

## Report for ISME

### Title of the event

*Innovation to combat the problems caused by multi-drug resistant bacteria, in the context of One Health*

**Date:** March 7<sup>th</sup>, 2024

**Place:** Palace of the Academies (Rubens Auditorium), Rue Ducale/Hertogsstraat, 1 - 1000 Brussels.

**Type of meeting:** Expert Meeting (Maximum 50 attendees)

**Context:** Project organized Under the Auspices of the EU Belgium Presidency

Under the auspices of



### Organization committee:

Philippe Gabant (Syngulon, BSM board member) & Guy Hélin (*Syngulon*)

Jacques Mahillon (*UCLouvain, NaComi Vice President*)

Eveline Peeters (*VUB, BSM chair*)

Mimi Deprez (*VUB*)



**In collaboration with:** Belgian Society for Microbiology (BSM - <https://belsocmicrobio.be/>)



**Social media:** The Young BSM members posted before and during the meeting on social media.

### Objective of the meeting:

The aim of the meeting was to present and discuss the strengths of the Belgium Microbiology to fight the surge of multi-resistance to antibiotic (AMR) and this in the One Health context. Representative from different Belgium Institutions were invited to present their roles and visions to limit AMR spreading. A link with the EU institutions was made by the HERA agency. Importance of training and activities of young scientists in microbiology (represented by the Young BSM) were presented. The importance of microbes in all human activities was illustrated by the implication of Belgium microbiologists of the SK-Cen in space exploration. During the meeting new alternative to antibiotics were presented and discussed (Phages, bacteriocins). At the end of the meeting the potential of synthetic biology to control AMR was presented and discussed in a final panel discussion. At the end of meeting a networking drink was organized. A total of forty attendees joined the meeting.

**Program:**

- 14:00 Welcome word by Jacques Mahillon (UCLouvain, NaCoMi Vice-President) and Eveline Peeters (VUB, BSM Chair)
- 14:15 Jean-Paul Pirnay (Queen Astrid Military Hospital, Brussels): Phage therapy
- 14:45 Françoise Van Bambeke (UCLouvain): Limit of current antibiotics
- 15:00 Jean-Baptiste Perrin (HERA) - Keynote AMR - Innovations from EU's view point
- 15:45 Charles Van der Henst (VUB, VIB, ISME ambassador)
- 16:00 Coffee Break
- 16:30 Young BSM: Amir Hassan (UGent)
- 16:40 Agustin Reséndiz Sharpe (KU Leuven) - Alternatives to animal models to test antimicrobials
- 16:50 Natalie Leys (SCK-CEN) - The control and use of microbes in human space exploration
- 17:10 Fabiana Dal Pozzo (AMCRA) - Adopted strategies and challenges to tackle AMR in veterinary medicine
- 17:30 Philippe Desmeth (BCCM) - Importance of microbial collections
- 17:50 Philippe Gabant (Syngulon) with Vitor Pinheiro (Support Guy Bart Stan) - Synthetic Biology
- 18:00 Round table and Conclusions
- 18h30 Networking drink with members of the board of the BSM

**Media:**



Welcome word by Jacques Mahillon (UCLouvain, NaCoMi Vice-President)



Welcome word by Eveline Peeters (VUB, BSM Chair)



Jean-Paul Pirnay (Queen Astrid Military Hospital, Brussels): Phage therapy



Françoise Van Bambeke (UCLouvain): Limit of current antibiotics



Jean-Baptiste Perrin (HERA) - Keynote AMR - Innovations from EU's view point.



Charles Van der Henst (VUB, VIB, ISME ambassador)



Amir Hassan (UGent): Young BSM



Natalie Leys (SCK-CEN): Control and use of microbes in human space exploration



Fabiana Dal Pozzo (AMCRA): Adopted strategies to tackle AMR in vet medicine



Panel discussion

Under the auspices of



*Brussels - March 7, 2024*

## **Innovation to combat the problems caused by multi-drug resistant bacteria (AMR) in the context of *One Health***

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*The organising Committee*

Philippe Gabant & Guy Hélin (Syngulon)

Jacques Mahillon (UCLouvain)

Eveline Peeters (VUB)

Mimi Deprez (VUB)



*Many thanks to...*



*and to...*



Under the auspices of



*The Royal Academies for Science and the Arts of Belgium (RASAB)*

*National Committee for Microbiology (NaCoMi)*