatia): AIFM3 GENE EXPRESSION IN KIDNEYS OF *YOTARI* MICE

PS06. Ivona Kosović (University of Split, School of Medicine, Department of Anatomy, Histology and Embryology, Split, Croatia): CX37, CX40, CX43 AND CX45 GENE EXPRESSION IN DEVELOPING, POSTNATAL AND NEPHROTIC HUMAN KIDNEYS

PS07. Sumejja Baljević (University of Sarajevo, Clinical Center, Department of Clinical Pathology, Cytology and Human Genetics Sarajevo, Bosnia and Herzegovina): PRESENCE OF COMPLEX COMBINED HEMATOLOGIC NEOPLASMS – CASE REPORT

PS08. Sanja Ćakić (University of Belgrade, Institute for Medical Research, Department for Medical Entomology, Belgrade, Serbia): MULTILOCUS SEQUENCE TYPING ANALYSIS OF *BORRELIA AFZELII* STRAINS ISOLATED FROM *IXODES RICINUS* TICKS FROM SERBIA

PS09. Dijana Topalović (University of Belgrade, Faculty of Pharmacy, Department of Pathobiology, Belgrade, Serbia): ANTIGENOTOXIC EFFECT OF QUERCETIN ON THYROXINE-INDUCED DNA DAMAGE IN HUMAN WHOLE BLOOD CELLS *IN VITRO*

PS10. Marija Bruić (University of Belgrade, Faculty of Pharmacy, Department of Pathobiology, Belgrade, Serbia): ASSESSMENT OF DNA DAMAGE IN BLOOD, LIVER AND KIDNEY CELLS IN A HYPERTENSIVE RAT MODEL USING COMET ASSAY

PS11. Ana Huđek (University of Zagreb, Faculty of Food Technology and Biotechnology, Zagreb, Croatia): GENOTOXIC EFFECT OF IRINOTECAN ON HUMAN LIVER AND COLON TUMOR CELLS

PS12. Maida Hadžić (University of Sarajevo, Institute for Genetic Engineering and Biotechnology, Sarajevo, Bosnia and Herzegovina): $K_2[B_3O_3F_4OH]$ INDUCED APOPTOSIS AND REDUCED CELL VIABILITY IN HUMAN ACUTE MYELOID *LEUKEMIA* CELL LINE UT-7

PS13. Jelena Petković (University of Belgrade, Institute of Molecular Genetics and Genetic Engineering, Belgrade, Serbia): CELLULAR FACTORS INVOLVED IN RECONSTITUTION OF OXIDATIVE DAMAGED POPULATION OF *USTILAGO MAYDIS*

PS14. Dragana Bosnić (University of Belgrade, Institute of Molecular Genetics and Genetic Engineering, Laboratory for Plant Molecular Biology, Belgrade, Serbia): SILICON ALLEVIATES COPPER TOXICITY IN CUCUMBER BY INCREASED CU-BINDING CAPACITY AND ENHANCED ANTIOXIDATIVE DEFENSE

PS15. Ivana Nikolić (University of Belgrade, Institute of Molecular Genetics and Genetic Engineering, Laboratory for Plant Molecular Biology, Belgrade, Serbia): GENERATION OF STABLE *ARABIDOPSIS DSSI* MUTANTS USING CRISPR-CAS9 TECHNOLOGY

PS16. Jasna Hasanbegović (University Džemal Bijedić, Agromediterranean Faculty, Mostar, Bosnia and Herzegovina): GENETIC CHARACTERISATION OF ALMOND (*Prunus amygdalus L.*) USING MICROSATELLITE MARKERS

Graduate Students Session

PS17. Nikolina Tomić (University of Sarajevo, Institute for Genetic Engineering and Biotechnology, Sarajevo, Bosnia and Herzegovina): MODULATORY EFFECTS OF DELPHINIDIN AND HALOGENATED BOROXYNE ON *CAT* GENE EXPRESSION IN CULTURED LYMPHOCYTES

P18. Azra Ličina Sinanović (University of Tuzla, Faculty of Technology, Tuzla, Bosnia and Herzegovina): BIHOR DNA PROJECT - RESULTS OF RESEARCH

PS19. Merima Miralem (University of Sarajevo, Faculty of Science, Sarajevo, Bosnia and Herzegovina): DNA ANALYSIS SUGGEST POTENTIAL KIN RELATIONSHIP BETWEEN TWO PERSONS FROM DISTINCT MEDIEVAL ARCHAEOLOGICAL SITES

PS20. Dženana Klepo (University of Sarajevo, Faculty of Natural Science and Mathematics, Sarajevo, Bosnia and Herzegovina): EVALUATION OF THIOMERSAL AND PARACETAMOL GENOTOXICITY IN HUMAN LYMPHOCYTE CULTURE

PS21. Irma Durmišević (University of Sarajevo, Faculty of Science, Department of Biology, Sarajevo, Bosnia and Herzegovina): CYTOGENOTOXIC POTENTIAL OF THREE DIFFERENT PARABENS *IN VITRO*

PS22. Mahira Mehanović (University of Sarajevo, Faculty of Science, Sarajevo, Bosnia and Herzegovina): COMPARATIVE CYTOTOXICITY ANALYSIS OF EXTRACTS OF *THYMUS BRACTEOSUS* VIS EX BENTHAM AND *ACINOS ORONTIUS* (K.MALY) ŠILIĆ

Undergraduate Students Session

PS23. Nora Pušeljić (University of J.J.Strossmayer, Faculty of Medicine, Osijek, Croatia): TURNER SYNDROME WITH HAPLOINSUFFICIENCY IN XP22.3 AND XQ28 MICRODELETION

PS24. Nika Pušeljić (University of Osijek, Faculty of Medicine, Osijek, Croatia): CONGENITAL HYPOTONIA AND EPILEPSY AS MAIN CLINICAL SIGNS OF WOLF-HIRSCHHORN SYNDROME

PS25. Emina Huseinbegović (International University of Sarajevo, Genetics and Bioengineering Department, Sarajevo, Bosnia and Herzegovina): URINE qRT-PCR ASSAY AS A SCREENING TOOL FOR THE DETECTION OF CONGENITAL HUMAN CYTOMEGALOVIRUS INFECTION OF INFANTS IN SARAJEVO CANTON

PS26. Tamara Lukić (University of Sarajevo, Faculty of Science, Sarajevo, Bosnia and Herzegovina): DNA ANALYSIS OF ABORTED FETAL TISSUES IN FORENSIC CASES

PS27. Alen Džaferspahić (University of Sarajevo, Faculty of Science, Sarajevo, Bosnia and Herzegovina): CRITICAL POINTS IN PERFORMING ALKALINE COMET ASSAY ON ORAL LEUKOCYTES

PS28. Dženan Kovačić (International Burch University, Department of Genetics & Bioengineering, Sarajevo, Bosnia and Herzegovina): TWO-COMPONENT VAULT NANOPARTICLE SYSTEM FOR EFFICIENT TREATMENT OF LATENT AND ACTIVE TUBERCULOSIS