



**EDCTP**

*The power of sharing science*



Science Summit at UNGA78  
12-29 September 2023

UNGA78 Science Summit | EDCTP event at UNGA78 Science Summit

# Investing in research and development of innovative digital health solutions for Africa

14 September 2023 – 09:00-11:30 EDT/15:00-17:30 CEST

New York, United States & virtual (hybrid)



Supported by the  
European Union



## About EDCTP

---

The European & Developing Countries Clinical Trials Partnership (EDCTP) is a public–public partnership between 15 European and 26 African countries, supported by the European Union. EDCTP's vision is to reduce the individual, social and economic burden of poverty-related infectious diseases affecting sub-Saharan Africa.

EDCTP's mission is to accelerate the development of new or improved medicinal products for the identification, treatment and prevention of infectious diseases, including emerging and re-emerging diseases, through pre- and post-registration clinical studies, with emphasis on phase II and III clinical trials. Our approach integrates conduct of research with development of African clinical research capacity and networking.

The second EDCTP programme is implemented by the EDCTP Association supported under Horizon 2020, the European Union's Framework Programme for Research and Innovation.

# Contents

Investing in research and development of innovative digital health solutions for Africa	4
Case study 1   Blockchain high coverage rabies post-exposure prophylaxis to achieve zero human rabies deaths in Africa (BlockRabies)	6
Case study 2   Improving access to SARS-CoV-2 screening and testing through community-based COVID-19 case-finding and the use of digital solutions in Lesotho and Zambia (TREATS-COVID & Mitral)	7
Case study 3   Dual diagnosis by Spectral Artificial Visual Examination for Female Genital Schistosomiasis and cervical cancer. Digital, new, low-cost, and simple diagnosis and training (DUALSAVE-FGS)	8
Case study 4   Expanding digital data capacities of African clinical trial centres through a cloud-based global health research platform	9
EDCTP's investment in global health and clinical trials	10
Agenda	12
Biographies	14

# Investing in research and development of innovative digital health solutions for Africa

As we strive towards achieving the Sustainable Development Goals (SDGs) and Universal Health Coverage (UHC), and laying the foundation for the post-2030 Sustainable Development Agenda, health systems in low- and middle-income countries (LMICs) need to embrace the opportunities presented by digital health solutions. Working smarter and faster is key to harnessing more efficient, equitable and contextualised healthcare in an integrated manner. Combining health technologies with other scientific innovations such as mobile and digital technologies (mHealth and eHealth), artificial intelligence (AI), big data processing, and other emerging technologies offers the potential for widespread transformation of health systems.

Despite large-scale investments in product development for poverty-related infectious diseases (PRDs), progress in achieving public health gain remains slow, while sub-Saharan Africa bears the highest burden of these diseases. Moreover, these diseases co-exist with a growing burden of other morbidities, requiring improved systems that facilitate surveillance for multiple diseases and with ability to support introduction of several medical interventions. There is a need to provide sustained support to research and development and to encourage the use of new, innovative approaches and emerging health

technologies in sub-Saharan Africa to achieve rapid progress and impact. The COVID-19 pandemic has unveiled the use of digital health and generation of novel knowledge that could advance prevention, treatment or diagnosis of PRDs in this part of the world with rapidly growing 'digital – hungry' urban populations and mainly young people with a median age of under 20 years.

The European & Developing Countries Clinical Trials Partnership (EDCTP) is investing in innovative approaches to enhance research on poverty-related infectious diseases in sub-Saharan Africa. As a partnership between currently 26 African and 15 European countries, EDCTP aims to accelerate the development of new or improved medical interventions for the identification, treatment and prevention of these diseases.

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 2022, the second EDCTP programme (EDCTP2; 2014-2024) portfolio comprised 438 grants awarded through 60 calls for proposals, representing a total investment of EUR 824 million. Clinical trials supported by EDCTP2 involve international

collaborations spanning >60 countries and 350 institutions in Europe and sub-Saharan Africa, with broader global collaboration. Results from these clinical trials have generated pivotal evidence which has informed national and international policy and practice.

On 10 May 2022, the European Commission and the EDCTP Association launched the Global Health EDCTP3 Joint Undertaking, highlighting the importance of ensuring research and innovation collaboration, cooperation and funding in the area of infectious diseases, and the commitment of the partners.

As part of the 9th edition of the Science Summit around the 78th United Nations General Assembly (UNGA78), and on the occasion of EDCTP's 20th anniversary, this session aims to illustrate the value of investing in research and development of innovative digital health solutions for addressing unmet medical needs in Africa through a global partnership such as EDCTP. The objectives of the session will be:

- Promoting awareness about EDCTP and its role and contribution towards attaining the SDGs
- Showcasing practical examples

of how EDCTP and its partners are supporting clinical research using smart, highly innovative health technologies or concepts to prevent, treat or diagnose PRDs in sub-Saharan Africa, and the development of solutions that are easily integrated or linked to existing electronic or digital systems used in the implementation of clinical research and health systems' patient management

- Demonstrating how the use of digital technology in public health interventions can serve as a driver for the development of African health systems, improving access to health data and research evidence to better develop and implement informed health policies and improved clinical guidelines for healthcare in sub-Saharan Africa
- Discussing the role of digital health solutions in addressing Africa's health challenges and opportunities, including lessons learned from the COVID-19 pandemic response, and the enabling research, policy, regulatory and financial environments that are needed.

# Case study 1 | Blockchain high coverage rabies post-exposure prophylaxis to achieve zero human rabies deaths in Africa (BlockRabies)

Digital solutions to health care have a large untapped potential to foster health care for humans and animals in Africa. Dog transmitted human rabies still kills thousands of Africans every year because of inadequate post-exposure prophylaxis supply chains, lack of awareness of patients and health personnel, poor compliance of patients and the lack of diagnostic capacity and communication between human and animal health services. A participatory social process combining practical knowledge of authorities, communities and service providers and academic expert knowledge identifies the key points for a culturally adapted practical and ethical implementation of a digital application secured by blockchain technology in Côte d'Ivoire and Mali.

The BlockRabies digital application (BRApp) is an electronic patient recording system combined with vaccine supply chain and dog rabies diagnosis reporting. It is the first One Health blockchain secured digital application and allows real time inter-sectoral public and animal health communication, patient compliance follow up and vaccine supply chain management. The participating countries own the processes

and data. The announcement on the blockchain is anonymized and only accessible to selected users. All involved actors mutually confirm transactions of anonymized data.

Upon successful testing and implementation, we hope to reduce human rabies mortality to almost zero. The potential of this application and extensions to a general electronic health record cannot be overestimated. We can imagine patients reaching health centers with a digital or printed QR code allowing the health personnel to see the patient's health record and make new entries increasing the efficiency of patient care. Drug supply chains are followed up from the central pharmacies to the patient and re-stocking can take place timely to prevent drying out. In the case of zoonoses, cross-sector communication between animal and public health accelerates etiological diagnosis and reduce suffering and premature death. The potential of rabies elimination by coordinated dog mass vaccination is a further potential. Integrated electronic patient registration goes along with digital diagnostic algorithms and artificial intelligence applied to diagnostic equipment and disease surveillance

towards a hard to overestimate  
improvement of the public's health in  
Africa in the next decade.

This project is part of the EDCTP2  
programme supported by the European  
Union (grant number CSA2018HS-2517-  
BlockRabies). The research team is led by  
Professor Jakob Zinsstag, Swiss Tropical  
and Public Health Institute, Switzerland.

## Case study 2 | Improving access to SARS-CoV-2 screening and testing through community-based COVID-19 case-finding and the use of digital solutions in Lesotho and Zambia (TREATS-COVID & Mistral)

SARS-CoV-2 wreaked havoc on a global scale, negatively impacting the world's population and causing disruption and challenges from clinical and public health to economic settings. But it also provided an invaluable foundation and opportunities to learn. In 2020 at the peak of the COVID-19 Pandemic, research teams in Lesotho and Zambia investigated the effects of community-led interventions, rapid point-of-care diagnostics and swab self-collection in mitigating the COVID-19 epidemic in these countries. Innovative and locally adapted mitigation strategies to improve the COVID-19 care cascade, protect the communities and health care workers, and in return increase access to essential services were desperately needed. The Mistral project and the TREATS-COVID project had established SARS-CoV-2 screening facilities in North-Eastern Lesotho and Central Province in Zambia. Both settings had challenges throughout the trace-screen-test-isolate cascade, and although the barriers differed, both operated in environments where there was a need for innovative and pragmatic approaches that increased access to SARS-CoV-2 screening and testing in order to respond to the acute

epidemic crisis. This led to the BRCC-EDCTP collaboration.

The overall aim of the collaboration was to mitigate the impact of the COVID-19 epidemic in Lesotho and Zambia by improving the COVID-19 trace-screen-test-isolate cascade through eHealth-supported community-based testing, utilization of rapid diagnostic tests and self-collection of swabs. The project also evaluated a range of potential community-based point-of-care tests to detect SARS-CoV-2 and antibodies to the virus. These included a novel computer-aided diagnostic tool for interpretation of chest X-rays that has been developed by one of the project partners, initially for TB but was adapted for COVID-19. This collaboration enabled a unified approach, tailored to the specificities of the two settings to mitigate the COVID-19 pandemic in Lesotho and Zambia.

The collaboration convened expertise from various disciplines and institutions to improve the COVID-19 care cascade, reduce community transmission, and mitigate the impact on service utilization in resource-limited settings. Through close collaboration with the communities



and local health authority and utilization of locally developed solutions, the project provided a sustainable and locally grounded COVID-19 response – with an impact even beyond the project period.

This research was part of a joint initiative to bring together research teams from the Botnar Research Center for Child Health (BRCCCH) and the European & Developing Countries Clinical Trials Partnership (EDCTP) in collaborative projects. The research team supported by the BRCCCH, led by Dr Klaus Reither (Swiss TPH), builds upon the Mistral project. The research team supported by the EDCTP, led by Dr Kwame Shanaube (Zambart), builds upon the TREATS-COVID project.

## Case study 3 | Dual diagnosis by Spectral Artificial Visual Examination for Female Genital Schistosomiasis and cervical cancer. Digital, new, low-cost, and simple diagnosis and training (DUALSAVE-FGS)

### **The problem:**

Around 300 million African girls and women are at risk from the poverty related disease, Female Genital Schistosomiasis (FGS), 400 million are at risk from cervical cancer in the lower part of the uterus. Most of these people live in Sub-Saharan Africa. The symptoms from FGS are similar to those from cervical cancer and sexually transmitted infections. Women with FGS infected tissue (lesions), have obscure bloody and unpleasant smelling discharge. They could also be in pain and be at higher risk for HIV and Human papillomavirus, a sexually transmitted family of viruses.

FGS is best diagnosed by directly looking at the shape and colour of the lesion at the point-of care. The problem is that this visual diagnosis is difficult to master because the lesion looks similar to lesions caused by cervical cancer and other diseases. Therefore, health professionals need several weeks of training where the disease is seen frequently, and often they need a colposcope (a microscope fitted with a light) to recognize FGS. Worldwide, there are only a handful of health professionals who are proficient in FGS diagnosis.

### **The solution:**

- The sophisticated colposcopes are not readily available in rural areas. Thus, a Greek partner in our project has developed a simple version of the colposcope and linked it to a smartphone to take pictures of the lesions. Software in the smartphone will compare these pictures with stored pictures of cervical cancer and FGS and determine if the woman undergoing the procedure has one of these diseases or not. Our colposcope uses light that is able to penetrate the tissue and possibly see eggs placed there by the Bilharzia worm which causes FGS. The software designed by our Greek partner was originally intended for cervical cancer recognition and is used for this in some countries. It will be adapted and validated for FGS diagnosis in this project.
- Health professionals do not know FGS.

### **What we will do:**

- In three countries with different routines for gynaecological investigations of women, we will conduct a clinical trial. The ultimate

aim is a local production of the mentioned diagnostic tool. With lessons learnt from the COVID-19 pandemic, an eLearning course will be designed and tested. Equipment, consultations and training will be adapted to practical realities (such as unstable electricity, internet, and cultural considerations). As recommended by the WHO, the diagnosis should be at the point-of-care.

- We will develop Africa-wide scalable training and an interdisciplinary research team will work on policy briefs and management protocols.

This is a thrust to promote health for women, clinical research and digitalization for vulnerable populations. Clinicians and inter-disciplinary scientists will receive training in FGS research methodology. We will evaluate the procedures, and their impact on women. PhD and Masters' students will receive training and the international collaboration will be between three African and three European countries.

This project is funded by the European Research Council under the European Union's Horizon 2020 /ERC Grant agreement no. 101057853 (DUALSAVE-FGS).

## Case study 4 | Expanding digital data capacities of African clinical trial centres through a cloud-based global health research platform

The EDCTP-Novartis-TriNetX joint initiative on digital data capabilities has the primary objective to help healthcare organisations (HCOs) in SSA improve engagement with pharmaceutical companies and contract research organisations, thereby increasing the number of industry-sponsored clinical trials that will be available to the research centres and their patients. Equipping HCOs with an intuitive online Real World Data Platform empowers them to conduct time-sensitive feasibility on their data and understand if they have the patient population available for a clinical trial.

The initiative is facilitated through TriNetX's cloud-based global health research platform, which provides HCOs with leading-edge analytical tools that allow researchers to easily query all structured and unstructured patient data for a plethora of local use-cases, gaining real-time responses and insights into patient populations. Research centres receive access to the platform, hardware, data mapping and training, with staff additionally being equipped with the requisite skills to ensure continued updating of quality-controlled information on the evolving clinical trials regulatory, legal

and compliance landscape, to ensure a sustainable high-quality product. As such, a parallel secondary benefit is to also help participating research centres to advance their healthcare infrastructure and enhance local research capabilities, maximising the benefits of local patient data resources whilst also fostering multi-centre research collaboration in therapeutic areas that extend beyond communicable diseases that are traditionally supported.



# Agenda

15:00-17:30 CEST

## Chair

- **Harleen Grewal**, Professor of Microbiology and Global health, University of Bergen, Norway; Chairperson of the EDCTP Scientific Advisory Committee
- **John Gyapong**, Vice Chancellor of the University of Health and Allied Sciences, Ghana

15:00-15:05	<b>Welcome and introduction from the co-Chairs</b>
15:05-15:15	<b>Unleashing the role of medical technologies in combatting the unmet medical challenges attributed to PRDs in sub-Saharan Africa towards attaining the SDGs and UHC</b> Michael Makanga, EDCTP (Netherlands)
15:15-15:25	<b>Case study 1 – Blockchain high coverage rabies post-exposure prophylaxis to achieve zero human rabies deaths in Africa (BlockRabies)</b> Jakob Zinsstag, Swiss Tropical and Public Health Institute (Swiss TPH, Switzerland)
15:25-15:35	<b>Case study 2 - Improving access to SARS-CoV-2 screening and testing through community-based COVID-19 case-finding and the use of digital solutions in Lesotho and Zambia (TREATS-COVID &amp; Mitral)</b> Kwame Shanaube, Zambart (Zambia)
15:35-15:45	<b>Case study 3 - Dual diagnosis by Spectral Artificial Visual Examination for Female Genital Schistosomiasis and cervical cancer. Digital, new, low-cost, and simple diagnosis and training (DUALSAVE-FGS)</b> Santiago Martinez, University of Agder (Norway)
15:45-15:55	<b>Case study 4 - Expanding digital data capacities of African clinical trial centres through a cloud-based global health research platform</b> Gadi Lachman, TriNetX LLC (United States)

15:55-16:10	<b>Audience Q&amp;A</b>
16:10-17:00	<p><b>Panel discussion</b></p> <p><b>The role of digital technology in addressing Africa's health challenges</b></p> <ul style="list-style-type: none"> <li>• Irene Norstedt, Director, People Directorate, Directorate-General for Research and Innovation, European Commission</li> <li>• Roseanne Rotondo, Head of Global Health Access, Novartis (United States)</li> <li>• Gadi Lachman, CEO and President, TriNetX LLC (United States)</li> <li>• Jean Philbert Nsengimana, Chief Digital Advisor, African Centres for Disease Control (Africa CDC)</li> <li>• Lindiwe Makubalo, Assistant Regional Director, WHO Regional Office for Africa (WHO/AFRO)</li> </ul>
17:00-17:20	<b>Audience Q&amp;A and discussion</b>
17:20-17:30	<p><b>Closing remarks</b></p> <p>Marcel Tanner, EDCTP High Representative (Europe)</p>



## Gadi Lachman

**TriNetX LLC, United States**

Gadi Lachman is the Founder and Chief Executive Officer of TriNetX, the global network of healthcare organizations driving real-world research to accelerate the development of new therapies. Starting in 2014, TriNetX has grown into the largest global platform for clinical research. Mr. Lachman has successfully led TriNetX into a mature, profitable, and fast growing organization that has disrupted the ways in which clinical research is being conducted and has improved health outcomes for patients across all therapeutic areas. TriNetX has become the number one platform for clinical research used across all large pharma companies and many smaller ones. Mr. Lachman has been named Entrepreneur of the Year by Ernst & Young and sits on the board of the Friends of the National Library of Medicine. Prior to founding TriNetX, Mr. Lachman held leadership positions at TriZetto, American Well, and Eliza. He also spent time at Lehman Brothers and served as an Officer in the Israeli Special Forces. Mr. Lachman earned his MBA from Harvard Business School where he was named a Baker Scholar for finishing in the top 5% of his class. He received an LL.B., Law, and B.A. in Accounting from Tel-Aviv University.



## Harleen Grewal

**University of Bergen, Norway**

Professor Harleen Grewal is Professor of Microbiology (2002) and Global health (2013) (University of Bergen, Norway) and Consultant Physician at the Haukeland University Hospital, also in Bergen. An MD (1987, University of Maharashtra, India), she trained in medical microbiology at the All India Institute of Medical Sciences (1991) and the Haukeland University Hospital (2000). In 1995, she obtained a PhD in molecular microbiology (University of Bergen). Prof. Grewal has been involved in collaborative international work in Europe, Africa (South Africa and Tanzania) and Asia (India, Myanmar, and Nepal) and has conducted research on the molecular pathogenesis of diarrhoeal and respiratory pathogens. Since 2002, she focused on tuberculosis-related research: e.g. building site capacity for TB vaccine efficacy testing, antimicrobial resistance and rapid point-of-care diagnostics to improve personalised therapy. She received the Schering-Plough prize (microbiology) and the Søren and Sigurd Falch award (medical research).





## Irene Norstedt

### European Commission

Irene Norstedt works at the European Commission, where she is the Director responsible for the People Directorate within the DG for Research and Innovation. The People Directorate works towards developing 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 particularly 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). Before joining the European Commission, she worked for the Swedish life science company Biacore AB and at the Swedish embassy in London. Irene studied at the Royal Institute of Technology in Stockholm and the University of Sussex and holds a Master of Science (MSc) in Chemical Engineering.



## Jakob Zinsstag

### Swiss Tropical and Public Health Institute

Prof. Dr. Jakob Zinsstag is a veterinarian with a PhD in tropical animal health. He spent eight years in West Africa at the International Trypanotolerance Centre in The Gambia and four years as the director of the Centre Suisse de Recherches Scientifiques in Côte d'Ivoire. Since 1998 he heads a research group on human and animal health at the Swiss Tropical and Public Health Institute. Since 2011 he is deputy head of department of Epidemiology and Public Health at Swiss TPH. He focuses on the control of zoonoses in developing countries and the provision of health care to mobile pastoralists using a One Health approach. He is past president of the International Association for Ecology and Health and former president of the scientific board of the Transdisciplinary network of the Swiss Academies. He is editor-in-chief of CABI One Health resources. He received the Meritorious Award by the World Organization of Animal Health (WOAH) in 2023.

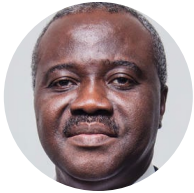


## Jean Philbert Nsengimana

### Africa Centers for Disease Control and Prevention (Africa CDC)

Jean Philbert Nsengimana (Phil) is the Chief Digital Health Advisor at Africa CDC. He also serves as a special advisor to the Commons Project and the

Digital Impact Alliance, working to unlock the full potential of technology and data for Africa's prosperity. Prior to those roles, he served as the Minister of Youth and ICT in the Government of Rwanda for 6 years. During his tenure, he spearheaded the Smart Africa Alliance and YouthConnekt Africa – two pan African organizations focused on accelerating digital transformation and youth empowerment. He holds a Masters of Public Administration from the Harvard Kennedy School of Government, a Global MBA in Information Technology from the SP Jain School of Global Management in Singapore, a Masters in Software Engineering and Bachelor's degree in Computer Science from the University of Rwanda. He serves on many boards including the Alliance for Affordable Internet, IntraHealth International, StartUpAfrica and Place Fund.



## John Gyapong

**University of Health and Allied Science, Ghana; Chair of the Global Health EDCTP3 Scientific Committee**

Professor John Gyapong is the Chair of the Scientific Committee (SC) of Global Health EDCTP3 Joint Undertaking and former Vice Chair of the Scientific Advisory Committee (SAC) of EDCTP2. He is a Public Health Physician and an Epidemiologist. He studied Medicine at the Kwame Nkrumah University of Science and Technology, Kumasi, Ghana and later studied Public Health (MSc) and Epidemiology (PhD) at the London School of Hygiene and Tropical Medicine of the University of London.

He established and managed the Ghana Neglected Tropical Diseases Control Programme for eight years. For twelve years, he was Director for Research and Development of the Ghana Health Service where he was responsible for health systems and implementation research.

From 2009 to 2016, he worked for the University of Ghana initially as Vice-Dean and Professor of Epidemiology and Disease Control at the School of Public Health, and later as the Pro-Vice-Chancellor responsible for Research, Innovation and Development. From 2016 to 2022, he was the Vice-Chancellor of the University of Health and Allied Sciences in Ghana. He is currently an Adjunct Professor of Global Health at the Georgetown University in Washington DC, USA. He serves on several international research review committees and boards and has over 150 publications in peer-reviewed journals.



## Kwame Shanaube

**Zambart, Zambia**

Dr Kwame Shanaube is a clinical epidemiologist, currently serving as the Deputy Director of Research at Zambart and as an honorary lecturer at the University of Zambia School of Public Health. She has 18 years of experience working in public health research. Her research interests cover a wide range of disciplines from TB/HIV epidemiology, community-based cluster randomised trials, and operational research through evaluation of field diagnostics to adolescent health. Over the past 18 years, Dr Shanaube has been involved in several studies reflecting these areas. She is the country principal investigator of a multi-country epidemiologic study to assess the IGRA positivity and to build capacity to conduct a TB vaccine efficacy study funded by GATES MRI. Additionally, Dr Shanaube is the country principal investigator of a study looking at bidirectional screening for TB and COVID-19.



## Lindiwe Makubalo

**WHO Regional Office for Africa (WHO/AFRO)**

Dr Lindiwe Makubalo was appointed to the position of Assistant Regional Director in 2021. She oversees the Regional Office's effort to strengthen Coordination and Integration of functions. In addition, she is responsible for cross cutting areas - Anti-microbial resistance, Diagnostics and Laboratory Services, Data Analytics and Knowledge Management, Research, Integrated Service Delivery as well as new units focusing on Strategic Development & Monitoring and Science & Innovation. Dr Makubalo has over 25 years of national and international experience in epidemiology and public health and was involved in health reform and restructuring of the health sector in South Africa. She has served in numerous national and international expert advisory committees including the South African Medicines Control Council, Medicines Control Council and UNITAID.

Prior to joining the WHO Regional Office for Africa, Dr Makubalo held a diplomatic position as Minister – Health, to the United Nations representing the South African Government and contributing to global policy shaping in diverse areas including UHC, NCDs, Ebola, Covid-19, and access to medicines. She has held positions at WHO HQ responsible for Health Systems, the Tropical Diseases Research Centre in Zambia focusing on tropical diseases research and PHC delivery systems; and the South African MRC focusing largely on HIV/AIDS.



## Marcel Tanner

### EDCTP High Representative

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. He 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.



## Michael Makanga

### EDCTP, Netherlands

Dr Makanga is a clinician-scientist with 28 years of professional experience of working on health and poverty-related infectious diseases in Africa. This includes 24 years of work experience on medical product development and clinical regulatory activities. He holds a Medical Degree from Makerere University, Uganda; a Master's Degree at the University of Liverpool, and a PhD Clinical Pharmacology at the Liverpool School of Tropical Medicine, United Kingdom. He is also a Fellow of the Royal College of Physicians of Edinburgh, Scotland. Dr Makanga is the Executive Director of EDCTP. Before joining EDCTP, Dr Makanga was first in clinical practice and academia, and later clinical research and research management. Moreover, he has served in various scientific and policy advisory boards for international product development, philanthropic organisations, World Bank and pharmaceutical companies involved in developing medicinal products for poverty-related and neglected diseases.



## Santiago Martinez

### University of Agder, Norway

Dr Santiago G. Martinez is an Associate Professor in Digital Health at the University of Agder (Norway). He is part of the DUALSAVE-FGS project consortium of 27 researchers in 9 institutions, who do implementation research on Female Genital Schistosomiasis (FGS) in Mozambique, Eswatini and South Africa. He is a work package co-leader with the aim to design and

evaluate an evidence-based education and training program for healthcare professionals (HCPs) to diagnose FGS at the point of care (PoC). He is also the main supervisor of the PhD student (Ms. Andrea Jervell Hult, MD) connected to that work package. He designed the state-of-the-art Usability laboratory for education and research in the University of Agder, Norway. He has tutored more than a 100 Master students from information and communications technology, medicine and nursing. He has contributed to European and Norwegian projects in collaboration with hospitals and other stakeholders, centred on FGS, people living with HIV (in collaboration with the King's College of London and Southern Norwegian hospital), and chronic obstructive pulmonary disease. He has published more than 90 articles on digital health, of which the latest in collaboration with the WHO and UNAIDS about the production of the Pocket Atlas for FGS led by Prof. Eyrun Kjetland and Pamela Mbazazi.



## Rosanne Rotondo

**Novartis, United States**

Rosanne has been with Novartis for 16 years. In her current role, Rosanne leads the Global Health Access team responsible for the development and execution of new approaches to maximize access to medicines, both within the Global Health unit and the wider enterprise in service of underserved populations. In her previous roles Rosanne led the Global Health Flagship Program Teams focused on Malaria, Leprosy, Chagas and Sickle Cell Disease, was the head of Health System Strengthening & Innovation and facilitated the implementation of the Novartis Access Principles as well as the development and integration of global health innovation into the core business of Novartis.

Prior to joining the Global Health organization, Rosanne was the Development Head, Centre of Excellence, Emerging Markets. Rosanne held the position of Strategic Project Leader in the Established Medicines & Anti-Infectives Development Unit, transferring from the Consumer Health Division where she was Head of the Rx to OTC switch Franchise. During her 8 years in Novartis Consumer Health, she held several leadership positions. Her experience also includes clinical trial management as well as other development functions. She has been in the pharmaceutical industry for over 30 years, in pharma, biotechnology, and consumer health.

Rosanne is a registered nurse, licensed in New Jersey, holds a Bachelor's of Science in Nursing from the University of Connecticut, and has completed work towards a Masters of Public Health

## **European & Developing Countries Clinical Trials Partnership**

The Hague, the Netherlands, September 2023

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

### **Europe Office**

#### **Postal address and visiting address**

Anna van Saksenlaan 51  
2593 HW The Hague  
The Netherlands

**Phone:** +31 70 344 0880/0897

**Email:** [info@edctp.org](mailto:info@edctp.org)

**Web:** [www.edctp.org](http://www.edctp.org)

**Twitter:** @EDCTP

**YouTube:** edctpmedia

### **Africa Office**

Postal address

P.O. Box 19070

Tygerberg 7505, Cape Town  
South Africa

### **Visiting address**

Francie van Zijl Drive,  
Parowallei 7505, Cape Town  
South Africa

**Phone:** +27 21 938 0690

**Fax:** +27 21 938 0569



*The power of sharing science*