5th World Congress on Targeting Infectious Diseases

TARGETING PHAGE & ANTIBIOTIC RESISTANCE
Phage therapy and other innovative ideas

May 17 - 18, 2018 Florence - Italy

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CONFIRMED SPEAKERS

- **Impact of virulent bacteriophages on vibrio cholerae infection and their use in preventing cholera**
  - Minmin Yen, Tufts University, USA

- **Fighting multi-drug resistant Klebsiella pneumoniae by using lytic phages**
  - Marco Maria D’Andrea, University of Siena, Italy

- **Control of catheter associated biofilms through efflux inhibition**
  - Brian Jones, University of Brighton, United Kingdom

- **Lytic bacteriophages in the treatment of biofilm-forming bacteria involved in prosthetic joint infections**
  - Mariagrazia Di Luca
  - Charité-Universitätsmedizin, Germany

- **Microencapsulation of purified bacteriophages for targeted therapeutic applications**
  - Danish Malik
  - Loughborough University, United Kingdom

- **Microarray patches for prevention and treatment of infectious diseases and their potential for reducing antibiotic resistance**
  - Ryan Donnelly
  - Queen’s University Belfast, United Kingdom

- **Phage-based antimicrobials: novel approaches for managing drug-resistant bacteria**
  - Alexander Sulakvelidze
  - Intralytix Inc., USA

- **Antimicrobial discovery from extreme halophiles**
  - Brendan Gilmore
  - Queen’s University Belfast, United Kingdom

- **Development of infection-responsive surface coatings for bacteriophage delivery in the catheterised urinary tract**
  - Scarlet Milo
  - University of Bath, United Kingdom

- **Reincarnation of a staphylococcal pathogenicity island as an antibacterial drone**
  - Richard Novick
  - New York University, USA

- **Development and use of personalized bacteriophage-based therapeutic cocktails to treat a patient with a disseminated resistant Acinetobacter baumannii infection**
  - Robert T. Schooley, University of California, USA
Day 1 – May 17, 2018

7h30  Registration & welcoming of attendees – Badges & Abstracts book Distribution

8h55  Opening Ceremony

9h00  General Introduction: How to overcome and combat antibiotic resistance in 2018?

Session 1: Phage Therapy 2018: recent advances & challenges

9h20  Fighting multi-drug resistant Klebsiella pneumoniae by using lytic phages
Marco Maria D’Andrea, Università di Siena, Italy

9h45  Control of catheter associated biofilms through efflux inhibition
Brian Jones, Queen Victoria Hospital NHS Foundation Trust, United Kingdom

10h10  Impact of virulent bacteriophages on vibrio cholerae infection and their use in preventing cholera
Minmin Yen, Tufts University, USA

10h35  Coffee Break, Poster & Networking Session

11h20  Lytic bacteriophages in the treatment of biofilm-forming bacteria involved in prosthetic joint infections
Mariagrazia Di Luca, Charité – Universitätsmedizin Berlin Hospital, Germany

11h45  Microencapsulation of purified bacteriophages for targeted therapeutic applications
Danish Malik, Loughborough University, United Kingdom

12h10  Development of infection-responsive surface coatings for bacteriophage delivery in the catheterised urinary tract
Scarlet Milo, Queen Victoria Hospital NHS Foundation Trust, United Kingdom

12h35  Lunch Break, Poster & Networking Session

14h00  Development and use of personalized bacteriophage-based therapeutic cocktails to treat a patient with a disseminated resistant Acinetobacter baumannii infection
Robert T. Schooley, University of California, USA

Short Oral Presentations (7 minutes for presentation + 3 minutes for questions)

14h25  Selection and characterisation of phages able to degrade biofilm produced by clinical isolates of E. faecalis
Pasquale Marmo, University of Roma Tor Vergata, Italy

14h35  Analysis of the conserved genes present in MRSA strains: Can they make phage therapy harder than expected?
Ignacio Mir-Sanchis, University of Chicago, USA
14h55 State-of-the-art of modeling in vivo dynamics of naturally-occurring phages and in vivo dynamics of therapeutic phages
Victoriya Volkova, Kansas State University, USA

15h05 Bacteriophage therapy and urinary tract infections
Tamara Perepanova, S.R. Institute of Urology and Interventional Radiology, Russia

15h15 Experience and perspectives of phage therapy of cardiovascular implant-assotiated infections
Evgenii Rubalskii, Hannover Medical School, Germany

15h25 Concept of individualized medicine based on personalized phage therapy for intensive care unit patients suffering from healthcare-associated infections
Andrey Aleshkin, G. N. Gabrichevsky Moscow Research Institute for Epidemiology and Microbiology, Russia

16h35 Safe & active sustained release of phages in gastro-intestinal tract
Farzaneh Moghtader, Hacettepe University, Turkey

16h45 Phages intended for preventing and treating infections caused by paenibacillus larvae in honey bee larvae
Ewa Jonczyk-Matysiak, Polish Academy of Sciences, Poland

16h55 Mycobacteriophage based platforms to discover drug targets for mycobacteria
Sujoy Das Gupta, Bose Institute, India

17h05 Efficient in vivo phage therapy via immunological cloaking
Yoon Sung Nam, Korea Advanced Institute of Science & Technology, Korea

17h10 Bacteriophage ΦSA012 has a broad host range against Staphylococcus aureus and effective lytic capacity in a mouse mastitis model
Hidetomo Iwano, Rakuno Gakuen University, Japan

17h20 Comparison of effectiveness of experimental phage cocktail, single phage and commonly used antibiotics in eradication of salmonella enterica serotypes found in poultry
Katarzyna Kosznik-Kwaśnicka, Polish Academy of Sciences, Poland

17h30 Acenitobacter prophage mining for production of specific endolysins
Ahmed Sahib Abdulamir, Alnahrain University, Iraq

17h40 Use of a biolog™ system for monitoring and overcoming phage and antibiotic resistance during the treatment of MDR infections in humans
Biswajit Biswas, Biological Defense Research Directorate, USA

Phage Therapy Speed Collaboration

This session is dedicated to all attendees, academics, start-ups and industrials who are looking for collaboration: each attendee can present his project during one or two minutes to other attendees.

If you would like to take part to the Phage Therapy Speed Collaboration, please contact us.

18h30 End the first day

20h00 Targeting Phage & Antibiotic Resistance 2018 Dinner
You can register online before May 2.
Day 2 – May 18, 2018

8h55 Opening of the second day

Session 2: Innovations against antibiotic resistance

9h00 Antimicrobial discovery from extreme halophiles
*Brendan Gilmore*, Queen’s University Belfast, United Kingdom

9h25 Microarray patches for prevention and treatment of infectious diseases and their potential for reducing antibiotic resistance
*Ryan Donnelly*, Queen’s University Belfast, United Kingdom

9h50 Reincarnation of a staphylococcal pathogenicity island as an antibacterial drone
*Richard Novick*, New York University, USA

10h15 Coffee Break, Poster & Networking Session

11h15 Microbiota & medicine revolution: the strategic role of phage
*Marvin Edeas*, Institut Cochin, University Paris Descartes, France

Short Oral Presentations (7 minutes for presentation + 3 minutes for questions)

11h40 Gut microbiome and virome after human fecal transfer
*Karin Moelling*, University of Zurich, Switzerland

11h50 Genome editing of virulent staphylococcal phages using CRISPR-CAS10
*Asma Hatoum-Aslan*, University of Alabama, USA

12h00 CRISPR-CAS9 promotes the re-sensitization of enterobacteriaceae clinical strains to β-Lactams
*Thaysa Tagliaferri*, RWTH Aachen University Hospital, Germany

12h10 Therapeutic application of phage OMKO1 in two cases of antimicrobial resistant pseudomonas aeruginosa
*Benjamin Chan*, Yale University, USA

12h20 Mycobacterial tuberculosis NadD, a promise for targeting latent and drug-resistant tuberculosis
*Leonardo Sorci*, Politechnic University of Marche, Italy

12h30 Inhibition of Shikimate kinase from M. Tuberculosis and H. Pylori for antibiotic discovery
*Concepción González-Bello*, Universidade de Santiago de Compostela, Spain

12h40 Using phage to select for evolution of reduced virulence in pathogenic bacteria
*Paul E. Turner*, Yale University, USA

12h50 Lunch Break, Poster & Networking Session

Session 3: Presentation of Innovations & Perspectives

14h00 Phage-based antimicrobials: novel approaches for managing drug-resistant bacteria
*Alexander Sulakvelidze*, Intralytix, USA

Short Oral Presentations (7 minutes for presentation + 3 minutes for questions)

14h25 Novel phage based therapeutics to address antibiotic resistance
*Naomi Zak*, Biomx, Israel

14h35 Engineering bacteriophage recognition baseplates in staphylococcal phages
*Jeffrey Radding*, EnBiotix Inc., USA
14h45 Bridging a gap in phage therapy: towards fast and efficient production of highly purified phages for various applications  
_Frenk Smrekar_, Jafral, Slovenia

14h55 Addressing challenges for the clinical development of phage products  
_Sandra Morales_, AmpliPhi Biosciences, Australia

15h05 Detection of bacteria in air by using an air sampler carrying phages and gold nanoparticles by raman probe  
_Erhan Piskin_, Institute of Graduate School of Science and Engineering, Turkey

15h15 Salmonella rissen φ1: a molecular switch  
_Marina Papaianni_, University of Naples Federico II, Italy

15h25 A phase 1 clinical trial to evaluate the safety, tolerability and preliminary efficacy of bacteriophages in patients with staphylococcus aureus chronic rhinosinusitis  
_Sarah Vreudge_, University of Adelaide, Australia

15h35 Coffee Break

15h50 Isolation of environmental campylobacter phages and their application for meat decontamination and phage-therapy in poultry  
_Giuseppe Aprea_, Istituto Zooprofilattico Sperimentale dell’Abruzzo e del Molise “G. Caporale”, Italy

16h00 Isolation and characterization of bacteriophages active against avian pathogenic e. Coli  
_Džiuginta Jakočiūnė_, University of Copenhagen, Denmark

16h10 Effect of dilution rate on continuous production of phages using two chemostats in series  
_Francesco Mancuso_, Loughborough University, United Kingdom

16h20 Metagenome analysis of a russian and georgian cocktails and a placebo-controlled safety trial of a single phage versus phage cocktail in healthy staphylococcus aureus carriers  
_Shawna McCallin_, University of Lausanne, Switzerland

16h30 Listeria monocytogenes’ infective prophage that promotes virulence is controlled by an ancient cryptic prophage, an evidence for the co-optation of phage remnant regulatory genes  
_Anat Herskovits_, Tel Aviv University, Israel

16h40 Potential use of phages as sanitizing agents to reduce hospital pathogens on hard surfaces  
_Elisabetta Caselli_, University of Ferrara, Italy

16h50 Round Table Discussion & Concluding Remarks  
Targeting Phage & Antibiotic Resistance 2018 Awards

17h30 End of Targeting Phage & Antibiotic Resistance 2018