



## 15HLT01 MetVBadBugs

### Quantitative measurement and imaging of drug-uptake by bacteria with antimicrobial resistance

Agenda for 9M Meeting INRiM,  
2<sup>nd</sup>/3<sup>rd</sup> February 2017

#### Day One – Thursday 2<sup>nd</sup> February 2017

- 12:00** Lunch\*\*
- 13:20** Welcome (Paulina Rakowska - NPL)
- 13:25** Overview of project objectives (Paulina Rakowska - NPL)
- 13:30** **WP1: Well-controlled model systems to allow cross-platform measurement of penetration, accumulation and efflux of antibacterial agent**
- Short presentation on each activity due in 2016/17 followed by a round table discussion/short slides if needed to update on all the activities of WP1 – UNOTT as WP leader to lead this session.*
- Introduction to session: challenges and upcoming deliverables in 2017 UNOTT
  - A1.1.1 Preparation of artificial biofilm model system (due April 17) NPL
  - A1.1.2 Relative vertical concentration depth profiles by SIMs (due Oct 17) NPL
  - A1.1.3 Production of artificial biofilm/antimicrobial samples (due Oct 17) NPL
  - A1.1.4 Deliverable 8 'Report on the suitability of using the reference sample model for biofilms in a VAMAS interlaboratory study' (due Oct 17) NPL
  - A1.2.1 Preparation of facilities for microbial manipulation (due Oct 17) UNOTT
- 15:00** Coffee break
- 15:30** **WP2: Imaging and localisation of antimicrobials in bacteria and biofilms**
- Short presentation on each activity due in 2016/17 followed by a round table discussion/short slides if needed to update on all the activities of WP2 – NPL as WP leader to lead this session.*
- Introduction to session: challenges and upcoming deliverables in 2017 NPL
  - A2.1.1 High-pressure freezing of bacteria (due Oct 17) NIBSC
  - A2.1.2 High-pressure freezing of biofilms (due Oct 17) NIBSC
  - A2.1.3 Protocols - storage & shipment of cryogenic samples (due Oct 17) NIBSC

- A2.1.4 Cryo-preparation training (due Oct 17) NIBSC
- A2.2.1 Study of photoionisation schemes (due Oct 17) NPL
- A2.2.2 Identification of suitable schemes (due Oct 17) NPL
- A2.3.5 3D nanoSIMS on selected sampled (due Oct 17) NPL
- A2.3.6 MS/MS analysis (due Oct 17) NPL
- A2.4.2 Method for 3D imaging of bacteria (due Oct 17) NPL

**17:00**      **WP6: Management and coordination**      NPL

- A6.3.2 Nine month reporting (due Mar 2017)

**17:30**      Close

## Day Two – Friday 3<sup>rd</sup> February 2017

**08:30**      **WP3: Dynamic measurement of biocide interaction**  
*Short presentation on each activity due in 2016/17 followed by a round table discussion/short slides if needed to update on all the activities of WP3 – INRiM as WP leader to lead this session.*

- Introduction to session: challenges and upcoming deliverables in 2017      INRiM
- A3.1.2 Raman Spectroscopy characterisation (due Oct 17)      INRiM
- A3.2.1/ A 3.2.2 SERS platforms (due Oct 17/Dec 17)      INRiM
- A3.3.1 Enhancing TERS sensitivity (due Oct 17)      INRiM
- A3.4.1 Development of PALM/STORM (due Oct 16)      LENS
- A3.4.2 Beam shaping (due Apr 17)      LENS
- A3.4.3 Optical scanning of thick sample volumes (due Apr 17)      LENS
- A3.4.4 3D localisation accuracy (due Apr 17)      LENS
- A3.4.5 PALM/STORM/multicolour imaging optical config. (due Apr 17)      LENS
- A3.5.1 Drug selection (due Oct 16)      LENS
- A3.5.2 Selection of membrane proteins (due Oct 16)      LENS
- A3.5.3 Labelling strategy for dual colour super co-localisation (due Oct 17)      LENS
- A3.6.1 Labelling strategy for biofilm labelling (due Oct 16)      LENS

**10:00**      **Coffee/short break**

**10:15**      **WP4: Quantitative measurements of biocide concentration**  
*Short presentation on each activity due in 2016/17 followed by a round table discussion/short slides if needed to update on all the activities of WP4 – PTB as WP leader to lead this session.*

- Introduction to session: challenges and upcoming deliverables in 2017      PTB
- A4.1.1 Exopolysaccharide samples (due Dec 17)      NPL
- A4.2.1 Measurement protocol (due Jun 17)      PTB
- A4.2.3 NAP-XPS biofilm tests (due Dec 17)      PTB
- A4.2.4 Raman testing of biofilm sample (due Dec 17)      PTB
- A4.3.1 NAP-XPS measurements E.coli biofilms (due Apr 17)      BAM
- A4.3.2/A4.3.3 XPS protocols (due Aug 17/Dec 17)      BAM
- A4.4.1 Biofilm container (due Apr 17)      PTB

- A4.4.3 Exopolysaccharide model biofilm to liquid cell (due Dec 16) PTB
- A4.4.4 Measurement protocol (due Jun 17) PTB

**11:45 WP5: Creating impact**

*Short presentation on each activity due in 2016/17 followed by a round table discussion/short slides if needed to update on all the activities of WP5 – BAM as WP leader to lead this session.*

- Introduction to session: challenges and upcoming deliverables in 2017 BAM
- A5.1.5 Two joint dissemination meetings (due Jun 17) NPL

**13:00** Any other business (all partners)  
Next meetings  
Stakeholder meeting

**13:30** Lunch

**14:30** Breakout sessions for further discussion if required All

**15:00** Meeting close

\*\* Please note that with the new H2020 EMPIR financial rules all consortium partners need to incur costs for any project dinner. INRiM covering the cost of any consortium subsistence outside of working hours is an illegible cost. Please ensure you have euros to cover lunch and dinner.