

WELCOME

8th

WORLD
CONGRESS

PHAGE THERAPY 2025

TARGETING PHAGE THERAPY



Agenda

International Society
of **Microbiota**

June 10-11, 2025 - Berlin

TARGETING
PHAGE
THERAPY 2025

Targeting Phage Therapy 2025

June 10 - 11, 2025 – Berlin, Germany

Day 1 - June 10, 2025

8h00 Welcoming of attendees & Badge Distribution

8h50 Welcome Note of Targeting Phage Therapy 2025

Chairs: Christian Willy, Marvin Edeas

9h00 Keynote Speech



Phage Therapy 2030: Getting from Here to There

Robert T. Schooley, University of California, San Diego, USA

Session 1 – Phage-Bacteria Interactions & Resistance



9h30 - **Bacteriophage Therapy: A Renaissance – From Military Medicine to Civilian Healthcare**

Christian Willy, Military Academic Hospital Berlin, Germany



9h55 - **Phage Defense Systems: Are They an Obstacle for Phage Therapy?**

Stan J.J. Brouns, Delft University of Technology, The Netherlands

10h20 Coffee Break, Networking and Poster Sessions

Chairs: Stan J.J. Brouns, Alberto Danielli



11h00 - **Yersinia Phage Stories: Impact on Phage Therapy**

Mikael Skurnik, University of Helsinki, Finland



11h25 - **Biocontrol of Phage Resistance in Pseudomonas Infections – Fitness Trade-Offs Between Phages and Antibiotic Sensitivity**

Jumpei Fujiki, Rakuno Gakuen University, Japan

11h50 Short Oral Presentations & Innovations

DUOFAG – Human Clinical Trial Phase I

Dana Štveráková, MB PHARMA s.r.o., Czech Republic

Successful Eradication of Chronic Pseudomonas Aeruginosa Infection with Personalised Bacteriophage Therapy in Children with Cystic Fibrosis: An Early Phase Clinical Trial

Jagdev Singh, The Children's Hospital at Westmead, Australia

First Use of Phage Therapy in Canada for the Treatment of a Life-Threatening, Multidrug-Resistant Staphylococcus Epidermidis Periprosthetic Joint Infection: An N-of-1 Trial

Marisa A. Azad, University of Ottawa at the Ottawa Hospital, Canada

A Multifaceted Experience with Phage Therapy: A Short Review of Successful and Challenging Cases across Multiple Body Systems

Mariam Dadiani, Eliava Phage Therapy Center, Georgia

Anti-Quorum Sensing Phages Rescue Galleria mellonella Larvae from Pseudomonas aeruginosa Infection

Kira Céline Koonce, University of Copenhagen, Denmark

12h40 Lunch Break, Networking, Poster

Group photo

Session 2 – Phage Therapy Across Systems: From Gut Ecosystems to Precision Oncology

Chairs: Robert T. Schooley, Domenico Frezza



14h00 - **Complex Phage Communities Control Gut (im)balances and May Hold the Key to Restore Gut Biosis**

Dennis Sandris Nielsen, University of Copenhagen, Denmark



14h25 - **KlebPhaCol: Novel Gut Phage Order Associated with the Human Gut**

Franklin Nobrega, University of Southampton, United Kingdom



14h50 - **Targeting Tumors with Engineered Phages: A New Frontier in Precision Oncology**

Alberto Danielli, University of Bologna, Italy



15h15 - **Engineering Phages for Cancer Therapy: Insights into Immune Interactions and Targeting in Ex-Vivo and In-Vivo Models**

Alena Kaltenbrunner, University of Bologna, Italy

15h40 Coffee Break, Networking, Poster

16h20 Short Oral Presentations & Innovations

PHAGE–Postbiotic Synergy: A Novel Strategy against Pseudomonas Aeruginosa in Burn Wound Infection in Galleria Mellonella

Mine Egin, Karadeniz Technical University, Turkey

Bacteriophage-based vaccine and IL-12 Gene Therapy Eradicate Aggressive Melanoma

Andrej Cör, Valdotra Orthopaedic Hospital, Slovenia

Session 3 - Phage Therapy in Veterinary Medicine, Agricultural & Industrial Applications

Chairs: Hidetomo Iwano, Loris Rizzello



16h40 - **Phage Therapy in Veterinary Medicine: Presentation of First Clinical Trial in Japan**

Hidetomo Iwano, Rakuno Gakuen University, Japan



17h05 - **Bacteriophages Applications in Broiler Farms: Strategies & Perspectives**

Sandra Sevilla, Centro de Calidad Avícola y Alimentación Animal, Spain

17h30 Short Oral Presentations & Innovations

New Insights into Bacteriophage Therapy in Dogs

Eva Maria Kalbhenn, LABOKLIN GmbH & Co. KG, Germany

In Ovo Phage Administration as a Novel Prophylactic Approach against Salmonella Typhimurium in Broiler Chickens

Jan Torres-Boncompte, Centro de Calidad Avícola y Alimentación Animal de la Comunidad Valenciana, Spain

From Cells to Larvae: A Two-Front Approach to Salmonella Eradication Using Bacteriophage Vb_Sen-Miriam1

Łukasz Grabowski, University of Gdansk, Poland

Cure of a Difficult-To-Treat Pseudomonas Aeruginosa Canine Chronic Otitis Externa (Oe) with the PyoBacteriophage Cocktail Followed by Antibiotics

Raphaël Baudin, Lausanne University Hospital, Switzerland

Coevolution of Bacteriophages Enhances Biocontrol of Shiga Toxin-Producing Escherichia Coli in Food Matrix

Nicola Mangieri, University of Milan, Italy

18h20 End of Conference Day One

20h00 Speakers' Dinner (reserved for ticket holders)

TARGETING PHAGE THERAPY 2025

Targeting Phage Therapy 2025

June 10 - 11, 2025 – Berlin, Germany

Day 2 - June 11, 2025

8h25 Welcoming of attendees & Badge Distribution

Chairs: Marco Cafora, Mikael Skurnik

8h30 Short Oral Presentations & Innovations

Addressing Phage Resistance in Pseudomonas Aeruginosa Isolates from People with Cystic Fibrosis

Federica Briani, Università degli Studi di Milano, Italy

Isolation, Characterization and Anti-Biofilm Activity of Lytic Bacteriophage K2 against Klebsiella Pneumoniae Isolates

Damla Damar Celik, Marmara University, Turkey

Collateral Effects of Bacteriophage Resistance on Antibiotic Sensitivity in Pseudomonas Aeruginosa

Laura Rianne Baars, Leiden University, Netherland

Session 4 - Innovative Phage Applications in Clinical Research



09h00 - **Translating Phage Therapy into the Clinic: Recent Accomplishments and Next Challenges**

Jeremy Barr, Monash University, Australia



09h25 - **Inhaled Bacteriophage Therapy for Multidrug Resistant Pseudomonas Aeruginosa: Advances & Perspectives**

Gail L. Stanley, Yale University, USA



9h50 - **Bacteriophage Therapy for Critical Infections Related to Cardiothoracic Surgery**

Christian Kühn, Hannover Medical School, Germany

10h15 Coffee Break, Networking, Poster

Chairs: Anna Pistocchi, Gail L. Stanley

11h00 - Short Oral Presentations & Innovations

Endolysin (LysK04) Combined with Plant-Derived Phenylpropanoid Disrupt Outer Membrane Barriers and Exhibits Broad-Spectrum Antibacterial Activity Against High-Risk Gram-Negative Pathogens

Susweta Das, Dayananda Sagar University, India

Biohybrid Composites of Platelet-Rich Fibrin and Gelatin Hydrogel Beads (Nano/Micro) for Targeted Phage Delivery in the Treatment of Infected Wounds

Farzaneh Moghtader, TiPhage, Turkey

Phage P04 Loaded Polysaccharide Hydrogel to Combat Biofilm-Forming Klebsiella Pneumoniae Infected Lesions

Harshitha N, Dayananda Sagar University, India

Antibody Alternatives from Bacterial Viruses: Phage Receptor Binding Proteins as Novel Tools for Diagnostics and Therapy of Bacterial Infections

Peter Braun, *Fraunhofer Institute for Translational Medicine and Pharmacology ITMP, Germany*

Determining the potential of Bacteriophages to evolve their host range

Wallapat Phongtang, *Friedrich-Schiller-Universität Jena, Germany*

Phage-Antibiotic Composite Efficacy on Dual-Species Biofilm

Tea Glonti, *Queen Astrid Military Hospital, Belgium*

Freeze-Dried Tablets for Therapeutic Application of Bacteriophages

Marie Komárková, *Masaryk University, Czech Republic*

Source-Dependent Variability in Staphylococcus Aureus Susceptibility to Bacteriophage Infection

Hanife Nur Karakoc Parlayan, *Karadeniz Technical University Trabzon, Turkey*

12h20 Lunch Break, Poster & Exhibition Sessions

Chairs: Christian Kühn, Franklin Nobrega



13h30 - **Endolysin B as a New Approach & Archetype in M. Tuberculosis Treatment**

Loris Rizzello, *University of Milan, Italy*



13h55 - **Ex Vivo Pig Lung as a New Cystic Fibrosis Model for the Study of Pseudomonas aeruginosa Biofilm Infection and Phage Therapy Application**

Marco Cafora, *University of Milan, Italy*

14h20 - Short Oral Presentations & Innovations

Novel Mycobacteriophages as a Promising Adjunct in the Fight Against Drug-Resistant TB and NTM Infections

Anthony Vocat, *Lausanne University Hospital, Switzerland*

Phage Heteroresistance in Clinical Klebsiella Pneumoniae Isolates: Impact of Differential Capsule Expression on Phage Efficacy

Iris Najjar, *Escola Paulista de Medicina-Universidade Federal de São Paulo, Brazil*

Broad-Spectrum Lytic Bacteriophages from Wastewater as Therapeutic Candidates against Antibiotic-Resistant Clinical Strains

Erva Rakici, *Recep Tayyip Erdogan University, Turkey*

Five Years of Adaptive Phage Therapy in the Intensive Care Unit: Prospects, Limitations, Opportunities

Ekaterina A. Chernevskaya, *Federal Research and Clinical Center of Intensive Care Medicine and Rehabilitation, Russia*

Session 5 – From Bench to Market: GMP Production, Regulation & the Future of Phage Therapies

Chairs: Barbara Brenner, Jeremy Barr



14h50 - **Phage Therapy in Europe: Legal, Regulatory, and Ethical Issues**

Barbara Brenner, *Kanzlei BRENNER, Germany*



15h15 **Practical Session: GMP (Good Manufacturing Practices) for phage production. Scaling production. Quality control and standardization. Market access and commercialization strategies**

Frenk Smrekar, *JAFRAL, Slovenia*



15h35 **CellMaker- The Ideal Solution for Scalable Phage Manufacturing**

Ruta Teterovska, Cellexus International Ltd., United Kingdom

15h45 The Lausanne University Hospital GMP Production Pipeline for Manufacture of Therapeutic Bacteriophages
Gregory Resch, Lausanne University Hospital, Switzerland

GMP-Compliant Bacteriophage Bulk Production as APIs for Personalized Human Medicine: A European Perspective
Milan Bunata, FAGOFARMA, Czech Republic

From Biology to Business: INCATE as a Catalyst in the Antibacterial Innovation Pipeline
Mercedes Gonzalez Moreno, Hans Knöll Institute (HKI), Germany

AWMF Sk2 Guideline Personalized Bacteriophage Therapy in Germany
Simone Lieberknecht-Jouy, University Hospital Frankfurt, Germany

16h25 **Concluding Remarks**

Phage Therapy in Transition: A Vision for the Coming Decade
Christian Willy, Military Academic Hospital Berlin, Germany

16h40 **Discussion & Awards of Targeting Phage Therapy 2025**

17h00 Drinks and Appetizer - Networking

17h00 **End of Targeting Phage Therapy 2025**

For more information, please visit: www.phagetherapy-site.com

TARGETING PHAGE THERAPY 2025