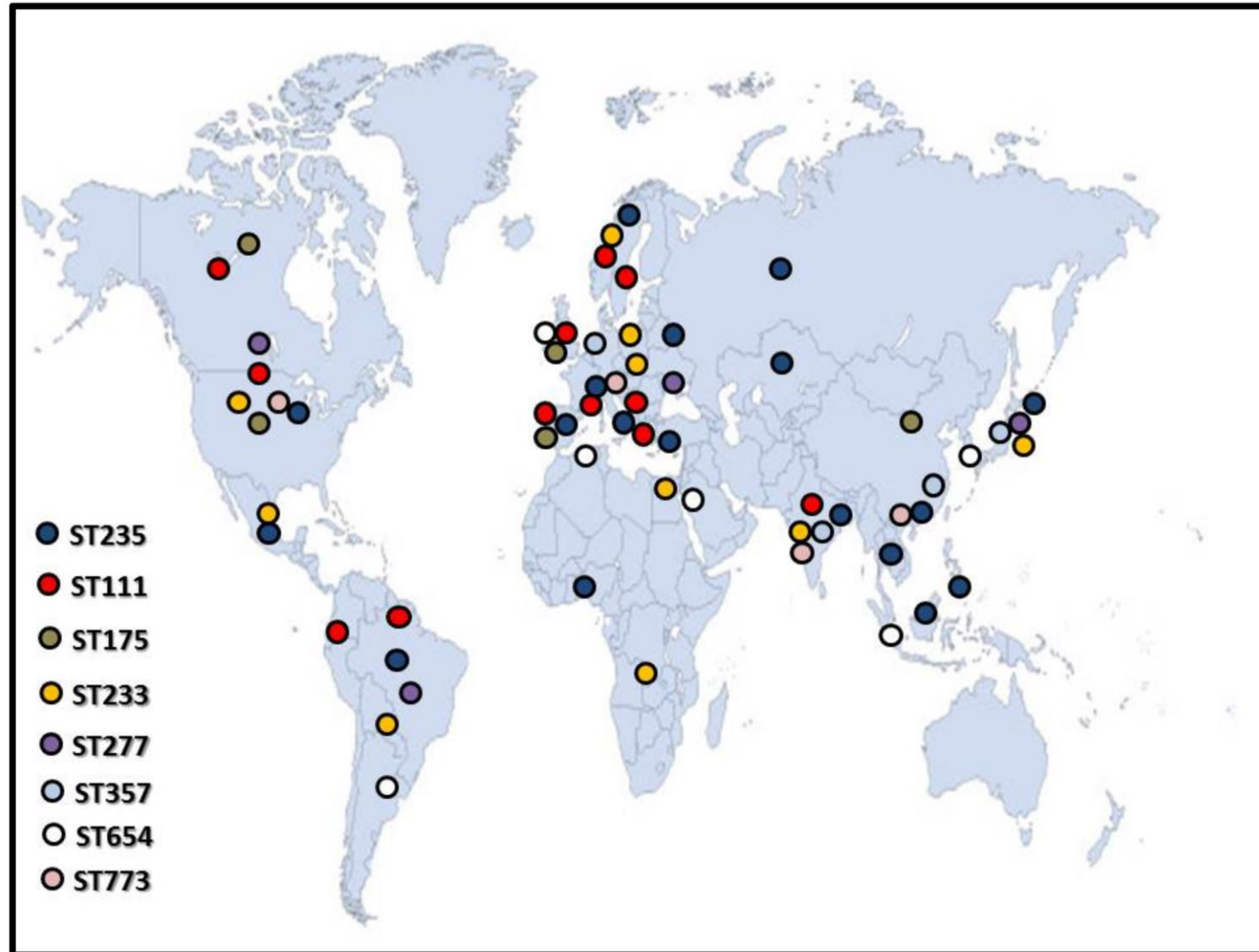# Science and Content

Among other things, the UNGA High-Level Meeting Political Declaration,

"30. Invite[d] the Quadripartite organizations to establish an independent panel for evidence for action against antimicrobial resistance in 2025 to facilitate the generation and use of multisectoral, scientific evidence to support Member States in efforts to tackle antimicrobial resistance, making use of existing resources and avoiding duplication of on-going efforts, after an open and transparent consultation with all Member States on its composition, mandate, scope, and deliverables"
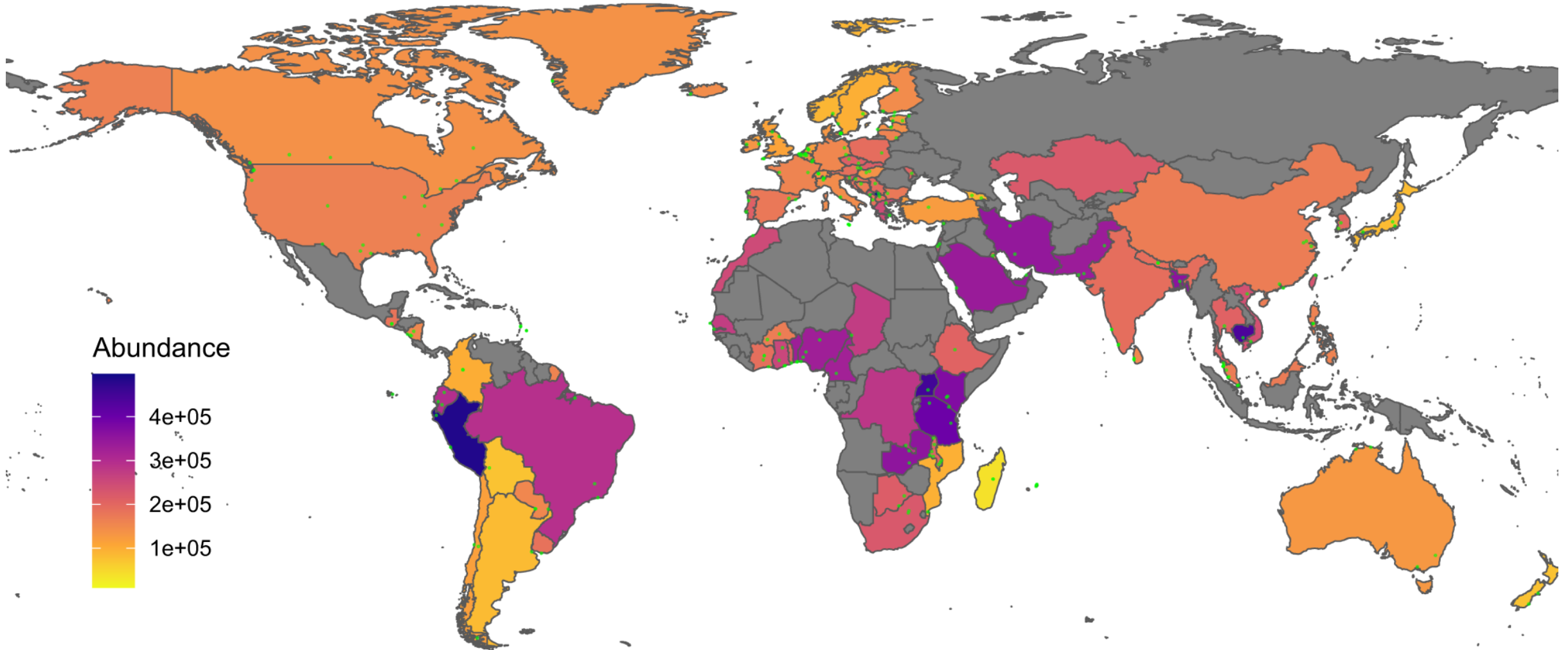
Diversity and Distribution of Resistance Markers in *Pseudomonas aeruginosa* International High-Risk Clones.

Genomic analysis of sewage from 101 countries reveals global landscape of antimicrobial resistance
Munk, P., Brinch, C., Møller, F.D. *et al. Nat Commun* **13**, 7251 (2022).

Learning Lessons

- John Amuasi, Kwame Nkrumah University of Science and Technology (KNUST), Kumasi, Ghana, Bernhard Nocht Institute of Tropical Medicine (BNITM) & University Medical Center Hamburg-Eppendorf (UKE), Hamburg, Germany; Co-Chair, The Lancet One Health Commission
  - Lessons from One Health

- Hannah Hughes, Senior Lecturer International Politics and Climate Change, Department of International Politics, Aberystwyth University
  - Lessons from the IPCC

Science and Content: Questions for discussion

1. **How should the Panel's agenda be set**? Who should prioritize it's to-do list and how?

2. **How can The Panel be viewed as inclusive and consultative,** particularly as there are very many and very many types of AMR stakeholders. What will **transparency** mean for SPEAR?

3. Will the **panel focus** more on curating evidence and promoting gap filling or in ensuring the uptake of evidence-based interventions?

4. **What kind of evidence should SPEAR seek out or solicit ?**

    1. **What data sources should SPEAR consider?** How will it close the gap in evidence breadth and depth from **low-resource settings that bear most of the AMR brunt**? How will it balance the generation of more granular data in data-rich areas with obtaining the most basic data from data poor ones?

    2. Quite a bit is already known about AMR. **How best can the panel synthesize and use existing information rapidly and effectively?**

    3. There are imbalances with data availability across the One Health spectrum, with most available data relevant to human health alone. How should SPEAR address these?

5. There will likely be tensions between completeness and speed in the workings of the panel. Should the Panel aim for workings that are highly **robust and inclusive or push towards rapid decision-making**?

6. How should SPEAR interface with Panels that have complementary/ overlapping interests and responsibilities to ensure that outcomes are **synergistic and there are no duplications** (as requested by UNGA)?

Science and content – summary of input received from speakers and working tables

SPEAR's Agenda

- The Panel should set its own agenda but be inclusive, consultative and transparent in the manner that it does so. Governments and stakeholders need to be able to propose topics.

- A clear priority-setting process must be laid out apriori (Gp6). There may be a need for regional/sectoral quotas (Gp5)

- Inclusive and multidisciplinary from the start.

- Start modestly and plan to grow (Gp1)

Admissible evidence

- AMR scope of the panel should include antibacterial, antifungal, antiparasitic and antiviral resistance. This will create by-in and also recruit expertise to the work of the panel.

- Diverse types of evidence need to be collected, curated and used by the panel – clinical, microbiological, use and consumption data from humans and animals, environmental data, plant sector data, economics, behavioral sciences, other social science and qualitative information, information from non-scientists – indigenous information.

- All data should be received and evaluated. "Be open to listen to all kinds of backgrounds" (Gp1). Quality thresholds can be developed to weight evidence for rigor.

Data sources

- Needs to start by scanning the horizon and curating information that already exists – published and unpublished

- State of the problem: TrACASS, available surveillance information

- Unlock private sector and any other data not in the public domain

- Evidence of impact of actions - including in what contexts particular interventions will reduce the most burden / what combinations of interventions may be most impactful in different contexts

- Identification of evidence gaps / areas where more evidence is needed either geographically or in particular topics - evidence of status or evidence of solutions

- Use participatory approaches to knowledge gathering and synthesis

- Transparency on how data were collected, the basis for selection and the type of data (Gp 6). Also transparency on non-use of evidence (Gp 8)

Workings

- A listening and learning panel (Gp6): "Vocal but not tone deaf" (Gp2). Accept and learn from imperfections and mistakes "Nothing will be perfect"(Gp5)

- The panel has to refine and prioritise, and present to the quadripartite

- There should be working groups eg along IPCC lines, for example (Gp 8) – Burden, Innovation, Containment

- Panel should identify gaps and make recommendations for filling them

- Panel could create capacity for data generation and use

- The panel should be at the forefront of reviewing new approaches/ technological solutions (Gp4)

- The panel should steward accessible platforms for tracking data (Gp 7) and tools for policy-makers (eg modelling tools to look at interventions prospectively)

- The panel should amplify success stories, as a means for generating buy in for AMR

- Are there proxy markers for AMR? (Potential to interact with other panels)

Collaboration

- Many many stakeholders
- OHHLEP
- Diagnostics Panel

Outstanding questions/ no consensus

- Gaps: most people thought the panel should identify gaps. Some thought the panel should fill them; others not.