

**EU Joint Programming Initiative on
Antimicrobial Resistance (JPI AMR)**
An overview

**“Our Environment, Our Health: One Health”
Conference NUI Galway
28th September 2018**

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Member of JPI AMR Management Board**

HR^B Health
Research
Board

**Research.
Evidence.
Action.**



www.jpiamr.eu

Why a JPI on AMR?

Through use and misuse of antibiotics, bacterial resistance continues to spread making antimicrobial drugs (including antibiotics) ineffective. Hence, the current situation is very grim. A British Committee, on behalf of the UK Government, found that at present in the US and Europe alone, 50,000 deaths per year can be related to antimicrobial resistance. And these figures are set to rise. The prediction is that by 2050, 10 million people will die each year due to drug resistant infections that will cost the society \$100 billion.

Joint collaborative actions, maximising research efforts and benefiting from the exchange of best practise, are crucial to tackle this problem. At the moment:

- Few new drugs are being developed
- There is excessive use of antibiotics
- Resistance continues to spread
- Funding and research efforts are dispersed
- All this leads to a global societal problem, which will spiral out of control without action.

JPIAMR aims to align resources by creating a collaborative platform, maximising existing and future efforts to combat AMR

JPIAMR'S ADDED VALUE

ALIGNS INTERNATIONAL RESOURCES TO ENABLE JOINT ACTIONS IN AREAS OF UNMET NEEDS

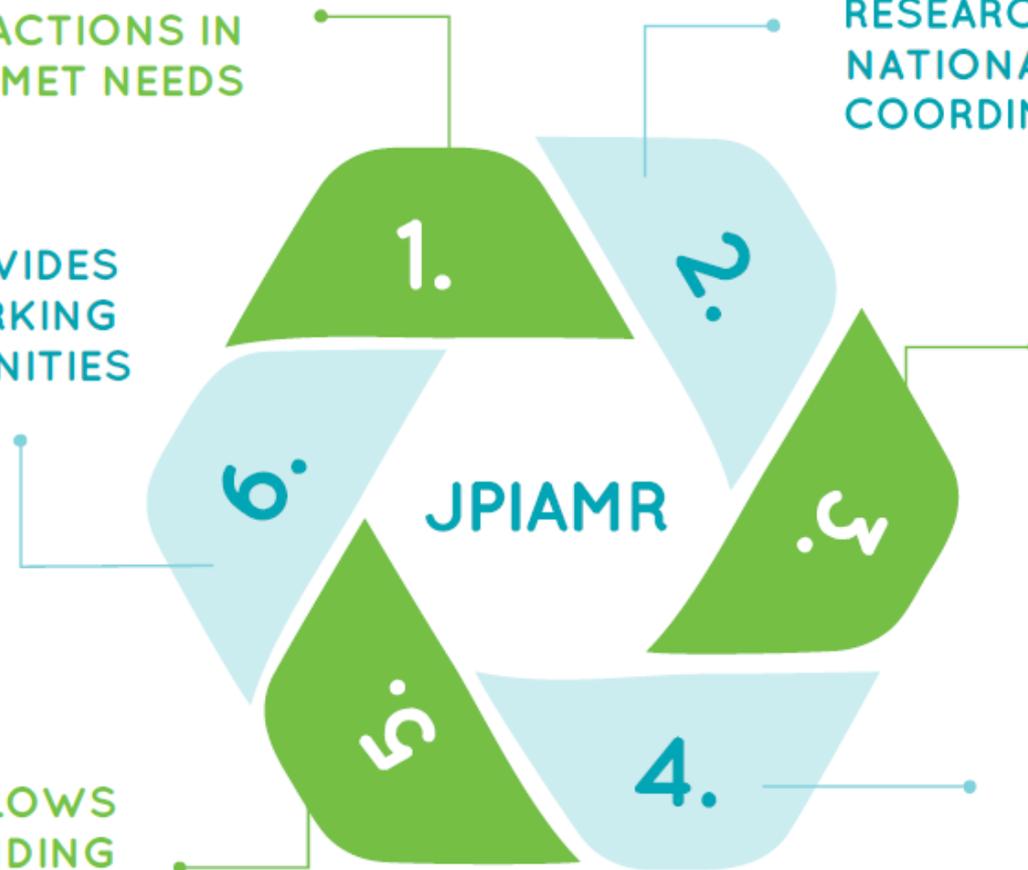
SHARED COMMON STRATEGIC RESEARCH AGENDA TO ALIGN NATIONAL PRIORITIES AND COORDINATED ACTIONS

COLLABORATIVE PLATFORM TO TAKE THE AMR COMBAT FROM AWARENESS TO ACTION

SUPPORTING INTERNATIONAL RESEARCH AND FACILITATING ITS TRANSLATION TO INDUSTRY AND POLICY

PROVIDES NETWORKING OPPORTUNITIES

ALLOWS FUNDING POT TO CREATE LARGER POT



JPIAMR

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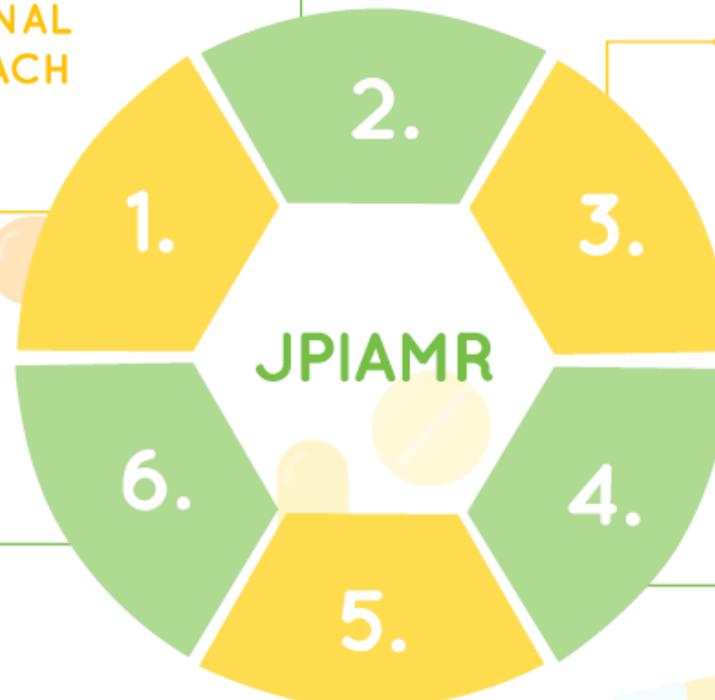
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STRATEGIC RESEARCH AGENDA (SRA)

TO BRING TOGETHER ALL PLAYERS IN THE FIELD FOR A MULTI-DIMENSIONAL APPROACH

TO PROVIDE A PLATFORM FOR PARTNERS TO COLLABORATE IN A TAILOR-MADE FASHION ON SPECIFIC TOPICS

TO DRAFT FUTURE RESEARCH PROGRAMMES

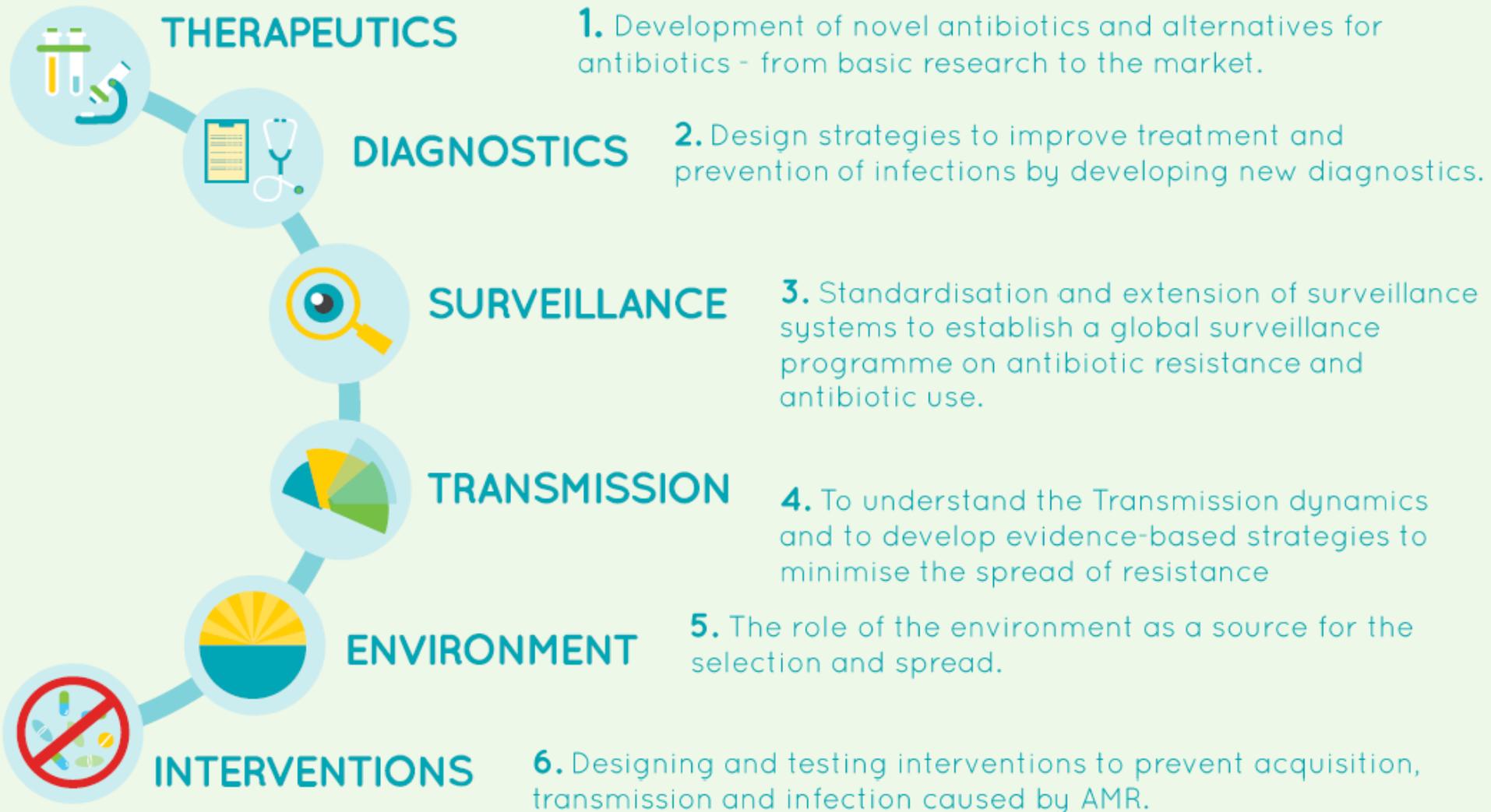


TO FORM A COMPREHENSIVE APPROACH TO REDUCE THE AMR BURDEN

A FRAMEWORK TO BEGIN JOINT ACTIONS

A FRAMEWORK FOR CREATING AN EXTENSIVE TRANS-EUROPEAN WORK PROGRAMME ON AMR

SRA – UNITING UNDER ONE STRATEGY



In Brief

- Formed in 2011 by 15 European Countries with the support of the European Commission
- Now comprise **27** countries globally.
- Funding €65 M of basic and exploratory research on new antibiotics, stewardship of existing antibiotics, and studies and control of the spread of antibiotic resistance between humans, animals, and the environment in a One Health perspective.
- Also supports research through several activities such as the establishment of a Virtual Research Institute.
- JPIAMR coordinates national research programmes on AMR through its Strategic Research Agenda and with input from the IMI and a network of non-governmental stakeholders.

What we do



Mission: To join forces across nations by leading the alignment, coordination, and support to Antimicrobial Resistance One Health collaborative research and global policy activities.

By: “providing scientific evidence” and “finding routes for novel antibiotics and new anti-infectious strategies”.

Goals:

- To align national and international research programmes.
- To support and coordinate transformative research.
- To develop the JPIAMR Virtual Research Institute.
- To promote innovation and translation of research results.
- To bridge the gap between research and policy.

WORKING TOGETHER



*New members in 2018:
Egypt, India, Ireland, South
Africa, South Korea*



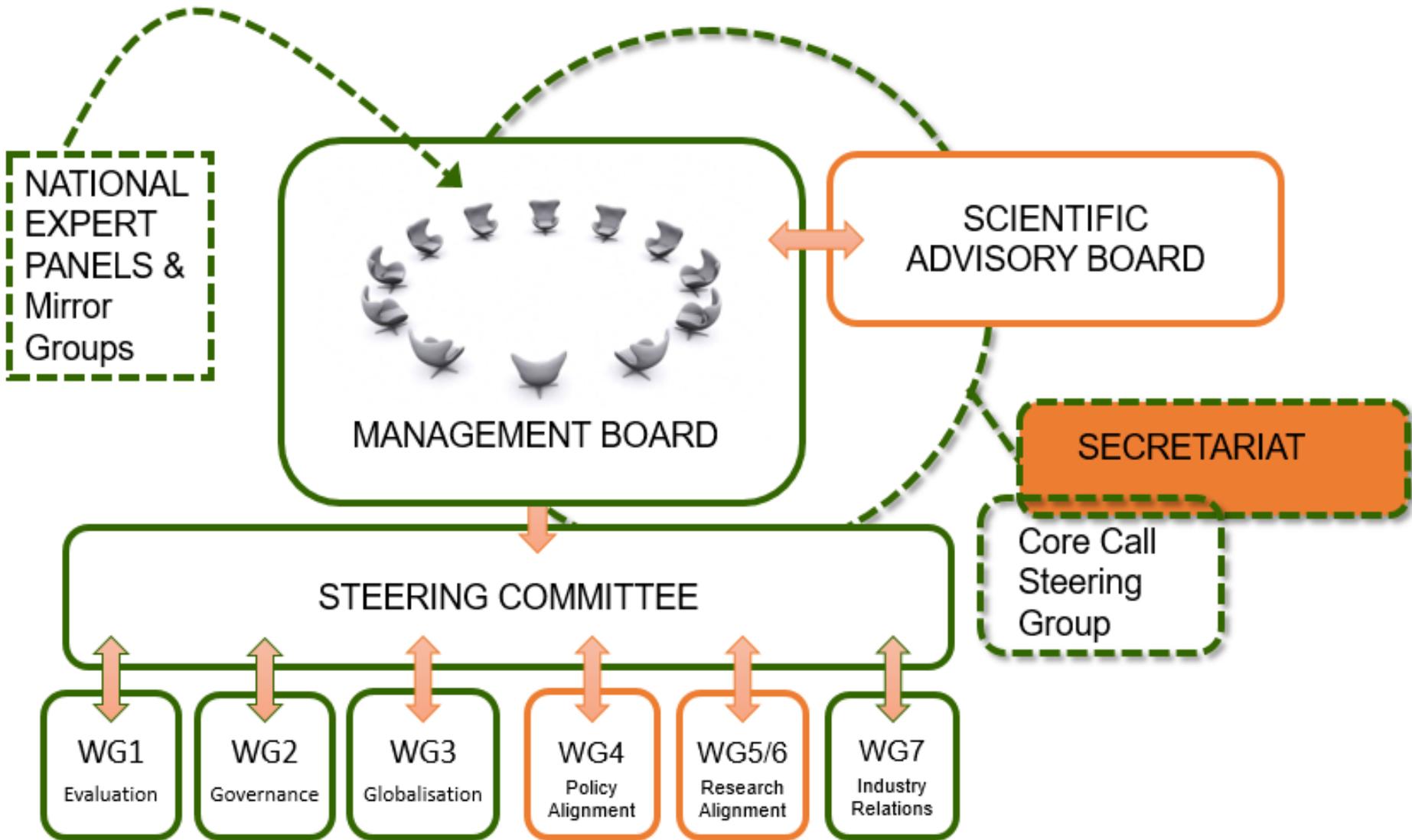
*The European Commission (DG
Research) is a full non voting
member*

Membership Structure

- Management Board (MB) – decision making body
Chair: Carlos Segovia (Spain), Vice-Chair: Jan-Ingvar Jönsson (Sweden).
 - MB Working Groups – 7 in total
- Steering Committee
 - Chair and Vice-Chair
- Scientific Advisory Board
- Stakeholder Advisory Board
- Secretariat – hosted by Swedish Research Council
- Topic related/activity related working groups and sub-groups

Members rights & responsibilities

- Nominated Management Board member has a governmental mandate
- All members are represented in the Management Board (max 2 representatives)
- Have voting rights
- Active contribution to activities of JPIAMR expected from countries represented by MB member:
 - Attend MB meetings regularly (twice/year)
 - Member of at least 1MB Working Group
 - Participate in some of Joint Actions
 - Answer official JPIAMR surveys
- Contribute to JPIAMR operations:
 - Contribute in-kind for the time to participation in meetings, workshops and Working Groups events and travel costs of member's representatives
 - Contribute in-kind with the organisation of some of the JPIAMR meetings or workshops
 - If in the future financial fees are decided to be set by the MB, its members would have to contribute



Steering Committee Members

The Steering Committee provides steering direction of the JPIAMR initiative and strategic input to deliver its mission.

Name	Affiliation	Country
Carlos Segovia, <i>Chair</i>	National Institute of Health Carlos III	Spain
Jan-Ingvar Jönsson, <i>Vice-Chair</i>	Swedish Research Council	Sweden
Antoine Andremont	Aviesan/Inserm	France
Richard Gordon	S A Medical Research Council	South Africa
Joachim Klein	Federal Ministry of Education and Research	Germany
Jonathan Pearce	Medical Research Council	United Kingdom

Scientific Advisory Board

- The Scientific Advisory Board (SAB) assists the Management Board and the JPI AMR initiative in all matters of scientific interest, including establishing the Strategic Research Agenda (SRA), and proposing scientific priorities based on societal needs and new scientific evidence.
- Also supports the activities to implement the SRA.

Scientific Advisory Board Members

Name	Affiliation	Country
Laura Piddock, <i>Chair</i>	University of Birmingham	UK
Jean-Yves Madec, <i>Vice-Chair</i>	ANSES	France
Jocelyn Arquembourg	Université de la Sorbonne Nouvelle, Paris	France
Eric Brown	McMaster University	Canada
Teresa M Coque	Instituto Ramón y Cajal de Investigación (IRYCIS)	Spain
Ana Maria De Roda Husman	RIVM Netherlands	Netherlands
Petra Gastmeier	Institute for Hygiene and Environmental Medicine, Berlin	Germany
Bruno Gonzalez-Zorn	Complutense University, Madrid	Spain
Christina Greko	National Veterinary Institute	Sweden
Katherine Payne	University of Manchester	UK
Jesús Rodríguez Baño	Hospital Universitario Virgen Macarena	Spain
Gunnar Skov Simonsen	University of Tromsø	Norway
Mark Sobsey	University of North Carolina	USA
Evelina Tacconelli	University of Tübingen	Germany
Athanassios Tsakris	University of Athens	Greece

Stakeholder Forum

- The purpose of the JPIAMR Stakeholders Forum is to have and facilitate a dialogue with all interested parties who would like to join the efforts of promoting research in area of antimicrobial resistance.
- The Forum will ensure that all the relevant stakeholders remain informed concerning the outputs, results and initiatives of JPIAMR.

Working Groups

- Evaluation – Chair: Sweden
- Governance – Chair: Spain
- Globalisation – Chair: Germany
- Policy Alignment – Chair: Sweden
- Research Alignment – Chair: The Netherlands
- Virtual Research Institute – Chair: Canada
- Research Infrastructures – Chair: The Netherlands
- Industry Relations – Chair: UK

Implementation Activities

1. Mapping the AMR landscape funding & resources

2. Developing International Collaborations

3. Exploratory Scoping Workshops

4. Calls for Research Proposals

5. Alignment of Research Programmes & AMR
International policies

6. Virtual Research Institute (research infrastructures,
research institutes & capacity building)

WORKSHOPS EXPLORATORY / SCOPING



2015

- Information Systems, Madrid
- Diagnostics, London
- Research Infrastructures, Amsterdam
- Transmission Dynamics, Berlin
- Intergovernmental Collaboration, Paris

2016

- EU-US New Frontiers in Antibacterial Resistance Research, Stockholm
- Transatlantic Clinical Trials, Stockholm
- Surveillance, Oslo

2017

- Early discovery of new antibiotics, January, Paris
- Environment, September, Goteborg
- Virtual Research Institute, September, Berlin

2018

- JPIAMR funded Research Networks Workshop, March, Frankfurt
- SRiA update stakeholders conference, Fall
- Regional Workshop, October, Buenos Aires

Coordination and Support Actions

CSAs

- **CSA 1.0 2012-2016** - To support the implementation of the Joint Programming Initiative on Antimicrobial Resistance, the initiative received funding from FP7
- **CSA 2.0 EXEDRA 2017-2020** - To expand JPIAMR globally, and to create a long-term sustainable governance structure, which coordinates national funding and collaborative actions supporting the implementation of the JPIAMR Strategic Research Agenda (SRA).

Calls

- 2020 ERAnet Cofund in the area of AMR interventions 2020 WP
- **9th Call (2019):** Diagnostic and surveillance tools, technologies and methods for detection of antibiotic resistant bacteria and/or resistance elements in multiple One Health and geographic settings, including LMIC - ERA-NET JPI-EC-AMR - **HRB not participating**
- **8th Call (2018):** JPIAMR Network Call on Virtual Research Institute - **HRB not participating**
- **7th Call (2018): JPIAMR Network Call on Surveillance**
- **6th Joint Call (2018): Innovations against antibiotic-resistant bacteria: new targets, compounds and tools.**
- **5th Joint Call (2017): Prevention and Intervention strategies to Control AMR infections**
- 4th Joint Call (2016): Networks Working Groups
- 3rd Joint Call (2016): Transmission Dynamics – ERAnet Cofund call
- 2nd Joint Call (2015): Translational research on repurposing of neglected antibiotics and characterizing antibiotics or antibiotic and non-antibiotic combinations to overcome bacterial antibiotic resistance
- 1st Joint Call (2014): Transnational call InnovaResistance: Innovative approaches to address antibacterial resistance

5th call Prevention and Intervention strategies to Control AMR infections

- 9 applications from Ireland (53 in total) – 5 coordinators from Ireland
- 20 went to stage 2 – 2 from Ireland

Irish Researchers funded 5th call

Acronym	Title	Coordinator	Institution	Funding
INART	Intervention of antimicrobial resistance transfer into the food chain	Fiona Walsh (Irish partner Fiona Brennan, Teagasc)	NUI Maynooth	€369,966
ExcludeMRSA	Preventing transmission of MRSA from livestock to humans through competitive exclusion	Jaap Wagenaar (2 Irish partners (Marcus Claesson, UCC & Peadar Lawlor, Teagasc)	Utrecht University, the Netherlands	€357,107

JPI Antimicrobial Resistance: Therapeutics

- **Description:** Two-stage Joint Transnational Call for research into therapeutics for AMR
- **Scope:** Innovations against antibiotic-resistant bacteria: new targets, compounds and tools. Fundamental, translational research, with the exception of clinical trials.
- **IE applicants:** 4 applications at stage 1 with IE coordinator/partners,
- **Partners:**
 - **1 coordinator**
 - 1 application shortlisted for stage 2,
 - **HRB money allocated:** Up to €370,000
 - **Money requested from HRB from IE applicants (at second stage where relevant):** €369,394
 - **Peer Review Panel date/decision date:** Sep 5, final decision by Sep 22

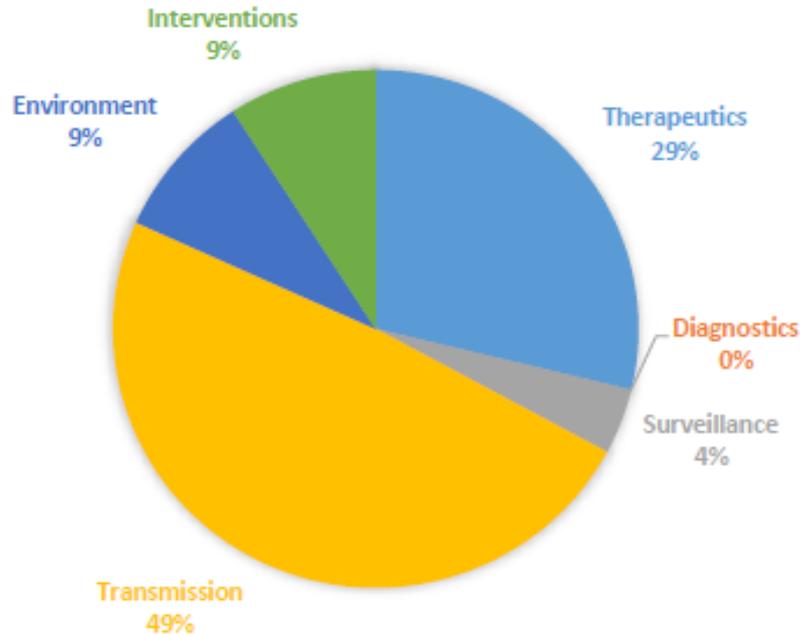
JPIAMR Surveillance Network call

- **Description:** Support for surveillance and enhancing resource alignment, via a network by developing e.g. white papers, prospective views, guidelines and/or best practice/roadmap/systematic reviews and frameworks of value to the wider research community.
- **Scope:** Networking activities only – research costs not eligible. Must be at least 15 partners from 10 countries, at least three from Low to Middle Income. Coordinator pays for all activities of the network, travel, workshops etc.
- **IE applicants:** 1 coordinator applied from Ireland
- **HRB money allocated:** Up to €50,000 for one network
- **Money requested from HRB from IE applicants (at second stage where relevant):** €50,000
- **Peer Review Panel date/decision date:** Sep 19

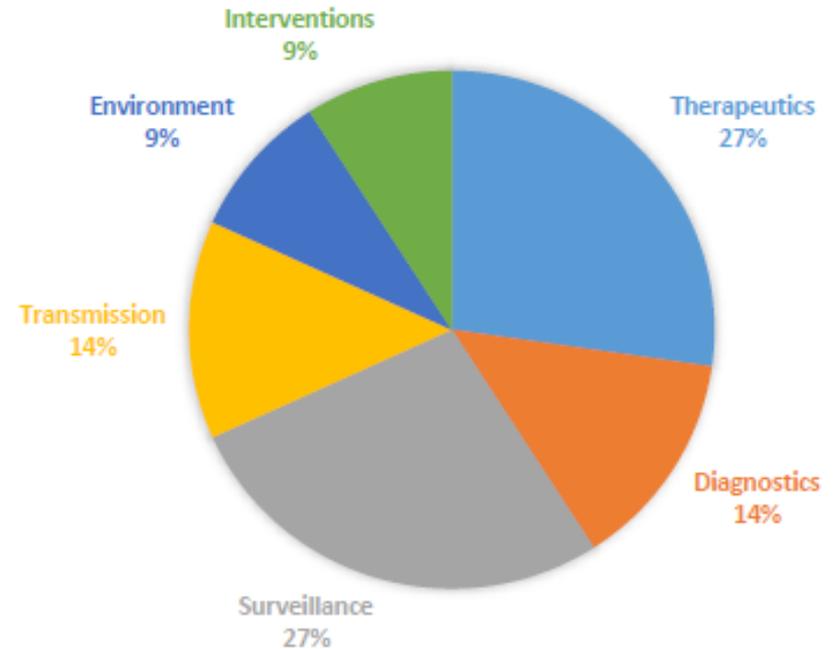
JPIAMR FUNDING 2014-2017

JPIAMR has funded approx. 52 M€ of AMR research supporting 50 projects

RESEARCH PROJECTS



NETWORKS/WORKING GROUPS



- Call 1. Therapeutics
- Call 2. Therapeutics
- Call 3. Transmission
- Call 4. Networks/Working Groups
- Call 5. Interventions

Activities at International Level

Collaboration with International Organisations

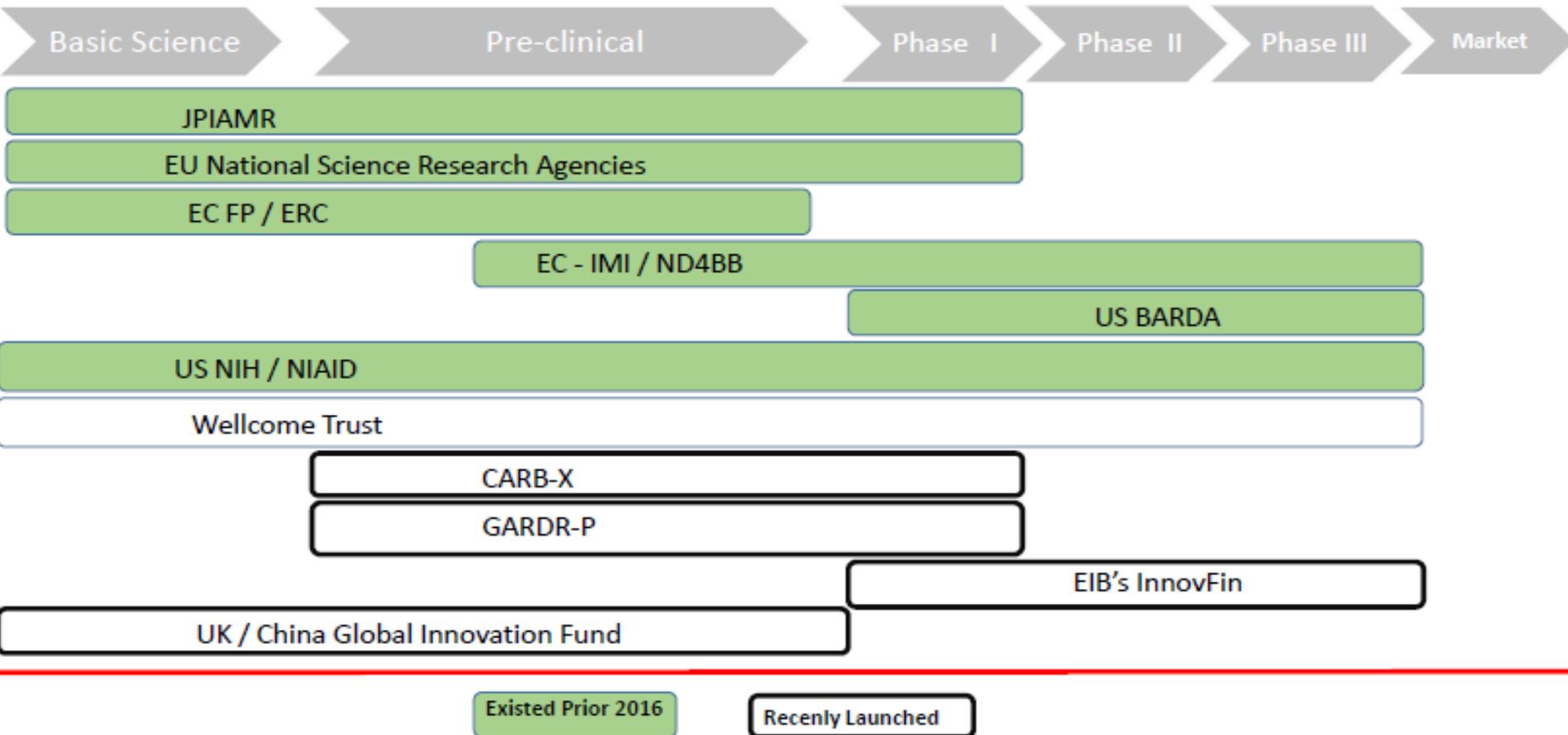
- UNGA and IACG and UN AMR call for Action
- WHO (on R&D prioritization and in the AB pipeline analysis)
- TATFAR
- G20 AMR Global Hub
- European Commission
- G7 resolutions
- G20 resolutions

Collaboration with International Funders

- Wellcome
- CARB-X
- GARP-D
- IMI
- PEW Trust

International funding collaboration

ANTIBIOTIC DRUG DEVELOPMENT AND INTERNATIONAL FUNDING INITIATIVES



The JPIAMR Virtual Research Institute is a virtual platform to connect research networks and research performing institutes/centres to implement Antimicrobial Resistance One Health collaborative research on the JPIAMR Strategic Research Agenda priority topics by increasing knowledge, diversity, collaborations and capability.



Connecting AMR researchers under the JPIAMR priority topics in a One Health approach



Building capacity and strengthening capability



Facilitating access to scientific information and infrastructures



Global reach: Bridging geographic borders in the research community



Breaking practical barriers between fields of research



Increasing awareness and visibility of the AMR issue



Producing scientific evidence for developing policy and guidelines

JPIAMR database

AMR infrastructure

Research Infrastructure

- Host institution
- Title of project/programme
- Project description/relevance to antimicrobial research area
- Total cost
- Contact person
- Contact details
- Funder
- Date of infrastructure

Research Centers

- Institution
- VRI or AMR relevant institution
- Department; work group
- Affiliation
- Country
- Scope
- Link
- Contact person

AMR Research

Projects

- Project title
- Principal Investigator
- Organization
- Funding agency
- Sector (Human, animals...etc)
- Keywords
- Abstract
- Disease areas

Funding

- Country
- Funding agency
- Host institution
- Antimicrobial Resistance Area
- Research classification

Policy

- National AMR policy (weblink)
- Country
- Duration (year from/to)

AMR Industry

Products in development/pipeline

- Project (academia-industry collaboration)
- Drug/Compound name
- Company
- Compound category
- Target
- Expected Activity
- Potential Indication/Product description
- Current development phase

JPIAMR KEY COMMITMENTS 2018

1. Three joint research calls with a preliminary budget of 15M€
 - New targets, new therapies, and tools addressing the WHO pathogens priority list
 - Surveillance, and we will build on our recent success and support Research Networks across international borders.
 - First VRIs networks
2. In response to this growing AMR challenge the JPIAMR will launch a ground breaking AMR Virtual Research Institute.
 - International Workshops, Development plan, Pilot call
3. JPIAMR commit to increasing activities to prioritise research within the Strategic Research and Innovation Agenda to develop roadmaps, identify gaps and needs for research and actions.
4. To map AMR research funding as well as research centres/facilities and infrastructures
5. To develop a database

- Thank you