

MetVBadBugs – Quantitative measurement and imaging of drug uptake by bacteria with antimicrobial resistance

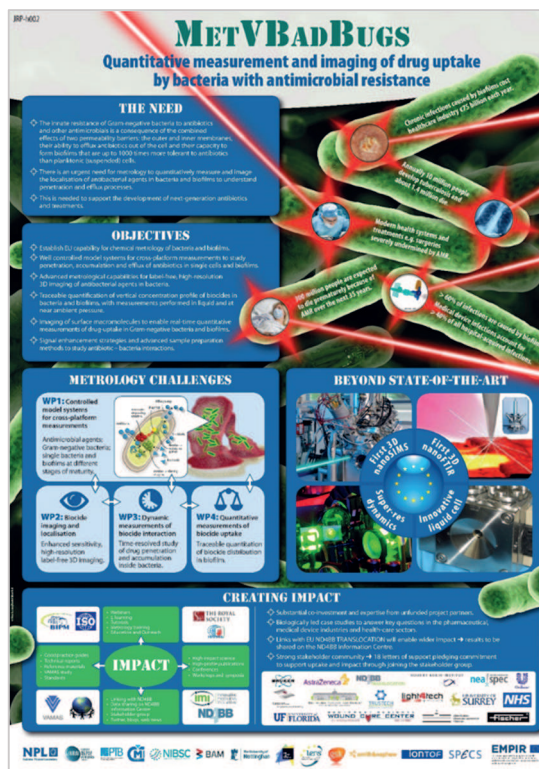
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There is no single technique that can deliver all of the measurement answers needed by scientists studying antimicrobial resistance (AMR) and developing new antibiotics. The development of new technologies and capabilities is needed as well as a robust metrology framework, built on fundamental studies of the techniques and combined with a cross measurement platform validation including pre-normative studies. By bringing together the leading European metrology experts, European Metrology Programme for Innovation and Research (EMPIR) presents an excellent platform to address the metrology gaps and to support the AMR research.

A new project has just been launched under the EMPIR – MetVBadBugs [1]. This project will develop innovative measurement capabilities to quantify and image the penetration of drugs into Gram-negative bacteria and to measure the accumulation and efflux of the drugs. The tools and understanding generated will provide vital help to scientists optimising antimicrobial drugs to combat antibiotic-resistant bacteria. The consortium of the project brings together senior scientists from big pharma, medical device and biomedical discovery sectors as well as world-class metrology expertise from European national measurement institutes (NMIs) and microbiology from international leaders in the field, making it uniquely placed to support the challenge.



References

1. <http://www.euramet.org/research-innovation/empir/empir-calls-and-projects/empir-call-2015/>