SCIENTIFIC PROGRAMME

Third International Conference on Zoology, Zoonoses and Epidemiology October 21 – 23, 2019, Hissar, Bulgaria

Monday, 21 October 2019

13.00 – 18.00 Arrival, registration, posters set up. SPA Hotel "Hissar".

EPIDEMIOLOGY

(Maritsa hall)

Session chairs: Prof. Rumen Konstantinov, Dr. NadezhdaVladimirova

- 14.00 14.10 Communicable diseases in the human evolution. Wiliam Money
- **14.10 14.20** Epidemiological forecasting biosocial nature and methodology. **Yordanka Stoilova**
- 14.20 14.30 Contemporary aspects of the epidemiological surveillance of socially significant tick-borneinfections (TBIs) in Varna region. Rumen Konstantinov
- 14.30 14.40 Epidemiological aspects of anthrax in North-East Bulgaria.

 Tsonko Paunov
- 14.40 15.00 Benefits for the community from pneumococcal immunization programs. Magdalina Mircheva, GSK
- 15.00 15.10 Legionella infections in Bulgaria. Iskra Tomova
- 15.10 15.20 Zoonotic potential of Helicobacter spp. Irena Mladenova
- 15.20 15.40 Decontamination principles and tendencies. Contemporary methods and tools in reprocessing of reusable medical devices. **Dragomir Ivanov**, MTE
- 15.40 15.50 Basic principles and approved decontamination method against biological warfare agents. Milena Nikolova
- 15.50 16.10 Coffee-break

EPIDEMIOLOGY

(Maritsa hall)

Session chairs: Assos. Prof. Nina Gatcheva, Prof. Irena Mladenova

- 16.10 16.25 Implementation of Medical standard on prevention and control of nosocomial infections: Conclusions based on questionnaire surveys of BAPIC BulNoso, 2012 2018.
 Nina Gatcheva
- 16.25 16.40 The pressure of vaccines on microorganisms and their response. Andrey Galev
- 16.40 17.00 Influenza and influenza vaccination in cardiovascular diseases. Nikolay Badzhineroy, Sanofi-Pasteur
- 17. 00 17.15 Measles in Europe and in Bulgaria during the 2-nd decade of 21 century. Nadezhda Vladimirova
- 17.15 17.35 Immunizations for preterm infants. Petya Galabova, GSK
- 17.35 17.50 A review of global good practices to improve communication between pediatricians and parents on the topic of vaccines. Savina Stoitsova
- 17.50 18.00 Vaccine-preventable diseases in HIV (+) persons. Nikolay Vatev
- **19.30 Welcome cocktail** at the Lobby bar, SPA Hotel "Hissar".

Tuesday, 22 October 2019

- **8.00 9.00** Registration
- 9.00 9.45 Opening. Maritsa hall in SPA Hotel "Hissar"
- 9.45 10.15 Plenary lecture: Public Health challenges. Assoc. Prof.
 Dr. Angel Kunchev, MD, Chief State Health Inspector, Ministry of Health
- 10.15 10.45 Plenary lecture: Satellite tracking of birds: science and practice. MSc Stoycho Stoychev, Conservation Director of the Bulgarian Society for the Protection of Birds /BirdLife in Bulgaria
- 10.45 11.00 Coffee-break

GENETICS AND MOLECULAR TAXONOMY

(Hissar hall)

Session chair: Prof. Dr. Teodora Staykova **Session secretary:** Assist. Prof. Dr. Miroslav Antov

- 11.00 11.15 Molecular taxonomy study of genus *Alosa* (Clupeidae) in Black Sea based on variability in cytochrome b sequences.

 Darinka Boyadzhieva-Doychinova
- 11.15 11.30 Diagnostic markers for discrimination of the Bulgarian honey bee *Apis mellifera macedonica*, type *rodopica*, in accordance with its valuable ethological and productive qualities. **Evgeniya Ivanova**
- 11.30 11.45 New chromosomal form of mole rat in Bulgaria? Synaptonemal complex karyotype of *Nannospalax leucodon* (Rodentia) from the eastern area of Sofia. Sergey Matveevsky

BIODIVERSITY, ECOLOGY AND CONSERVATION ZOOLOGY (Hissar hall)

Session chair: Assoc. Prof. Dr. Tsenka Chassovnikarova **Session secretary:** Chief Assist. Prof. Dr. Vesela Mitkovska

- 11.45 12.00 Some parasitological features of *Paradiplozoon bliccae* (Monogenea: Diplozoidae) infestation in *Pseudophoxinus burduricus* an endemic fish species from Doğanbaba Creek, Turkey. Özlem Özmen
- 12.00 12.15 Pathological effects of *Eustrongylides excisus* in four teleost fish species of Eğirdir Lake, with a new host record.

 Özlem Özmen
- 12.15 12.30 Factors influencing the expansion of the Pine processionary moth (*Thaumetopoea pityocampa*) in Central Bulgaria. Gergana Zaemdzhikova
- 12.30 12.45 The flight of the Pine processionary moth (*Thaumetopoea pityocampa*) in the Valey of Mesta, Bulgaria. Gergana Zaemdzhikova

- 12.45 13.00 Impact of egg parasitoids on Pine processionary moth (*Thaumetopoea pityocampa*) in a new habitat in Bulgaria. Georgi Georgiev
- 13.00 13.15 DNA damage in sperm cells biomarker for genotoxicity in striped field mouse (*Apodemus agrarius* Pallas, 1771) from rice fields. Vesela Mitkovska

ONE HEALTH

(Maritsa hall)

Session chairs: Assoc. Prof. Angel Kunchev Prof. Dr. Todor Kantardjiev

11.00 – 11.45 Review of new and current Public Health Programs in Republic of Bulgaria

- National Program for control and treatment of rotavirus infections in Republic of Bulgaria (2017 2021).
- National Program for primary prophylaxis of cervical cancer (2017 2020).
- National Program for improving seasonal influenza vaccination (2019 2022).
- National Program for elimination of measles and rubella (2019 2022).
- Draft of National Program for control of viral hepatitis in Republic of Bulgaria (2019 2024).

11.45–13.00 National Immunization Calendar – News, Challenges, Reporting and Control

- National Immunization Calendar 2020 changes, trends, experience Implementation of NIC 2019.
 - Dr. Kremena Parmakova, Ministry of Health
- Spread of pneumococcal serotypes in Bugaria after the introduction of PCV10.

Prof. DSc Todor Kantardzhiev,

National Center of infectious and parasitic diseases

- Vaccinations the point of view of the GP.
 Assoc. Prof. Lyubomir Kirov, National association of general practitioners in Bulgaria
- Epidemic management the experience of a Regional Health Inspectorate.

Dr. Bozhidara Kayrakova, RHI Sofia Region

- Legal aspects of the Immunization Calendar implementation – lawyer's point of view.
 Maria Sharkova, lawyer
- Vaccinations and anti-vaccine movement, attitude of the Bulgarians - joint study of Ministry of Health and University of Ruse "Angel Kanchev".

Assoc. Prof. Nikola Sabev, University of Ruse

MenB and Reverse vaccinology.
 Dr. Magdalina Mircheva (GSK)

13.00 – 14.00 Lunch, Restaurant SPA Hotel "Hissar"

BIODIVERSITY, ECOLOGY AND CONSERVATION ZOOLOGY

(Hissar hall)

Session chair: Assoc. Prof. Dr. Ivelin Mollov **Session secretary:** Chief Assist. Prof. Dr. Peter Boyadzhiev

- 14.00 14.15 Honey bee colony losses in Bulgaria during the period 2017 2019. Iliyana Ilieva
- 14.15 14.30 The parasitoid complex associated with *Larinus sibiricus*Gyllenhal, 1835 (Coleoptera: Curculionidae) in Bulgaria.
 Miroslav Antov
- 14.30 14.45 Atypical winter activity of fungus gnats (Diptera: Mycetophilidae) in critically endangered Mediterranean and sub-Mediterranean type habitats in Bulgaria. Aneliya Pavlova
- 14.45 15.00 Fish diversity and distribution in the Ceyhan River Estuary (Adana-Turkey). **Deniz Innal**
- 15.00 15.15 Seasonal changes in density and diversity of fishes in the Seyhan River Estuary (Mersin-Turkey). **Deniz Innal**
- 15.15 15.30 Land-management subsidies for shrub removal are a major threat for herpetofauna in Bulgaria. **Georgi Popgeorgiev**
- 15.30 15.45 Pilot line transect surveys of cetaceans in a Bulgarian MPA BG0001007 Strandzha SCI. **Dimitar Popov**

15.45 – 16.00 Coffee-break

16.00 – 18.00 Poster session, Trakiya hall in SPA Hotel "Hissar"

ONE HEALTH

(Maritsa hall) **Session chairs:** Assoc. Prof. Angel Kunchev

Prof. Dr. Todor Kantardjiev

14.00 - 14.50

- Vector-borne zoonoses current situation and future challenges to human and veterinary medicine.
- Vector-borne infectious diseases in humans in Bulgaria. Prof. Iva Hristova, National Center of Infectious and Parasitic diseases; Assoc. Prof. Angel Kunchev, MD, Ministry of Health, Republic of Bulgaria
- Current issues related to epizootic of African swine fever. **Prof.** Georgi Georgiev, Risk Assessment Center on Food Chain
- Role of different vectors for the outbreak of epidemics and epizootics in the country.

14.50 - 15.45

- Disinfections, disinsections, deratizations new and established disinfectants and pest control substances, mode of action, in cooperation with local authorities and Bulgarian Food Safety Agency
- Principles of DDD activities in epidemiology. Prof. Wiliam Money, National Expert Council of Surveillance and Control of Infection Diseases and Immunoprophylaxis, Ministry of Health
- Major mistakes in controlling mosquito populations in the country. Assoc. Prof. Ognyan Mikov, National Center of Infectious and Parasitic diseases
- DDD field activities the experience of the health inspector in Sofia RHI. **Tsezarina Ilieva**, Sofia RHI

• BFSA's experience in organizing large-scale disinfestations in the country.

EPIDEMIOLOGY

(Trakiya hall)

Session chairs: Prof. Yordanka Stoilova, Assoc. prof. Milena Karcheva

- 14.00 14.10 Chemical agents suitable for treatment of incubators. Disinfection of incubators multicentre questionnaire study, 2019. Milena Nikolova
- 14.10 14.20 Efficacy and toxicological profile of repellents with IR3535 and DEET. Sofia Bukovska
- 14.20 14.40 Cleaning and disinfection in healthcare facilities key aspect in the combat with healthcare-associated infections.

 Mitko Sterey (BioKomTrendafiloy)
- 14.40 14.50 Epidemiological assessment a basic element of medical support planning of military operations. Rostislav Kostadinov
- 14.50 15.20 Evidence based medicine in support of immunoprophylaxis. Ani Kevorkyan (MSD)
- 15.20 15.30 Study of infectivity with *Borrelia burgdorferi* sl among *Ixodes ricinus* population in Pleven region, Bulgaria. Alexander Blazhev
- 15.30 15.40 Research of the wild pigs infected with the parasite *Trichinella* in the Blagoevgrad district for the period from 01.01.2018. to 01.01.2019. **Andrey Galev**
- 15.40 15.50 Epidemiological evaluation of *L. monocytogenes* circulation. Svetla Staneva
- 15.45 16.00 Coffee-break
- 16.00 18.00 Poster session, Trakiya hall in SPA Hotel "Hissar"

ONE HEALTH

(Maritsa hall)

- **16.00 17.00** Closed meeting with the directors of Regional Health Inspections.
- 19.30 Conference dinner, Restaurant "Prestige" in SPA Hotel "Hissar"

Wednesday, 23 October 2019

9.00 - 11.00 Round table - discussion on current problems in the prevention and control of infectious diseases. Maritsa hall
 9.30 - 11.00 Presentations of sponsors - presentations of vaccines, medicines and disinfectants used in practice. Trakiya hall
 11.00 - 11.30 Closing the conference. Maritsa hall
 11.30 - 12.00 General Assembly of Bulgarian Scientific Society of Epidemiology of infectious and noninfectious diseases. Maritsa hall
 12.00 Lunch, Restaurant SPA Hotel "Hissar"
 13.00 Departure

POSTER SESSION

(Maritsa hall)

ZOOLOGY AND ZOONOSES (P1 – P46)

Poster panel: Scientific committee of International Conference on Zoology and Zoonoses

- P1 New and additional records of earthworms (Annelida: Clitellata) from Kopaonik Mountain: First finding of *Allolobophora treskavicensis* (Mršić, 1991) in Serbia. Filip Popović, Mirjana Stojanović, Tanja Trakić, Jovana Sekulić, Slobodanka Sekulić, **Ralitsa Tsekova**
- P2 Effects of a modern biorational insecticide spinosad on earthworm, *Eisenia fetida* (Savigny 1826). Jovana Sekulić, Mirjana Stojanović, Tanja Trakić, Filip Popović, **Ralitsa Tsekova**
- P3 The first detection of *Toxoplasma gondii* in rivers in Serbia. Vladimir Ćirković, Aleksandra Uzelac, Ivana Klun, **Dragana Miličić**, Olgica Djurković-Djaković
- P4 Morphological variability of Lepidurus apus (Linnaeus, 1758) (Notostraca, Crustacea) from Bosnia and Herzegovina. Dragana Miličić, Đorđe Janković, Goran Šukalo, Dejan Dmitrović, Srećko Čolić, Ivana Šaganović, Bojan Ilić, Luka Lučić, Sofija Pavković-Lučić, Vukica Vujić
- P5 Where to swim, where to eat? Laboratory report on behaviour of the ostracod *Heterocypris incongruens*. **Tatjana Savić**, Branka Petković, Sofija Pavković-Lučić, Dragana Miličić
- P6 Influence of sex ratio and wing morphology on mating success in *Drosophila melanogaster*: lessons from female and multiple choice experiments. **Sofija Pavković-Lučić**, Jelena Trajković, Dragana Miličić and Tatjana Savić
- P7 Isoenzyme polymorphism in populations of ants of the species Messor structor and Messor barbarous as an approach for their

- discrimination. **Ivan Stoyanov**, Teodora Staykova, Penka-Vasileva, Teodora Popova, Evgeniya Ivanova
- P8 Hygienic behaviour and fat body development in worker bees (*Apis mellifera* L.). **Svilen Lazarov**, Ivanka Zhelyazkova
- P9 Hygienic behaviour of local honey bee (*Apis mellifera* L.) and differences in the dimensions of chitin body parts of worker bees. **Svilen Lazarov**, Ivanka Zhelyazkova
- P10 Ontogenetic and caste differentiation in the expression of water-soluble proteins and some isozymes in termites of the species *Reticulitermes lucifugus* (Rossi, 1792) (Isoptera: Rhinotermitidae). Evgeniya Ivanova, Ivan Vulchev, Teodora Staykova, Teodora Popova, **Penka Vasileva**, Ivan Stoyanov, Miroslav Antov
- P11 Isoenzyme polymorphism of silkworm (*Bombyx mori* L.) breeds from germplasm resourses of Bulgaria. **Teodora Staykova**, Panomir Tzenov, Yolanda Vasileva, Nikoleta Takova, Evgenya Ivanova, Ivan Stoyanov, Penka Vasileva, Teodora Popova, Miroslav Antov
- P12 New parasitoids of *Leucoptera sinuella* (Reutti) (Lepidoptera: Lyonetiidae) in Bulgaria. Maria Dobreva, Pencho Dermendzhiev, Nikola Kavardzhikov, Rumen Nachev, Peter Boyadzhiev, **Georgi Georgiev**
- P13 Entomopathogenic fungi (Ascomycota, Hypocreales) as natural antagonists of the pine processionary moth, *Thaumetopoea pityocampa*, in Bulgaria. Marek Barta, Miriam Kádasi Horáková, **Margarita Georgieva**, Plamen Mirchev, Gergana Zaemdzhikova, Daniela Pilarska, Danail Takov, Milcho Todorov, Zdravko Hubenov, Plamen Pilarski, Georgi Georgiev
- P14 Syspastospora parasitica, a parasite of entomopathogenic fungi Beauveria pseudobassiana and B. varroae on Thaumetopoea pityocampa a new tritrophic associations in Bulgaria. Margarita Georgieva, Plamen Mirchev, Georgi Georgiev
- P15 Sensitivity to climate change of selected zooplankton species. Kremena Stefanova, Valentina Doncheva, Nadejda Valcheva, Elitsa. Stefanova, Snejana Moncheva, Nataliya Slabakova, Violeta Slabakova

- P16 Zooplankton traits vs. environmental conditions within intradecadal scale assessment in Lake Ohrid (North Macedonia, SE Europe). **Orhideja Tasevska**, Maria Špoljar, Dafina Gušeska, Goce Kostoski, ElizabetaVeljanoska Sarafiloska, Suzana Patcheva
- P17 Modelling factor Macrophyte communities for macrozoobenthos in Lake Prespa, Republic of North Macedonia. Biljana Budzakoska Gjoreska, Sasho Trajanovski, Sonja Trajanovska, Marina Talevska
- P18 Diversity of macrozoobenthos in different type of Charophyta mono species communities in Lake Ohrid. Sonja Trajanovska, Marina Talevska, Biljana Budzakoska-Gjoreska, Saso Trajanovski
- P19 Physical-chemical and biological indicators in function of the Lake Ohrid trophic state assessment. Elizabeta Veljanoska-Sarafiloska, Orhideja Tasevska, Lence Lokoska, Suzana Patceva, Jovica Leshoski
- P20 Histochemical and biochemical alterations in Zebra mussel, Dreissena polymoprha (Pallas, 1771) after Cd and PAHs chronic exposure. Stela Stoyanova, VeselaYancheva, Iliana Velcheva, Ilia Iliev, Tonka Vasileva, Veselin Bivolarski, Elenka Georgieva
- P21 Cd and PAHs exposure changes the condition index and soft tissue wet ratio in *Dreissena polymorpha* (Pallas, 1771): a statistical perspective. **VeselaYancheva**, Stela Stoyanova, IvelinMollov, Elenka Georgieva, IlianaVelcheva
- P22 Comparative analysis of the oxidative stress in Bulgarian Black sea bivalves and their bioindicator potential. Lachezar Yakimov, Elina Tsvetanova, Almira Georgieva, Galina Nenkova, Nesho Chipev, Albena Alexandrova
- P23 Evaluation of the impact of *Rapana* fisheries with beam trawl on juvenile stages of turbot in Western Black Sea. Elitsa Petrova, Vesselina Mihneva, **Feriha Tserkova**, Stoyko Stoykov, Stanimir Valchev, Philip Penchev
- P24 Contribution to parasite fauna of Prespa roach *Rutilus prespensis* (Karaman, 1924) (Pisces: Cyprinidae) in Lake Prespa, North

- Macedonia. **Stojmir Stojanovski**, Dijana Blazhekovikj-Dimovska, Stoe Smiljkov
- P25 Length-weight relationships for 5 cyprinid fish species from Lake Ohrid. Blagoja Trajchevski, Trajche Talevski
- P26 Ecosystem pressure and impact on fish population in Channel Studencista (Lake Ohrid). LidijaVelkova-Jordanoska, Blagoja Trajcevski
- P27 Insights into the genetic structure of the genus *Chondrostoma* (Pisces, Cyprinidae) across the central part of Balkan Penninsula. LidijaVelkova-Jordanoska
- P28 Researches on reed belt from Lake Prespa as habitat and spawning ground for cyprinid fishes. **Marina Talevska**, and Trajce Talevski
- P29 The impact of alien fish species on native fish population from Lake Dojran and Lake Tikvesh (Aegean catchment area). **Trajce Talevski**, Dragana Milosevic, Marina Talevska, Blagoja Trajceski, Aleksandra Lesoska, Elena Pejoski
- P30 Long-term changes of the ichthyofauna in the Iskar River, Danube basin. **Luchezar Pehlivanov**, Apostolos Apostolou, Stefan Kazakov, Boris Velkov
- P31 Feeding Ecology of the Green Toad (Bufotesviridis complex) in Urban Environment. Part 1. Trophic spectrum and niche. **Ivelin A. Mollov**, Anelia M. Stojanova, Peter S. Boyadzhiev
- P32 Feeding Ecology of the Green Toad (Bufotesviridis complex) in Urban Environment. Part 2. Prey Availability and Electivity. **Ivelin A. Mollov**, Anelia M. Stojanova, Peter S. Boyadzhiev
- P33 Pingers as cetacean bycatch mitigation measure in Bulgarian turbot fishery. **Dimitar Popov**, Galina Meshkova, Polina Hristova, Gradimir Gradev, Marina Panayotova, Hristo Dimitrov
- P34 Hematology data of striped mouse (*Apodemus agrarius*) from Southeastern Bulgaria (Strandzha Mountain): indicators for environmental status. **Hristo Dimitrov**, Angel Kunchev, Georgi Markov

- P35 Strategies in open field behaviour and new object exploration in eastern broad-toothed field mouse, *Apodemus mystacinus* and yellow-necked mouse, *Apodemus flavicollis*. Krastio Dimitrov, **Daniela Simeonovska-Nikolova**, Veselina Sidova, Venislava Racheva
- P36 Species diversity and population structure of small mammalian communities depending on habitat heterogeneity in Lozenska Planina Mountain, Bulgaria. Roumiana Metcheva, **Mihaela Beltcheva**, Iliana Aleksieva, J. Antonio Heredia-Rojas
- P37 Evidence of radioprotective effect of Resveratrol against extremely low frequency electromagnetic fields clastogenic effect.
 J. Antonio Heredia-Rojas, Mihaela Beltcheva, Roumiana Metcheva, Abraham O. Rodríguez-De la Fuente, Omar Heredia-Rodríguez
- P38 Natural and induced UV irradiation effects on some morphophysiological and genetic characteristics of albino mice.
 Michaela Beltcheva, Roumiana Metcheva, Margarita Topashka-Ancheva, Nikolay Tyutyundzhiev, Iliana Aleksieva, Peter Ostoich, Christo Angelov, J. Antonio Heredia Rojas
- P39 Comparative analysis of age changes in the growth of lower canine teeth of wild boar (*Sus scrofa*) males in Bulgaria. **Damyan Damyanov**
- P40 Red deer (*Cervus elaphus* L.) as a biomonitor for contemporary heavy metal pollution of the environment in forest mountain regions in Bulgaria. **Georgi Markov**, Atidzhe Ahmed, Chavdar Zhelev
- P41 Epigenetic variation and distinctness of red fox (*Vulpes vulpes*) populations in its European range. **Georgi Markov**, Milena Gospodinova
- P42 The relationship between the fertility potential quality and leukocyte concentration in the sperm as a potential indicator for the mutagenic effect of infections. **Spas Dzhoglov**, Vesela Mitkovska, Evgeniya Ivanova

- P43 Monitoring of micronucleus frequency in rodents with blood Parasites. **Vesela Mitkovska**, Hristo Dimitrov, Angel Kunchev, Tsenka Chassovnikarova
- P44 Various industries influence the rodent pest control in urban areas. Eliza Koteva, Hristo Dimitrov, Vesela Mitkovska, Tsenka Chassovnikarova
- P45 Compensatory increase of the reproductive capacity of red fox (Vulpes vulpes) in sympatric coexistence with the golden jackal (Canis aureus). **Abena Vlaseva**, Tsenka Chassovnikarova, Vesela Mitkovska, Hristo Dimitrov
- P46 General evaluation of the impact of invasive fish species on native freshwater fish fauna in Turkey. Saniye Cevher Özeren

EPIDEMIOLOGY (P47 – P60)

Session chairs: Assoc.prof. Ts.Paunov, Assoc.prof.A.Kevorkyan

- P47 Seroprevalence of Parvovirus B19 IgG antibodies among pregnant women. **Milena Karcheva**, Anton Petrov, Alexander Blazhev
- P48 Seroepidemiological survey of Parvovirus B19 IgG in childbearing age women. **T. Petkova**, S. Pachkova, Tz. Doichinova
- P49 Status and development of the anti-epidemic control system in the region of Varna. Eliyana Ivanova, Rumen Konstantinov
- P50 Investigating the attitudes of parents to vaccines and immunizations. Tsvetanka Mincheva, Svetla Angelova, Jordanka Mitova, Victoria Doycheva, B. Velinova

- P51 Study of hygienic disinfection of hands of staff and students in dental practice. V. Stoeva, A. Petrova, H. Batselova, D. Ivanov, B. Tilov
- P52 Control of Legionella spp. in dental practice in England and Bulgaria. V. Stoeva, S. Ilieva, I. Tomova, A. Atanasovski, A. Kevorkyan, Y. Stoilova
- P53 Varicella Outbreak in a Daycare in Plovdiv (2019). **H. Batselova**, N. Vatev, A. Galev
- P52 Surveillance of Ventilator-associated pneumonia in neonatal intensive care unit. V. Rangelova, A. Kevorkyan, M. Krasteva, Y. Kalchev
- P54 Vaccination with combined Hepatit A and Hepatitis B vaccine in autoimmunne diseases- report of two cases. A. Kevorkyan, Y. Stoilova
- P55 The main epidemiological paradigm in the context of viral hepatitis C: Comorbidity and co-infections. K.Terzieva, M. Nikolova, I. Popivanov, T. Doichinova, D. Shalamanov
- P55 The role serological screening for determining of HBsAg among hospitalized and ambulatory patients. A. Gotseva
- P56 Diagnosis and Treatment of Bisphosphonate Associated Osteonecrosis of the Jaws. **Meri Hristamyan**, Petya Pechalova, Ralista Raycheva, Veselka Hristamyan, Yordanka Stoilova
- P57 Epidemiological surveillance indicator for the effectiveness of the medical support in floods. **Rumyana Etova**, Rostislav Kostadinov
- P58 Epidemiology and health education as disaster medical support elements. RostislavKostadinov, **Mariya Georgieva**

P59 Poster Which Measures to Prevent the Spread of Measles at a Hospital in Bulgaria are Recommended when Examining / Hospitalizing a Patient. **Violeta Voynova-Georgieva**, Nina Gatcheva, Tanya Perchemlieva, Ani Kevorkyan

P60 Measles epidemic in Sofia region, February-September 2019. **G.Donkov**, B.Kayrakova, J.Mitova-Mineva, V.Doycheva