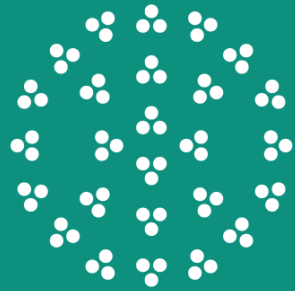


GLOBAL
AMR R&D
HUB



Antimicrobial resistance research and development funding landscape

Dr. Ralf Sudbrak
Deputy Director
Global AMR R&D Hub

STAR-IDAZ pre-congress workshop on ATAs, Aug 22nd, 2023

STAR-IDAZ – Global AMR R&D Hub Partnership



Global AMR R&D Hub | Newsletter Launch of Animal Health AMR R&D Data

I extend my congratulations on the launch of the Global AMR R&D Hub Animal Health Dynamic Dashboard.



The World Organisation for Animal Health (OIE) has supported the Global AMR R&D Hub during its expansion to include the Animal Health Dynamic Dashboard over the past months. We anticipate the Animal Health Dynamic Dashboard will enhance the global ability to actively engage all sectors in a One Health research approach, joining the efforts to inventory all relevant sectors projects, guide research priorities and identify innovative alternative approaches to control antimicrobial resistance in the animal health sector.

We would also like to acknowledge the Animal Health Dashboard's potential to highlight efforts, but also lack of resources directed currently to antimicrobial resistance research related to this sector. The dashboard will help to identify research gaps and to limit duplications in the animal health sector to channel resources more equitably and effectively. This presents future opportunities for synergies with academics, professional organisations and research consortiums to raise the visibility and allow feedback to research funders on animal health related research.

Sincerely,

Dr Elisabeth Erlacher-Vindel
Head of the Antimicrobial Resistance and Veterinary Products Department
World Organisation for Animal Health

July 2020



STAR-IDAZ and the Global AMR R&D Hub Joint Announcement

As part of the global initiative to control and counteract the effects of antimicrobial resistance (AMR), today, STAR-IDAZ International Research Consortium on Animal Health and the Global AMR R&D Hub have entered a collaboration partnership. The partnership is based on their common interest to strengthen global research efforts and reduce duplication of research on priority infectious diseases of animals relevant to AMR.

August 2020

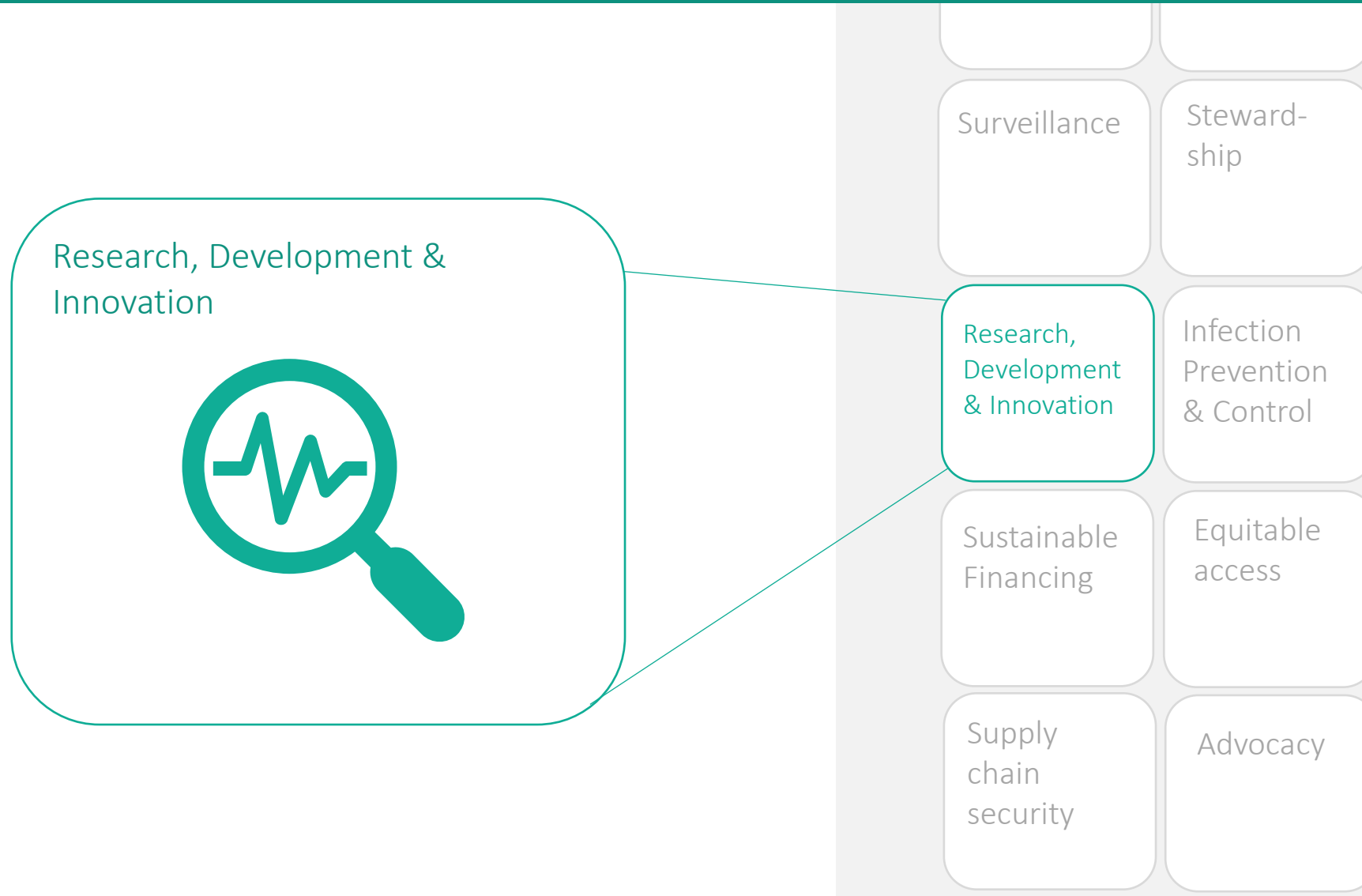


December 2022 STAR-IDAZ SIRCAH2 Launch

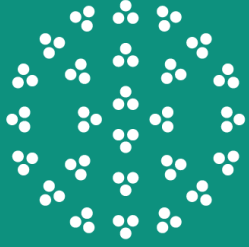


December 2019 STAR-IDAZ IRC Workshop on ATA

Research & Development: Crucial element in efforts to tackle AMR



GLOBAL AMR R&D HUB



A global partnership working to improve and enhance AMR R&D activities and policies across the One Health spectrum

Pillar 1:

Guide & support evidence based decision making

Pillar 2:

Enhance collaboration & coordination

Pillar 3:

Promote awareness, knowledge & visibility

Established May 2018

17 Countries + EC + two Foundations

Australia, Canada, China, France, Germany, India, Italy, Japan, Netherlands, Norway, Spain, Switzerland, Sweden, Russia, Turkey, United Kingdom, United States, EC, Wellcome Trust, Bill & Melinda Gates Foundation

5 Observers



FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS



World Organisation for Animal Health
Founded as OIE



World Health Organization



AFRICA CDC
Centres for Disease Control and Prevention
Safeguarding Africa's Health



OECD

Global AMR R&D Funding Landscape

Dynamic Dashboard - Public & Philanthropic investments across One Health sectors since 2017



Investments in AMR R&D

240 funders

13,552 projects

11,18 billion USD

4 One Health sectors

Antibacterials in development

73 priority products[^]

17 products for TB

22 products for *C. diff*

* Information provided by WHO and the PEW Charitable Trusts
^ As prioritized by WHO and PEW

Incentives for antibacterial R&D

24 push incentives

7 pull incentives

What are we doing to fix the challenges hindering the development of, and access to, priority antibacterials for human health.



- What is the state of public & philanthropic funding for AMR R&D globally across One Health sectors?
- Is this funding being translated into the products that we need to mitigate AMR?
- Where are the gaps and opportunities?
- What are we doing to incentivise development of and access to priority antimicrobials?

Information presented in the three galleries of the Dynamic Dashboard as at July 27th 2023

Global AMR R&D Funding Landscape

Dynamic Dashboard - Public & Philanthropic investments across One Health sectors since 2017



dashboard.globalamrhub.org/

HOW MUCH?

➤➤➤ **11.03 billion USD**
Total Amount – since 2017

13324 projects
~2 billion USD per year

WHO?

237 funders



48%



17%



14%

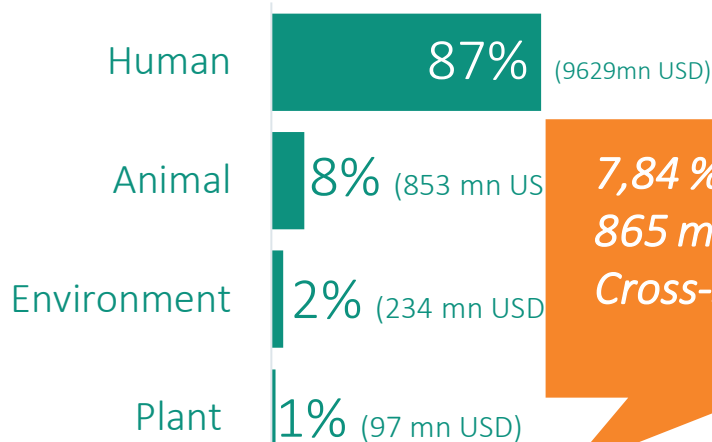
WHERE?

96% High income countries
10,58 billion USD

4% Low & middle income countries
0,45 billion USD

WHAT?

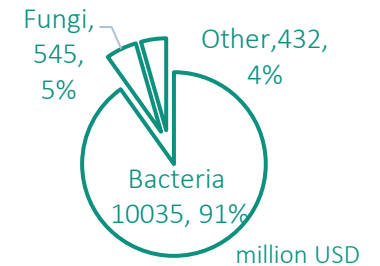
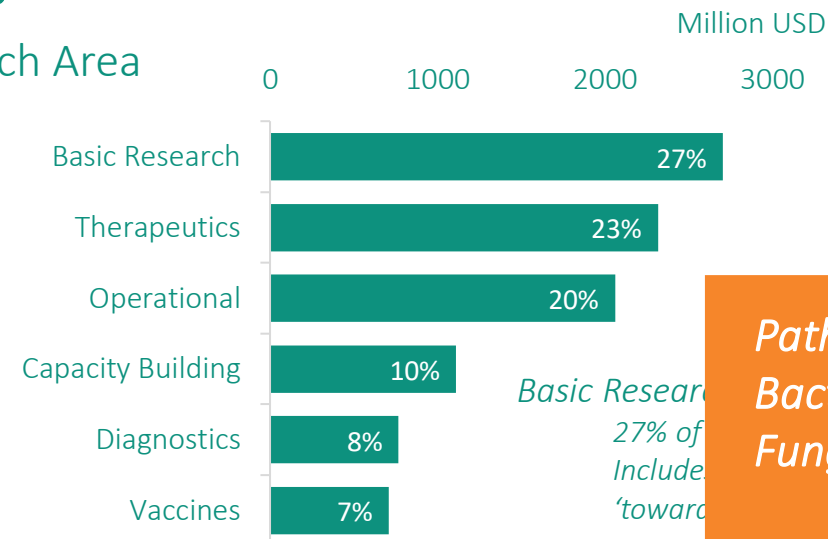
One Health sector



7,84 %
865 million USD
Cross-sectoral research

WHAT?

Research Area



Pathogens:
Bacteria – 91%
Fungi – 5%

% of total funding volume

Information presented in the three galleries of the Dynamic Dashboard as at July 24th 2023

Dynamic Dashboard

<https://dashboard.globalamrhub.org/>



Search Contact Definitions Library Ralf Sudbrak

Dynamic Dashboard

RESEARCH AREA

Animal health

No. of Funders
129

Total Investment
USD
1.18bn

No. of Projects
1692



Last updated: 27.07.2023

Select your filter

Animal Groups
All

Research Area
All

Food
All

Parameter

Number of Projects

Total Investments

Currency
USD EUR

Status
Active Closed

Reset filter

*Product related only refers to therapeutics, diagnostics, vaccines, other products and preventives

*by year = incomplete years

See Data Table

by Year (Total Investments in USD)

by Research Area (Total Investments in USD)

by Infectious Agent (Total Investments in USD)

by Sector Subgroup (Total Investments in USD)

by Type of Research Organisation (Total Investments in USD)

by Type of Funder (Total Investments in USD)

Suggested reference: Global AMR R&D Hub, 2020. Dynamic Dashboard: AMR R&D Investments Gallery. Last update date 27.07.2023

Dynamic Dashboard
as at July 27th, 2023

- Investments in AMR R&D
- Funding Distributors
- ▼ All sectors
- Countries
- Research Organisations
- Funder
- Cross Sector**
- ▼ Animal
- Research Area
- > Environment
- ▼ Human
- Research Area
- Pathogen
- Product Development
- ▼ Plant
- Research Area
- Data Trends
- Our Data
- Antibacterials in Clinical Development
- Incentives for Antibacterial R&D


Animal Health AMR R&D

The funding landscape in LMICs



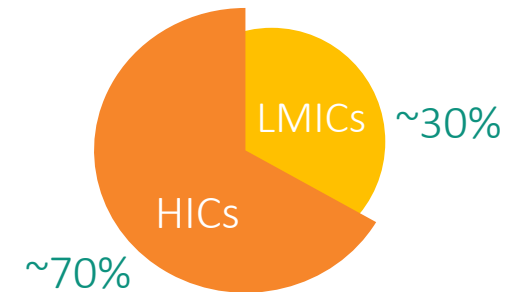
LOW AND MIDDLE INCOME COUNTRIES

KEY INSIGHTS:

- 1 Funding in animal health AMR R&D is highly concentrated 
- 2 Relatively little funding goes directly to research institutions in LMICs **4%**
- 3 AMR R&D in aquaculture remains underfunded **10%**

GLOBAL

- 827 mn USD (8% of total)
- 1596 projects
- 120 funders



WHAT?

- Livestock 57% (471 mn USD)
- Poultry 32% (268 mn USD)
- Aquaculture 11% (93 mn USD)

South America – funded projects in Dynamic Dashboard



Projects with missing data

Brazil

FAPESP: 258 projects (budget)

CAPES: 450 projects (budget, end date)

Argentina

FONCYT: 108 projects (abstracts)

Country of RO	Funder	No. of Projects	Comments
Argentina	Academy of Medical Sciences	1	
	Agencia Nacional de Promoción Científica y Tecnológica	23	abstracts missing
	Ministry of Science, Technology and Productive Innovation	1	JPIAMR
	National Institutes of Health	1	
	National Scientific and Technical Research Council	5	AR-UK: Innovation and Collaboration to tackle AMR
Brazil	Bill & Melinda Gates Foundation	1	
	Conselho Nacional das Fundações Estaduais de Amparo à Pesquisa	1	JPIAMR
	GAMRIF	1	BactiVac
	National Council for Scientific and Technological Development	12	Grand Challenges Brazil
	National Institutes of Health	1	
	São Paulo Research Foundation	493	budgets provided by funder
	Wellcome Trust	3	
Chile	Agencia Nacional de Investigación y Desarrollo	2	budgets missing
	Bill & Melinda Gates Foundation	1	
Colombia	Centers for Disease Control and Prevention	1	
	European Commission	1	
	Netherlands Enterprise Agency	1	
Peru	National Institutes of Health	2	
	Wellcome Trust	1	
Total		552	

South America and JPIAMR



Country	Role in Project	Research Organisation	PI	Project
Argentina	Network Observer	Universidad Maimónides	Gabriel Levy Hara	GAP-ONE-2
Argentina	Network Observer	Universidad Maimónides	Gabriel Levy Hara	GAP-ONE
Argentina	Network Observer	Administración Nacional de Laboratorios e Institutos de Salud	Josephina Campos	NeWIS
Argentina	Partner	National University of La Plata	Martin Rumbo	ABIMMUNE
Argentina	Funder	Ministry of Science, Technology and Productive Innovation (MINCYT)		Call AMR through the JPIAMR
Brazil	Partner	University of São Paulo	Ilana Camargo	MISTAR
Brazil	Network Partner	University of São Paulo	Ilana Camargo	TEAPOTS
Brazil	Funder	Conselho Nacional das Fundações Estaduais de Amparo à Pesquisa (CONFAP)		Call Aquatic Pollutants
Brazil	Observer	University of Campinas	Susanne Rath	CONTACT
Brazil	Partner	University of São Paulo	Marcelo Zaiat	PRESAGE
Brazil	Network Observer	D'Or Institute for Research in Education	Fernando Bozza	ICALM
Brazil	Network Observer	University of São Paulo	Eliana Guedes Stehling	WAWES
Brazil	Network Observer	University of São Paulo	Nilton Lincopan	KlebNet
Colombia	Partner	Colombian Association of Pork Farmers	Corina Zambrano	FARM-CARE

Calls to action for AMR

Incentivising the development of new antibacterial treatments 2023

Progress Report by the Global AMR R&D Hub & WHO



G7 Finance Ministers and Central Bank Governors Meeting Communiqué

13th May, 2023

“ We reaffirm our commitment to supporting antibiotic development and welcome the updated antimicrobial resistance (AMR) progress report by the World Health Organisation (WHO) and the Global AMR R&D Hub.”



Finance Track

G7 Nagasaki Health Ministers' Communiqué 13-14th May, 2023

“ ... to prevent pandemics, the instrument should tackle AMR
... reiterate commitments to monitor, coordinate and enhance G7 efforts to incentivise AMR R&D
... commit to exploring and implementing push and pull incentives that promote investment in R&D of antimicrobials
... welcome AMR progress report by WHO and the Global AMR R&D Hub
... continue to build on and implement previous G7 Finance and Health Ministerial commitments on strengthening antibiotic innovation ...”



長崎保健大臣会合
Health Ministers' Meeting
in NAGASAKI

G7 Hiroshima Leaders' Communiqué 20th May, 2023



“ Recognizing the rapid escalation of AMR globally, we continue to commit to exploring and implementing push and pull incentives to accelerate R&D of antimicrobials as well as promoting antimicrobial access and stewardship for their prudent and appropriate use toward the UNGA HLM on AMR in 2024.”

United Nations General
Assembly - High Level
Meeting on AMR in 2024

Road to UNGA: Collaboration & Co-ordination



3rd High-Level Ministerial Conference on AMR, OMAN
(Nov 24-25, '22) The AMR Pandemic: From Policy to One Health Action



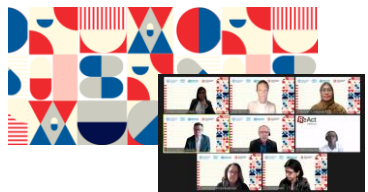
Engagement with G20 India presidency
– SEC represents the HUB in Health Working Group Meetings
Osaka Declaration 2019: We call on interested G20 members and Global AMR R&D Hub to **analyze push and pull mechanisms to identify best models for AMR R&D**



6th meeting of the Global Leaders Group on AMR
(Feb 7-8) '23 Hub invited to present on global AMR funding landscape.
Recommendations & alignment on UNGA 2024



G7 PROGRESS REPORT
Renewed commitments from G7 leaders to continue to commit to exploring and implementing push and pull incentives to accelerate R&D of antimicrobials as well as promoting antimicrobial access and stewardship for their prudent and appropriate use...



Hub is a member of the **AMR Multi-Stakeholder Partnership Platform**



76th World Health Assembly
Side events at the Seventy-sixth World Health Assembly held in Geneva, Switzerland, on 21–30 May 2023.



Hub is a member of the **EU AMR One Health Network**

Webinar on Alternatives to Antibiotics (ATA)



Building on collaboration with **STAR-IDAZ** (roadmap) and the report on vaccines in animal health

Objective

- Highlight and discuss the way forward for funding R&D for alternatives to antibiotics in human and animal health and their market entry, with a focus on bacteriophage
- Enhance dialogue between key stakeholders in the value chain, including policy makers, academia, industry and regulatory authorities

Possible Topics

- Advances in the research and development of alternatives to antibiotics
- Country experiences & Regulatory pathways
- Awareness & engagement

Where/When ?

Online, 90 minutes in December 2023

THANK YOU

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globalamrhub@dzif.de

<https://globalamrhub.org>

<https://dashboard.globalamrhub.org/>

Funding:



Bundesministerium
für Bildung
und Forschung



Bundesministerium
für Gesundheit