



Africa-Europe
Clusters of
Research Excellence
Africa-Europe CoRE



ARUA
African Research
Universities Alliance



The Guild
of European Research-Intensive Universities

A new strategy for Africa-Europe science collaboration

ADDRESSING GLOBAL SCIENCE INEQUALITIES

Current science landscape

[Sooryamoorthy 2022](#)



Africa's share: just under **8% of global science production**



Growth: significant **progress over the last 20 years**



Concentration: **45% of production in South Africa and Egypt**

Global representation

[Times Higher, 2024](#)

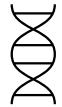


Top universities: **only 4 African institutions** in global top 500 (all in South Africa) despite population of 1.3 billion on the continent, which is projected to double by 2050





SDG impact: only 3.8% of climate research funds reach Africa; 78% goes to non-African researchers

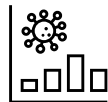


Health breakthroughs: Africa's genomic diversity is vast, yet only 2% of recorded genomes are African.

Importance of inclusion

[Ziervogel et al. 2022: Le Monde, 30/04/2023](#)

Funding inefficiencies



Misalignment: funding often reflects donor priorities

Non-Communicable Diseases (67% of deaths) receive 1% of health funding;
TB, malaria, HIV (7% deaths) receive 39% of funding



A shared vision for Africa and Europe

From global disparities to transformative collaboration: principles of equitable partnerships for a sustainable future put into practice together

ARUA and The Guild

Strategic advocacy for long-term, equitable Africa-Europe research partnerships

23

African research universities

22

European research-intensive universities

2020

[Joint concept note](#) -- Calling for excellent research at the heart of confronting **common challenges** faced on both continents.

2021

[Joint call](#) -- Increase Africa's research capacity through: **long-term collaboration and investment in science infrastructure**

2023

[Joint statement](#) -- Welcoming the AU-EU Innovation Agenda focus on **equitable**, long-term partnerships with **brain circulation** and **capacity building**

[Sectoral call for action](#) -- 2,000 universities and research institutions call for actions towards better integrated Africa-Europe funding programmes



AU-EU Innovation Agenda



Adopted in 2023 – [click or scan for more detail about this intercontinental framework for R&I](#)



Key focus areas for collaboration:



PUBLIC HEALTH



INNOVATION & TECHNOLOGY



GREEN TRANSITION



CAPACITIES FOR SCIENCE

Guiding principles:

- **Equity** in collaboration
- **Brain circulation** - mutual exchange of knowledge and expertise
- **Capacity-building** - strengthening research capabilities
- **Long-term approach** - sustainable, enduring partnerships



B e r l a y m o n t



Commission européenne
Europese Commissie



Africa-Europe Clusters of Research Excellence (CoRE)

- Established by **ARUA** & **The Guild** in Summer 2023
- **120 institutions** across **42 countries** in Europe, Africa, and beyond
- Listed on the [Dashboard of Initiatives of the AU-EU Innovation Agenda](#)

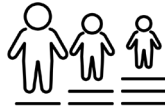
Features of all Africa-Europe CoREs



Sustainable Development Goals (SDGs): focused on impactful scientific solutions for societal transformation



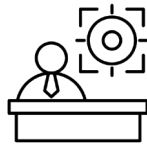
Scientific Excellence: Leading researchers from both continents address priority research challenges



Equity: Fair credit, funding, and collaborative research across regions



Inclusion: Involves researchers from 120 institutions across 42 countries, going beyond ARUA and The Guild networks



Long-term focus and institutional support: institutional commitments from universities to support long-term goals and Cluster priorities. Bottom-up approach where researchers define priorities, backed by university leadership



Brain circulation and capacity-building: developing inclusive postgraduate education frameworks that promote lasting improvements in Africa's research capacity.



Towards Equity in Global Science

The Africa-Europe CoREs aim to address societal needs through innovative collaborative partnership which can be a vehicle for change, inviting funders, researchers, policy-makers, business, and civil society to join forces to carry out new, effective action

What are the key needs?



Supportive funding: new models to foster Africa-focused doctoral schools and globally networked graduates



Inclusive research funding: backing for groundbreaking projects that engage researchers across Africa.



Research infrastructure: investments in accessible facilities through Africa-Europe Clusters.



Societal engagement: encouraging collaboration with policy-makers and businesses to tackle shared challenges



Our first Conference

Commitment to Africa 2063 Agenda and EU's Global Gateway

In September 2024, +250 researchers from over 49 institutions across more than 27 countries in Africa, Europe and beyond gathered in South Africa

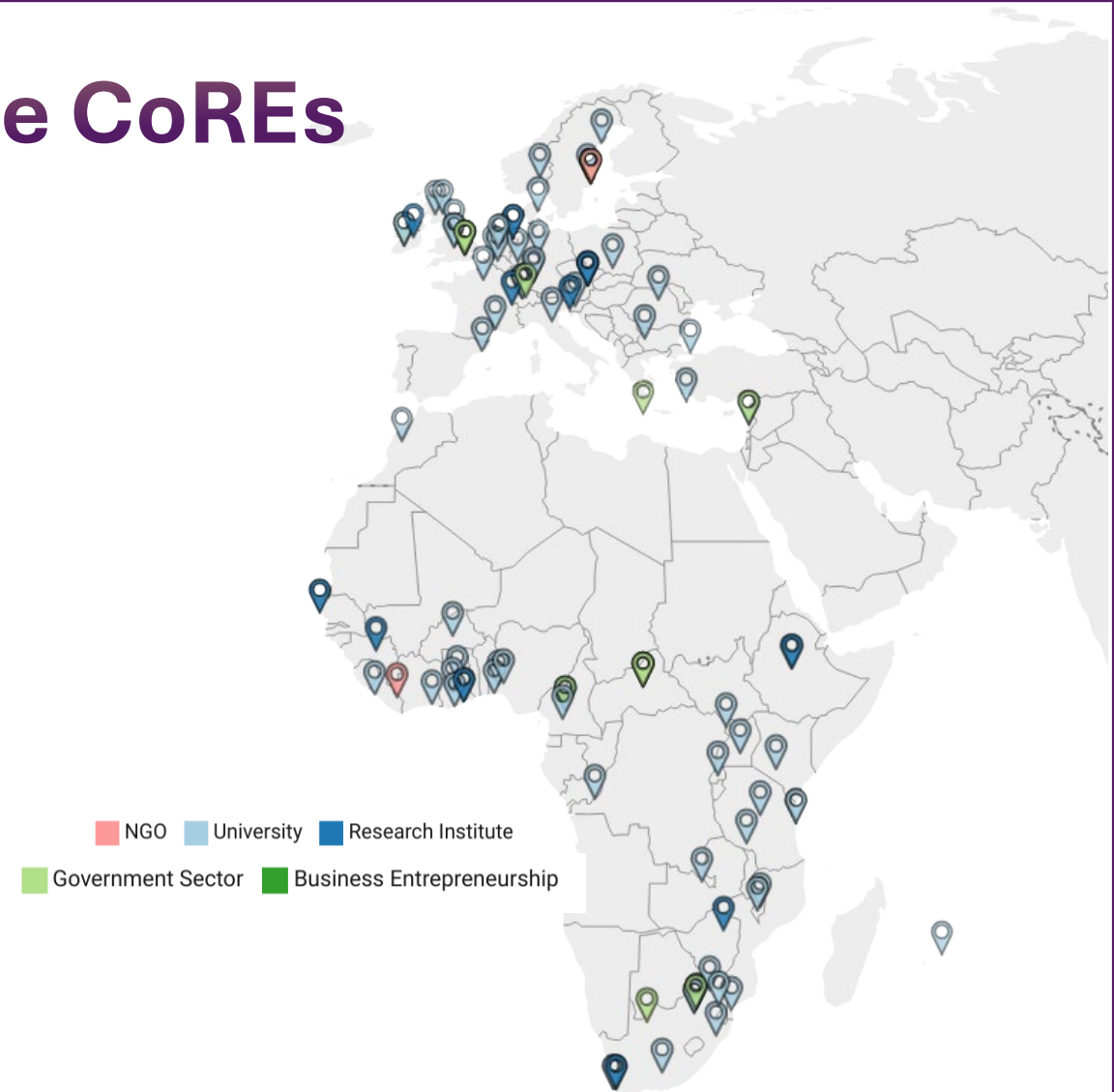
[Find out more on our webpage](#)

Key facts about Africa-Europe CoREs

21 CoREs up and running with
120 institutions across **42 countries**
in Europe, Africa, and beyond.

Reported achievements from our first year
(July 2023 – June 2024):

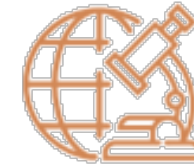
- ❖ **65 funding applications** submitted
- ❖ **Over 48 public events** organised
by CoREs or with CoRE participation
- ❖ **37 publications** underpinned by
CoRE activities





PUBLIC HEALTH CoREs

- Advanced Infectious Diseases Research and Training
 - Food Environment Actions for the Promotion of Health
 - Genomics for Health in Africa
 - Health, Gender and Sexualities
 - Multimorbidity
- Migration and Health
 - Non-Communicable Diseases and Multimorbidity
 - Preparedness and Response to Pandemics and Shocks
 - Translational Research in Infection, Immunity and Inflammation



CAPACITIES FOR SCIENCE CoREs

- Interdisciplinary Peace Research
- Inequalities, Poverty, and Deprivation Across Africa
- The Politics of Sustainable Development



GREEN TRANSITION CoREs

- Solutions for Climate Change Adaptation and Mitigation
- Sustainable Water for Human Well-Being
- Renewable Energy
- Water Resources Management for a Sustainable and Just Future



INNOVATION & TECHNOLOGY CoREs

- Artificial Intelligence, Data Science, and Theoretical and Computational Thinking
- Sustainable Food Systems
- Creative Economics: Cultures, Innovation and Sustainability
- Engineering for the Future
- Mathematics

To learn more about
Africa-Europe CoRE
scan here:





**How can you engage
with the CoRE
initiative?**

Connect, collaborate, and create opportunities
with the CoRE initiative and contribute our movement for
Africa-Europe collaboration based on R&I excellence



Co-Leads

Click the names of the Co-Leads to access their emails.

ARUA	The Guild	
University of Ghana, Ghana	University of Glasgow, United Kingdom	University of Tübingen, Germany
Gordon A. Awandare - Director, West African Centre for Cell Biology of Infectious Pathogens (WACCBIP)	Andy Waters and Lilach Sheiner - Head of School of Infection and Immunity and Deputy Head Parasitology	Steffen Borrmann - Professor, Institute for Tropical Medicine

→ [Full list of partners](#)



Maps showing the **geographical span** of involved organisations in Africa and Europe;



Non-Communicable Diseases and Multimorbidity

Priority Area	
Public Health	
Abstract	
While Europe is in the post-epidemiological transition phase, with chronic diseases still the leading cause of death, but with slowly decreasing incidence and mortality rates, Africa is still in the epidemiological transition phase with chronic diseases becoming the leading cause of death. The CoRE in Non-Communicable Diseases and Multimorbidity aims to address the growing burden of non-communicable diseases (NCDs) and their co-morbidities in Africa. The Cluster's mission is to develop innovative and context-specific solutions for the study, prevention and management of NCDs and their co-morbidities in low- and middle-income countries. The Cluster will focus on building research capacity, conducting cutting-edge research, and promoting knowledge translation and dissemination, as well as mobility and exchanges. The Cluster's approach is multi-disciplinary, collaborative, and participatory, with a focus on equitable partnerships and community engagement. Further, Africa provides an opportunity for the global scientific community in understanding the complex NCD mechanisms as well as getting solutions to the rising NCD problem in the region. The Cluster's goal is to improve the health and well-being of populations in Africa by reducing the burden of NCDs and co-morbidities across the lifespan and to contribute to the attainment of the Sustainable Development Goals.	
Co-Leads (Academic, University)	
ARUA	The Guild
Frederick Bukachi Director of ARUA Centre of Excellence for NCDs - University of Nairobi , Kenya	Pasquale Maffia, Prof. of Cardiovascular Immunology, International Lead, School of Infection & Immunity - University of Glasgow , United Kingdom
Ibrahima Bara Diop, Head of Cardiology, Fann Hospital, Dakar, Prof. of Cardiology; Abdoulaye Samb, Prof. of Physiology, Head of the Department of Medical Physiology, Faculty of Medicine, Pharmacy and Dentistry, Dean of the Faculty of Medicine - Cheikh Anta Diop University , Senegal	Xavier Jouven Professor of Cardiology and Head of Cardiology, Georges Pompidou Hospital, Director of the "Epidemiology of Cardiovascular Diseases" research unit at INSERM-PARC - Université Paris Cité , France
Mayowa Ojo Owolabi Professor of Neurology, Director Center for Genomic and Precision Medicine - University of Ibadan , Nigeria	Tomasz J. Guzik Professor of Medicine - Jagiellonian University , Poland
Ntobeko Ntusi, Prof. of Medicine, Department of Medicine and Groote Schuur Hospital - University of Cape Town , South Africa	
Core Partners (Academic, University)	
Ama de-Graft Aikins Professor of Psychology - University of Ghana , Ghana	
Maria Papathanasopoulos, Professor - University of the Witwatersrand , South Africa	
Damalie Nakanjako, Professor of Medicine, Principal College of Health Sciences - Makerere University , Uganda	
Oluyemi Akinloye, Professor of Clinical Chemistry and Molecular Diagnosis Director, Centre for Genomics of Non-communicable Diseases and Personalized Healthcare - University of Lagos , Nigeria	
Fidèle Sebera, Prof. of Neurology Head of Neurology, Neuropsychiatric Hospital Ndera - University of Rwanda , Rwanda	
Prof. Stephan Windecker, Chairman Dept. of Cardiology, Bern University Hospital - University of Bern , Switzerland	
Other Partners (including non-academic ones)	
Mwapatsa Mipando, Associate Professor Biomedical Science & Team Leader for Blantyre-Blantyre Research Project - Kamuzu University of Health Sciences , Malawi	
Mia Crampin, Prof. of Epidemiology, Director - The Malawi Epidemiology and Intervention Research Unit , Malawi	
Bamba Gaye, Assistant Prof., General Secretary of the ARNcd Head of the research Department, Cardiology Department, University Hospital of Fann - The African Research Network for non-communicable diseases , Senegal	
Roland N'Guetta, Professor and Head of Cardiology - University of Abidjan , Ivory Coast	
Ali Ibrahim Touré, Professor of Cardiology - University of Abou Moumouni , Niamey	
Patrice Zabsonré, Professor of Cardiology - University of Ouagadougou , Burkina Faso	
Samuel Kingue, Professor of Internal Medicine and Cardiology - University of Yaoundé 1 , Cameroon	

Academics and institutions involved in each CoRE



Get in touch with academic co-leads
by clicking their names on each CoRE
profile page

visit our
[African-Europe CoRE webpage](#)

CONNECT

with CoRE's academic co-leads to
build project consortia or enquire
about joining as a CoRE member

CONTRIBUTE

best practice ideas for collaboration
across Africa and Europe



CREATE

Funding opportunities for multilateral
collaboration on both continents,
incentivize equity and long-term
action based on R&I excellence

INVEST

in African R&I infrastructure &
intercontinental doctoral networks

For more information, please contact:

ARUA

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Relevant Sources:

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- Sooryamoorthy, R., 2022. *Science in Africa: Contemporary Trends in Research*. *Journal of Scientometric Research*.
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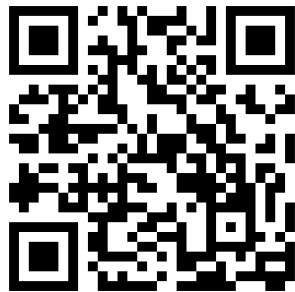
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