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## Program

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### Tuesday 07.07.2015

16.00 – 20.00      **Registration and poster mounting (Session I, II, III, VI and LBA)**

17.00 – 21.00      Satellite events (to be held at the University of Gdansk Library)

### Wednesday 08.07.2015

9.00 – 10.00      **Conference Opening and Keynote Lecture**

Opening Lecture:

The life and scientific activity of Professor Rudolf Stefan Weigl  
Prof. dr hab. Wiesław Barabasz

Keynote Lecture:

Physiological proteomics of Gram-positive model bacteria  
Prof. Michael Hecker

10.00 – 11.15      **Special interest session: American Society  
for Microbiology's Science Policy Forum**

Joanna Karczewska-Golec, ASM Young  
Ambassador to Poland, Member of the  
Young Leaders Circle at ASM, Chair

Discussion Panel

11.15 – 11.45      coffee break

11.45 – 13.45      **Session I. Bacteriophages and plasmids**

Prof. dr. hab. Grzegorz Węgrzyn, Chair

1. New ways to combat pathogenic bacteria – bacteriophage lytic enzymes as an  
alternative to antibiotic therapy

Magdalena Plotka, Agnieszka Morzywołek, Anna-Karina Kaczorowska, Tadeusz  
Kaczorowski

2. From sewage-treatment plants to phage therapy: step-by-step phage analysis and  
application

Piotr Golec

3. Staphylococcal Twort-like phages encode a homolog of bacterial virulence  
determinants. Can we use these phages for therapeutic purposes?

Aleksandra Głowacka, Magdalena L. Ulatowska, Małgorzata B. Łobocka

4. Construction and characterization of T4-like phages lacking head proteins gp24  
or gpSoc

Joanna Majewska, Katarzyna Hodyra-Stefaniak, Weronika Beta, Zuzanna  
Każmierczak, Dorota Lecion, Anna Kłopot, Marek Harhala, Paulina Miernikiewicz,  
Mateusz Mąkosa, Patryk Waśko, Karolina Wojtyna, Andrzej Górski, Krystyna  
Dąbrowska

5. Diversity of bacteriophages in urban sewage

Agata Jurczak-Kurek, Borys Wróbel

6. Diversity of centromere-like *parS* elements within *repABC* cassettes of *Rhizobium leguminosarum* bv. *trifolii* TA1

Piotr Koper, Kamil Żebracki, Małgorzata Marczak, Anna Skorupska, Andrzej Mazur

7. Role of the *exo-xis* region in development of bacterial viruses from the family of lambdoid phages

Sylwia Bloch, Bożena Nejman-Faleńczyk, Aleksandra Dydecka, Katarzyna Licznarska, Agnieszka Felczykowska, Gracja Topka, Alicja Węgrzyn, Grzegorz Węgrzyn

13.45 – 14.45

lunch

14.45 – 16.45

## **Session II. Regulation of gene expression in Prokaryotes**

Prof. dr hab. E. Katarzyna Jagusztyn-Krynicka, Chair

1. Genetic evidence of interrelated functions for ppGpp, transcription factors and chaperones

Mike Cashel

2. Computational and functional analysis of a toxin-antitoxin system of *Staphylococcus pseudintermedius*

Monika Janczak, Michał Bukowski, Grzegorz Dubin, Adam Dubin, Benedykt Władysław

3. ExoY, a nucleotidyl cyclase toxin from *Pseudomonas aeruginosa*

Dorothee Raoux-Barbot, Cosmin Saveanu, Louis Renault, Abdelkader Namane, Vasily Ogryzko, Daniel Ladant, Undine Mechold

4. Direct and indirect regulation of *kdgM2* gene expression by the OmpR two-component response regulator in *Yersinia enterocolitica*

Marta Nieckarz, Adrianna Raczkowska, Karolina Skorek, Ewa Stefańska, Iga Milczewska, Dorota Stosio, Michał Dadlez, Katarzyna Brzostek

5. Transcriptomic description of a classic model of carbon catabolic repression in *Streptomyces coelicolor*

Alba Romero, Romina Rodríguez-Sanoja, Daniel Segura, Sergio Sánchez

6. Isothiocyanates reduce toxicity of enterohemorrhagic *Escherichia coli* (EHEC) O157:H7 strains

Dariusz Nowicki, Olga Rodzik, Sylwia Martyn, Wioletta Kobiela, Grzegorz Węgrzyn, Anna Herman-Antosiewicz, Agnieszka Szalewska-Palasz

16.45 – 17.00

coffee break

17.00 – 19.00

## **Session III. DNA replication, recombination and repair**

Prof. dr hab. Jarosław Dziadek, Chair

1. Viruses, viroids and vectors

Karl Maramorosch

2. Initiation of *Helicobacter pylori* chromosome replication as a model to study bacterial oriosome assembly on bipartite origins

Rafał Donczew, Paweł Jaworski, Małgorzata Nowaczyk, Marcelina Klajner, Christoph Weigel, Jolanta Zakrzewska-Czerwińska, Anna Zawilak-Pawlik

3. Identification of a putative chromosomal replication origin from *Bdellovibrio bacteriovorus* and its interaction with the initiator protein DnaA

Łukasz Makowski, Rafał Donczew, Christoph Weigel, Anna Zawilak-Pawlik, Jolanta Zakrzewska-Czerwińska

4. The interplay between the acetate overflow pathway and the initiation of DNA replication in *Escherichia coli* cells

Joanna Tymecka-Mulik, Lidia Gaffke, Ewelina Czuba, Katarzyna Kozłowska, Lidia Boss, Monika Maciąg-Dorszyńska, Grzegorz Węgrzyn, Monika Glinkowska

5. The lack of Hfq protein affects DNA replication process in *Escherichia coli*  
Grzegorz Marek Cech, Dominika Kamrowska, Véronique Arluison Agnieszka Szalewska-Palasz, Grzegorz Węgrzyn

20.00

## Welcome Reception

### Thursday 09.07.2015

9.00 – 11.00

#### Session IV. Biotechnology

Prof. dr. hab. Anna Skorupska, Chair

Prof. dr. hab. Jan Fiedurek, Chair

1. Alcoholic fermentation: problems and perspectives

Andriy A. Sibirny, Marta Semkiv, Olena Kurylenko, Justyna Ruchala, Kostyantyn Dmytruk

2. New methods for ethanol, methanol and formaldehyde determination in environment and food products

Vladimir Sibirny

3. Enhanced production of polygalacturonase by solid state fermentation – process conditions, the enzyme isolation and partial characterization

Halina Zaslona, Anna Trusek-Hołownia

4. Molecular identification of *Paramecium bursaria* syngens and studies on geographic distribution using mitochondrial cytochrome *c* oxidase subunit I (COI) as marker

Patrycja Zagata, Magdalena Greczek-Stachura

5. Exposition of influenza A matrix protein 1 on the surface of recombinant *Bacillus subtilis* endospores

Tomasz Łęga, Nina Ciosek, Paulina Pranszke, Bogusław Szewczyk, Dawid Nidzworski

6. Influence of the silver nanoparticles on fungal community in different environments

Katarzyna Pietrzak, Beata Gutarowska

11.00 – 13.00

#### Poster Session (I, II, III, VI and LBA)

13.00 – 14.30

Sponsor Lectures

14.30 – 15.30

lunch

#### Taking down posters from Session I, II, III, VI and LBA

#### Mounting posters for Session IV, V and VII

15.30 – 19.00

Gdańsk sightseeing with a guide (optional)

## Friday 10.07.2015

9.00 – 11.00

### Session V. Clinical microbiology and immunology

Prof. dr. hab. Antoni Różalski, Chair

1. Comparison of antibiotic resistance and virulence between biofilm-producing and non-producing clinical isolates of *Enterococcus faecium*

Anna Siénko, Piotr Wieczorek, Piotr Majewski, Dominika Ojdana, Dorota Olszańska, Elżbieta Tryniszewska

2. Biological activity studies of surfactin – biosurfactant produced by *Bacillus subtilis*  
Emilia Siwak

3. Evaluating the immunogenicity and protective efficacy of PLGA (85:15) nanoparticulate *Brucella* vaccine containing rL7/L12 protein of *Brucella abortus*  
Damini Singha, Rakesh Bhatnagar

4. *Klebsiella pneumoniae*: characteristics of carbapenem resistance and virulence factors  
Esra Deniz Candan, Nilüfer Aksöz

5. The surface expression of CD25 (IL-2R) as a molecular marker of NK cell's cytotoxic activity

Karolina Rudnicka, Agnieszka Matusiak, Maria Walencka, Eliza Miszczyk, Adrian Gajewski, Magdalena Chmiela

6. Multiresistant *Elizabethkingia meningoseptica* infections in tertiary care  
Inam Danish Khan

11.00 – 11.30

coffee break

11.30 – 13.30

### Session VI. Environmental microbiology

Prof. dr. hab. Wanda Małek, Chair

Prof. dr. hab. Wiesław Barabas, Chair

1. Role of microorganisms in bioremediation of oil polluted soils  
Valentyn S. Pidgorskyi, Taisia M. Nogina

2. Biological diversity of the Black Sea deepwater soil and surface water bacteria  
V. O. Ivanytsia, O. Y. Bobrova, A. M. Ostapchuk, J. B. Kristoffersen, N. V. Korotaeva, G. V. Lisyutin, M. M. Chaban, M. Shtennikov

3. Integrins in the marine environment  
Ewa Kotlarska, Aneta Łuczkiwicz, Artur Burzyński

4. Confronting the challenges of the brackish water environment – bacterial adaptations to osmotic stress analyzed by OMIC approaches  
Joanna Karczewska-Golec, Piotr Golec, Stephanie Markert, Joerg Bernhardt, Maja Kochanowska-Łyżeń, Thomas Schweder, Agnieszka Szalewska-Palasz

5. Comparative transcriptome analysis of wood decay fungus *Cerrena unicolor*  
Grzegorz Janusz, Andrzej Mazur, Jerzy Wielbo, Piotr Koper, Kamil Żebracki

6. Partial characterization of a highly divergent hantavirus isolated from the European mole (*Talpa europaea*) in Poland  
Se Hun Gu, Janusz Hejduk, Janusz Markowski, Marcin Markowski, Pawel P. Liberski, Richard Yanagihara

13.30 – 14.30

lunch

14.30 – 16.30

**Poster Session (Session IV, V and VII)**

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- 16.30 – 18.30      **Session VII. New methods in microbiology**  
Prof. dr. hab. Adam Jaworski, Chair
1. New molecular method for typing clinical strains of Streptococcus Anginosus Group  
Katarzyna Obszańska, Izabela Kern-Zdanowicz, Izabela Sitkiewicz
  2. Rapid culturing, enumeration and analysis of bacterial cells using droplet microfluidics  
Ott Scheler, Tomasz S. Kaminski, Michal Horka, Artur Ruszczak, Piotr Garstecki
  3. Use of  $k$ -Nearest Neighbors algorithm in viral host prediction  
Wojciech Gałań, Maciej Bąk
  4. Can blue light be used against *Pseudomonas aeruginosa*?  
Grzegorz Fila, Mariusz Grinholc
  5. A rapid qualitative assay for detection of *Clostridium perfringens* from canned food products  
Gayatri Ashwinkumar Dave
  6. Enhancement of oil pollution bioremediation by electric field application  
Oksana Aliieva, Olena Matvyeyeva
  7. Microbiocenosis in different type of manures and hygienisation methods  
Katarzyna Matusiak, Beata Gutarowska, Sebastian Borowski
- 18.30 – 19.00      **Conference closing**
- 20.00                Get Together Party (optional)

## **Saturday 11.07.2015**

- 9.00 – 17.00      Trip to the Castle of Teutonic Knights in Malbork (optional)