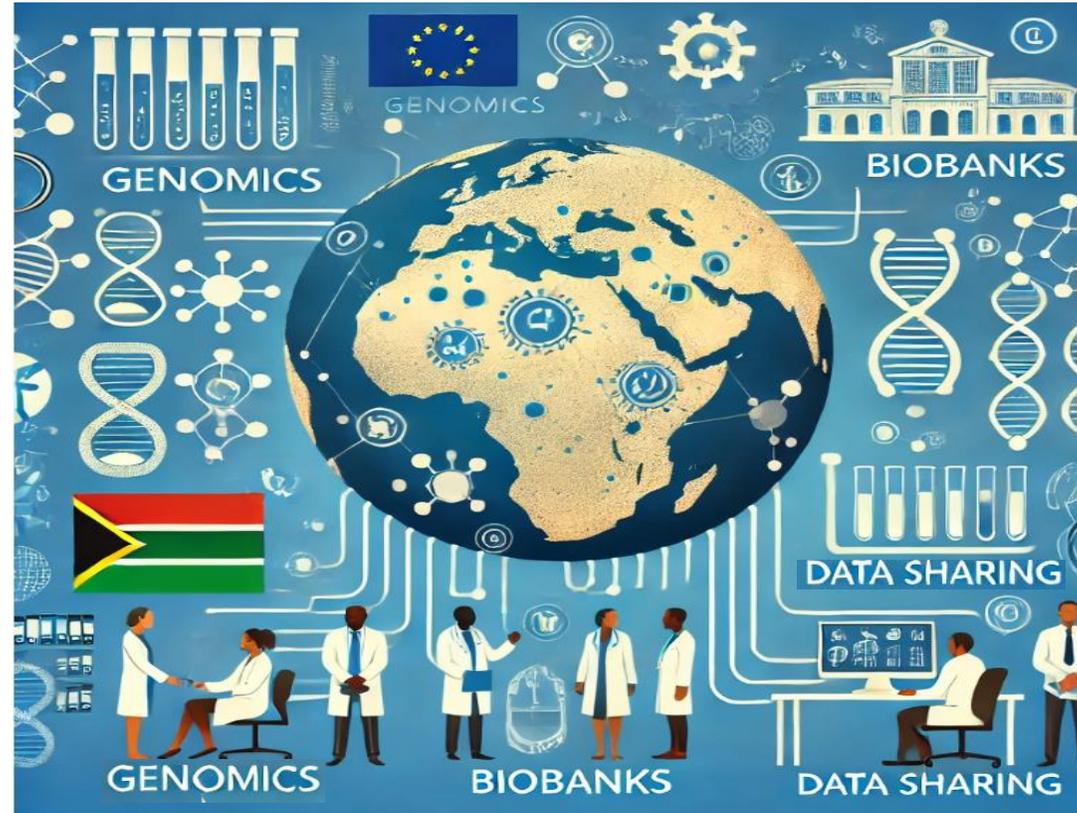


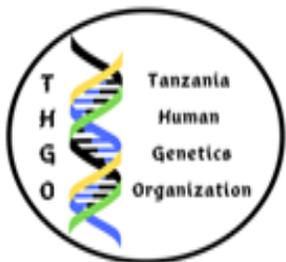
Personalized Medicine in Africa: Perspectives on Strengthening EU-Africa Collaboration



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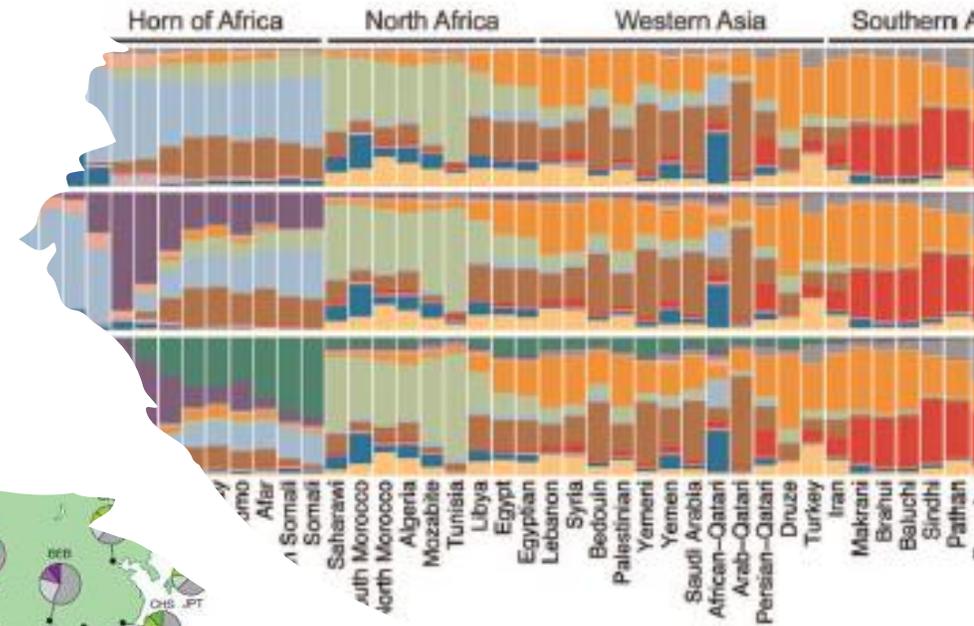
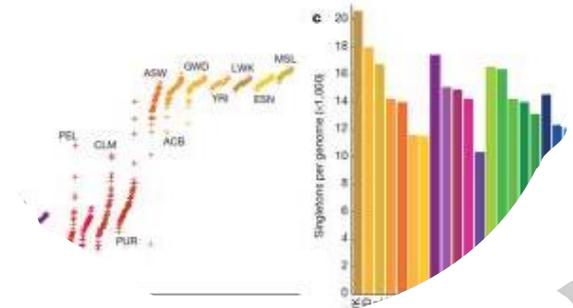
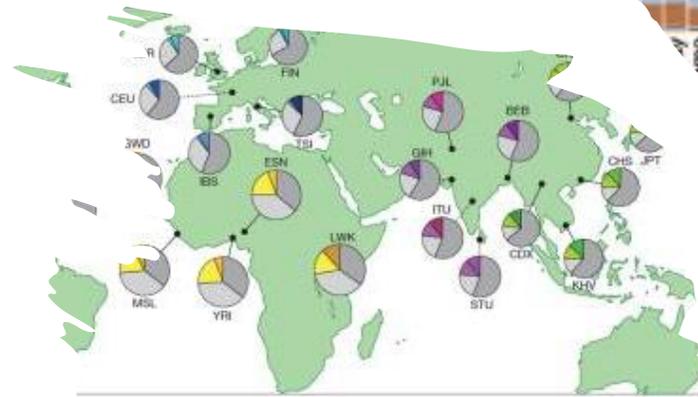
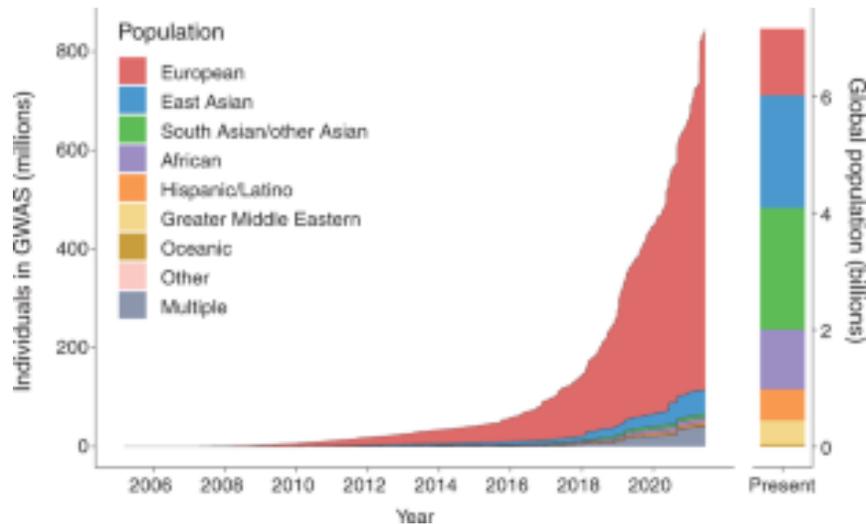
EU-Africa Per Med Webinar, 20 Jan 2025



Personalized medicine

- **Personalized Medicine (PM):** Revolutionizing healthcare by tailoring interventions based on genetic, environmental, and lifestyle factors.

2022:
Europeans 86%
Africans 1.1%



1.4 billion people

- Africa is the world's second largest and second most populous continent
- 54 countries, >3000 ethnic groups, >2100 languages
- ~50% of the African population are children <18 years old
- By 2050, 40% of the world's children will live in Africa



My perspective as an African researcher

- **Why is Africa Key:**

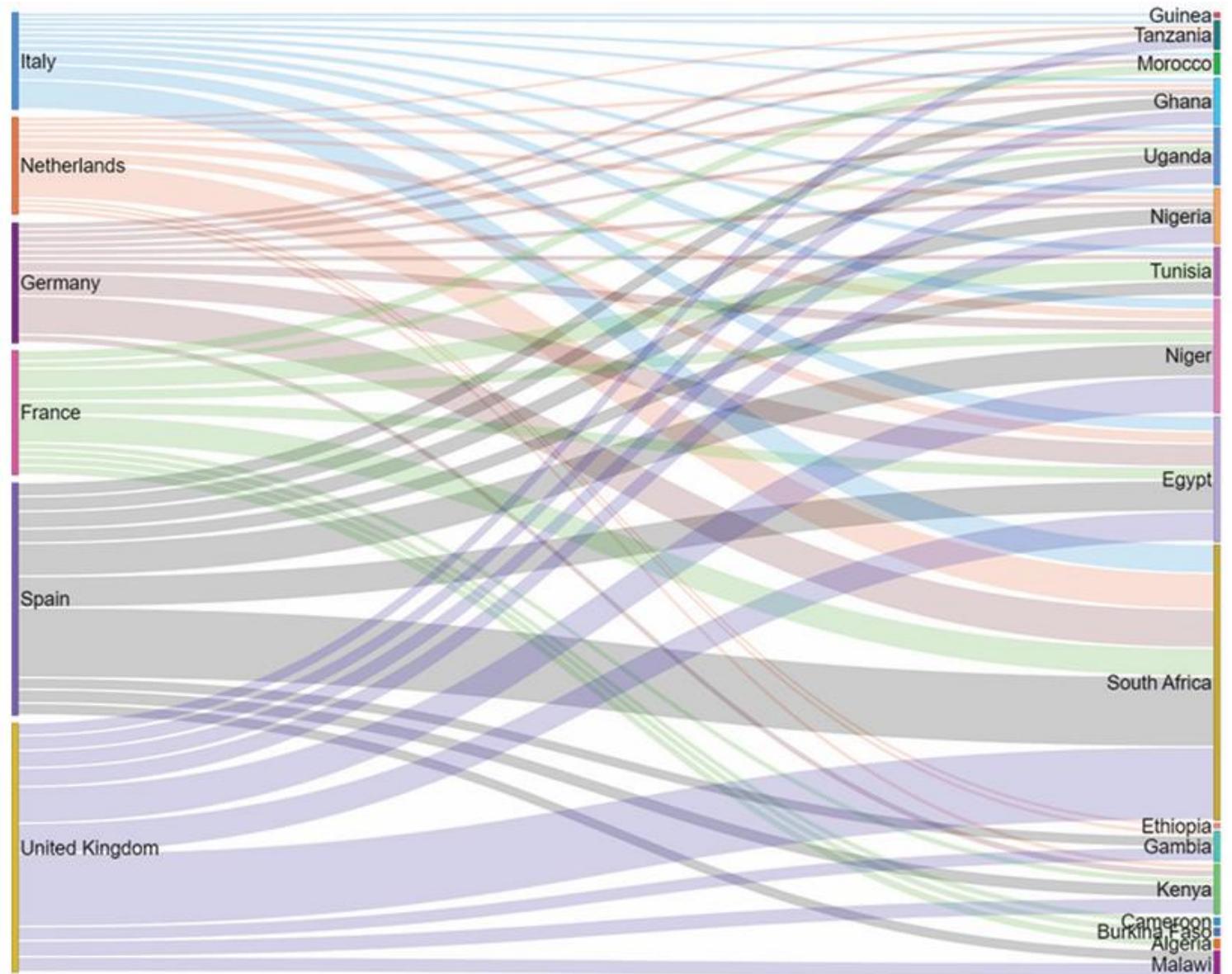
- Genetic diversity positions Africa as a key player in global genomic research.
- Addressing Africa's unique health challenges (e.g., SCD, infectious diseases, non-communicable diseases).

- **Purpose of the Talk:**

- Assess the EU-Africa Per Med Action Plan.
- Highlight its potential impact and relevance on recommendations.



Co-authorship network between the highly active European countries (United Kingdom, France, Germany, Italy, Spain and the Netherlands) with their top African collaborating countries



Context of the Action plan

Key Objectives:

Facilitate collaboration in PM research.

Strengthen Africa-Europe bilateral STI relations.

Core Features:

Infrastructure development:
Biobanks, genomic hubs.

Capacity building:
Training, knowledge transfer.

Ethical and regulatory frameworks: FAIR principles and inclusivity.

Why It Matters for Africa:

Provides tools to address local healthcare challenges.

Aims to build Africa's PM capacity and integrate it into healthcare systems.

Strengths of the action plan

Infrastructure Development:

Biobanks and genomic hubs to address Africa's research infrastructure gaps.

Enhanced bioinformatics networks for data analysis.

Capacity Building:

Focus on training and knowledge exchange to create skilled professionals.

Ethics and Governance:

Emphasis on FAIR principles, ethical data sharing, and regulatory frameworks.

Inclusivity:

Acknowledges the need for African representation in global research.

Challenges from an African perspective

- **Infrastructure Gaps:**

- Limited access to advanced research facilities.

- Reliance on external resources.

- **Sustainability Concerns:**

- Long-term funding and government buy-in.

- **Equity in Collaboration:**

- Risks of "helicopter science" and unequal partnerships.

- **Policy Gaps:**

- Lack of integration of PM into national health systems.



Opportunities for mutual benefit

- **Africa's Genetic Diversity:**

- Unparalleled opportunities for global genomic discoveries.

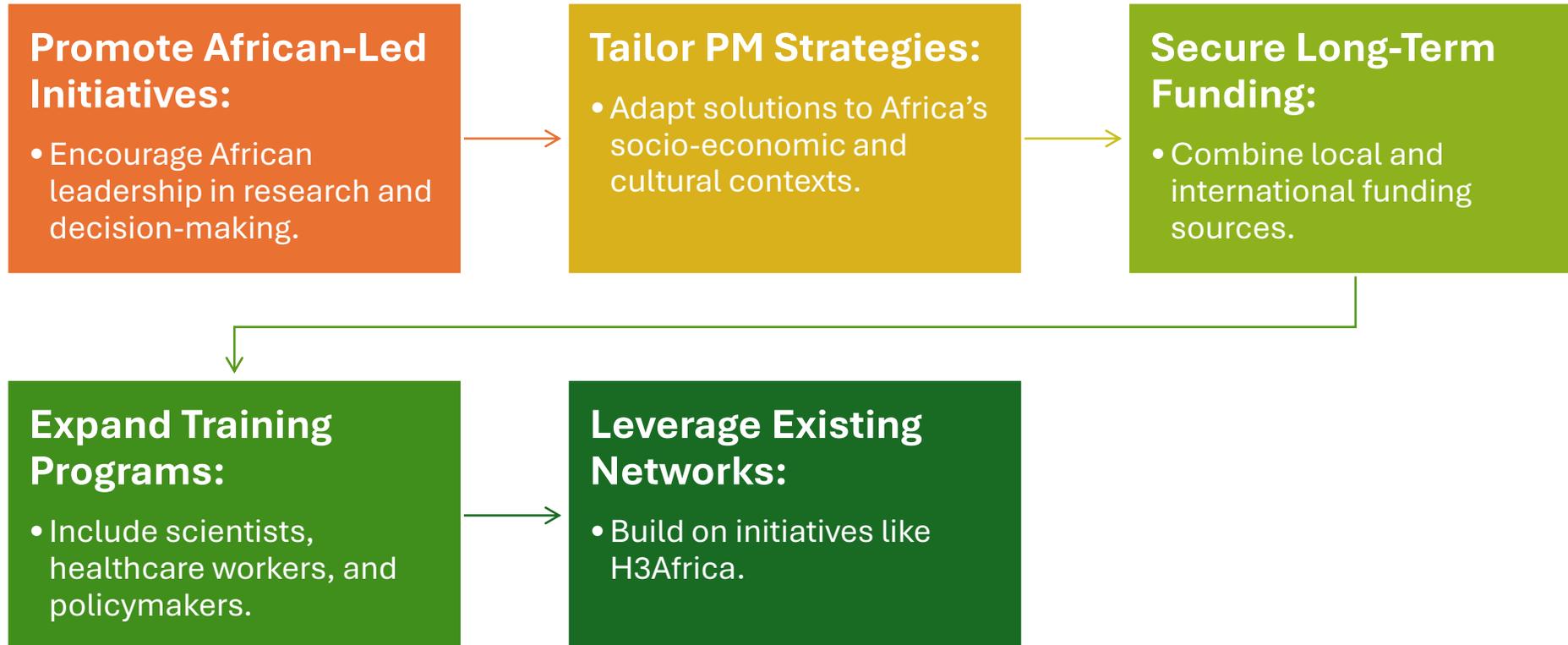
- **Knowledge Transfer:**

- European expertise in PM can strengthen Africa's research capacity.

- **Health Equity:**

- Collaborative projects can reduce health disparities and improve outcomes.

Actionable steps to implement the plan's recommendations



Vision for the future

“My vision for Africa-Europe collaboration in personalized medicine is one of equality, sustainability, and shared success.

In 10 years, I hope to see African-led genomic research centers contributing groundbreaking discoveries to the global community. I envision healthcare systems where personalized medicine is integrated, reducing disparities and improving outcomes for millions.

But achieving this vision requires commitment from all stakeholders. By prioritizing equity, sustainability, and inclusivity, we can ensure that this collaboration is transformative for both continents.”

**Africa's people
must be able to
write their own
genomics agenda**

**Genomics on the continent is finally getting
the attention it deserves – but funding needs
to come from more diverse sources.**

Roadmap for sustainable diverse genomic studies

