The Virtual Research Institute (JPIAMR-VRI)

The Challenge – Antimicrobial Resistance (AMR)

- Resistant bacteria know no geographical boundaries.
- The rising threat of antibiotic resistance urgently requires a One Health holistic and multi-sectoral approach.
- There is a lack of AMR research collaboration, coordination, and sharing of knowledge, data and resources, on a global scale.

About the JPIAMR-VRI

The JPIAMR-VRI is a virtual platform to connect research networks, and research performing institutes, centres and infrastructures beyond sectorial and geographic boundaries in a larger global network under JPIAMR topics in a One Health approach.
JPIAMR-VRI is envisioned as a dynamic network of AMR research facilities that will change the way resources are shared and used, and will ensure a closer and continuous dialogue among researchers and others stakeholders.

Why a VRI on AMR?

JPIAMR, the largest joint venture in research coordination and support for AMR, recognises a need to implement a global alignment of AMR research. The JPIAMR-VRI will strengthen partnerships, facilitate innovation and avoid duplication. It will address the spread and burden of AMR.

Aim of the JPIAMR-VRI

By connecting the global scientific community along the six pillars of the joint Strategic Research and Innovation Agenda, the JPIAMR-VRI will provide an unprecedented level of knowledge exchange, facilitate the analysis of knowledge gaps, increase capacity, improve coordination, implement breakthrough collaborative research and increase the visibility of the research performed. It will bridge borders and disrupt barriers between fields of AMR research through the formation of a virtual "corridor" - facilitating alignment of strategies, and the production and sharing of scientific evidence. Supporting the development of policy and guidelines - to reduce the global burden of AMR.

AMR Research Capacities

- **Connecting**: Bridging Partnerships, Collaborations, Forums, Workshops, Webinars
- **Access**: Enabling Global Access, Mappings, Frameworks, Blueprints, Expertise, Knowledge Transfers, Structuring.
- **Data sharing**: Online Sharing Platforms, Libraries, Catalogues
- **Scientific Innovation**: Building Evidence in all One Health domains of AMR, including human and animal health and the environment.
- **Capacity Building**: Training, Virtual Education, Train the Trainers, Exchange Programs
- **Awareness**: Developing and Sharing research results, Promoting AMR in the Global Agenda

2018	2019	2020	2021
First Funded Networks	Design and Development	Implementation and Launch	Operations and Evaluation

JPIAMR	VRI

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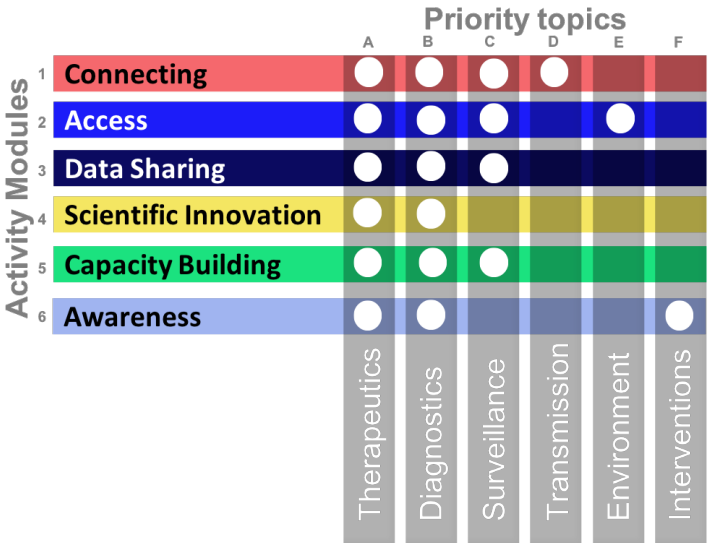
The First Funded Networks

In 2018, JPIAMR funded eight Networks to develop activities to build the foundation of the JPIAMR-VRI.

They are covering a wide range of AMR research areas addressing key JPIAMR-VRI activities/modules as represented by the white dots in the matrix.

Below are short summaries of their Network activities and how they align within the matrix.



Matrix of the first funded Networks' activities contributing to the foundation of the JPIAMR-VRI.

IRAADD
To reverse the severe funding problem in R&D and efficiently translate findings into novel and useful therapeutic products. Together with Academia, Industry & Policy, develop blueprints on research for antibiotic discovery and development. (1A, 2A, 3A, 4A, 6A, 6F)

Coord.: Rolf Müller, Germany

AMR Dx Global
Produce a Strategic Action Plan for the establishment of a Virtual School of Diagnostics to provide training and capacity building (5A, 5B, 5C).

Coord.: Till Bachmann, UK

VeRI-Beam
Define and clarify the regulatory assessment of differentiation criteria for alternative antimicrobial treatments to avoid drug development market access risks, pitfalls and misuse of public funding. Share (scientific and non-scientific) knowledge with AMR Research community in non-competitive matter. (2A, 2B, 3A, 3B, 4A, 4B, 5A, 5B, 6A, 6B)

Coord.: Florence Sejourne, France

GAP-One
Current figures fail to capture the full health & economic burden in AMR and are mostly based on human health from High Income Countries. Identify data elements and provide a framework to assess data quality required to build a reliable tool for estimating resource waste due to AMR worldwide under One-Health. (2C, 3C)

Coord.: Luigia Scudeller, Italy

CONNECT
To design an environment to facilitate the transfer of knowledge and create connections amongst scientists both within and between disciplines. (1B, 1C, 1D)

Coord.: Nicola Petrosillo, Italy

AMRIC
Platform for global data sharing for acute and critical care environments to determine impact of AMR. (3C, 5B)

Coord.: Srinivas Murthy, Canada

NEAR AMR
Determining common capacity & capability training needs in AMR research from Europe and Africa. Inform on preferred profile for global surveillance data sharing platform of what is realistically possible within a range of existing healthcare systems from multiple geographical settings with various resources limitations. (3C, 5C)

Coord.: Adam Roberts, UK

TT (Translocation-Transfer)
To design a pathway facilitating the transfer of knowledge between existing academically driven antibiotic drug discovery programmes, with a focus on compound permeation and efflux considerations. (3A, 4A)

Coord.: Mathias Winterhalter, Germany

In addition to the above Networks, JPIAMR also recently funded 10 Surveillance Networks in the area of human and animal health, and environment.

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