

AFRICA-EUROPE CLUSTERS OF RESEARCH EXCELLENCE CONFERENCE

29 September - 2 October 2024

Stellenbosch University







Introduction

Stellenbosch University

On behalf of Stellenbosch University and Rector and Vice-Chancellor Prof. Wim de Villiers, we are privileged to welcome you to the Africa-Europe CoRE Conference 2024. As co-hosts, together with the ARUA and The Guild secretariats, we are honoured to bring together esteemed scholars, researchers and practitioners from Africa and Europe to foster dialogue, collaboration and partnership. This conference is not just a significant milestone, but a crucial platform, providing a unique opportunity to explore innovative solutions and strengthen networks essential to addressing the pressing challenges faced by our societies and respective continents.

This conference is particularly important, as it represents the first joint initiative between the African Research Universities Alliance (ARUA) and The Guild of European Research-Intensive Universities (The Guild) to establish clusters of research excellence. The creation of these CoREs exemplifies one of Stellenbosch University's core strategic themes, namely "Purposeful partnerships and inclusive networks", aligning with our belief that the best solutions emerge from collaborative efforts that bring together diverse perspectives, expertise and experiences. By fostering these responsible and equitable partnerships, we aim to enhance our collective capacity to generate locally relevant and globally impactful knowledge.

Just like our partnering institutions in the CoREs, Stellenbosch University is committed to research for impact, where our research endeavours contribute meaningfully to societal development and transformation. As a leading research-intensive African university, we are deeply invested in the ideals of this partnership, which emphasises collaborative research, capacity-building and knowledge

exchange as essential tools for addressing global challenges. This conference serves as a critical platform for advancing impactful research that responds to our local communities' needs and contributes to broader global objectives, such as the United Nations Sustainable Development Goals (SDGs) and the African Union-European Union Innovation Agenda. The thematic areas covered by the CoREs - spanning public health, Sustainable Development, Climate Adaptation, Artificial Intelligence, and more - reflect the breadth and depth of our challenges. These areas require innovative, interdisciplinary approaches and cross-border collaboration, demonstrating our shared commitment to solving the most complex issues of our time. Through purposeful partnerships and inclusive networks, we seek to build robust, sustainable connections that leverage the strengths of our institutions and researchers. Together, we can make substantial and sustainable contributions to science, technology and society. We use this opportunity to acknowledge the extensive work driven through ARUA and The Guild to launch the first 20 CoREs in the summer of 2023 to address societal and scientific challenges framed by the AU-EU Innovation Agenda. Prof Ernest Aryeetey (former Secretary-General of ARUA and former Vice-Chancellor of the University of Ghana), Prof Jan Palmowski (Secretary-General of The Guild since 2016) and the presidents/rectors. vice-presidents, researchers and co-leads of each cluster are particularly acknowledged for their contributions

CoREs are a new form of collaboration between some of the best researchers from both continents, striving for equitable partnerships in an unequal world. Their launch has been enabled by resources committed by our institutions to address the SDGs through excellent research, education, capacity-building, mobility and innovation. CoREs

were proposed by academics and selected according to the excellence of their 10-year collaborative plans, which contribute to the four priority areas of the EU-AU Innovation Agenda.

We encourage all participants to engage fully in the diverse range of presentations and discussions throughout the conference. Your contributions are not just welcomed, but they are crucial. They will help shape new ideas, inspire innovation, and promote collaboration. Your role is integral, enabling us to push the frontiers of knowledge and deliver research that makes a tangible difference. Let us seize this moment to strengthen our resolve to work collaboratively, build capacities, and generate solutions that are inclusive, equitable and impactful.

We extend our sincere appreciation to all participants, speakers and organisers who

have made this conference possible. Your involvement is not just acknowledged, but deeply appreciated. It is a testament to your dedication to advancing research and innovation for the common good. We recognise and value your efforts, and we are confident that this conference will serve as a catalyst for new ideas, partnerships and meaningful contributions that will have a lasting impact.

Welcome to Stellenbosch University and to what promises to be an inspiring and productive conference.



Prof. Hester C Klopper
Deputy Vice-Chancellor: Strategy, Global and
Corporate Affairs
Stellenbosch University



Prof. Sibusiso Moyo

Deputy Vice-Chancellor: Research, Innovation and Postgraduate Studies

Stellenbosch University



About the African Research Universities Alliance (ARUA)

Established in 2015 with 16 leading research universities in Africa, the African Research Universities Alliance (ARUA) currently comprises 20 full members and three associate members from 13 African countries. ARUA pursues the vision of making African researchers and institutions globally competitive while contributing to the generation of knowledge for the socioeconomic transformation of the region.

The Alliance distinguishes itself from other university networks in Africa by bringing together several peer African institutions that are willing to pool their limited resources to generate a critical mass that can more effectively support their limited but growing number of researchers. Underlying this approach is the conviction that institutions can more effectively leverage their resources for additional resources by working together.

ARUA is pursuing its mission by focusing on four pillars, namely (i) enhancing collaborative research, (ii) expanding and improving training and support for PhDs, (iii) building capacity for research management, and (iv) developing research advocacy.

Also, ARUA has been on a mission to strengthen African universities through effective capacity-building that comes from collaborating with leading institutions to significantly increase their research output. The Alliance seeks to develop a robust knowledge/research ecosystem based on local researchers. In the search for local solutions to local problems, ARUA expects that the improved research output from member universities will become internationally visible. ARUA is also developing an African voice for global public discourses on development. The two characteristics of local relevance and global competitiveness underlie ARUA's work.

Within the past eight years that the network has operated, it has developed several collaborative initiatives, including the following:

- The establishment of 13 centres of excellence (CoEs) to pursue various capacity-building and research excellence initiatives to align with the SDGs. These CoEs were established with support from UK Research and Innovation (UKRI).
- ii. The Pilot Early-Career Research Fellowship, which has facilitated mobility for over 30 young African scholars to spend up to a year at the ARUA CoEs to work on cutting-edge research that aligns with the focus of the CoEs. The initiative has been



About The Guild

tion of | The Guild vision

Our scientific and societal challenges require a concerted and ambitious response from Europe's leading research institutions to develop and showcase real and sustained solutions of global significance, in conjunction with not-for-profit organisations, industry and business. We will establish The Guild as a distinct voice, focusing activity on core areas of engagement with clearly defined outcomes and instruments of measurement. The Guild will be an effective voice to further research, create innovation for public benefit, and enrich public debate at European and national levels.

The Guild is a transformative network of European research-led universities that is committed to optimising the opportunities afforded by its members' world-leading research. Through the knowledge they produce, The Guild will engage with policymakers, enhance public debate, promote excellence in higher education, and collaborate with private and public institutions to solve global problems. Through the commitment of its members for collaborative exchange in research, innovation and public engagement, The Guild will set new standards for the effectiveness of a university network

- supported by the Carnegie Corporation of New York and the South African National Research Foundation
- iii. The initiation of a Data-Gathering and Benchmarking Project, which has led to the establishment of offices of institutional research and communities of practice on data-driven decision-making at member universities with funding from the Carnegie Corporation of New York.
- iv. The launch of 20 clusters of research excellence (Africa-Europe CoREs), which bring together researchers from over 169 institutions across 60 countries in collaboration with The Guild of European Research-Intensive Universities.
- v. The co-creation of the African Charter for Transformative Research Collaborations.
- vi. The successful hosting of biennial international conferences where researchers get to reflect on how various research endeavours can help us better understand the policy issues relevant to the development of Africa.

ARUA remains an important institutional arrangement to counter the challenges faced by African universities as they seek to enhance their research portfolio and impact their societies.

externally, and for each member's access to policy and research funding opportunities.

The Guild core principles

Members of The Guild share a commitment to research quality as the key driver for knowledge creation, to better inform policymaking and the targeting of research funding in the EU, and to develop close partnerships with cultural organisations, think tanks, industry and businesses. The core principles that underpin The Guild embody a vision of how common and shared activity strengthens best practice and builds capacity within each member institution. Through its core activities, The Guild will further serve to amplify each member's voice in a national context.

- Promote the pursuit of knowledge, and be a strong voice in defence of free research, academic freedom and the integrity of the researcher.
- 2. Position research-intensive universities as the principal drivers of the European knowledge economy, indispensable for further innovation and the creation of highquality jobs, improvements to medicine and the quality of life, the understanding of culture and what it is to be human, and the success of European countries as close neighbours and advocates of human rights.
- Collectively effect change through frank and open dialogue, and drive policy by establishing an agenda-setting voice, exchanging knowledge broadly, and leading on democratic debate within European and national contexts.
- Create opportunities and provide support for innovation and entrepreneurship through sustained collaboration with leading industry and business partners, including SMEs, NGOs as well as other private and public bodies both nationally

- and within Europe.
- Support inclusivity and equal opportunities through its academic engagement, including in relation to social mobility, minorities, sustainability and gender.
- Promote the sustainability of European funding to enhance research, teaching and innovation across all parts of Europe according to the principles of excellence.
- Foster a commitment to the breadth of human knowledge, including SSAH (the social sciences, arts and humanities), STEMM (science, technology, engineering, mathematics and medicine), as well as new and emerging fields across disciplines.
- 8. Share best practice and benchmarking data for the continued advancement of Guild members individually and collectively to develop deeper understandings and build collaboration on areas of synergy and research strength.
- Play a leading role in global discussions on the importance of research and education for the benefit of society, culture and the economy.

Strengthening the African knowledge society

Since 2019, The Guild has developed a close partnership with ARUA to support sustainable partnerships between African and European universities. The African Union and the European Union have a unique opportunity to develop their strategic partnership through investing in sustainable and equitable collaboration in research, innovation and higher education. To tackle the common challenges, from public health to environmental change, ARUA and The Guild have emphasised the importance of strengthening the African knowledge society through enhancing African universities' capacities for excellent research.

Programme

Sunday, 29 September 2024: Arrival of delegates

WELCOME DINNER

La Pineta Restaurant (informal)

Host and Programme Director

	Host and Programme Director: Prof. Hester Klopper Deputy Vice-Chancellor: Strategy, Global and Corporate Affairs, Stellenbosch University
18:00 - 21:00	 Welcome Messages: Stellenbosch University – Dr. Nicky Newton-King Chair: Stellenbosch University Council African Research Universities Alliance (ARUA) - Prof. Sizwe Mabizela Chair of ARUA and Vice-Chancellor: Rhodes University The Guild - Prof. Anders Hagfeldt Chair of The Guild and Vice-Chancellor: Uppsala University
	Vote of Thanks: Prof. Sibusiso Moyo Deputy Vice-Chancellor: Research, Innovation and Postgraduate Studies, Stellenbosch University
	Entertainment by Lokxion Foundation
Monday, 30 Septer	mber 2024
08:00 - 08:55	Arrival and Registration
	PLENARY SESSION 1
09:00 - 09:30	 Official Welcome and Context-Setting Stellenbosch University, South Africa - Prof. Wim de Villiers Rector and Vice-Chancellor African Research Universities Alliance (ARUA) - Prof. John Gyapong Secretary-General The Guild - Prof. Jan Palmowski Secretary-General Moderator: Prof. Sibusiso Moyo Deputy Vice-Chancellor: Research, Innovation and
	Postgraduate Studies, Stellenbosch University
	PLENARY SESSION 2
09:30 - 10:15	 Keynote Address Africa-Europe Partnerships: Advancing Equity, Impact and Capacity-Building through the Africa-Europe Clusters of Research Excellence
	Prof. Funmi Olonisakin Vice-President: International, Engagement and Service, King's College
10:15 - 10:45	Tea Break
	PLENARY SESSION 3
10.15 10.00	Cluster Presentations
10:45 – 12:30	Session Facilitators: Prof. John Gyapong Secretary-General, ARUA Prof. Jan Palmowski Secretary-General, The Guild

12:30 - 13:30			
	Photo Session & Lunch		
	BREAKAWAY SESSION 1		
13:30 - 16:30	CoRE individual group meetings and workshops facilitated by Co- Leads to ensure priorities for the Cluster are planned in an equitable manner		
	Session Facilitators: Cluster Co-Leads		
	PARALLEL EVENT 1		
	Steering Committee Meeting		
14:00 – 16:30	Co-Chairs: Prof. John Gyapong Secretary-General, ARUA Prof. Jan Palmowski Secretary-General, The Guild		
	CONFERENCE DINNER		
19:00 – 21:00	Webersburg Wine Estate Hosted by: Prof. John Gyapong Secretary-General, ARUA Prof. Jan Palmowski Secretary-General, The Guild Entertainment by Just Friends Band		
Tuesday, 1 Octobe	r 2024		
08:30 - 08:55	Arrival		
	PLENARY SESSION 4A		
09:00 - 09:45	Keynote Address: Social Justice and Transdisciplinary Research: Why Collaborate? Prof. Thuli Madonsela Director of the Centre for Social Justice, Chair for Social Justice, and founder of the Thuma Foundation for Democracy Leadership and Literacy		
	Session Chair: Prof. John Gyapong Secretary-General, ARUA		
	PLENARY SESSION 4B		
09:45 – 10:15	Keynote Address: • The South African Science and Innovation Landscape		
	Mr. Daan du Toit Acting Director-General, SA Department of Science and Innovation		
10:15 - 10:45	Tea Break		
	PLENARY SESSION 5		
10:45 – 12:00	PLENARY SESSION 5 Research grants and opportunities session (hybrid session)		
10:45 – 12:00			
10:45 – 12:00 12:00 – 12:30	Research grants and opportunities session (hybrid session)		
	Research grants and opportunities session (hybrid session) Sean Rowlands Senior Policy Officer, The Guild		

15:00 - 15:30	Break		
	BREAKAWAY SESSION 3		
15:30 – 18:40	PARALLEL SESSIONS FOR CORES See Draft Outline in Addendum at end of programme		
Evening	Free evening for conference delegates		
Wednesday, 2 Oct	ober 2024		
08:00 - 08:25	Arrival		
	PLENARY SESSION 6		
	CoRE Conclusions and Feedback 3 min per CoRE		
08:30 - 10:15	 Session Concluding Remarks by: ARUA: Prof. John Gyapong Secretary-General, ARUA The Guild: Prof. Jan Palmowski Secretary-General, The Guild Stellenbosch University: Prof. Wim de Villiers Rector and Vice-Chancellor, Stellenbosch University 		
10:15 - 10:45	Tea Break		
10:45 – 12:15	Chancellor, Stellenbosch University		

	CLOSING PLENARY	
12:15 – 12:45	Concluding Remarks: ARUA and The Guild Secretaries-General	
12:45 – 15:00	Lunch and Networking Entertainment by Lokxion Foundation and Just Friends Band	

ADDENDUM

The purpose of these sessions is to enable members of our Clusters to learn about, and engage with, colleagues from other clusters, and to explore avenues for collaboration.

Colleagues can choose any of the parallel sessions they are interested in, and we request each Cluster presenting itself to allow maximum time for interaction, ideas, and collaboration

For those presenting their Cluster in their session, we ask that you present your Cluster's ambitions to an academic, non-specialist audience, and identify input from other Clusters that could be helpful to you (10-12 min, followed by 28-30 min discussion). All sessions must end promptly after 40 minutes to allow the next session to start.

	Room 1	Room 2	Room 3	Room 4	Room 5
15.30 – 16.10	Infectious Diseases	Health, Gender, Sexualities	Renewable Energy	Sustainable Food Systems	Inequalities, Poverty, Deprevation
16.20 - 17.00	Multimorbidity	Food Environment Actions	Water Resources Management	Artificial Intelligence	Migration and Health
17.10 - 17.50	Infection, Immunity, Inflammation	Genomics for Health in Africa	Nature-Based Solutions	Creative Economies	Politics of Sustainable Development
18.00 - 18.40	Non- Communicable Diseases	Pandemics and Shocks	Sustainable Water and Land	Engineering for the Future	Capacities for Science

Note:

This is a draft outline: Final sessions will be confirmed shortly ahead of the Conference, once we have a clearer sense of final numbers of Clusters attending.

If you wish to present together with another Cluster, do let us know: sean.rowlands@theguild.eu and aalloye@arua.org.za.



CoRE preamble

A new strategy for Africa-Europe science collaboration

Africa's share of global science production is clearly insufficient: It currently stands at just under 8%, which represents considerable growth over the past 20 years, but there is still considerable potential for further growth, particularly as over 45% of Africa's science production is concentrated in South Africa and Egypt (Sooryamoorthy 2022). Only four universities (all in South Africa) are in the global top 500 (Times Higher Education, 2024) – a figure all the more striking on a continent of over 1.3 billion people, whose population is expected to almost double by 2050.

New, equitable inclusion of Africa in global science production is crucial for:

 Addressing the UN SDGs. The Intergovernmental Panel on Climate Change (IPCC) has underlined that "indigenous and local knowledge" is crucial in fighting climate change. But at present, 3.8% of global funding for climate research is spent on Africa, and of this small amount, 78% goes to researchers outside the continent (Ziervogel et al. 2022).

- Enabling major scientific breakthroughs. For instance, even though Africa is home to the greatest genomic variety in the world, only 2% of genomes recorded are from Africa (Le Monde, 2023). Working with African populations and scientists can dramatically improve global health.
- 3. More effective science funding. Currently, development assistance often reflects donor rather than recipient priorities. In health research, for instance, 67% of deaths in low and middle-income countries are attributable to non-communicable diseasess (NCDs), but they attract only 1% of total health funding. Meanwhile, tuberculosis, malaria and HIV attract 39% of total funding, with only 7% of attributable deaths

The need for long-term and equitable research collaboration that builds up Africa's science capacity echoes an urgent call from the research sector. Since 2020, ARUA and The Guild have articulated the demand for new, long-term and equitable research partnerships between Africa and Europe. The networks, consisting of 22 institutions in Africa and 22 institutions in Europe, call for excellent research to be at the heart of societal responses to the common challenges both continents face. For that reason, they

have joined forces to push for new ways of collaborating across the continent. In 2021, our joint call demanded a significant boost to Africa's science capacities through long-term collaboration and investment.

Features of Africa-Europe Clusters of Research Excellence

- Each excellent academic in the CoREs is committed to the change that excellent science, education and capacity-building can bring to society. As an expression of commitment to the Africa 2063 Agenda and the EU's Global Gateway, the CoREs embody existing and potential synergies between both continental approaches to the attainment of the UN SDGs.
- Scientific excellence: All CoREs bring together some of the leading researchers in their fields across both continents to address new research challenges identified in close partnership.

- Equity: Having co-created their research and impact agenda across both continents, all CoREs will strive for equity in a deeply unequal world in the way research is carried out, credit is received, and funding is allocated.
- Inclusion: Whilst the CoRE initiative was inspired and led by ARUA and The Guild, our Clusters bring together researchers from beyond the networks, from 120 institutions across 42 countries.
- Long-term focus: This is guaranteed by the institutional commitment of our universities.
 ARUA and The Guild university leaderships have been deeply involved in the creation of the Clusters, supporting the bottomup articulation of Cluster priorities by researchers with a long-term commitment of institutional support.

PUBLIC HEALTH

The following set of clusters are grouped into a priority area that is aligned with the AU-EU Innovation Agenda.

Translational Research in Infection, Immunity, and Inflammation

Rapid urbanisation and lifestyle changes in sub-Saharan Africa (SSA) are transforming its disease epidemiology. The region is facing a double burden of disease: a rising prevalence of non-communicable diseases, while the burden of infectious diseases (ID) and antimicrobial resistance remains high.

The host immune system plays a pivotal role in these conditions, and understanding the interactions between pathogens and host immunity is critical for effective treatments and prevention. However, populations in SSA are underrepresented in immunity and ID research, despite significant genetic, epidemiological and contextual differences.

In response, this CoRE will establish a network of institutions with expertise in infection, immunity and inflammatory response; aiming to promote capacity exchange programmes that boost training and research efforts, knowledge, and technology transfer among institutions and equip the region with the necessary skills to acquire evidence that informs policies to help address pressing public health challenges in the coming years.

CO-LEADS		
ARUA	THE GUILD	
MAKERERE UNIVERSITY, UGANDA Prof. Damalie Nakanjako - MBChB, MMED, PhD, Professor of Medicine and Principal at the College of Health Sciences	RADBOUD UNIVERSITY, THE NETHERLANDS Quirijn de Mast - MMED, PhD, Internist- infectious diseases specialist, Department of Internal Medicine	

CoRE PARTNERS			
UNIVERSITY OF RWANDA, RWANDA Florence Maisasa - MD, PhD, Chair, Department of Medicine ADDIS ABABA UNIVERSITY, ETHIOPIA Dr. Yimtubezinash Woldeamanuel Mulate - Centre for Innovative Drug Development and Therapeutic Trials for Africa (CDT-Africa)	MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES (MUHAS), TANZANIA Salim Masoud - MMED, PhD, Department of Microbiology		
GHENT UNIVERSITY, BELGIUM Prof. Linos van den Kerkhoven – Department of Internal Medicine and Head of HIV Cure Research Centre	UNIVERSITY OF GHANA, GHANA Gordon A. Awandare - Pro-Vice-Chancellor, Academic and Student Affairs		

Migration and Health

UNIVERSITY OF GHANA, GHANA

Centre for Migration Studies

and Asian Studies (CAAS)

& Asian Desk Coordinator, CAAS **Dr. Getahun Fenta Kebede** - Assistant

Professor of Development Studies, Senior Social

Impact Assessment Expert, CAAS

Prof. Mary Boatemaa Setrana - Associate Professor of Migration and Social Change

ADDIS ABABA UNIVERSITY, ETHIOPIA

Prof. Zerihun Berhane - Associate Professor of
Development Studies, Head: Centre for African

Dr. Samuel Tefera Alemu - Assistant Professor

Migration – involving diverse movements of people within and between countries and regions, including refugees – is a key determinant of health, but evidence-informed policy and programme responses to address migration and health (MH) remain limited.

In line with The Guild's position paper on health research (2022) and the AU-EU Innovation Agenda, the Migration and Health CoRE addresses the key scientific challenge of MH across the AU-EU migration corridor. This corridor is associated with multiple health concerns, determined by a range of structural and social factors that are experienced differently by diverse migrant groups and the communities through which they move, live and work.

The Migration and Health CoRE will develop collaborative research to generate evidence-informed, cross-country policy approaches to support good health. The focus will be on migrants and migration-impacted communities along the AU-EU migration corridor, as well as efforts towards universal health coverage.

CO-LEADS		
ARUA	THE GUILD	
UNIVERSITY OF WITWATERSRAND, SOUTH AFRICA Assoc. Prof. Jo Vearey - Director ARUA CoE on Migration & Mobility and the African Centre for Migration & Society Dr. Carren Ginsburg - Senior Researcher Medical Research Council (MRC)/Wits Rural Public Health and Health Transitions Research Unit (Agincourt)	UPPSALA UNIVERSITY, SWEDEN Dr. Soorej Jose Puthoopparambil Director of the World Health Organisation Collaborating Centre on Migration and Health Data and Evidence	
CoRE PARTNERS		

UNIVERSITÉ CATHOLIQUE DE LOUVAIN,

BELGIUM Prof. Philippe Bocquier

Institute for the Analysis of Change in Contemporary and Historical Societies (IACS)

Health, Gender and Sexualities

The Health, Gender and Sexualities CoRE aims to generate ground-breaking interdisciplinary research to address health disparities among gender and sexual minority populations, and integrate public health and social sciences to understand the complex interplay of social, cultural, and healthcare-related factors affecting health outcomes and access to care.

Over a ten-year period, the CoRE envisions conducting innovative research, developing interdisciplinary training, fostering international collaboration, and influencing evidence-based policy. Milestones during that period include initiating collaborative research projects, establishing a master's programme, facilitating capacity-building through a research school for doctoral students, and organising research conferences.

To promote equitable collaboration, the cluster emphasises the following priorities: fostering inclusive decision-making processes, engaging in collective capacity-building, ensuring transparent communication, demonstrating cultural sensitivity, and actively working towards the decolonisation of research.

By integrating social science and public health perspectives, methods and theories, the cluster aims to generate comprehensive insights and innovative solutions, and strengthen research capacities, foster cross-disciplinary dialogue, and address health disparities faced by gender and sexual minority populations.

CO-LEADS		
ARUA	THE GUILD	
UNIVERSITY OF PRETORIA, SOUTH AFRICA Pierre Brouard - Acting Director at Centre for Sexualities, AIDS and Gender Christi Kruger - Senior Research Manager at Centre for Sexualities, AIDS and Gender	UNIVERSITY OF OSLO, NORWAY Kåre Moen - Associate Professor of Community Medicine and Global Health; Head of Postgraduate Studies	
CoRE PA	ARTNERS	
UNIVERSITY OF WITWATERSRAND, SOUTH AFRICA Melissa Steyn - Professor & Director, Wits Centre for Diversity Studies Kudzaiishe Vanyoro - Associate Researcher William Mpofu - Researcher	CENTRE FOR SEXUAL HEALTH AND HIV AIDS RESEARCH, ZIMBABWE Nelson Muparamoto - Research Manager Gracious Madimutsa Jamali - Social Scientist	
UPPSALA UNIVERSITY, SWEDEN Mats Målqvist - Professor, Women's and Children's Health Director, Sustainability Learning and Research Centre	KING'S COLLEGE LONDON, UK Rishita Nandagiri - Lecturer in Global Health and Social Medicine Programme Director, MSc Bioethics & Society	
MUHIMBILI UNIVERSITY OF HEALTH AND ALLIED SCIENCES (MUHAS), TANZANIA Melkizedeck Leshabari - Professor, Behavioural Sciences Emmy Metta - Senior Lecturer & HoD, Behavioural Sciences		
ADDIS ABABA UNIVERSITY, ETHIOPIA Getnet Tadele - Professor, Sociology	UNIVERSITY OF MAURITIUS, MAURITIUS Ramola Ramtohul - Associate Professor, Sociology & Gender Studies	

Multimorbidity

Non-communicable diseases, the leading cause of death worldwide, usually co-exist with other chronic health conditions in the same individual, giving rise to multimorbidity. There is a lack of data on the burden or clustering of multimorbidity at the population level, or context-specific evidence to guide integrated, optimal prevention and management of multimorbidity in sub-Saharan Africa (SSA).

The Multimorbidity CoRE will leverage digital technology and artificial intelligence to address key gaps in quantification, clustering, trend prediction and evaluation of new interventions to improve diagnostics, safety and effectiveness of interventions for the prevention, treatment and control of multimorbidity in SSA.

To ensure sustainability, this CoRE will collaborate with governments, industry and partner agencies to enhance training of the next generation of healthcare practitioners across the spectrum of patient care for multimorbidity in all partner countries. The CoRE will explore precision medicine approaches as a next-step strategy towards addressing multimorbidity in SSA.

00 1 5450

CO-LEADS			
ARUA	THE GUILD		
UNIVERSITY OF GHANA, GHANA Prof. George Obeng Adjei - Director, Centre for Tropical Clinical Pharmacology and Therapeutics at University of Ghana Medical School	UNIVERSITY OF WARWICK, UK Prof. Paramjit Gill - Professor of General Practice at Warwick Medical School		
CoRE PARTNERS			
UNIVERSITY OF PRETORIA, SOUTH AFRICA Prof. Tivani Mashamba-Thompson - Deputy Dean of the Faculty of Health Sciences	UNIVERSITY OF LIBERIA, LIBERIA Prof. Bernice T. Dahn - Vice-President/ Executive Dean College of Health Sciences		
AFRICA Dr. Cari van Schalkwyk - Senior Researcher at South African Centre for Epidemiological Modelling and Analysis (SACEMA)	KING'S COLLEGE LONDON, UK Melanie Amna Abas - Professor of Global Mental Health, Institute of Psychiatry, Psychology and Neuroscience		
AARHUS UNIVERSITY, DENMARK Prof. Per Kallestrup - Department of Public Health, Institute of General Medical Practice			
CENTRE FOR CLINICAL INTERVENTION RESEARCH, COPENHAGEN UNIVERSITY HOSPITAL & UNIVERSITY OF SOUTHERN DENMARK, DENMARK			

Prof. Christian Gluud - Head of Copenhagen Trial Unit

Preparedness and Response to Pandemics and Shocks

Emerging and re-emerging global health threats such as severe acute respiratory syndrome (SARS), swine flu (H1N1), ZIKA, monkeypox, yellow fever and COVID-19 have demonstrated that no system in any country is invulnerable to unexpected shocks. Moreover, there are persistent knowledge and capacity gaps regarding effective strategies for the prevention and detection of, response to and recover from public health emergencies across the health and especially the non-health sectors

The similarities and differences in vulnerabilities and capacities across the African Union (AU) and European Union (EU) offer a great opportunity for learning and enhancing resilience across both continents.

This CoRE for Preparedness and Response to Pandemics and Shocks is uniquely positioned to harness lessons from COVID-19 and other outbreaks and shocks to ensure a multi-sectoral system resilience that addresses critical sustainable-development drivers to better respond to pandemics and shocks. It will leverage technologies, innovations, expertise and resources in the EU and AU.

CO-LEADS ARUA THE GUILD UNIVERSITÉ CATHOLIQUE DE LOUVAIN, MAKERERE UNIVERSITY, UGANDA Prof. Rhoda K. Wanyenze - Dean of School of BELGIUM Public Health Prof. Niko Speybroeck - Director of Centre for Research on the Epidemiology of Disasters **Dr. Suzanne Kiwanuka** - Head of Health Policy Planning and Management Department Dr. Rawlance Ndeijo - Lecturer and Researcher Mr. Steven Kabwama - Epidemiologist and Research Associate Mr. Douglas Bulafu – Research Associate

CORE PARTNERS

UNIVERSITY OF CAPE TOWN, SOUTH AFRICA Prof. Lucy Gilson – School of Public Health and Family Medicine

UNIVERSITY OF OSLO, NORWAY Assoc. Prof. Katerini T. Storeng - Centre for Development and the Environment Assoc. Prof. Jacinta Muinde - Department of Community Medicine and Global Health

CHEIKH ANTA DIOP UNIVERSITY, SENEGAL **Prof. Ibrahima Seck** – *History Department* Member

UNIVERSITY OF IBADAN, NIGERIA **Prof. Olufunmilayo Fawole** – *Dean of the* Faculty of Public Health

KAROLINSKA INSTITUTET, SWEDEN

Prof. Tobias Alfvén – Senior Researcher and Clinical Professor in Global Child Health at the Department of Global Public Health

UNIVERSITY OF KINSHASA, DEMOCRATIC REPUBLIC OF CONGO Prof. Mala Ali Mapatano - Public Health, Epidemiology and Nutrition at the Public Health School of Kinshasa and Director of the National Centre for the Epidemiology of Diabetes

Genomics for Health in Africa

The CoRE for Genomics for Health in Africa aims to leverage the potential of genomics to revolutionise healthcare in Africa. Genomics can provide a better understanding of rare diseases, cancers and infections, which can lead to more effective treatments.

Combined with biochemical, biophysical and structural analyses, genomics serves as a powerful tool for precision medicine and personalised treatment approaches. However, despite its enormous value, genomics is underutilised in Africa due to insufficient infrastructure, resources and scientific capacity.

This CoRE will build capacity for genomics-based diagnostics of rare diseases, cancers and infections, coupled with investigating protein structure-function relationships and supporting optimal drug treatment and vaccine development. It will provide a unique and open platform to the African research community to exploit the full potential of genomics coupled with protein structure-function studies, as a fundamental tool to revolutionise public healthcare for both infectious and rare non-communicable diseases.

THE GUILD

ARUA STELLENBOSCH UNIVERSITY, SOUTH

AFRICA Prof. Dr. Shahida Moosa - Head of Medical Genetics, Tygerberg Hospital

Prof. Dr. Tulio de Oliveira - Director, Centre for Epidemic Response and Innovation

UNIVERSITY OF BERN, SWITZERLAND

Prof. Dr. Carmen Faso - Multidisciplinary Centre for Infectious Diseases (MCID) Co-Chair and MCID Interfaculty Lecturer

Prof. Dr. Volker Thiel - MCID Co-Chair and Professor of Virology

UNIVERSITY OF TÜBINGEN, GERMANY

Dr. Tobias Haack - Deputy-Director & Lead Physician, Institute of Medical Genetics and Applied Genomics; Centre for Rare Diseases **Prof. Dr. Olaf Riess** – *Director of the Institute of* Medical Genetics and Applied Genomics; Centre for Rare Diseases; Centre for Personalised Medicine

CORE PARTNERS

RHODES UNIVERSITY, SOUTH AFRICA

Prof. Özlem Tastan Bishop - Director of Research Unit in Bioinformatics (RUBi), Department of Biochemistry and Microbiology Prof. Adrienne Edkins - SARChl Chair and Professor of Biochemistry

UNIVERSITY OF GHANA, GHANA

Dr. Anita Ghansah - Senior Research Fellow. Department. of Parasitology, Noguchi Memorial Institute for Medical Research

STELLENBOSCH UNIVERSITY, SOUTH AFRICA

Prof. Dr. Marlo Möller – DSI-NRF Centre of Excellence for Biomedical Tuberculosis Research; South African Medical Research Council Centre for Tuberculosis Research

Dr. Desiree C. Petersen - Specialist Scientist and Senior Researcher, DSI-NRF Centre of Excellence for Biomedical Tuberculosis Research; South African Medical Research Council Centre for Tuberculosis Research

Dr. Caitlin Uren - New Generation of Academics Programme Lecturer and Researcher, DSI-NRF Centre of Excellence for Biomedical Tuberculosis Research; South African Medical Research Council Centre for Tuberculosis Research

CORE PARTNERS

UNIVERSITY OF NAIROBI, KENYA - CENTRE FOR EPIDEMIOLOGICAL MODELLING AND ANALYSIS

Dr. Loice Ombajo - Infectious Disease Specialist and Senior Lecturer, Department of Medicine

Dr. Moses Masika - Lecturer, Department of Medical Microbiology & Immunology

Dr. Victor Atunga Mobegi - Senior Lecturer, Department of Biochemistry and Centre for Biotechnology and Bioinformatics

UNIVERSITY OF BERN, SWITZERLAND

Prof. Dr. Carlo Largiadèr – Department of Clinical Chemistry (Inselspital)

UNIVERSITY OF KWAZULU-NATAL, SOUTH AFRICA

Dr. Jennifer Giandhari - Laboratory Medicines and Medical Sciences Department

UNIVERSITY OF RWANDA, RWANDA

Prof. Annette Uwineza - Associate Professor of Medical Genetics

RADBOUD UNIVERSITY, THE NETHERLANDS

Prof. Alexander Hoischen – Associate. Professor of Human Genetics

Food Environment Actions for the Promotion of Health

The triple burden of malnutrition is a critical global health challenge driven by intersecting processes, including urbanisation, food systems transformation and socioeconomic inequalities.

This CoRE comprises three core ARUA institutions, two core institutions from The Guild and other public, private and non-governmental organisations from both Africa and Europe. It seeks to advance the study of food environments through cutting-edge research, develop the next generation of scholars through an equitable capacity-building programme with support for early-career researchers and, engage in collaborative research, education and policy-related activities to enhance food environments.

The disciplinary and sectoral diversity represented by this CoRE supports local research and engagement, while at the same time developing collaborative engagement to understand food environment drivers and their implications for planetary and human health.

CO-LEADS

ARUA

THE GUILD

UNIVERSITY OF CAPE TOWN, SOUTH AFRICA

Jane Battersby - Senior Lecturer, Department of Environmental and Geographical Science

UPPSALA UNIVERSITY, SWEDEN

Meena Daivadanam – Associate Professor & Senior Lecturer in Global Health, Unit of Global Health and Migration, Department. of Women's and Children's Health

CORE PARTNERS

MAKERERE UNIVERSITY, UGANDA

David Guwatudde - Department of Epidemiology & Biostatistics

Juliet Kiguli - Department of Community Health and Behavioural Sciences

UNIVERSITY OF GLASGOW, UK

Graeme Young - Lecturer in Social and Public Policy (Urban Studies)

UNIVERSITY OF GHANA, GHANA

Amos Laar - Department of Population, Family and Reproductive Health

UNIVERSITY OF CAPE TOWN, SOUTH AFRICA

Peter Delobelle - Chief Research Officer

UPPSALA UNIVERSITY, SWEDEN

Steve Mckeever – Associate Professor, Department of Informatics and Media

Katie Winkle – Associate. Senior Lecturer and Assistant Professor, Department of Information & Technology

Eva-Charlotte Ekström - Professor of Global Nutrition, Unit of Global Health and Migration, Department of Women's and Children's Health

Advanced Infectious Diseases Research and Training

This CoRE will tackle the next frontiers in infectious disease (ID) research in an equitable partnership. Its overarching goal is to understand the fundamental biology of pathogens and of infections, and to inform drug and intervention discovery and development.

ID pathogens have a divergent biology and complex interactions with their host and the environment. Meaningful progress towards disease control necessitates an integrated and multidimensional understanding, which can only be achieved in a partnership of complementary and synergistic expertise that our Cluster embodies.

Further, the under-representation of researchers based in Africa in the field's global leadership, and their limited access to cutting-edge technologies, are major barriers for significant leaps in progress, as many IDs are endemic in Africa.

This CoRE will overturn this damaging inequality through an equitable and open revolving-door model for training in existing skills, and through simultaneously establishing novel technologies in partnership between ATG scientists.

CO-L	EADS
ARUA	THE GUILD
UNIVERSITY OF GHANA, GHANA Gordon A. Awandare – Director of West African Centre for Cell Biology of Infectious Pathogens	UNIVERSITY OF TÜBINGEN, GERMANY Steffen Borrmann - Professor, Institute for Tropical Medicine
	UNIVERSITY OF GLASGOW, UK Andy Waters - Head of School of Infection and Immunity Lilach Sheiner - Deputy Head of Parasitology
CoRE PA	RTNERS
CHEIKH ANTA DIOP UNIVERSITY, SENEGAL Moustapha Mbow - Professor of Immunology, Biomedical Laboratory of UCAD/HMO Hospital, Head of the Blood Bank and HLA Typing Unit, Senior Scientific Officer at Institute of Health Research, Epidemiological Surveillance and Training	UNIVERSITY OF CAPE TOWN, SOUTH AFRICA Prof. Nicola Mulder - Head of Computational Biology Division, and Primary Investigator of H3ABioNet
MAKARERE UNIVERSITY, UGANDA Enock Matovu - Associate Professor of Molecula	ır Parasitology
RADBOUD UNIVERSITY, THE NETHERLANDS Prof. Dr. Teun Bousema - Professor of Epidemiol Dr. Taco Kooij - Assistant Professor of Molecular	
UNIVERSITY OF BERN, SWITZERLAND - MULTI DISEASES (MCID) Carmen Faso - MCID Co-Chair and Interfaculty L Volker Thiel - MCID Co-Chair and Professor of Vi	ecturer

Non-Communicable Diseases and Multimorbidity

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 multidisciplinary, collaborative and participatory, with a focus on equitable partnerships and community engagement. Further, Africa provides an opportunity for the global scientific community to understand the complex NCD mechanisms as well as find solutions to the rising NCD problem in the region.

The Cluster's goal is to improve the health and wellbeing of populations in Africa by reducing the burden of NCDs and co-morbidities across the lifespan and to contribute to the attainment of the SDGs.

CO-LEADS		
ARUA	THE GUILD	
UNIVERSITY OF NAIROBI, KENYA Frederick Bukachi - Director of ARUA Centre of Excellence for NCDs	UNIVERSITY OF GLASGOW, UK Pasquale Maffia – Professor of Cardiovascular Immunology; International Lead: School of Infection & Immunity	
CHEIKH ANTA DIOP UNIVERSITY, SENEGAL Ibrahima Bara Diop - Head of Cardiology at Fann Hospital, Dakar; Professor of Cardiology	UNIVERSITY OF CAPE TOWN, SOUTH AFRICA Ntobeko Ntusi - Professor of Medicine, Department of Medicine; Groote Schuur Hospital	
UNIVERSITY OF IBADAN, NIGERIA Mayowa Ojo Owolabi - Professor of Neurology; Director of Centre for Genomic and Precision Medicine	JAGIELLONIAN UNIVERSITY, POLAND Tomasz J. Guzik - Professor of Medicine	

UNIVERSITÉ PARIS CITÉ, FRANCE

Neurology at Neuropsychiatric Hospital Ndera

Xavier Jouven - Professor of Cardiology and Head of Cardiology at Georges Pompidou Hospital, Paris; Director of the "Epidemiology of Cardiovascular Diseases" Research Unit at PARCC-Inserm	
CoRE PARTNERS	
UNIVERSITY OF GHANA, GHANA Ama de-Graft Aikins - Professor of Psychology	UNIVERSITY OF THE WITWATERSRAND, SOUTH AFRICA Maria Papathanasopoulos - Professor of Pathology
MAKERERE UNIVERSITY, UGANDA Damalie Nakanjako – Professor of Medicine; Principal of College of Health Sciences	UNIVERSITY OF LAGOS, NIGERIA Oluyemi Akinloye - Professor of Clinical Chemistry and Molecular Diagnosis; Director at Centre for Genomics of Non-Communicable Diseases and Personalised Healthcare
UNIVERSITY OF RWANDA, RWANDA Fidèle Sebera - Professor of Neurology; Head of	UNIVERSITY OF BERN, SWITZERLAND Prof. Stephan Windecker - Chair of Department

of Cardiology, Bern University Hospital

GREEN TRANSITION

The following set of clusters are grouped into a priority area that is aligned with the AU-EU Innovation Agenda.

Nature-Based Solutions for Climate Change Adaptation and Mitigation

As recognised in the IPCC AR6 report, Africa and Europe are highly vulnerable to climate variability and change, with consequences for heat-related morbidity and mortality, biodiversity loss, reduced food production, and water scarcity. To reduce risks associated with climate change and to safeguard economic development, transdisciplinary research and adaptation measures based on nature-based solutions (NbS) are urgently needed.

Here, through the Africa-Europe Cluster of Research Excellence (CoRE) on Nature-Based Solutions for Climate Change Adaptation and Mitigation, we propose to build a multidisciplinary and transdisciplinary research capacity and network between European and African academic and research institutions, with the following long-term ambitious objectives: (1) to establish a climate service hub for Africa, (2) to develop an NbS innovation hub, (3) to implement innovative NbS adaptation and mitigation measures, and (4) to establish a training infrastructure promoting the creation of doctoral networks and educational activities to promote cultural and educational exchanges between European and African universities.

CO-LEADS		
ARUA	THE GUILD	
UNIVERSITY OF CAPE TOWN, SOUTH AFRICA Prof. Mark New - Director of African Climate and Development Initiative Dr. Petra Holden - Researcher at African Climate and Development Initiative	UNIVERSITY OF BOLOGNA, ITALY Prof. Silvana Di Sabatino - PhD Coordinator "Future Earth, Climate Change and Societal Challenges"; Atmospheric Physics Research Group Coordinator	
AFRICA Prof. Guy Midgley - Director, School for Climate Studies		

	CoRE PARTNERS	
UNIVERSITY OF GLASGOW, UK Prof. Fabrice Renaud Prof. Simon McGrath Dr. MD Sarwar Sohel	UNIVERSITY OF GÖTTINGEN, GERMANY Prof. Dr. Reimund P. Rötter Prof. Dr. Bernhard Bruemmer	MAKERERE UNIVERSITY, UGANDA Dr. John Bosco Insuju
UNIVERSITY OF PRETORIA, SOUTH AFRICA Prof. Veronica Ueckermann Prof. Marietjie Venter Dr. Maryke de Villier Dr. Johan Steyl Prof. Abel Ramoelo	UNIVERSITY OF NAIROBI, KENYA Prof. Daniel Ochieng Olago Prof. Ouma Gilbert Ong'isa Mr. Ames Otieno Kaoga Dr. Ongoro Eunice	UNIVERSITY OF THE WITWATERSRAND, SOUTH AFRICA Prof. Sally Archibald Prof. Francois Engelbrecht

	CoRE PA	RTNERS	
UNIVERSITY OF CAPE TOWN, SOUTH AFRICA Dr. Petra Holden Dr. Jasper Slingsby Prof. Gina Zier Vogel Dr. Anna Taylor Prof. Adam West Prof. Lindsey Gilson Dr. Chris Trisos Dr. Vernon Visser Dr. Andreas Meyer Dr. Gylnis Humphrey	STELLENBOSCH UNIVERSITY, SOUTH AFRICA Prof. Kanshu Rajuratnam Prof. Tulio de Oliveira Prof. Nox Makunga Dr. Lokotola Lueme Prof. Pedro Monteiro Prof. S vd Heyden Prof. S Clusella-Trullas Dr. Andrew Watson Dr. Heath Beckett		UNIVERSITY OF GHANA, GHANA Dr. Kwasi Appeaning Addo Prof. Christoper Gordon Dr. Adelina Maria Mensah
UNIVERSITY OF BOLOGNA, ITALY Dr. Laura S. Leo Dr. Paolo Ruggieri Dr. Salvatore Pascale Prof. Igor Diemberger Prof. Alessandra Scagliarini Prof. Valerio Carelli		RHODES UNIVERSITY, SOUTH AFRICA Prof. Heila Lotz-Sisitka Prof. Brad Ripley Prof. Susanne Vetter Prof. Nelson Odume Dr. Chika Nnadozie	

Renewable Energy

This CoRE is intended to facilitate a long-term sustainable transition toward a sustainable energy system. This global challenge will only be solved by a collaborative and multidisciplinary approach, which this Cluster actively pursues.

The three pillars around which the Cluster is built are technology development, equitable societal transition, and sustainable education and training. The Cluster will consist of six CoRE members: three ARUA universities (Stellenbosch University as African lead and host of the ARUA CoE in Energy, and the universities of Ghana and Makerere) and three Guild universities (Ghent University as European lead, and the universities of Oslo and Groningen). Non-CoRE members will participate to increase impact, where feasible.

The CoRE will be able to mobilise quickly and have a significant impact thanks to substantial support from the member institutions, the significant existing research infrastructure, and the widespread networks of the members.

CO-LEADS		
ARUA	THE GUILD	
STELLENBOSCH UNIVERSITY, SOUTH AFRICA Cristina Trois - Director of the Centre for Renewable and Sustainable Energy Studies (CRSES)	GHENT UNIVERSITY, BELGIUM Michel de Paepe - Promotor, spokesperson for EnerGhentIC	
CoRE PARTNERS		
MAKERERE UNIVERSITY, UGANDA Prof. John Mango Magero, et al Deputy Principal, College of Natural Sciences	UNIVERSITY OF GHANA, GHANA Prof. David Dodoo-Arhin et al. – Director of the Institute of Applied Science and Technology & Head, Banga Africa Energy and Hybrid Materials Research Laboratory	
UNIVERSITY OF GRONINGEN, THE NETHERLANDS Prof. Lorenzo Squintani - Director of the Wubbo Ockels School for Energy and Climate	UNIVERSITY OF OSLO, NORWAY Prof. Øystein Prytz, et al Leader: Centre for Materials Science and Nanotechnology, Professor at the Department of Physics	

Sustainable Water and Land Resource Management for Human Well-Being

Land degradation, associated conflicts, and climate change are global development challenges that particularly affect African countries. Progress in combating land degradation is lagging expectations and was further slowed by the Covid-19 pandemic. This calls for urgent responses and sustainable actions that go beyond business-as-usual practices.

The overarching goal of this CoRE is to link key research partners in sustainable water and land resource management with partners from policy and practice. Together, these teams would address land degradation to foster sustainable development, conflict resolution, and human well-being. Taking care of land, water – and, in particular, the long-term health of ecosystems and landscapes – is fundamental to ensuring food security, to building resilience to climate change and pandemics, and to supporting sustainable livelihoods. This CoRE contributes mainly to the "Green Transition" priority area, and partly to "Innovation and Technology" and "Capacities for Science".

CO-LEADS		
ARUA	THE GUILD	
ADDIS ABABA UNIVERSITY, ETHIOPIA Gete Zeleke - Director: Water and Land Resource Centre (WLRC)	UNIVERSITY OF BERN, SWITZERLAND Prof. Dr. Thomas Breu - Director: CDE (Centre for Development and Environment)	
CoRE PARTNERS		
RHODES UNIVERSITY, SOUTH AFRICA Dr. Jane Tanner - Head of Hydrology	UNIVERSITY OF NAIROBI, KENYA Dr. Boniface Wambua, et al Chairman of Department of Geography, Population and Environmental Studies	
BABES-BOLYAI UNIVERSITY, ROMANIA Prof. Dr. Sergiu Milicoiu - Director of the Centre for African Studies	CHEIKH ANTA DIOP UNIVERSITY, SENEGAL Dr. Mamadou Bouna Timéra - Assesseur de la Faculté des Lettres et Sciences Humaines	

Water Resources Management for a Sustainable and Just Future

The global landscape for the management of our water resources is changing. Increasing demand, industrialisation, climate change and increasing entwining of social and ecological systems mean that traditional water resource management (WRM) is not meeting the challenges of our changing environments. Furthermore, disconnects between science and practice mean that innovative research and technological advances often do not translate into practical WRM.

Decisions about future WRM are therefore highly uncertain, increasing risks and vulnerability for people and environment. Research is needed to consider existing governance and policy gaps, challenges with conventional approaches to WRM, technological innovations, peoples' relations regarding water, and future potential water-related risks. Future WRM needs to be transformative in order to be sustainable and have relevance for Africa and Europe. This Africa-Europe Cluster of Research Excellence (CoRE) focuses on exploring different solutions, learning opportunities/exchanges and pathways to innovation, policy and investment in WRM in Africa and Europe, and solutions that build long-term meaningful capacity within WRM.

CO-LEADS		
ARUA	THE GUILD	
RHODES UNIVERSITY, SOUTH AFRICA Dr. Jane Tanner - Director, ARUA Water CoE Dr. Oghenekaro Odume - Director, IWR	UNIVERSITY OF LJUBLJANA, SLOVENIA Prof. Barbara Hribar Lee - Professor of Physical Chemistry	

CORE PARTNERS

ADDIS ABABA UNIVERSITY, ETHIOPIA

Tadesse Fetahi, et al. - Research Director and Coordinator of a Joint MSc Programme in Aquatic Ecosystems and Environmental Management (AEEM)

UNIVERSITY OF RWANDA, RWANDA

Dr. Venuste Nsengimana - Deputy Director
of the Centre of Excellence in Biodiversity and
Natural Resource Management (CoEB)

CHEIKH ANTA DIOP UNIVERSITY, SENEGAL
Prof. Serigne Faye - Head of the Water
Doctoral School EDEQUE

UNIVERSITY OF LAGOS, NIGERIA

Prof. Ezechiel OLonge, et al. - Department of
Civil and Environmental Engineering

RADBOUD UNIVERSITY, THE NETHERLANDS

Dr. Stjepan Picek - Associate Professor

UNIVERSITY OF IBADAN, NIGERIA

Prof. Ayodele Samuel Jegede - Medical Sociology/Anthropology and Bioethics, Department. of Sociology, Faculty of the Social Sciences

MAKERERE UNIVERSITY, UGANDA
Assoc. Prof. George Nyakairu, et al. Department of Chemistry, College of Natural
Science

UNIVERSITY OF DAR ES SALAAM, TANZANIA Dr. Augustina Alexander, et al. - Department of Water Resources Engineering

UNIVERSITY OF BERN, SWITZERLAND Prof. Dr. Thomas Breu - Director CDE (Centre for Development and Environment)

UPPSALA UNIVERSITY, SWEDEN

Dr. Martin Mickelsson - Researcher

UNIVERSITY OF CAPE TOWN, SOUTH AFRICA

Assoc. Prof. Kirsty Carden, et al. - Associate Professor and Future Water Institute

INNOVATION & TECHNOLOGY

The following set of clusters are grouped into a priority area that is aligned with the AU-EU Innovation Agenda.

Artificial Intelligence, Data Science, and Theoretical and Computational Thinking

Artificial intelligence (AI) methods have become powerful tools for addressing societal challenges in almost all areas of life. This development is fuelled by improved connectivity, increased computational power, and data access. Applications of AI will play an essential role in achieving many of the SDGs by tackling problems in a multitude of areas, like climate change, food security, education, public health, access to energy and clean water, and, in the areas of the social sciences and humanities, social justice, to name a few.

While the SDGs and many connected societal challenges are global, the capacity for utilising AI methods and research in AI and data science still needs to be improved in Africa. The goal of the Cluster is to strengthen the capabilities for research and postgraduate training in these areas at key universities in Africa and initiate research projects in areas of global relevance.

CO-LEADS		
ARUA	THE GUILD	
STELLENBOSCH UNIVERSITY, SOUTH AFRICA Francesco Petruccione - Professor of Quantum Computing and Director of National Institute for Theoretical and Computational Science	UPPSALA UNIVERSITY, SWEDEN Thomas Schön – Beijer Professor of Artificial Intelligence	
CoRE PARTNERS		
ADDIS ABABA UNIVERSITY, ETHIOPIA Solomon Gizaw - Head of Computational Data Science	MAKERERE UNIVERSITY, UGANDA Prof. John Magero Mango, et al Mathematics	
UNIVERSITY OF LAGOS, NIGERIA Victor Odumuyiwa, et al. – Director of NITDA IT Hub	UNIVERSITY OF NAIROBI, KENYA Prof. Patrick Weke - Actuarial Science	
UNIVERSITY OF LJUBLJANA, SLOVENIA Aleksander Sadikov - Head of the Al Laboratory	UNIVERSITY OF TÜBINGEN, GERMANY Prof. Philipp Berens - Data Science	
UNIVERSITY OF RWANDA, RWANDA Denis Ndanguza - Professor and Dean of the	UNIVERSITY OF WARWICK, UK Prof. Olalekan Uthman – Director of Warwick	

Centre for Global Health

Society

UNIVERSITY OF COVENTRY, UK

Prof. Elena Gaura - Professor of Pervasive

Computing; Fellow of the Women's Engineering

Sustainable Food Systems

Prof. Marc Heijde - Professor of Plant Biotechnology

Affairs

As a truly global platform, this Africa-Europe Cluster of Research Excellence (CoRE) will address food systems challenges by (1) conducting collaborative research on food systems transformation, (2) assuring continuity through a ten-year collaboration, (3) pooling resources for scale and impact, and (4) significantly bolstering capacity in African institutions. Collaboration will span disciplines, geography and sectors, enabling solutions that transcend unilateral approaches.

The ten-year activity plan is aligned with three pillars: education, research, and technology transfer. The plan draws on the broad fundraising and rich network capabilities inherent in the Cluster membership. Building on the sound foundation of already established partnerships and programmes, extensive collaborative research and capacity-building are envisaged, with a particular focus on early-career researchers embedded in joint projects. By ensuring that the next generation of scientists operate within a global community that co-creates solutions with multisectoral stakeholders, the Cluster will make substantive contributions to addressing challenges in

African and European food systems.		
CO-LEADS		
ARUA	THE GUILD	
UNIVERSITY OF PRETORIA, SOUTH AFRICA Prof. Frans Swanepoel - Interim Director ARUA Centre of Excellence in Sustainable Food Systems	UNIVERSITY OF BOLOGNA, ITALY Prof. Luca Fontanesi - Professor of Agricultural and Food Sciences	
CoRE PARTNERS		
UNIVERSITY OF WARWICK, UK Prof. Murray Grant - Elizabeth Creak Charitable Trust, Chair in Food Security	UNIVERSITY OF GÖTTINGEN, GERMANY Prof. Dr. Meike Wollni - Professor of Environmental and Resource Economics	
GHENT UNIVERSITY, BELGIUM	UNIVERSITY OF NAIROBI, KENYA	

and Molecular Biology/IPBO Programme Manager Professor of Horticulture UNIVERSITY OF GHANA, GHANA MAKERERE UNIVERSITY, UGANDA **Prof. Irene Egyir** – Dean of School of Agriculture **Prof. John Magero Mango** - Department of **Mathematics** UNIVERSITY OF KWAZULU-NATAL, SOUTH UNIVERSITY OF LJUBLJANA, SLOVENIA AFRICA **Prof. Natasa Poklar Ulrih** - *Professor of* Prof. Joyce Chitja - Associate Professor of Food Biochemistry, Department of Food Science and Security & Director of the African Centre for Food Technology Security UNIVERSITY OF THE WESTERN CAPE, SOUTH UNIVERSITY OF LEEDS, UK

Prof. Cecilia Moraa Onyango - Associate

Prof. Steven Banwart - Director of the Global Prof. Julian May - Director DSI-NRF CoE in Food Food and Environment Institute Security UNIVERSITY OF MONTPELLIER, FRANCE UNIVERSITY OF MPUMALANGA, SOUTH François Pierrot - Vice-President, International **AFRICA Prof. Victor Mlambo** - Professor of Animal

UNIVERSITY OF JOHANNESBURG, SOUTH UNIVERSITY OF HOHENHEIM. GERMANY **AFRICA** Prof. Dr. Mizeck Chagunda - Chair of Animal **Prof. Olanivi Fawole** – Director of Postharvest and Breeding & Husbandry in the Tropics and Agroprocessing Research Centre Subtropics; Principal Lead for University-Wide Network on Research in and with Africa

Sciences

School of Science

RHODES UNIVERSITY, SOUTH AFRICA

of Research Unit in Bioinformatics (RUBi)

Ozlem Tastan Bishop - Professor and Director

Creative Economies: Cultures, Innovation and Sustainability

This CoRE aspires to become an international point of reference for research on creative economies.

Research on creative economies has so far been narrowly focused on the Global North and has not placed enough value on cultures, heritage, innovations and ideas from the Global South. The CoRE rebalances this perspective by supporting research collaborations across European and African universities, addressing shared research challenges that aim to support the development of more equitable, innovative and sustainable creative economies.

The project acknowledges that recognising the value of all cultures and creative expression is the foundation of both economic and social development, as well as international cooperation. Creative economies are not only essential to the innovation, technology and economic development of many cities and regions, but are also cornerstones of sustainable development, community engagement and dialogue across cultures and generations.

CO-LEADS		
ARUA	THE GUILD	
RHODES UNIVERSITY, SOUTH AFRICA Prof. Jen Snowball - Department of Economics, Professor of Economics	KING'S COLLEGE LONDON, UNITED KINGDOM Prof. Roberta Comunian - Department	
UNIVERSITY OF LAGOS, NIGERIA Prof. Duro Oni – Department of Creative Arts, Professor of Theatre Arts	of Culture, Media and Creative Industries, Professor of Creative Economies Dr. Eka Ikpe – Director of the Africa Leadership Centre, and Reader in Development Economics in Africa	
CoRE PARTNERS		

UNIVERSITY OF CAPE COAST, GHANA

Dr. Madinatu Bello - Department of Theatre and Film

STELLENBOSCH UNIVERSITY, SOUTH

AFRICA

Prof. Michael Graha - Faculty of Economic and Management Sciences

UNIVERSITY OF THE WITWATERSRAND, SOUTH AFRICA

Ms. Avril Joffe - Postgraduate Coordinator and Chair of School of Arts Dr. Munyaradzi Chatikobo - Head of Cultural Policy and Management

UNIVERSITY OF GHANA, GHANA

Dr. Mohammed-Aminu Sanda - Senior Lecturer at the Department of Organisation and HR Management

Dr. Akosua Keseboa Darkwah - Associate Professor at the Department of Sociology

UNIVERSITY OF NAIROBI, KENYA

Samuel M. Maina - Head of the Department of Art & Design

Mrs. Joanne Mosom - Lecturer

AARHUS UNIVERSITY, DENMARK

Assoc. Prof. Teke Ngomba - Department of Media and Journalism Studies, School of Communication & Culture

 ${\bf Assoc.\ Prof.\ Nanna\ Schneidermann}\ -\ Department\ of\ Anthropology,\ School\ of\ Culture\ and\ Society$

Engineering for the Future

Engineering plays a key role in solving complex global challenges, including mitigating climate change, energy and food security, and public health. These challenges do not fall in a specific discipline, nor are they limited to a single country, region or continent. They must be addressed by applying interdisciplinary approaches across diverse geographical locations for impactful and effective solutions.

The vision of this CoRE is to provide an engineering training and research ecosystem that brings this insight through collaboration between African and European universities. The goal is to develop a cohort of PhD graduates who are trained in engineering research and development, as well as governance, leadership, inclusivity and sustainability to drive excellence and underpin Agenda 2063, making Africa a global powerhouse through working with government and industry.

, and the second of the second		
CO-LEADS		
ARUA	THE GUILD	
UNIVERSITY OF PRETORIA, SOUTH AFRICA Prof. Wynand Steyn – Dean of Faculty of Engineering, Built Environment and IT	KING'S COLLEGE LONDON, UK Prof. Barbara Shollock - Head of the Department of Engineering	
CoRE PARTNERS		
MAKERERE UNIVERSITY, UGANDA Assoc. Prof. Dorothy Okello – Dean of School of Engineering Prof. Rhoda Wanyenze – Dean of School of Public Health Prof. John Magero Mango - Mathematics		
UNIVERSITY OF GHANA, GHANA	UNIVERSITY OF LJUBLJANA, SLOVENIA	

Prof. Elsie Effah Kaufmann – Dean of School Prof. Miha Moškon - Associate Profes

Prof. Miha Moškon - Associate Professor of Computer Science at the Faculty of Computer and Information Science

UNIVERSITY OF IBADAN, NIGERIA Prof. Victor Olawasina Oladokun - Industrial and Production Engineering UNIV Prof. Metal

UNIVERSITY OF LAGOS, NIGERIA Prof. Muhammed (MOH) Amuda -Metallurgical and Materials Engineering

UNIVERSITY OF NAIROBI, KENYA

of Engineering Sciences

Dr. John Obiero - Senior Lecturer and Chairman of the Department of Environmental and Biosystems Engineering

Prof. Duncan Mbuge - Associate Professor at the Department of Environmental and Biosystems Engineering

Mathematics

Building on over twenty years of successful collaboration between African and European partners, CoRE-Math is ready to take a critical next step in supporting socioeconomic development in Africa and address significant challenges as described in the SDGs. CoRE-Math seeks to enhance multidisciplinary and interdisciplinary research and promote applications of mathematics beyond academia. Additionally, its planned doctoral programme aims to produce graduates proficient in mathematics and computing skills, well prepared to adapt to and excel in a rapidly evolving job market, thereby increasing productivity. To achieve these goals, CoRE-Math will create platforms for academia-industry interaction and interdisciplinary research. These platforms will include working groups, contact workshops, industry and innovation days, modelling weeks, and statistics offices. Furthermore, CoRE-Math will develop a high-standard collaborative PhD programme to expand PhD training and meet societal demands. They will also ensure that the existing postgraduate programmes are up to date and aligned with societal priorities.

CO-LEADS		
ARUA	THE GUILD	
MAKERERE UNIVERSITY, UGANDA	UPPSALA UNIVERSITY, SWEDEN	
John Magero Mango - Associate Professor	Bengt Ove Turesson - Head ISP, Director IPMS	
EAUMP Inter-Network	Georgios Dimitroglou Rizell - Head	
Ismail Mirumbe - Senior Lecturer, Head of	Department of Mathematics	
Department of Mathematics	Jörgen Östensson - Head of the Centre for	
Prof. Mukadasi Buyinza - Deputy Vice-	Interdisciplinary Mathematics (CIM)	
Chancellor: Academics	Prof. Charlotte Platzer Björkman - Deputy	
	Vice-Chancellor: Science and Technology	

CoRE PA	ARTNERS
ADDIS ABABA UNIVERSITY, ETHIOPIA Girum Aklilu - Senior Lecturer, Head of Department of Mathematics	ADDIS ABABA UNIVERSITY, ETHIOPIA Tilahun Abebaw - Senior Lecturer
ADDIS ABABA UNIVERSITY, ETHIOPIA Prof. Worash Getaneh - Vice-President for Research and Technology Transfer	UNIVERSITY OF DAR ES SALAAM, TANZANIA Sylvester Rugeihyamu - Senior Lecturer, Head of Department of Mathematics
UNIVERSITY OF DAR ES SALAAM, TANZANIA Prof. Nelson M K Boniface - Deputy Vice- Chancellor: Research	UNIVERSITY OF NAIROBI, KENYA Prof. Stephen Luketero - Head of Department of Mathematics
UNIVERSITY OF NAIROBI, KENYA Prof. M. Jesang Hutchinson - Deputy Vice-Chancellor: Research, Innovation and Enterprise	UNIVERSITY OF RWANDA, RWANDA Celestin Kurujyibwami - Senior Lecturer, Head of Department
UNIVERSITY OF RWANDA, RWANDA Dr. Ndikumana Raymond - Deputy Vice- Chancellor: Research and Academics	UNIVERSITY OF GRONINGEN, NETHERLANDS Prof. Steffen Müller - Mathematics
UNIVERSITY OF GRONINGEN, NETHERLANDS Prof. Dr. J.W.M. Frenken - Dean: Faculty of Science and Engineering	UNIVERSITY OF OSLO, NORWAY Prof. Giulia Di Nunno - Mathematics
UNIVERSITY OF OSLO, NORWAY Prof. Geir Dahl - Head of Department of Mathematics	

OTHER P.	ARTNERS		
UNIVERSITY OF ZAMBIA, ZAMBIA Prof. Mervis Kikonko – Head of Department of Mathematics and Statistics Prof. Boniface Namangala – Deputy Vice- Chancellor: Academic Affairs	LAPPEENRANTA-LAHTI UNIVERSITY OF TECHNOLOGY, FINLAND Prof. Lassi Roininen Prof. Tapio Helin Matti Heiliö Miracle Amadi		
LINKÖPING UNIVERSITY, SWEDEN Prof. Martin Singull	STOCKHOLM UNIVERSITY, SWEDEN Prof. Tom Britton & Paul Vaderlind		
UNIVERSITY OF AMSTERDAM, NETHERLANDS Assoc. Prof. Diletta Martinelli	UNIVERSITY OF BERGEN, NORWAY Prof. Guttorm Alendal		
Prof. Alessandra Micheletti – President European Consortium for Mathematics in Industry (ECMI)	ICIAM, NETHERLANDS Prof. Wil Schilders – President of the International Council for Industrial and Applied Mathematics (ICIAM)		

CAPACITIES FOR SCIENCE

The following set of clusters are grouped into a priority area that is aligned with the AU-EU Innovation Agenda.

The Politics of Sustainable Development

This CoRE, which brings together interdisciplinary and transdisciplinary expertise from the social sciences, humanities, natural sciences and law, will undertake innovative research and develop PhD training programmes that build capacity for achieving sustainable development.

A major outcome will be to increase the knowledge base on governance for sustainable development and strengthen the science-policy interface required for societal transformation. We will ensure the long-term sustainability of the CoRE and its scientific impact by developing a community of knowledge partners, including senior researchers, policymakers, doctoral students, and early-career scholars equipped with actionable knowledge and skills, allowing them to plan and support evidence-based public policies aimed at achieving sustainable development in response to the climate challenges.

We aim to train a minimum of 40 PhDs at participating universities in Africa over ten years, and to develop skills and apply evidence-based research findings to design and implement national and regional policies on climate and sustainable development in Africa and Europe.

The CoRE will contribute to Africa-Europe collaboration by undertaking cutting-edge research and building a knowledge base that is operationalised into cost-effective, inclusive and equitable policies that promote sustainable development.

CO-LEADS			
ARUA	THE GUILD		
UNIVERSITY OF PRETORIA, SOUTH AFRICA Dr. Heide Hackmann – Director of Future Africa Maano Ramutsindela – Africa Research Chair in Sustainability Transformations	UNIVERSITY OF OSLO, NORWAY Prof. Dan Banik - Centre for Development and the Environment Prof. Tore Rem - Director of UiO: Democracy		
CoRE PA	RTNERS		
UNIVERSITY OF NAIROBI, KENYA Prof. Karuti Kanyinga – Institute for Development Studies	UCLOUVAIN, BELGIUM Prof. Sandy Tubeuf - Professor of Health Economics		
UTRECHT UNIVERSITY, THE NETHERLANDS Prof. Frank Biermann – Copernicus Institute of Sustainable Development	UNIVERSITY OF MALAWI, MALAWI Prof. Boniface Dulani – Director of Research at Afrobarometer		
UNIVERSITY OF ADDIS ABABA, ETHIOPIA Prof. Aklilu Amsalu – Centre for Sustainable Dev	relopment		

Capacities for Peace Research: Exploring Conflict, Environment, Technology, Inequality, and Identity in Africa

This CoRE will undertake an interdisciplinary approach to address peace and security challenges at the intersection of the environment, technology and political (in)stability, focusing on four cross-cutting intervention areas: (1) knowledge generation and dissemination, (2) capacity-building and cohort-building across the academia, (3) dissemination, and (4) practice in Africa and Europe.

The approach will be systematic, participatory, decolonised, and solution-oriented. The pathways to change include the development of research databases, supervision capacities and joint PhDs, research workshops, policy dialogues and peacebuilding interventions.

Existing knowledge systems show that identity and inequality influence peace and conflict in Africa because they interact to underline access to income, environment, political participation, and technology. Despite the growing global significance of environmental sustainability and technological proliferation, their nexus with identity and inequality has not been adequately studied in African peace and (in)security discourses. This Cluster fills this gap by centring them as important contributors alongside peace and security.

CO-LEADS		
ARUA	THE GUILD	
ADDIS ABABA UNIVERSITY'S INSTITUTE FOR PEACE AND SECURITY STUDIES, ETHIOPIA Mercy Fekadu Mulugeta – Director of the ARUA Centre of Excellence on Post-Conflict Societies	KING'S COLLEGE LONDON, UNITED KINGDOM Dr. Eka Ikpe – Director of the African Leadership Centre	

CoRE PA	RTNERS
GHENT UNIVERSITY, BELGIUM Prof. Dr. Koen Vlassenroot – Conflict Research Group	MAKERERE UNIVERSITY, UGANDA Prof. Sarah Ssali – Dean of the School of Gender
UNIVERSITY OF GHANA, GHANA Mary Boatemaa Setrana – Director, Centre for Migration Studies	UNIVERSITY OF PRETORIA, SOUTH AFRICA Prof. Tawana Kupe – Department of Political Science
UNIVERSITY OF LAGOS, NIGERIA Taibat Lowanson – Co-Director: Centre for Housing and Sustainable Development	UNIVERSITY OF NAIROBI, KENYA Prof. M. Jesang Hutchinson – Deputy Vice-Chancellor (Research, Innovation and Enterprise)
UNIVERSITY OF WARWICK, UNITED KINGDOM Dr. Briony Jones - Director, Warwick Interdisciplinary Research Centre for International Development	OBAFEMI AWOLOWO UNIVERSITY, NIGERIA Olusola Olayode - Professor of International Relations

UNIVERSITY OF DAR ES SALAM, TANZANIA

Bernadeta Killian – Professor of International Relations
Dr. Ng'wanza Kamata – Senior Lecturer of Political Science
Dr. William John Walwa – Senior Lecturer of Political Science

Promoting Impactful Research and Education on Inequalities, Poverty, and Deprivation Across Africa

Coordinated interdisciplinary research that pools the strengths of researchers from the Global South and the Global North is crucial to effectively contribute to the attainment of the SDGs.

This CoRE will provide a knowledge base for SDG compliance and enhanced development for Africa. It will grow indigenous, African research capacity with a work programme that covers the multidimensional inequalities that are confronted in several of the SDGs, and that intersect to perpetuate inequality and poverty.

The CoRE will design and implement impactful, innovative joint research programmes and cognate capacity-building activities by developing joint master's and PhD projects, a joint doctoral programme, and training programmes for policymakers, civil society and business enterprises. It will enhance the (inter)disciplinary knowledge infrastructure of its partners by training and mentoring research staff. It will deliver an inclusive, multidimensional analysis of deprivation and poverty that addresses various inequalities.

CO-LEADS

CO-L	LAUS		
ARUA	THE GUILD		
UNIVERSITY OF CAPE TOWN, SOUTH AFRICA Prof. Murray Leibbrandt – NRF Chair in Poverty and Inequality Research; Director: African Centre of Excellence for Inequality Research (ACEIR)	UNIVERSITY OF GRONINGEN, THE NETHERLANDS Prof. Robert Lensink – Vice-Dean: Research, Faculty of Economics and Business (FEB); Director: FEB Research Institute; Professor of Finance and Financial Markets		
CoRE PA	RTNERS		
UNIVERSITY OF GHANA, GHANA Prof. Robert Darko Osei – Institute of Statistical, Social and Economic Research; Dean of School of Graduate Studies; Coordinator of Ghana Node of ACEIR	AARHUS UNIVERSITY, DENMARK Prof. Daniele Nosenzo et al. –Department of Economics & Business Economics, and Member of the Centre for Integrative Business Psychology		

UNIVERSITY OF GÖTTINGEN, GERMANY

Prof. Sebastian Vollmer - Professor of

Development Economics

Stellenbosch UNIVERSITY IYUNIVESITHI UNIVERSITEIT

About Stellenbosch University (SU)

Stellenbosch University (SU) is firmly committed to the pursuit of knowledge, research and innovation, in service of society. We provide a world-class centre for learning and development that is globally relevant, yet rooted in the upliftment and transformation of our local communities. Our actions are guided by key values and attributes, and enabled by outstanding staff and students, sound operating systems and a deep sense of purpose. SU is home to an academic community of more than 32 500 students, including more than 3 700 international students from 104 countries. SU has 4 658 permanent and fixed-term contract staff members, including 1 393 academics.

Our ten faculties (AgriSciences, Arts and Social Sciences, Economic and Management Sciences, Education, Engineering, Law, Medicine and Health Sciences, Military Science, Science, and Theology) as well as the School for Climate Studies, the School for Data Science and Computational Thinking and the Stellenbosch Business School are located across five campuses in the Western Cape province of South Africa.

According to the Department of Higher Education and Training's official figures, SU

remains among South Africa's most researchintensive universities, both per capita and in terms of total research output.

Our more than 500 scientists with a National Research Foundation rating include 22 A-rated scholars, who are regarded as leading international researchers. Through the 50 research chairs and nine centres of excellence we host, we leverage our strengths to deliver scientific solutions to real-world challenges. This has seen SU establish itself as a leader in fields such as biomedical research, wine biotechnology, animal sciences, mathematical biosciences, invasion biology and more. Moreover, some 330 SU-registered postdoctoral fellows continue to bolster our research effort.

We also use our research output to promote innovation and entrepreneurship. This has led to a record number of registered trademarks, licences, patent applications, disclosures and SU spin-out companies.

Our excellence is recognised globally. On the Times Higher Education World University Rankings 2024, SU falls in the 301–350 bracket of institutions worldwide, while the QS World University Rankings 2024/25 puts us in 296th spot globally.

UNIVERSITY OF NAIROBI, KENYA

of Economics and Development Studies;

Coordinator of Kenya Node of ACEIR

Prof. Damiano Kulundu Manda - Department

Conference participants

Comercia	ice partici	Jants	Prot.	David	Dodoo-Arhin	University of Ghana
			Dr.	Selorm	Dorvlo	University of Ghana
TITLE FIRST NAME	LAST NAME	INSTITUTION	Ms.	Fiona	Drummond	Rhodes University
Dr. Emmanuel	Abbey	ARUA	Ms.	Corina	du Toit	Stellenbosch University
Dr. Brent	Abrahams	Stellenbosch University	Ms.	Andrea	du Toit	University of Pretoria
Prof. Hugues	Abriel	University of Bern	Prof.	Adrienne	Edkins	Rhodes University
Dr. Damilola	Adegoke	King's College London	Dr.	Kibur	Engdawork	Addis Ababa University
Prof. George	Adjei	University of Ghana	Ms.	Haajirah	Esau	University of Cape Town
Prof. James	Akanmu	University of Lagos	Dr.	June	Fabian	University of the Witwatersrand
Prof. Oluyemi	Akinloye	University of Lagos	Prof.	Carmen	Faso	University of Bern
Dr. Taye	Aklilu Amsalu	Addis Ababa University	Prof.	Fhatuwani Mudau	Fhatuwani	University of KwaZulu-Natal
Prof. Akanni	Aknyemi	Obafemi Awolowo University, Ile Ife	Prof.	Assefa	Fiseha	Addis Ababa University
Dr. Augustina	Alexander	University of Dar es Salaam	Prof.	Luca	Fontanesi	University of Bologna
Ms. Abigail	Alloye	ARUA	Ms.	Maléne	Fouché	Stellenbosch University
Prof. Gareth	Amery	University of KwaZulu-Natal	Dr.	Jaco	Franken	Stellenbosch University
Prof. Irene	Andia Biraro	Makerere University	Prof.	Elena	Gaura	Coventry University
Dr. Marie	Antignac	African Research Network	Ms.	Siddiqah	George	University of Cape Town
Prof. Philip	Antwi-Agyei	Kwame Nkrumah University of Science and Technology	Dr.	Jennifer	Giandhari	University of KwaZulu-Natal
Ms. Helin	Bäckman Kartal	Uppsala University	Prof.	Paramjit	Gill	University of Warwick
Dr. Vebjørn	Bakken	University of Oslo	Prof.	Åse	Gornitzka	University of Oslo
Prof. Oluyemisi	Bamgbose	University of Ibadan	Prof.	Rituparno	Goswami	University of KwaZulu-Natal
Prof. Jane	Battersby	University of Cape Town	Ms.	Juby	Govender	University of Pretoria
Dr. Heath	Beckett	Stellenbosch University	Dr.	Heide	Hackmann	Stellenbosch University
Prof. Rosemond	Boohene	University of Cape Coast	Prof.	Anders	Hagfeldt	Uppsala University
Prof. Steffen	Borrmann	University of Tübingen	Prof.	Tadesse	Hailu	Addis Ababa University
Prof. Zoran	Bosnic	University of Ljubljana	Dr.	Kajsa	Hallberg Adu	Uppsala University
Dr. Bouchaib	Boulanouar	University Mohamed 6 Polytechnic - UM6P	Mr.	Calumn	Hamilton	University of Groningen
Prof. Daniel	Branch	University of Warwick	Dr.	Anthea	Hansen	Stellenbosch University
Mr. Pierre	Brouard	University of Pretoria	Dr.	Rebecka	Henriksson	University of KwaZulu-Natal
Prof. Fred	Bukachi	University of Nairobi	Prof.	Sarah	Howie	Stellenbosch University
Prof. Mukadasi	Buyinza	Makerere University	Prof.	Barbara	Hribar Lee	University of Ljubljana
Dr. Aissata	Camara	Institut Pasteur of Guinea	Prof.	Margaret Jesang	Hutchinson	University of Nairobi
Prof. Kirsty	Carden	University of Cape Town	Prof.	Eka	Ikpe	King's College London
Prof. Marco	Carricato	University of Bologna	Prof.	Ayodele	Jegede	University of Ibadan
Dr. Davide	Chinigò	University of Bologna	Prof.	Briony	Jones	University of Warwick
Prof. Nico	Cloete	Centre for Higher Education Trust (CHET)	Prof.	Xavier	Jouven	Université Paris Cité
Prof. Roberta	Comunian	King's College London	Ms.	Peliwe	Jubase	Stellenbosch University
Prof. Alberto	Credi	University of Bologna	Prof.	Gabriel	Kabanda	University of KwaZulu-Natal
Dr. Quirijn	de Mast	Radboud University	Dr.	Tim	Kamanu	University of Nairobi
Prof. Wim	de Villiers	Stellenbosch University	Prof.	Reginald	Kavishe	Kilimanjaro Christian Medical University College
Prof. Silvana	Di Sabatino	University of Bologna	Mr.	Ntokozo	Khuzwayo	University of KwaZulu-Natal
Prof. Igor	Diemberger	University of Bologna	Prof.	Hester	Klopper	Stellenbosch University
Du Diamanul	Diale	Kyrama a Nilyu yana la Liniy ayaitu ya Cajamaa anal Talaha alaany	D (NIail Amthamai	I/a a vla a mally r	Liniversity of Kyra Zuly Netal

Kwame Nkrumah University of Science and Technology

University of Tübingen

Djim ML.

Prof. Neil Anthony

Prof. Antoine

Koorbanally

Kouchner

Prof. David

Diongue

Dodoo-Arhin

Institute for Water Research

University of Ghana

University of KwaZulu-Natal

Bismarck

Ms. Ana

Dinko

Diogo de Oliveira

Mr. Nugent Lewis Stellenbosch Univer Prof. Anthony Leysens Stellenbosch Univer Dr. Tania Lima King's College Londo Prof. Franklyn Lisk University of Warwice Prof. Sugnet Lubbe Stellenbosch Univer	en Ms. a Dr. Prof wwn ities Network gen Dr. a Prof of Health and Allied Sciences sity Dr. sity Dr.	Simo of. Fhatuwani of. Xavier Francis Mercy Fekadu Sussy of. Jeff Christine	Moyo Mpetshwa Mthethwa Mudau Muianga Mujjuni Mulugeta Munialo Murugan Musanase	Stellenbosch University University of Pretoria University of KwaZulu-Natal University of KwaZulu-Natal Eduardo Mondlane University Makerere University Addis Ababa University University of Pretoria University of Cape Town
Dr. Christi Kruger University of Pretorial Prof. Elin Larsson Uppsala University Dr. Anna Ledin Uppsala University Prof. Murray Leibbrandt University of Cape To Worldwide University Dr. Peter Lennie Worldwide University Prof. Robert Lensink University of Groning Dr. Laura S. Leo University of Bologn Prof. Melkizedeck Leshabari Muhimbili University Mr. Nugent Lewis Stellenbosch Univer Prof. Anthony Leysens Stellenbosch Univer Dr. Tania Lima King's College London Prof. Franklyn Lisk University of Warwice Prof. Sugnet Lubbe Stellenbosch Univer	Dr. Prof prof own Dr. ies Network gen Dr. a Prof of Health and Allied Sciences Sity Dr. sity Dr.	Simo of. Fhatuwani of. Xavier Francis Mercy Fekadu Sussy of. Jeff Christine	Mthethwa Mudau Muianga Mujjuni Mulugeta Munialo Murugan	University of KwaZulu-Natal University of KwaZulu-Natal Eduardo Mondlane University Makerere University Addis Ababa University University of Pretoria University of Cape Town
Prof. Elin Larsson Uppsala University Dr. Anna Ledin Uppsala University Prof. Murray Leibbrandt University of Cape To Dr. Peter Lennie Worldwide Universit Prof. Robert Lensink University of Groning Dr. Laura S. Leo University of Bologn Prof. Melkizedeck Leshabari Muhimbili University Mr. Nugent Lewis Stellenbosch Univer Prof. Anthony Leysens Stellenbosch Univer Dr. Tania Lima King's College London Prof. Franklyn Lisk University of Warwice Prof. Sugnet Lubbe Stellenbosch Univer	Prof Prof Prof Own Dr. ities Network Dr. gen Dr. a Prof of Health and Allied Sciences Dr. sity Dr. sity Dr.	of. Fhatuwani of. Xavier Francis Mercy Fekadu Sussy of. Jeff Christine	Mudau Muianga Mujjuni Mulugeta Munialo Murugan	University of KwaZulu-Natal Eduardo Mondlane University Makerere University Addis Ababa University University of Pretoria University of Cape Town
Dr. Anna Ledin Uppsala University Prof. Murray Leibbrandt University of Cape To Dr. Peter Lennie Worldwide Universit Prof. Robert Lensink University of Groning Dr. Laura S. Leo University of Bologn Prof. Melkizedeck Leshabari Muhimbili University Mr. Nugent Lewis Stellenbosch Univer Prof. Anthony Leysens Stellenbosch Univer Dr. Tania Lima King's College London Prof. Franklyn Lisk University of Warwice Prof. Sugnet Lubbe Stellenbosch Univer	Profown Dr. ies Network Dr. gen Dr. a Prof of Health and Allied Sciences Dr. sity Dr.	of. Xavier Francis Mercy Fekadu Sussy of. Jeff Christine	Muianga Mujjuni Mulugeta Munialo Murugan	Eduardo Mondlane University Makerere University Addis Ababa University University of Pretoria University of Cape Town
Prof. Murray Leibbrandt University of Cape To Worldwide Universit Prof. Robert Lensink University of Groning Dr. Laura S. Leo University of Bologn Prof. Melkizedeck Leshabari Muhimbili University Mr. Nugent Lewis Stellenbosch Univer Prof. Anthony Leysens Stellenbosch Univer Dr. Tania Lima King's College London Prof. Franklyn Lisk University of Warwice Prof. Sugnet Lubbe Stellenbosch Univer	own Dr. ies Network Dr. gen Dr. a Prof of Health and Allied Sciences Dr. sity Dr. sity Dr.	Francis Mercy Fekadu Sussy of. Jeff Christine	Mujjuni Mulugeta Munialo Murugan	Makerere University Addis Ababa University University of Pretoria University of Cape Town
Dr. Peter Lennie Worldwide Universit Prof. Robert Lensink University of Groning Dr. Laura S. Leo University of Bologn Prof. Melkizedeck Leshabari Muhimbili University Mr. Nugent Lewis Stellenbosch Univer Prof. Anthony Leysens Stellenbosch Univer Dr. Tania Lima King's College Londo Prof. Franklyn Lisk University of Warwic Prof. Sugnet Lubbe Stellenbosch Univer	ies Network Dr. gen Dr. a Prof of Health and Allied Sciences Dr. sity Dr. sity Dr.	Mercy Fekadu Sussy of. Jeff Christine	Mulugeta Munialo Murugan	Addis Ababa University University of Pretoria University of Cape Town
Prof.RobertLensinkUniversity of GroningDr.Laura S.LeoUniversity of BolognProf.MelkizedeckLeshabariMuhimbili UniversityMr.NugentLewisStellenbosch UniverProf.AnthonyLeysensStellenbosch UniverDr.TaniaLimaKing's College LondoProf.FranklynLiskUniversity of WarwicProf.SugnetLubbeStellenbosch Univer	gen Dr. a Prof of Health and Allied Sciences Dr. sity Dr. sity Dr.	Sussy of. Jeff Christine	Munialo Murugan	University of Pretoria University of Cape Town
Dr. Laura S. Leo University of Bologn Prof. Melkizedeck Leshabari Muhimbili University Mr. Nugent Lewis Stellenbosch Univer Prof. Anthony Leysens Stellenbosch Univer Dr. Tania Lima King's College Londe Prof. Franklyn Lisk University of Warwice Prof. Sugnet Lubbe Stellenbosch Univer	a Prof r of Health and Allied Sciences Dr. sity Dr. sity Dr.	of. Jeff Christine	Murugan	University of Cape Town
Prof. Melkizedeck Leshabari Muhimbili University Mr. Nugent Lewis Stellenbosch Univer Prof. Anthony Leysens Stellenbosch Univer Dr. Tania Lima King's College Londe Prof. Franklyn Lisk University of Warwice Prof. Sugnet Lubbe Stellenbosch Univer	of Health and Allied Sciences Dr. sity Dr. sty Dr.	Christine	_	
Mr. Nugent Lewis Stellenbosch Univer Prof. Anthony Leysens Stellenbosch Univer Dr. Tania Lima King's College Londo Prof. Franklyn Lisk University of Warwic Prof. Sugnet Lubbe Stellenbosch Univer	sity Dr. sity Dr.		Musanase	University of Dynamole
Prof.AnthonyLeysensStellenbosch UniverDr.TaniaLimaKing's College LondoProf.FranklynLiskUniversity of WarwicProf.SugnetLubbeStellenbosch Univer	sity Dr.	Peter		University of Rwanda
Dr.TaniaLimaKing's College LondonProf.FranklynLiskUniversity of WarwicProf.SugnetLubbeStellenbosch University	,		Mwangi	University of Nairobi
Prof. Franklyn Lisk University of Warwic Prof. Sugnet Lubbe Stellenbosch University	on Dr.	Nomakwezi	Mzilikazi	Rhodes University
Prof. Sugnet Lubbe Stellenbosch Univer		Rose	Nabatanzi	Makerere University College of Health Sciences
	k Ms.	. Zuzana	Naidoo	University of KwaZulu-Natal
Mr. Vanga Ludidi Llaivareit of Protorie	sity Dr.	Joyce	Nakatumba-Nabende	Makerere University
Mr. Yanga Ludidi University of Pretoria	a Prof	of. Denis	Ndanguza Rusatsi	University of Rwanda
Prof. Peter Maassen University of Oslo	Dr.	Rawlance	Ndejjo	Makerere University
Mr. Sakikhaya Mabohlo Rhodes University	Prof	of. Zwelinzima	Ndevu	Stellenbosch University
Prof. Marco Madella Universitat Pompeu	Fabra Mr.	Raymond	Ndhlovu	Rhodes University
Prof. Pasquale Maffia University of Glasgo	w Prof	of. Mark	New	University of Cape Town
Ms. Annmaria A. Mahaga University of Nairobi	Ms.	. Phindile	Ngobese	University of the Witwatersrand
Prof. Sunil Maharaj University of Pretoria	a Dr.	Grace	Ngubeni	University of the Witwatersrand
Prof. Mohamad Fawzi Mahomoodally University of Mauritic	us Dr.	Rose Anne	Njiru	University of Nairobi
Ms. Tanja Malan Stellenbosch Univer	sity Ms.	. Linda	Nordling	Research Professional News
Prof. Mats Målqvist Uppsala University	Prof	of. Ntobeko	Ntusi	University of Cape Town
Dr. Hermane Mambili Mamboundou University of KwaZul	lu-Natal Ms.	. Linet Nyakimari	Nunda	University of Nairobi
Prof. John Magero Mango Makerere University	Dr.	Tonney	Nyirenda	Kamuzu University of Health Sciences
Ms. Pfarelo Matsila University of Pretoric	Prof	of. George	Obeng Adjei	University of Ghana
Ms. Johanna Mavhungu University of the Wit	watersrand Dr.	Denis	Obino	University of Nairobi
Ms. Yenziwe Mbuyisa Stellenbosch Univer	sity Prof	of. Bola	Oboh	University of Lagos
Dr. Emmy Metta Muhimbili University	of Health and Allied Sciences Dr.	Victor	Odumuyiwa	University of Lagos
Prof. Petrie Meyer Stellenbosch Univer	sity Dr.	Chisara	Ogbogbo	University of Ghana
Prof. Guy Midgley Stellenbosch Univer	sity Dr.	Chioma	Ohajunwa	Stellenbosch University
Dr. Neda Milevska Kostova Radboud University	Prof	of. Bamidele	Olu-Owolabi	University of Ibadan
Dr. Mwapatsa Mipando University of Glasgo	w Dr.	Anita	Ongosi	University of Nairobi
Prof. Sergiu Miscoiu Babes-Bolyai Univer	rsity Prof	of. Robert	Osei	University of Ghana
Prof. Kåre Moen University of Oslo		of. Joachim	Osur	Amref International University
Ms. Imaan Mohamed University of Cape To	own Prof	of. Mayowa	Owolabi	University of Ibadan
Prof. Marlo Moller Stellenbosch Univer	,	of. Jan	Palmowski	The Guild
Prof. Nosipho Moloto University of the Wit	watersrand Prof	of. Maria	Papathanasopoulos	University of the Witwatersrand
Prof. Shahida Moosa Stellenbosch Univer	•	of. Ulrich	Paquet	African Institute for Mathematical Sciences (South Africa)
Prof. Brunella Morandi University of Bologn	a Prof	of. Francesco	Petruccione	Stellenbosch University
Prof. Lynn Morris University of the Wit		of. Natasa	Poklar Ulrih	University of Ljubljana
Dr. Miha Moškon University of Ljubljar		of. Øystein	Prytz	University of Oslo
Ms. Puseletso Motsomane Stellenbosch Univer	sity Mr.	Soorej Jose	Puthoopparambil	Uppsala University

Prof.	Claire	Quinn	University of Leeds
Prof.	Helena	Ramalhinho Dias Lourenço	Universitat Pompeu Fabra
Prof.	Maano	Ramutsindela	University of Pretoria
Prof.	Vimal	Ranchhod	University of Cape Town
Ms.	Isobella	Reid	University of Oslo
Prof.	Natasha	Ribeiro	Eduardo Mondlane University
Prof.	Olaf	Riess	University of Tübingen
Prof.	Vasti	Roodt	Stellenbosch University
Mr.	Sean	Rowlands	The Guild
Dr.	Paolo	Ruggieri	University of Bologna
Dr.	Munya	Saruchera	Stellenbosch University
Prof.	Michael	Scott	University of Warwick
Dr.	Clement	Sefa-Nyarko	King's College London
Ms.	Lizél	Senekal	Stellenbosch University
Prof.	Rachid	Serraj	Mohamed VI Polytechnic University UM6P
Prof.	Lilach	Sheiner	University of Glasgow
Prof.	Worash Getaneh	Shibeshi	Addis Ababa University
Prof.	Barbara	Shollock	King's College London
Dr.	Hloniphile	Sithole Mthethwa	University of KwaZulu Natal
Ms.	Charmaine	Smith	University of Cape Town
Prof.	Jen	Snowball	Rhodes University
Dr.	Andrea	Solnes Miltenburg	University of Oslo
Prof.	Wynand	Steyn	University of Pretoria
Prof.	David	Sumpter	Uppsala University
Prof.	Frans	Swanepoel	University of Pretoria
Prof.	Stephen	Syampungani	Copperbelt University
Dr.	Jane	Tanner	Rhodes University
Prof.	Ozlem	Tastan Bishop	Rhodes University
Dr.	Aklilu A.	Taye	Addis Ababa University
Dr.	Godfrey	Temba	Kilimanjaro Christiani Medical University College
Ms.	Gelila	Tesfu	Addis Ababa University
Dr.	Therina	Theron	Stellenbosch University
Dr.	Sonja	Theron	University of Pretoria
Mr.	Desmond	Thompson	University World News
Dr.	Esther	Thontteh	University of Lagos
Prof.	Cristina	Trois	Stellenbosch University
Dr.	Bengt Ove	Turesson	Uppsala University
Dr.	Caitlin	Uren	Stellenbosch University
Dr.	Francois	van Schalkwyk	Stellenbosch University
Dr.	Cari	van Schalkwyk	Stellenbosch University
Dr.	Kudzaiishe	Vanyoro	University of the Witwatersrand
Prof.	Jo	Vearey	University of the Witwatersrand
Ms.	Anita	Veltmaat	University of Groningen
Ms.	Wilna	Venter	University of Cape Town
Dr.	Annelies	Verdoolaege	Ghent University

Mr.	Francois	Viljoen	Stellenbosch University
Prof.	Dieter	von Fintel	Stellenbosch University
Prof.	Jay	Walsh	University of Illinois
Prof.	Rhoda	Wanyenze	Makerere University
Prof.	Patrick	Weke	University of Nairobi
Prof.	Janine	Wichmann	University of Pretoria
Prof.	Zerihun	Woldu	Addis Ababa University
Prof.	Ingrid	Woolard	Stellenbosch University
Mr.	Sinetemba	Xoxo	Rhodes University
Dr.	Chika	Yinka-Banjo	University of Lagos
Prof.	Nelson Casimiro	Zavale	Eduardo Mondlane University
Prof.	Andreja	Ž gajnar Gotvajn	University of Ljubljana
Dr.	Kim	Zoeller	Global Change Institute

Thank you for joining us