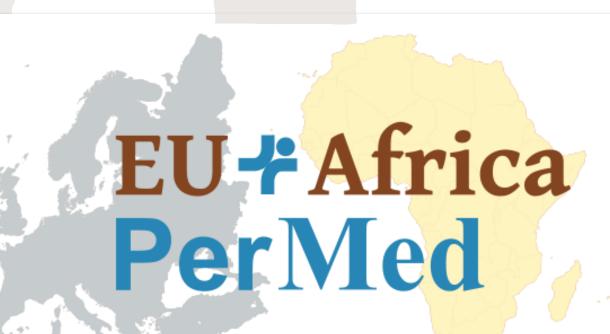
Africa's Areas of Mutual Interest in Personalised Medicine



2nd Stakeholder Workshop

Rizwana Mia (SAMRC) EU-Africa PerMed Project BUILDING LINKS BETWEEN
EUROPE AND AFRICA IN
PERSONALISED MEDICINE

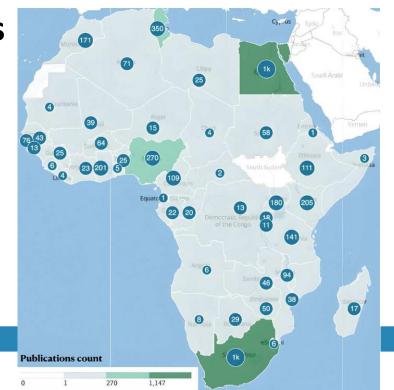


EU-Africa PerMed has received funding from the European Union's Horizon 2020 Research and Innovation programme under grant agreement No 964333

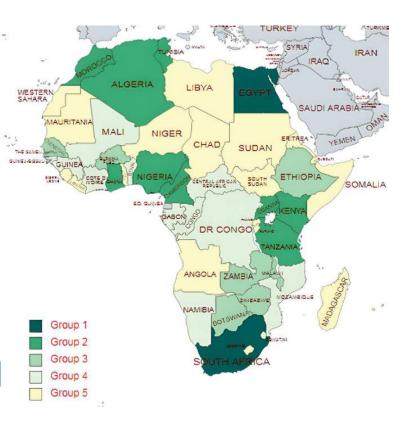
Mapping the landscape in Africa

- D2.1. Report: <u>Mapping the scientific and policy landscape of PM in Africa</u>
- D2.2. Report: The EU-AFRICA PerMed stakeholder mapping report
- D2.4. Policy Brief: Opportunities to Advance Personalised Medicine in Africa

Publications



Different Level of Adaption and implementation PM/Genomics capacities

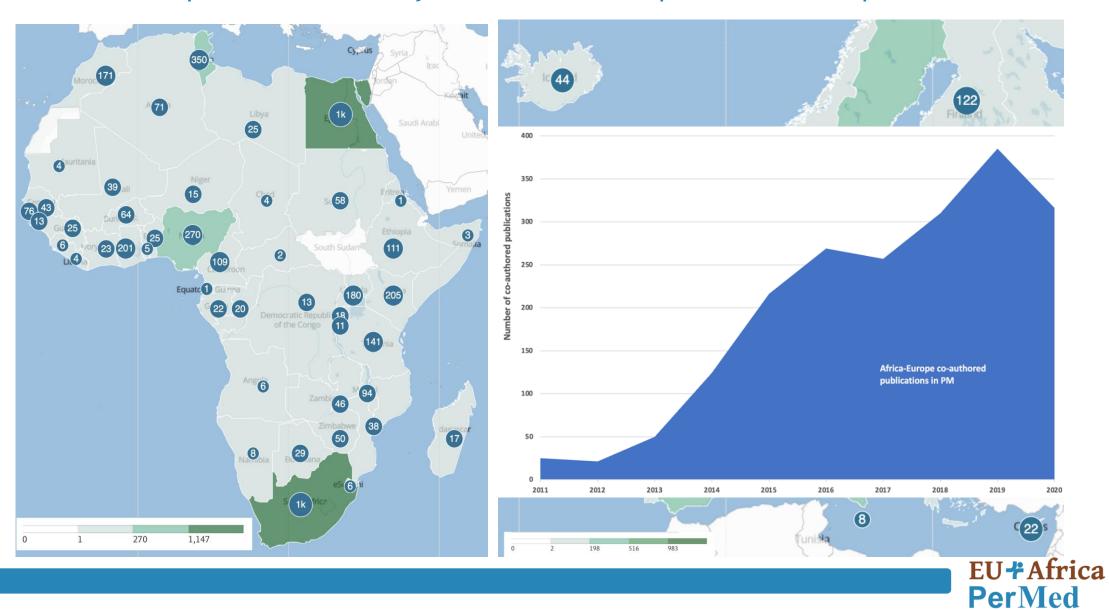


Scientific Productivity in Africa and Global view of coauthored publications

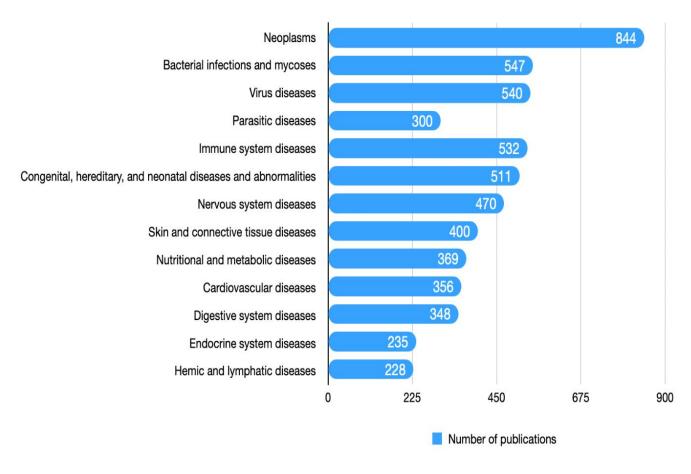


Publications per African country

Africa-Europe Co-authored publications



Disease categories & research areas



- Almost 82% of all articles were found to be related to one the 13 disease categories
- Interest in infectious diseases followed by cancer, immune system and nervous system diseases were more pronounced than other diseases
- The increase of articles in 2020 compared to 2011 was remarkable and more evident in Bacterial infection related publications (14-times increase), followed by Cardiovascular (11-times increase), and virus diseases (almost 8times increase)

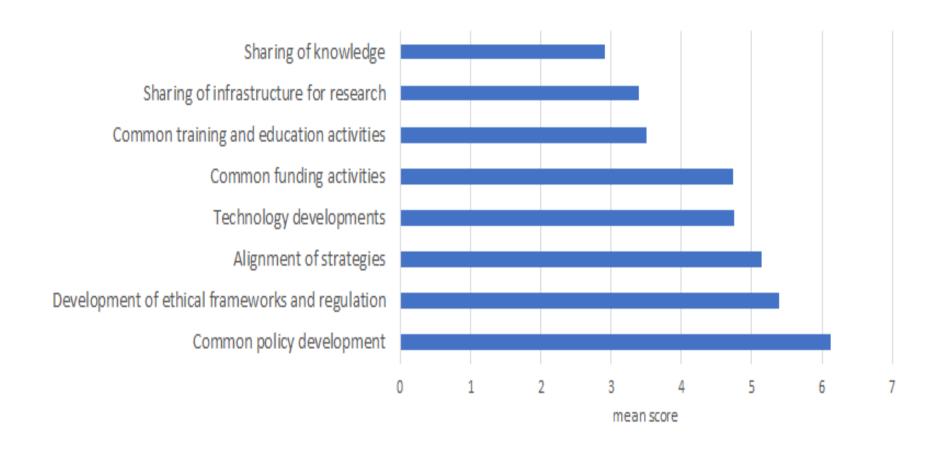


Regional Validation

- There is more activity than what has been published
- Including a robust Pharmacogenomics and non-communicable disease research
- A drive to establish Population Genomics Cohorts
- Sound establishment of data protection policy, and harmonization of regulation
- There is interest to develop more focus on PM in Africa



Survey Results showed interest in:





Opportunities, Needs and Interest

Opportunities that Africa can explore to strengthen the development and implementation of PM

- Investing and building on current research efforts in PM
- Generating and Utilising genomic data on African Population
- Establishing collaborations through the available platforms to strengthen PM implementation at the Continental level
- Developing skills locally and tapping into the diaspora-trained and skilled human resources to enhance PM
- Establishing and implementing the policy and ethics frameworks
- Citizen education

Policy recommendations

- Support research, data generation, mining, and translation into clinical care
- Skills and infrastructure development
- Ethical and regulatory framework development, strengthening, and harmonisation
- Awareness creation

Medical fields

- Cancer
- Cardiovascular disease
- Diabetes
- Infectious diseases
- Rare genetic diseases
- Immune disease
- Neurological diseases
- Mental health disorders

PM application

- Targeted treatment strategies
- Improved precise diagnostics
- Targeted prevention
- Clinical decision support
- Ethical, legal social frameworks
- Disease risk analysis



Top Areas of Interest

Main disease areas	 Cancer (HPV, cervical, breast, prostate, colon and esophageal cancers) Cardiovascular diseases Infectious diseases (malaria, HIV, TB, Hepatitis B and emerging infectious diseases) Diabetes and other metabolic-related conditions Rare genetic diseases Immune-system diseases Mental health conditions Other non-communicable diseases Nervous system diseases
Main thematic areas	 Pharmacogenomics Population genetics Training and capacity building: bioinformatics and data analysis Treatment strategies, tailored diagnostics, prevention Cancer screening, diagnosis, treatment and stem cell research Regulation around the incorporation of PM approaches into healthcare Data & other infrastructure/s PerMed



THANK YOU VERY MUCH FOR YOUR ATTENTION and we are looking forward to this session



