

# 6<sup>th</sup> COLLOQUIUM OF GENETICS



## PROGRAM

8.30 – 9.00 Registration

9.00 – 9.30 Chairman: Darja Žgur Bertok

**Opening of the 6th COLLOQUIUM OF GENETICS**

**Opening lecture:**

**L1: Duško Lainšček**, Lucija Kadunc, Mateja Manček Keber, Iva Hafner Bratkovič, Rok Romih, Roman Jerala: **CRISPR/CAS9 DELIVERY BY EXTRACELLULAR VESICLES FOR GENOME EDITING AND THERAPEUTIC TRANSCRIPTIONAL REGULATION**

9.30 – 10.45 Chairmen: Branka Javornik, Damjan Glavač

**Short lectures I: BIOTECHNOLOGY, MOLECULAR BASIS OF DISEASES:**

**S1: Ester Stajič**, Jana Murovec, Borut Bohanec: PROTOCOL DEVELOPMENT FOR GENOME EDITING IN CABBAGE (*Brassica oleracea* var. *capitata* L.) USING CRISPR/CAS9 TECHNOLOGY

**S2: Helena Volk**, Sabina Berne, Ingo Hein, Branka Javornik: CHARACTERISATION OF NOVEL *Verticillium nonalfalfae* CHITIN BINDING EFFECTOR

**S3: Alenka Matjašič**, Mara Popović, Damjan Glavač: ABERRANT EPIGENETIC NETWORK OF lncRNAs AND mRNAs IN GLIOMA DEVELOPMENT AND PROGRESSION

**S4: Katja Uršič**, Špela Kos, Urška Kamenšek, Maja Čemažar, Gregor Serša: PERITUMORAL GENE ELECTROTRANSFER OF IL-12 AS ADJUVANT THERAPY TO PLATINUM-BASED ELECTROCHEMOTHERAPY FOR TREATMENT OF MURINE MALIGNANT MELANOMA

**S5: Monika Savarin**, Maja Čemažar, Tomaž Jarm, Gregor Serša: VASCULAR TARGETED GENE ELECTROTRANSFER RADIOSENSIBILIZES TUMORS

10.45 – 11.15 **Coffee brake and Poster viewing I: BIOTECHNOLOGY, MOLECULAR BASIS OF DISEASES:**

**P1: Anja Domadenik**, Blaž Miklavc, Nina Pirih, Jerneja Štor, Petra Trobina, Damijan Nipič, Minja Zorc, Jernej Ogorevc, Peter Dovč: DEVELOPMENT OF A GENETIC TEST FOR THE FELINE AB BLOOD GROUP SYSTEM

**P2: Miha Slapnik**, Marko Flajšman, Jana Murovec: SEX DETERMINATION IN HEMP (*Cannabis sativa* L.) USING DNA MARKERS

**P3: Sinja Svetik**, Marko Flajšman, Borut Bohanec: ATTEMPT TO INDUCE HAPLOIDS OF CANNABIS (*Cannabis sativa* L.) WITH *in vivo* GYNOGENESIS TECHNIQUE USING IRRADIATED POLLEN

**P4: Špela Mestinšek Mubi**, Marko Flajšman, Jana Murovec: TISSUE CULTURE OF HEMP (*Cannabis sativa* L.): MICROPROPAGATION AND ADVENTITIOUS REGENERATION

**P5: Katarina Žnidar, Ajda Prevc**, Sanja Vouri, Loree C. Heller, Tanja Dolinšek, Maša Bošnjak, Gregor Serša, Katja Uršič, Maja Čemažar: EXPRESSION OF DNA SENSORS AFTER IRRADIATION OF B16F10 MOUSE MELANOMA CELLS

**P6: Barbara Rejc**, Alenka Šmid, Nataša Karas Kuželički, Ksenija Geršak, Irena Mlinarič Raščan: INFLUENCE OF POLYMORPHISMS OF TPMT AND GENES INVOLVED IN FOLATE AND METHIONINE METABOLISM ON MATERNAL AND FETAL MARKERS OF OXIDATIVE STRESS AND PREGNANCY OUTCOMES

**P7: Špela Tajnšek**, Tina Pečnik, Ines Cilenšek, Mojca Globočnik Petrovič, Tanja Kunej, Daniel Petrovič: ANALYSIS OF POLYMORPHISMS rs10738760 AND rs6921438 IN TYPE 2 DIABETIC PATIENTS WITH PROLIFERATIVE DIABETIC RETINOPATHY OF SLOVENE ORIGIN

**P8: Katarina Žnidar**, Maša Bošnjak, Tanja Dolinšek, Loree C Heller, Maja Čemažar: EXPRESSION OF DNA SENSORS AFTER ELECTROTRANSFER OF pDNA IN SPHEROIDS OF MOUSE MELANOMA CELL LINE B16F10

**P9: Iva Mencin, Aleša Kristan**, Tinkara Prijatelj, Danijela Vočanec, Martina Fink, Tadej Pajič, Irena Preložnik Zupan, Tanja Kunej, Nataša Debeljak: IDENTIFICATION OF SEQUENCE VARIANTS ASSOCIATED WITH FAMILIAL ERYTHROCYTOSIS IN *EPO*, *EPOR*, *EPAS1* AND *VHL* GENES: FROM *IN SILICO* ANALYSIS TO CLINICAL RESEARCH

**P10: Anja Domadenik**, Blaž Miklavc, Nina Pirih, Jerneja Štor, Petra Trobina, Minja Zorc, Jernej Ogorevc, Modest Vengušt, Peter Dovč: IS *GYS1* GENE MUTATION CAUSATIVE FOR POLYSACCHARIDE STORAGE MYOPATHY (PSSM) IN SLOVENIAN COLD-BLOODED HORSE BREED?

11.15 – 12.30 Chairmen: Tanja Kunej, Marjanca Starčič Erjavec

**Short lectures II: GENOMICS, INTERACTION GENOME-ENVIRONMENT, POPULATION GENETICS:**

**S6: Jana Obšteter**, Janez Jenko, Gregor Gorjanc: THE USE OF GENOMIC INFORMATION IN CATTLE BREEDING

**S7: Erik Rihtar**, Zdravko Podlesek, Darja Žgur-Bertok: THE HORIZONTALLY ACQUIRED PATHOGENICITY ISLAND PA<sub>Usp</sub> OF *Salmonella bongori* AND UROPATHOGENIC *Escherichia coli*, IS A NEW MEMBER OF THE TyrR REGULON

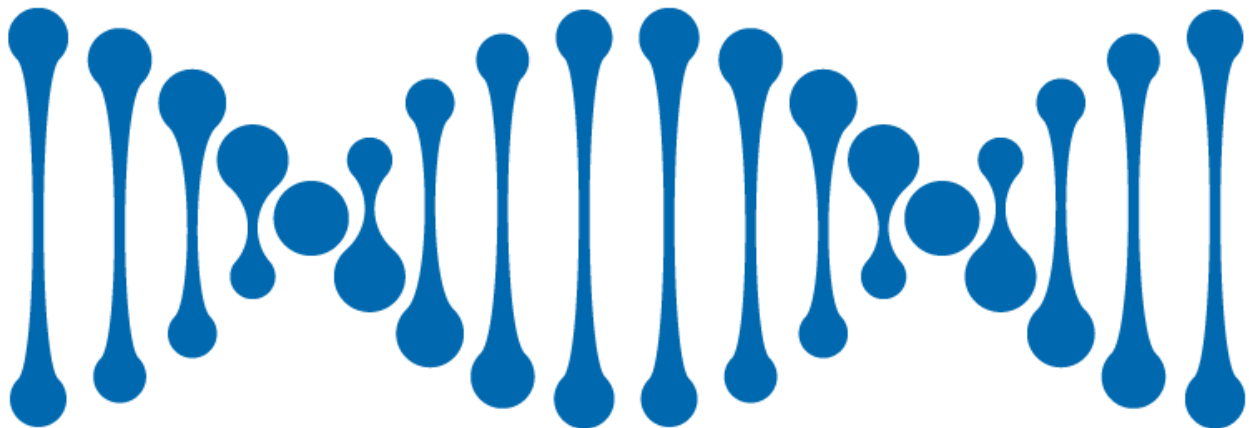
**S8: Mateja Janeš**, Minja Zorc, Vlatka Čubrić Čurik, Peter Dovč: POPULATION VARIABILITY OF TIBETAN TERRIER

**S9: Luka Predojevič**, Darja Žgur-Bertok, Marjanca Starčič Erjavec: COMPARATIVE ANALYSIS OF PHYLOGENETIC ASSIGNMENT OF HUMAN AND AVIAN EXPEC AND FECAL COMMENSAL STRAINS OF *Escherichia coli* USING BOTH CLERMONT PCR PHYLOTYPING METHODS REVEALED A NEED FOR A NEW PCR PHYLOTYPING MEHTOD

**S10: Katja Molan**, Katja Seme, Jerneja Ambrožič Avguštin: EXTENDED-SPECTRUM  $\beta$ -LACTAMASE PRODUCING *Escherichia coli* AND EMERGENCE OF CLONAL GROUP ST131 AMONG HUMAN RESPIRATORY TRACT ISOLATES

12.30 – 12.35 **Assembly of Genetic Society of Slovenia I: Introduction**

12.35 – 13.15 Lunch brake



13.15 – 14.00 **Poster viewing II: GENOMICS, INTERACTION GENOME-ENVIRONMENT, POPULATION GENETICS**

**P11: Anamarija Habič**, Tanja Kunej: IDENTIFICATION OF FUNCTIONAL POLYMORPHISMS LOCATED WITHIN ULTRACONSERVED REGIONS (UCRs) IN HUMAN

**P12: Bojan Papić**, Darja Kušar: COMPARISON OF ION PGM AND ILLUMINA HISEQ 2500 PLATFORMS BASED ON WHOLE-GENOME SEQUENCING OF *Listeria monocytogenes* ISOLATES

**P13: Maša Vidmar**, Alenka Šmid, Nataša Karas Kuželički, Irena Mlinarič-Raščan, Ksenija Geršak: THE INFLUENCE OF FOLIC ACID AND 5-METHYLTETRAHYDROFOLATE ON THE METABOLIC ACTIVITY DEPENDING ON CHANGES IN THE FOLATE CYCLE GENES

**P14: Andreja Petrič, Beti Kužnik**, Marija Medved, Simon Koren, Darja Žgur Bertok, Katja Molan, Melita Cajhen, Draženka Pongrac Barlovič, Marjanca Starčič Erjavec: GUT MICROBIOTA OF PREGNANT WOMEN WITH GESTATIONAL DIABETES AND MACROSOMIA

**P15: Žana Lovšin**, Jerneja Ambrožič Avguštin, Darja Žgur Bertok, Marjanca Starčič Erjavec: ANALYSIS OF ANTIBIOTIC RESISTANCES AMONG *Escherichia coli* ISOLATED FROM FECES OF PREGNANT WOMEN WITH GESTATIONAL DIABETES

**P16: Maja Zupan**, Luka Predojevič, Katja Molan, Darja Žgur-Bertok, Marjanca Starčič Erjavec: THE PREVALENCE OF GENOTOXINS (Usp and Clb) AND CLONAL DIVERSITY ANALYSIS OF *Escherichia coli* ISOLATES FROM WOMEN WITH GESTATIONAL DIABETES

**P17: Ivana Sedej**, Tina Čepin, Darja Žgur-Bertok, Marjanca Starčič Erjavec: PHYLOGENY AND VIRULENCE-ASSOCIATED GENES AMONG *Escherichia coli* ISOLATED FROM FECES OF PREGNANT WOMEN WITH GESTATIONAL DIABETES

14.00 – 15.00 Chairman: Darja Žgur Bertok

**Closing of the 6th COLLOQUIUM OF GENETICS**

**Closing lecture:**

**L2: Gregor Serša: GENE THERAPY OF CANCER**

**Prize announcements**

15.00 – 16.00 **Assembly of Genetic Society of Slovenia II: Continuation**