





EDCTP session at the UNGA79 Science Summit

Investing in clinical research in Africa to develop local solutions against the global challenge of Antimicrobial Resistance

26 September 2024, 11:00-13:00 EDT / 17:00-19:00 CEST (virtual)



About EDCTP

The European & Developing Countries Clinical Trials Partnership (EDCTP) is a European Union (EU)-funded partnership between institutions mandated by the governments of 15 European and 29 African countries, and the European Commission.

Launched in 2003 and renewed in 2014 and 2021 with funding through to 2031, EDCTP has been the focal point for EU support for global health research in Africa, and a visible sign of the EU's commitment to the infectious disease-related objectives of the Millennium Development Goals and more recently the Sustainable Development Goals. Additionally, it contributes to the implementation of the EU Global Health Strategy and the African Union (AU)-EU Innovation agenda.

Through its evolution, EDCTP has been driven by the infectious disease priorities of sub-Saharan Africa and the need to develop African countries' capacity to collectively address these priorities into the future.

The first EDCTP programme – **EDCTP1** – ran as an Article 185 Initiative of the Treaty on the functioning of the EU from 2003-2015 and operated as a European Economic Interest Grouping (EEIG).

The second EDCTP programme – **EDCTP2** – was launched in 2014 as another Article 185 Initiative implemented by the EDCTP Association and will run until 2024.

The third EDCTP programme – **Global Health EDCTP3** – was established in 2021 as a Joint Undertaking, which is an Article 187 Initiative of the Treaty on the functioning of the EU, and will run until 2031.

Contents

Investing in clinical research in Africa to develop local solutions against the global challenge of Antimicrol Resistance (AMR)	bial 4
EDCTP's investment in global health and clinical trials	6
Agenda	8
Case study 1 Isoniazid resistance: resetting the score with boosted ethionamide (bEto-TB)	10
Case study 2 Evaluation of treatment response, drug resistance and HIV-1 variability among adolescents on first- and second-line antiretroviral therapy in Cameroon: The READY-Study	11
Case study 3 The Pan-African Network for Rapid Research, Response, Relief and Preparedness for Infectious Disease Epidemics (PANDORA-ID-NET) and the One Health approach	12
Case study 4 Severe neonatal infection adaptive platform trials in Africa (SNIP-AFRICA)	13
Biographies	14

Investing in clinical research in Africa to develop local solutions against the global challenge of Antimicrobial Resistance (AMR)

Antimicrobial resistance (AMR) has been identified by the World Health Organization (WHO) as <u>one of the top 10</u> <u>global public health threats facing humanity</u>. At least 1.27 million people die as a consequence of AMR annually, with Africa having the world's highest mortality rate from AMR infections. Vulnerable population groups, such as women, children, the elderly and severely ill are hit the hardest. Without action, the death toll could rise even higher, to as many as 10 million deaths annually by 2050.

Tackling AMR requires multi-modal interventions, the collaboration of many disciplines and countries. AMR transmission is a critical global problem affecting humans, the environment, and animals, making it one of the global health issues which can significantly benefit from the One Health approach. Furthermore, the availability and access to existing effective antibiotics is also a challenge.

In May 2024, The Lancet series on AMR highlighted the need for sustainable access to effective antibiotics. Efforts to ensure equitable access to antibiotics in LMICs that experience the highest burden of AMR are particularly needed. The Global Leaders Group on AMR recently established that the world faces a serious antibiotic pipeline and access crisis that requires innovative financing measures and issued in June 2024 an urgent call to Member States of the United Nations to ensure an outcome-oriented political declaration at the 79th United Nations General Assembly (UNGA79) High-Level Meeting (HLM) on AMR that will take place in September 2024. Moreover, while accessible and affordable new or improved antimicrobials is an essential tool to combat resistant pathogens at the patient level, the first line of defence for containing the spread of AMR at the population level is an effective system to diagnose, detect, collect and integrate information about AMR on a large scale.

As a partnership between 29 African and 15 European countries and the European Commission at present, EDCTP aims to accelerate the development of new or improved medical interventions for the identification, treatment and prevention of poverty-related diseases in sub-Saharan Africa. This includes strains of pathogens which are drug resistant.

Launched in 2003 and renewed in 2014 and 2021, EDCTP has been the focal point of European Union (EU) support for global health research in Africa and is a visible sign of commitment to the Sustainable Development Goals (SDGs). By December 2023, the combined portfolio

of the first and second EDCTP programmes (EDCTP1 (2003-2015); EDCTP2 (2014-2024)) comprised 692 grants, representing a total investment of €1.03 billion. Several EDCTP2 projects with a specific focus on AMR have been funded, including through a <u>dedicated call for</u> <u>proposals in 2019</u> which invested €16 million to support the development of new drugs and vaccines for priority pathogens in AMR.

In May 2022, the European Commission and the EDCTP Association launched the third EDCTP programme, Global Health EDCTP3, which continues to focus on the major infectious disease threats facing sub-Saharan Africa, with greater emphasis placed on addressing antimicrobial resistance and the impact of the climate crisis on infectious diseases in this region. To date, Global Health EDCTP3 has invested €377 million in 21 calls for proposals, including committing €24 million through a <u>call for proposals launched in early 2024</u> on tackling AMR through research and development (R&D) in novel and existing antimicrobials.

The UNGA79 second high-level meeting on AMR on 26 September 2024 will provide an important opportunity for Member States to commit to increased investments in tackling the AMR pandemic, laying the ground for concrete actions to be agreed at the fourth AMR ministerial conference to be hosted by the Kingdom of Saudi Arabia in November 2024.

As part of the 9th edition of the Science Summit around UNGA79, this session aims to illustrate the value of investing in clinical research and development of accessible and affordable antibiotics, diagnostics, and vaccines for addressing unmet medical needs in Africa through a global partnership such as EDCTP. The objectives of the session will be to:

- Promote awareness about EDCTP and its role and contribution towards attaining the SDGs
- Highlight the role of R&D in tackling AMR and showcase practical examples of how the EDCTP programmes have supported clinical research on AMR
- Discuss the priority elements for mitigating AMR and achieving the SDGs - including advocating for One Heath approach, ensuring equitable access to antimicrobials, recognising prevention as the cornerstone of response, and safeguarding adequate, sustainable and predictable financing for antibiotic, diagnostics, and vaccine development.



EDCTP's investment in global health and clinical trials

2003-2024

	Funding of research	€1.03 BN	€377 M	>€257 M
	development	to support 692 grants since 2003 (€208 M EDCTP1; €824.30 M EDCTP2).	invested in 21 calls for proposals under Global Health EDCTP3 since 2022.	EU net contribution in signed grant agreements and proposals approved for funding under Global Health EDCTP3.
	Biomedical	477	58	>2,000
	interventions	clinical studies supported (102 EDCTP1; 375 EDCTP2). Of these. 150 are phase II and III clinical studies of drugs and vaccines (52 EDCTP1; 98 EDCTP2).	studies targeted pregnant women and their children (9 EDCTP1; 49 EDCTP2).	peer-reviewed publica- tions were generated (>700 EDCTP1; >1,300 EDCTP2).
	Clinical research	121	271	>1,660
	capacity	grants supported to enhance ethics and regulatory capacity in sub-Saharan Africa (75 EDCTP1; 46 EDCTP2).	fellowship grants to researchers from sub-Saharan Africa (56 EDCTP1; 215 EDCTP2).	trainees supported from sub-Saharan African countries through EDCTP projects (460 EDCTP1; 1,202 EDCTP2).
1 Jul	Epidemic	3	24	2
	preparedness	emergency calls have been triggered to respond to the Ebola (EDCTP2, 2018), COVID-19 (EDCTP2, 2020) and Mpox (Global Health EDCTP3, April 2024) outbreaks/ pandemics.	grants funded under Global Health EDCTP3 to strengthen preparedness capacity in sub-Saharan Africa.	epidemic preparedness networks - ALERRT and PANDORA-ID-NET - established for guiding the public health response to severe infectious outbreaks.
	European	€247 M	€528 M	€33 M
	coordination and partnerships	in cash contributions received from European member countries (€51 M EDCTP1; €196 M EDCTP2).	leveraged in cash and in-kind support from partners (€73 M EDCTP1; €455 M EDCTP2).	leveraged from Global Health EDCTP3 contribut- ing partners.

EDCTP-supported clinical trials and clinical studies on AMR



Intervention		
\$	Drugs	
	Vaccines	
	Diagnostics	
	Surveillance	

D	IS	ea	15	e

- HIV and HIV associated
- infections
- ntuberculosis
- Malaria
- Neglected infectious diseases
- Emerging diseases
- () Lower respiratory tract infections
- () Diarrhoeal diseases

Population		
	Adults (18 years and above)	
	Adolescents (12-18 years)	
	Children (2-12 years)	
٢	Infants (above 0-1 year)	
	Pregnant women and their children	

*Global Health EDCTP3-funded studies

.

Co-Chair

- Marcel Tanner, EDCTP High Representative, Switzerland
- Marleen Temmerman, Director Women's Health, Faculty of Heath Sciences, Aga Khan University, Kenya

17:00-17:05 CEST	Welcome and introduction from the co-Chairs
17:05-17:15 CEST	Combatting the global AMR pandemic and implementing the health SDGs through an African- European global health partnership for clinical research and development Michael Makanga, Executive Director; Global Health EDCTP3 Joint Undertaking, Belgium
17:15-17:25 CEST	Case study 1 – Isoniazid resistance: Resetting the score with boosted ethionamide (bEto-TB) David Barros, Vice President and Head of Global Health Medicines R&D Unit, GSK, Spain
17:25-17:35 CEST	Case study 2 – Evaluation of treatment response, drug resistance and HIV-1 variability among adolescents on first- and second-line antiretroviral therapy in Cameroon: The READY-Study Joseph Fokam, Head of Virology Laboratory, Chantal BIYA International Reference Centre for Research on HIV/AIDS Prevention and Management (CIRCB), Cameroon
17:35-17:45 CEST	Case Study 3 – The Pan-African Network for Rapid Research, Response, Relief and Preparedness for Infectious Disease Epidemics (PANDORA-ID-NET) and the One Health approach Francine Ntoumi, Founder, President and Executive Director of the Congolese Foundation for Medical Research (FCRM), Congo
17:45-17:55 CEST	Case Study 4 – Severe neonatal infection adaptive platform trials in Africa (SNIP-AFRICA) Julia Bielicki, Penta Foundation Board member and Reader at City St George's, University of London, United Kingdom
17:55-18:10 CEST	Audience Q&A
18:10-18:35 CEST	 Panel discussion: Priority investment areas for mitigating AMR and the role that Global Health EDCTP3 and its partners can play in implementing mechanisms for addressing UN priorities and helping to set the future agenda Irene Norstedt, Director, People Directorate, Directorate-General for Research and Innovation, European Commission Samuel Kariuki, Director, Eastern Africa, Drugs for Neglected Diseases initiative (DNDi), Kenya Yewande Alimi, AMR and One Health Unit Lead, Africa Centres for Disease Control and Prevention (Africa CDC), Ethiopia Jutta Reinhard-Rupp, Head of the Global Health Institute, Merck KGaA, Darmstadt, Germany
18:35-18:55 CEST	Audience Q&A and discussion
18:55-19:00 CEST	Closing remarks



Case study 1 | Isoniazid resistance: resetting the score with boosted ethionamide (bEto-TB)

The bEto-TB consortium, led by TASK Foundation and supported by GSK and BioVersys SAS, aims to combat drug-resistant tuberculosis by optimising the use of ethionamide, a well-established but underutilized drug due to dose-related intolerability.

Isoniazid is a key component of first-line TB therapy but resistance to it is found in approximately 11% of newly diagnosed TB cases. This poses a significant concern to global eradication efforts.

Alpibectir, a novel small molecule discovered by GSK in collaboration with Bioversys, enhances ethionamide's efficacy by increasing its bacterial bioactivation. In preclinical studies the combination of Alpibectir and Ethionamide (AlpE) allowed a threefold reduction in Ethionamide dose while maintaining or improving activity. This boosted combination preserves its full activity against isoniazid-resistant strains.

In the phase IIa trial TASK-010 bEto-TB (NCT05473195), the early bactericidal activity, safety, and pharmacokinetics of six treatment arms were evaluated. By reducing the ethionamide dose in combination with Alpibectir, the trial aims to maintain Ethionamide activity while minimising intolerability. Participants received AlpE at three dosing regimens: AlpE 9 mg/250 mg, AlpE 27 mg/125 mg, and AlpE 27 mg/250 mg to be compared against low- and standard-dose ethionamide (250 mg and 750 mg) and isoniazid (300 mg).

Ultimately, by revitalising ethionamide's role in the fight against drug-resistant TB, the consortium aims to deliver a tolerable and effective treatment for isoniazid-resistant TB. AlpE has the potential to replace isoniazid in first-line regimens and it is a strong candidate for inclusion in second-line TB treatment regimens.

Project at a glance

Project: bEto-TB

Project lead: Prof. Andreas Diacon, TASK Foundation NPC (TASK), South Africa

Countries involved: France, Spain and South Africa

Year funded: 2021

EDCTP funding: €2.70 M

Grant agreement: RIA2019AMR-2657

Case study 2 | Evaluation of treatment response, drug resistance and HIV-1 variability among adolescents on first- and second-line antiretroviral therapy in Cameroon: The READY-Study

Despite decades of concerted research efforts, HIV/ AIDS continues to have a devastating impact on Africa. Countries in Africa are lagging behind in reaching the UNAIDS targets. More than 80% of adolescents with HIV are resident in sub-Saharan Africa. At the time of introduction of a national 'test and treat' strategy in Cameroon, the READY study conducted a cross-sectional study of 1946 children, adolescents and adults living with HIV and on anti-retroviral therapy (ART) to measure viral suppression in the population.

The study observed a high virological failure rate of 20.6%, and with poorer outcomes among adolescents and those on more than 36 months ART. To understand this most affected group, 250 adolescents living with HIV were followed for a year to track viral load and CD4+ T cell numbers, with genotyping of HIV isolates from individuals showing signs of treatment failure. Results revealed worryingly high levels of HIV drug resistance, indicative of failure to control HIV replication in more than a third of adolescents in an urban setting and more than half of those at rural sites. Poor adherence was seen in about a third of participants. In addition, adolescents failing treatment were found to be harbouring high levels of hidden or 'archived' drug-resistance genes, suggesting that additional tools might need to be used to profile HIV infections and provide early warning of emerging drug resistance and impending treatment failure.

Other analyses have shown that a switch to second-line treatment in children is delayed on average by nearly a year. Switching is driven almost entirely in response to virological failure (high viral load), emphasising the importance of monitoring of viral load in this group.

Project at a glance

Project: READY-Study

Project lead: Dr Joseph Fokam, International Reference Centre Chantal Biya, Cameroon

Year funded: 2017

EDCTP funding: €0.15 M

Grant agreement: TMA2015CDF-1027

Case study 3 | The Pan-African Network for Rapid Research, Response, Relief and Preparedness for Infectious Disease Epidemics (PANDORA-ID-NET) and the One Health approach

PANDORA-ID-NET is a One Health Initiative, with a mission to develop and strengthen effective outbreak response capacities across all geographical regions in sub-Saharan Africa, in partnership with national governments and other international stakeholders. This multi-disciplinary network comprises 13 African and 9 European partners, and has played a key role in supporting epidemic preparedness and response to diverse diseases including COVID, Lassa fever, Mpox, and Chikungunya virus.

The COVID pandemic illustrated the catastrophic consequences that can follow when an infection jumps species and begins to spread between people. Globally, many efforts are underway to improve the capacity of countries to identify and respond to new zoonotic spillovers, and to reduce the risk of their occurrence.

A major focus of these activities is the One Health framework, which recognises the interdependence of human, animal and environmental health. Human health security cannot be achieved without considering interactions with wild and domesticated animals and the impact of environmental disruption.

PANDORA-ID-NET has been highly active in this area. It played a critical supportive role in the drafting, consultation and finalisation of the Framework for One Health Practice in National Public Health Institutions published by the Africa Centres for Disease Control and Prevention (Africa CDC). The document sets out a set of principles and guidance for national ministries of health and national public health institutions in Africa on how to address priority zoonotic diseases.

Project at a glance

Project: PANDORA-ID-NET

Project lead: Professor Francine Ntoumi, Fondation Congolaise pour la Recherche Médicale, Republic of Congo

Countries involved: Republic of Congo, France, Gabon, Germany, Ghana, Italy, Nigeria, Sierra Leone, Sudan, Tanzania, Uganda, United Kingdom, Zambia

Year funded: 2018

EDCTP funding: €10 M

Grant agreement: RIA2016E-1609

Project website: www.pandora-id.net

Case study 4 | Severe neonatal infection adaptive platform trials in Africa (SNIP-AFRICA)

SNIP-AFRICA is a partnership of 12 African and European institutions, funded by Global Health EDCTP3, and coordinated by Penta Foundation (Italy) and St George's Hospital, University of London (United Kingdom). It aims to improve the treatment of severe infection and sepsis in newborns in sub-Saharan African countries, where antimicrobial resistance (AMR) is a growing concern.

SNIP-AFRICA is establishing a clinical research network and a flexible infrastructure to support adaptive platform trials in Africa. This infrastructure includes a combination of clinical and microbiological surveillance activities, pharmacokinetic studies, a trial focused on empiric antibiotic treatment in settings with a high prevalence of multidrug-resistant bacteria, engagement with a wealth of stakeholders, and targeted training programmes aimed at building local research capacity, all under a coherent governance structure.

A key component to test the SNIP-AFRICA approach is the NeoSep1 trial, which will recruit approximately 1,200 neonates from neonatal units in Ghana, Kenya, South Africa, Tanzania and Uganda. This trial will compare novel antibiotic combinations with currently used antibiotic regimens to determine the effective treatment regimens when a considerable proportion of neonatal sepsis cases are thought to be caused by extended-spectrum betalactamase expressing Gram-negatives.

Through this innovative approach, SNIP-AFRICA sets out to reduce newborn mortality by improving the effectiveness of antibiotic treatments for neonatal sepsis. Additionally, the project seeks to establish a sustainable network of hospitals equipped to conduct research on severe childhood infections in Africa, addressing critical infection threats to infants and children with innovative, efficient and targeted research efforts.

Project at a glance

Project: SNIP-AFRICA

Project lead: Fondazione Penta ETS, Italy

Countries involved: Belgium, Ghana, Italy Kenya, South Africa, Switzerland, Tanzania, Uganda, United Kingdom

Year funded: 2023

EDCTP funding: €7.2 M

Grant agreement: 101103201

Project website: www.snip-africa.org

Biographies



Dr Yewande Alimi

AMR and One Health Unit Lead, Africa Centres for Disease Control and Prevention (Africa CDC), Ethiopia

Dr Alimi's impact extends globally as she serves on multiple advisory boards and groups, advocating for global health equity and gender equality. Notably, she has contributed as a One Health Technical Advisor for the Global Emerging Pathogens Treatment Consortium and as a member of the Scientific Task Force to Prevent Pandemics at the Source for the Harvard Global Health Institute (HGHI) and the Harvard T.H. Chan School of Public Health Center. With over a decade of expertise, Dr Alimi has significantly strengthened the technical capacity of African Union Member States in preventing and controlling infectious diseases using a One Health approach. She is recognized as a Subject Matter Expert in One Health and holds advisory and committee roles at esteemed institutions. Dr Alimi's vast experience includes setting up technical programs, establishing flagship programs at Africa CDC, and leading initiatives such as AMR awareness and advocacy efforts for young Africans. Her commitment to advocating equitable public health policies demonstrates her unwavering dedication to making a difference in global health, promoting equity, and advancing gender equality.

Dr David Barros-Aguirre

Vice President and Head of Global Health Medicines R&D Unit, GSK, Spain

Dr David Barros-Aguirre is VP within GSK Global Health, leading the Medicines R&D group with 90 members in Tres Cantos (Madrid, Spain) and GSK HQ in London. The unit focuses on novel treatments for infectious diseases like Malaria, Tuberculosis, and AMR. David leads several EU grant-funded projects for multi-drug-resistant TB, including ClicK-TB (€7M, 2019-2025), ERA4TB (€90M, 2020-2025), and Unite4TB (€92.5M, 2021-2028). He has a PhD in Medicinal Chemistry and postdoctoral studies in asymmetric synthesis from Universidad Autónoma of Madrid and Loughborough University. Joining GSK 20 years ago, he has led efforts in antimalarial and anti-TB drug discovery and development, resulting in clinical studies for compounds like Ganfeborole, Alpibectir, and GSK286.



Dr Julia Bielicki

Penta Foundation Board member and Reader at City St George's, University of London, United Kingdom

Julia Bielicki is currently a consultant in Paediatric Infectious Diseases and Infection Prevention and Control at the University of Basel Children's Hospital. She is also a Reader and senior PI at the Centre for Neonatal and Paediatric Infection, City St George's, University of London, where she is engaged in several large-scale national and international projects. Dr Bielicki's research focuses on observational and interventional studies investigating the use of antibiotics to treat neonates and children and the application of infection prevention and control measures in the light of an increasing burden of antimicrobial resistance for future generations. She co-ordinates the EDCTP3 funded SNIP-AFRICA project aiming to improve the way severe infections in newborns are treated.



Dr Samuel Kariuki

Director - Eastern Africa, Drugs for Neglected Diseases initiative (DNDi), Kenya

Sam Kariuki (DVM, MSc, PhD) obtained his DVM from the University of Nairobi (1989), MSc in Pharmacology and Toxicology, University of Nairobi (1991), and a PhD in Tropical Medicine from the Liverpool School of Tropical Medicine (LSTM) in 1997. He was awarded Doctor of Science (Honoris causa) by the LSTM in December 2022. Sam Kariuki is currently Director, Drugs for Neglected Diseases Initiative (DNDi) Eastern Africa. Previously, he was Acting Director General at the Kenya Medical Research Institute (KEMRI) (2021-2023) and Director of Research and Development (2018-2022). He is Fellow, African Academy of Sciences and Honorary Faculty, Wellcome Sanger Institute, visiting Professor of Tropical Microbiology, Nuffield Department of Medicine, University of Oxford, and the Ohio State University One-Health Initiative. He is also a member of the American Society for Microbiology and Section Editor, Journal of Medical Microbiology. Over the last 25 years his team has researched and published on the epidemiology and genomics of Antimicrobial Resistance (AMR) and genomic surveillance of key enteric pathogens endemic in Kenya and the region. Their findings have been instrumental in informing policy change in first line-treatment, prevention and control strategies for key enteric pathogens including cholera, typhoid fever, and invasive non-typhoidal Salmonella disease. He has published over 200 papers in peer-reviewed journals and written 4 chapters in textbooks of Microbiology and Infectious Diseases, majoring in Genomics and Epidemiology. He is a member of the National Antimicrobial Stewardship Interagency Committee (NASIC) advising Ministry of Health on One Health approach in implementation of the National Action Plan to combat AMR, and a member of the WHO Strategic and Technical Advisory Group for Antimicrobial Resistance (STAG-AMR).



Dr Michael Makanga

Executive Director, Global Health EDCTP3, Belgium

Dr Michael Makanga started his tenure as the Executive Director of Global Health EDCTP3 on 16 November 2023. He has extensive experience in the global health research sector and was previously the Executive Director of the EDCTP Association. He is a clinician-scientist with nearly thirty years of health and clinical research work experience in African and European institutions. He has a medical degree from Makerere University, a master's and PhD in pharmacology and therapeutics from the Liverpool University and School of Tropical Medicine, and is a fellow of the Royal College of Physicians of Edinburgh. He has vast experience in global health, research for health capacity development, engagement with policy makers, ethics and regulatory authorities in both Africa and Europe. Moreover, he has served in various scientific and policy advisory boards involved in developing medical products and associated technologies for infectious diseases, including the World Bank, international product development organizations, philanthropies and pharmaceutical companies.



Dr Irene Norstedt

Director, People: Health and Society Directorate, Directorate-General for Research and Innovation, European Commission

Irene Norstedt works at the European Commission where she is the Director responsible for the People: Health and Society Directorate within the DG for Research and Innovation. The People Directorate works towards the development of a healthy, safe, more equal, free, open and fair society, where the voice of the citizen and different communities are better heard. Irene has been at the European Commission since 1996, and has worked on various aspects of research in life sciences and particular health research throughout her career in the Commission. Areas of particular interest have been the set up of the public private partnership the Innovative Medicines Initiative (IMI) and the International Rare Diseases Research Consortium (IRDiRC). Prior to joining the European Commission, she worked for the Swedish life science company Biacore AB and at the Swedish embassy in London.

Professor Francine Ntoumi

Founder, President and Executive Director of the Congolese Foundation for Medical Research (FCRM), Congo

Francine Ntoumi, Ph.D., FRCP serves as the President and co-founder of the Congolese Foundation for Medical Research and leads its Research Center for infectious diseases in Brazzaville, Republic of Congo. She is Professor of molecular epidemiology of infectious diseases at the Institute of Tropical medicine, University of Tübingen. She has a long-standing record of research investigations on malaria in Senegal, Cameroon, Gabon and rep of Congo. Since 2009, Ntoumi has been highly involved in developing health research capacities in Central Africa through the coordination of the Central Africa clinical research network (CANTAM) and since 2018 leading the Pan-African Network for Rapid Research, Response, Relief and Preparedness for Infectious Diseases Epidemics consortium (PANDORA-Id-Net). She is also highly engaged in promoting gender balance in science in the African region through an important program, "To make Science, a female ambition." Ntoumi is member of several scientific and advisory committees and is involved in many international scientific networks in Africa, Europe, and the United States. She is a fellow of the African Academy of Science. In recognition of her efforts in developing research capacities in Africa, Prof. NTOUMI received many awards including the prestigious African Union Kwame Nkrumah Regional Scientific Award for women (2012), The Georg Forster Prize (Germany, 2015), the Christophe Merieux Prize (France), the Congolese Gold Medal in Science (2016) and the German federal Cross of Merit (2022). She has been acknowledged as Officer of Congolese Merit (2022) and in August 2023, she has been recognized as the Public health Champion by the World Health Organization. Currently, she is the National Ambassador for UNICEF in Rep of Congo.





Dr Jutta Reinhard-Rupp

Head of the Global Health Institute, Merck KGaA, Darmstadt, Germany

Jutta is leading the Global Health Institute, based in Switzerland, as part of the Global Health & Health Equity organization at Merck KGaA, Darmstadt, Germany.

She drives the vision and strategy of the institute and engages with key stakeholders within the Global Health Community. She serves as chair and scientific advisor at various boards.

Since January 2008, Jutta has been working in Italy and in Switzerland with responsibilities on the implementation of key strategic initiatives in the healthcare sector; she led the internal IMI (Innovative Medicine Initiatives) office and activities (European public-private partnerships); she co-chaired the Bioethics Advisory Panel and initiated the global health portfolio at Merck KGaA, Darmstadt, Germany leading to the creation of the Global Health Institute in 2017.

Jutta studied Biology in Mainz and Tübingen and received her PhD at the Max-Planck Institute in Tübingen. After her postdoctoral training, she joined biopharmaceutical industries in various assignments with increasing responsibilities.



Professor Marcel Tanner

EDCTP High Representative, Europe President, Swiss Academy of Sciences, Professor Emeritus of Epidemiology, Switzerland

Professor Marcel Tanner was Director of the Swiss Tropical and Public Health Institute from 1997 to 2015 and is now President of the Swiss Academy of Sciences. He holds a PhD in medical biology from the University of Basel and an MPH from the University of London. Lived and worked in Africa and Asia and has published extensively in many fields of health research (>650 original papers) and has received global recognition for his expertise in the field of infectious diseases research and control. He was co-investigator and coordinator of the first African malaria vaccine trial in 1992 and participated as co-principal investigator in several major intervention trials on malaria and schistosomiasis. He developed a Swiss field laboratory to what is now the Ifakara Health Institute in Tanzania from 1981-1985 and when back in Europe as programme director 1987-1997.



Professor Marleen Temmerman

Professor Obstetrics-Gynaecology and Director of the Centreof Excellence in Women and Child Health, Aga Khan University, Nairobi, Kenya

Prof Temmerman, MD, MPH, PhD, FRCOG, AAS, AAAS, NAM, MBS,is Professor Obstetrics-Gynaecology and Director of the Centreof Excellence in Women and Child Health, Aga Khan University, Nairobi, Kenya, and AKU-UNESCO Chair Youth Leadership in Science, Health, Gender and Education. She is also Em. Professor,Ghent University, Belgium. Prior: Director,RHR-WHO; Full Professor Ghent University, Belgium;Founding Director International Centre of Reproductive Health (ICRH); Elected Senator Belgian Parliament.She has a strong academic background with over 600 peer reviewed publications and books (H-index 106). Interest inwomen's health and rights, adolescents and youth health and wellbeing, sexual and reproductive health, maternal newborn health, health systems, vulnerable populations, infectious diseases, implementation research, digitalization and innovation, and global health politics and diplomacy.



European & Developing Countries Clinical Trials Partnership

The Hague, the Netherlands, September 2024 The EDCTP2 programme is supported under Horizon 2020, the European Union's Framework Programme for Research and Innovation.

Europe Office

Postal address P.O. Box 93015 2509 AA The Hague The Netherlands

Africa Office

Postal address P.O. Box 19070 Tygerberg 7505, Cape Town South Africa

Visiting address

Anna van Saksenlaan 51 2593 HW The Hague The Netherlands

Phone: +31 70 344 0880/0897

Email: info@edctp.org Web: www.edctp.org

Twitter: @EDCTP YouTube: edctpmedia

Visiting address Francie van Zijl Drive, Parowvallei 7505, Cape Town South Africa

Phone: +27 21 938 0690 **Fax:** +27 21 938 0569

The power of sharing science