



**4. KONGRES SLOVENSKEGA
MIKROBIOLOŠKEGA DRUŠTVA
Z MEDNARODNO UDELEŽBO**

4TH CONGRESS OF THE
SLOVENIAN MICROBIOLOGICAL SOCIETY
WITH INTERNATIONAL PARTICIPATION

Portorož
19. - 22. november 2008
November 19th to 22nd, 2008

Program kongresa / Congress programme

Wednesday, November 19, 2008

from 1:00 pm

REGISTRATION

4:00 – 6:00 pm

ROUND-TABLE DISCUSSION:

New Challenges for Microbiology Education in Bologna Era

(moderator: Peter Raspor)

»From experience to new concepts« prof. Viktor Nekrep – warming up presentation

Karl BAYER, Austria, Levente EMÖDY, Hungary, Ines MANDIČ MULEC, Slovenia, Dagojlo

OBRADOVIĆ, Serbia, Liljana PINTER, Croatia

6:00 – 6:15 pm

OPENING OF THE CONGRESS

6:15 – 6:45 pm

OPENING LECTURE

(chair: Peter Raspor, co-chair: Darja Barlič – Maganja)

Levente EMÖDY (HU):

Microbiology in medicine:

Challenges and opportunities in the 21th Century

6:45 pm

WELCOME PARTY

Thursday, November 20, 2008

9.00 – 9:30 am **Plenary lecture**

(chair: Jože Grom, co-chair: Aleš Gasparič)

Ilaria Capua (IT):

Avian Influenza: an ongoing challenge
for animal and public health

9:40 – 11:45 pm **Sessions**

1st Session

VIROLOGY

(chair: Olga Zorman Rojs, co-chair: Janos Minarovits)

9:40 – 10.00 am

Janos Minarovits (HU): Epigenotypes of Latent Epstein-Barr Virus Genomes

10:00 – 10:20 am

Mario Poljak (SI): A Review of Recent Slovenian Studies of HPV

10:30 – 11.00 am Coffee break

11:00 – 11:15 am

Uroš Krapež: Molecular Epidemiology and the Evolution of Slovene Isolates of Infectious Bronchitis Virus

11:15 – 11:30 am

Matjaž Peterka: Influenza Virus Purification: From Laboratory to Vaccine Production

11:30 – 11:45 am

Maruša Pompe-Novak: Genetic Variability of RNAs of *Grapevine Fanleaf Virus* (GFLV)

2nd Session

MICROBIAL GENOMICS AND PROTEOMICS

(chair: Aleš Gasparič, co-chair: Dušica Vujaklija)

9:40 – 10.00 am

Dušica Vujaklija (HR): Tyrosine Phosphorylation of Bacterial SSBs from Taxonomically Distant Bacterial Species

10:00 – 10:20 am

Polona Jamnik (SI): Proteomic Approach for Discovering Targets of Environmental Stressors Using Yeast as a Model Organism

10:30 – 11.00 am Coffee break

11:00 – 11:15 am

Rebeka Lucijana Berčič: *Mycoplasma Synoviae* Neuraminidase Cleaves Sialic Acid Residues from Various Chicken Glycoproteins

11:15 – 11:30 am

Sabina Berne: Progesterone-induced Gene Expression Profile of the Filamentous Fungus *Cochilobolus lunatus*

11:30 – 11:45 am

Matej Butala: Intradomain LexA Rotation is a Prerequisite for Specific DNA Binding

11:45 – 1.30 pm Lunch break

1:30 – 2:30 pm **Plenary session**

(chair: Olga Zorman Rojs, co-chair: Dragoljo Obradović)

1st Plenary lecture:

Sonja Smole Možina (SI):

Food-borne Pathogens - Challenges for Microbial Food Safety

2nd Plenary lecture:

Peter Biely (SK):

Xylanolytic Enzymes of Microorganisms:
Production, Properties and Applications

2:30 – 3:00 pm

**PRESENTATION OF SELECTED POSTERS
FROM 1ST DAY POSTER SESSION**

3:00 – 3:30 pm Coffee break

3:30 – 4:55 pm **Sessions**

1st Session

FOOD MICROBIOLOGY

(chair: Barbara Jeršek, co-chair: Faruk Čaklovica)

3:30 – 3:50 pm

Faruk Čaklovica (BiH): Dynamics of Antilisterial Activity of Selected Lactic-acid Bacteria in Fermented Sausages: Case Bosnian Soudjok

3:50 – 4:10 pm

Mateja Poljšak – Prijatelj (SI): Detection and Molecular Epidemiology of Calicivirus Outbreaks in Slovenia from 2001 to 2008

4:10 – 4.25 pm

Aleš Berlec: Sweet Without Saccharose – Expression of Brazzein in Lactic Acid Bacterium *Lactococcus lactis*

4:25 – 4:40 pm

Kenan Čaklovič: Occurrence of *Rhodotorula mucilaginosa (rubra)* in Traditional Bosnian Dairy Products

4:40 – 4:55 pm

Urška Henigman: Slovenian Shellfish Contaminated with Bacteria *Vibrio parahaemolyticus*

2nd Session

MICROBIAL PATHOGENICITY AND IMMUNE RESPONSE

(chair: Maja Čemažar, co-chair: Ivo Pavlik)

3:30 – 3:50 pm

Ivo Pavlik (CZ): Pathogenesis of Mycobacterial Infections and the Diagnostics of Paratuberculosis, Avian Tuberculosis and Mycobacterioses

3:50 – 4:10 pm

Alojz Ihan (SI): Cathepsin X Prevents an Effective Immune Response Against *Helicobacter pylori* Infection

4:10 – 4:25 pm

Daliborka Dušanić: *Mycoplasma syoviae* Invasion of Different Non-phagocytic Cells

4:25 – 4:40 pm

Gregor Serša: Combined Treatment of Murine Sarcoma Tumors by Intramuscular mIL-12 Gene Electrotransfer and Local Tumor Irradiation

4:40 – 4:55 pm

Julija Hmeljak: No Evidence of a Possible Infection with SV40 Among Slovenian Mesothelioma Patients

5:10 – 5:40 pm **Plenary lecture**

(chair: Mojca Benčina, co-chair: Danko Hajsig)

Roman Jerala (SI):

Molecular Mechanisms of Toll-like Receptor Activation

5:40 – 6:10 pm

(chair: Mojca Benčina, co-chair: Danko Hajsig)

Rok Gaber (SI):

Slovenian microbiology student session:

Slovenian iGEM Students in USA

Virotrap – presentation of the awarded project

6:10 – 7:30 pm

1ST DAY POSTER SESSION

7:30 – 8.30 *Evening meal*

8:30 - *Free evening*

Friday, November 21, 2008

9.00 – 9:30 am **Plenary lecture**

(chair: [Ines Mandič Mulec](#), co-chair: [Srečko Koren](#))

Nina Gunde Cimerman (SI):

Life at the Limits: (Bio)active Survival
of the Osmophilic Genus *Wallemia* (Basidiomycota)

9:40 – 11:45 pm **Sessions**

1st Session

ENVIRONMENTAL MICROBIOLOGY

(chair: [Ines Mandič – Mulec](#), co-chair: [James Prosser](#))

9:40 – 10.00 am

Ivan Kungulovski (MK): Renewables for Isolated Systems - Energy Suply and Waste
Water Treatment

10:00 – 10:20 am

Romana Marinšek Logar (SI): *Tetrahymena thermophila* - an Adequate Eukaryotic
Microorganism for Monitoring Environmental Toxicity and Genotoxicity

10:30 – 11.00 am Coffee break

11:00 – 11:15 am

Felix Haesler: Metabolomic Analysis of Antagonistic Interactions Against
Phytopathogenic Microorganisms Elucidated with Ultrahigh Resolution Mass
Spectrometry

11:15 – 11:30 am

Janez Hacin: Ecoremediation Potential of Fen Grassland Soil in the Ljubljana Marsh

11:30 – 11:45 am

Jana Boben: Plant Pathogens in Crop Biosecurity

2nd Session
MICROBIAL PHYSIOLOGY AND METABOLOMICS
(chair: Mojca Benčina, co-chair: Mark Caddick)

9:40 – 10.00 am

Mark Caddick (UK): RNA Stability, a Fundamental Aspect of Gene Regulation

10:00 – 10:20 am

Nataša Poklar Urlih (SI): Hyperthermophilic Archaeon *aeropyrum pernix* - from Growth to Biotechnological Application

10:30 – 11.00 am Coffee break

11:00 – 11:15 am

Štefanič Polonca: Microscale Social Interactions of *Bacillus Subtilis*

11:15 – 11:30 am

Tjaša Danevčič: Bioactivity and Regulation of Prodigiosin Like Pigment from *Vibrio* sp. DSM14379

11:30 – 11:45 am

Helena Lenasi: Interference of Flavonoids with Progesterone Signalling in Filamentous Fungus *Rhizopus nigricans*

11:45 – 1.30 pm Lunch break

1:30 – 2:30 pm **Plenary sessions**

(Chair: Manica Mueller Premru, co-chair: Ivan Eržen)

1st Plenary lecture:

James Prosser (UK):

The Role of Ecological Theory in Microbial Ecology:
is Size Important?

2nd Plenary lecture:

Smilja Kalenić (HR):

The Role of Clinical Microbiologist in the 21st Century

2:30 – 3:00 pm

**PRESENTATION OF SELECTED POSTERS
FROM 2ND DAY POSTER SESSION**

3:00 – 3:30 pm Coffee Break

3:30 – 4:55 pm **Sessions**

1st Session

MEDICAL MICROBIOLOGY

(chair: Manica Mueller – Premru, co-chair: Marek Gniadkowski)

3:30 – 3:50 pm

Marek Gniadkowski (PL): Genetic Background of Resistance in Medically Important Bacteria: the Beta-Lactamase Example

3:50 – 4:10 pm

Eva Ružić - Sabljic (SI): Molecular Characterisation of *Borellia burgdorferi* sensu lato

4:10 – 4:25 pm

Domen Jaklič: Antibacterial and Antifungal Activity of Larval Excreta/Secreta of *Lucilia sericata* Fly Larvae

4:25 – 4:40 pm

Manca Žolnir-Dovč: Molecular Methods in Clinical Laboratory for Mycobacteria – a 15-Year Experience

4:40 – 4:55 pm

Barbara Šoba: Multilocus Genotyping of *Cryptosporidium parvum* from Humans and Cattle in Slovenia

2nd Session

MICROBIAL ECOLOGY

(chair: Valentina Turk, co-chair: Franco Baldi)

3:30 – 3:50 pm

Franco Baldi (IT): A Strain of *Klebsiella oxytoca* Isolated from Acid Mine Drainage : Ecology and Applications

3:50 – 4:10 pm

David Stopar (SI): Ecophysiology of *Vibrio sp. DSM 14379* Isolated from the Northern Adriatic Sea

4:10 – 4:25 pm

Mihael Bricelj: Behaviour of Bacteriophage Tracer in Carstic Environment

4:25 – 4:40 pm

Tinkara Tinta: The Impact of Mariculture on Bacterial Communities in the Water Column and Sediment in Piran Bay (Gulf of Trieste, Northern Adriatic)

4:40 – 4:55 pm

Iztok Dogša: Structural Properties of Bacterial Polysaccharides by Small-angle X-ray Scattering

5:10 – 5:40 pm **Plenary lecture**

(Chair: David Stopar, co-chair: Janos Minarovits)

Holger Daims (AT):

Ecophysiology and Genomics of Nitrospira,
the Key Nitrite Oxidizers in Natural and Engineered Ecosystems

5:40 – 6:10 pm

Presentation of producers and their programs
(moderator: Dušan Novak)

6:10 – 7:30

2ND DAY POSTER SESSION

8:00 pm

Gala dinner

Saturday, November 22, 2008

9.00 – 9:30 am **Plenary lecture**

(Chair: Hrvoje Petković, co-chair: Vera Katalinić - Janković)

Karl Bayer (AT):

The Importance of Stress in Industrial Microbes

9:40 – 11:45 pm **Sessions**

1st Session

INDUSTRIAL MICROBIOLOGY

(chair: Hrvoje Petković, co-chair: Daslav Hranueli)

9:40 – 10.00 am

Daslav Hranueli (HR): Bioinformatic Tools for Mining Large DNA Data Sets

10:00 – 10:20 am

Kresimir Gjuračić (HR): The I-Scei Meganuclease: from Yeast Recombination Model Systems to Human Gene Therapy

10:30 – 11.00 am Coffee break

11:00 – 11:15 am

Urška Lešnik: Tetracyclines Introduced Again

11:15 – 11:30 am

Peter Mrak: Biotechnology in Active Pharmaceutical Ingredients Production: the Playground is Expanding

11:30 – 11:45 am

Polona Žnidaršič Plazl: Optimization of Progesterone 11 α -hydroxylation Process including Extraction in a Microchannel System

2nd Session
MICROBIAL DIAGNOSTICS
(chair: Tadeja Matos, co-chair: Gabriele Flekna)

9:40 – 10.00 am

Gabriele Flekna (AT): Real-time PCR for Detection and Quantification of Microorganisms in Food

10:00 – 10:20 am

Katja SEME (SI): Traditional and Molecular Methods in Medical Bacteriology

10:30 – 11.00 am Coffee break

11:00 – 11:15 am

Tanja Dreo: Real-time PCR Diagnostics of Plant Pathogenic Bacteria

11:15 – 11:30 am

Matjaž Ocepek: Comparison of DNA Extraction Methods to Detect *Salmonella* in Water

11:30 – 11:45 am

Ion Gutiérrez – Aguirre: Sensitive Detection of Rotavirus in Environmental Waters using CIM[®] Chromatographic Supports and RT-qPCR

12:00 – 13:00 **Closing sessions**

(Chair: Peter Raspor, co-chair: Darja Barlič – Maganja)

1st lecture

Tatjana Avšič - Županc (SI):

Climate Change and the Emergence of Viral Diseases

2nd lecture

Ljubiša Topisirović (SR):

The Challenge of Biotechnology for Microbiology