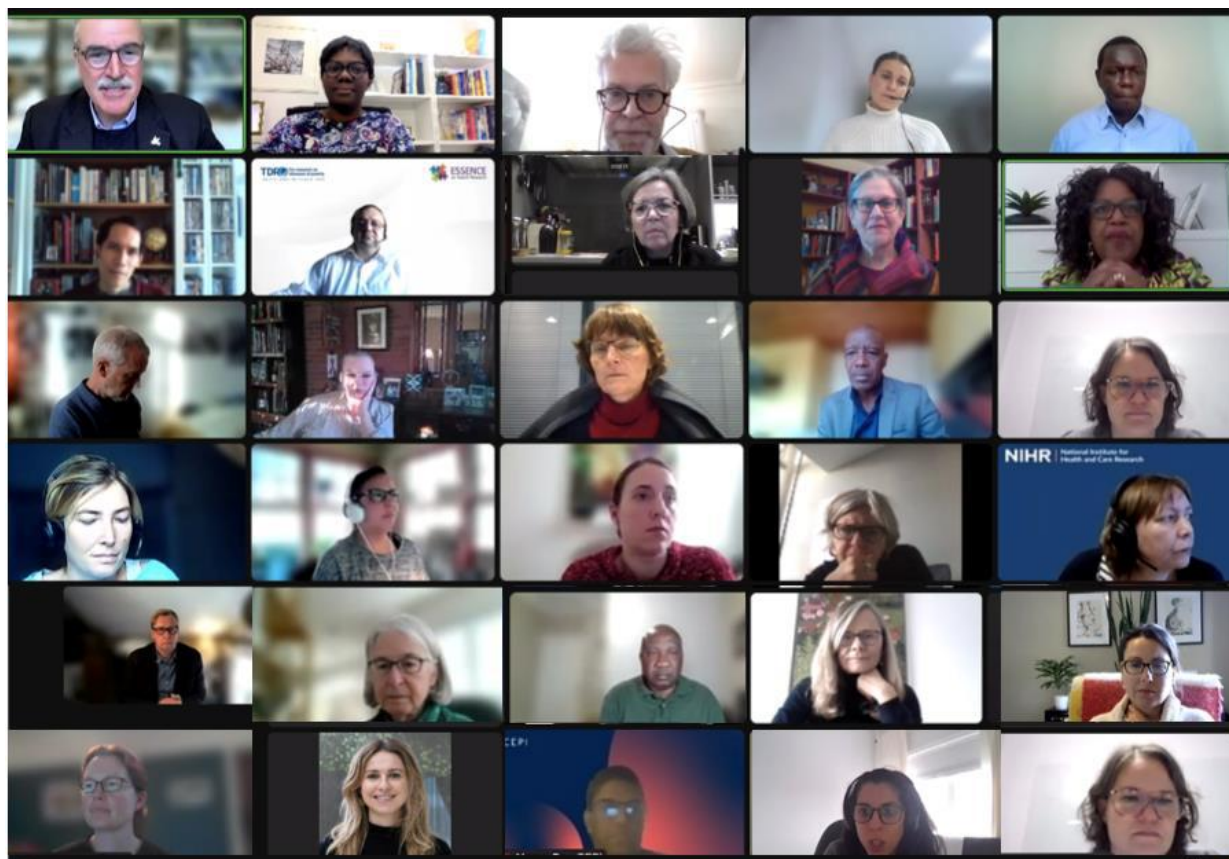


**Third Meeting of the ESSENCE Mechanism for Review of Investments in  
Research Capacity Strengthening in low- and middle-income countries  
focused on Funder Coordination**

**18 November 2022**



## Meeting Notes

**Objective:** The objective was to convene funders of global health research capacity strengthening (HRCS) for clinical research related to pandemic preparedness and share information on current and future key initiatives, best practices, and lessons learned; improve coordination; and increase equity and effectiveness in capacity strengthening efforts. Emphasis was given to capacity strengthening efforts in geographic areas at the lowest levels of capacity.

**Participants:** Major funders of health research capacity strengthening including those from high-income countries (HICs), low-and middle-income countries (LMICs), multilateral organizations, and philanthropy. (Researchers and other implementers and stakeholders in capacity strengthening activities will be consulted in other fora).

**The agenda and list of participants** are available in Annexes 2 and 3.

**The presentation slides** are enclosed to these notes following the order in which they were presented.

## 1. Welcome and background on ESSENCE / Meeting overview and background

Session co-chairs: **Peter Kilmarx**, Co-Chair, ESSENCE WGRI<sup>1</sup>, FIC/NIH<sup>2</sup>; **Thabi Maitin**, Co-Chair ESSENCE, Co-Chair, WGRI, SAMRC<sup>3</sup>

---

**Thabi** welcomed all attendees on behalf of the [ESSENCE](#) group and stated how delighted they are to have all participants join the meeting. She reiterated the role that ESSENCE plays in bringing together key funders of health research on an equal level to share the excellences of how they fund research, the challenges they face, and the opportunities they see in improving the work they are doing in LMICs. **Peter** briefly discussed the meeting overview and background, focusing his presentation on the background of WGRI as part of ESSENCE.

### Presentation on WGRI:

- The working group convened in 2018 with a goal to improve the collaboration among the funders of health research capacity strengthening following the report that was sponsored by the World Bank and CEPI, titled Money and Microbes.
- The simple metrics for national health research capacity involves three indicators, of which the working group looked at the number of clinical trials in a country in the WHO registry, the number of funding research activities in the country listed in the world report, and number of publications from a country listed in Scopus.
- The Global Health Security Agenda (GHSA) has established a R&D task force that is developing more detailed indicators that could be used as part of a joint external evaluation (JEE) for countries to access their own R&D capacity relevant to pandemic preparedness; and in order to use that to mobilize resources.
- ESSENCE is hopeful that funders would increasingly use these metrics to guide their work of capacity strengthening and that jointly, can have targets in developing road maps for achieving a rational level of health research capacity around the world.
- For additional background on WGRI and other components of the ESSENCE Mechanism, see Annex 1.

## 2. Funder strategies and future initiatives for research capacity strengthening for pandemic preparedness in LMICs – PART 1

Session moderated by **Garry Aslanyan**, WHO/TDR, Coordinator, ESSENCE Secretariat.

---

### a. [Global Research Collaboration for Infectious Disease Preparedness](#) (GloPID-R) - **Hans-Eckhardt Hagen**

A quick run through of the objectives of the Global alliance funding organizations as part of GloPID-R investing in research related to new or re-emerging infectious diseases to increase preparedness and facilitate rapid research response was made to lead off the discussion on funder strategies and future initiatives.

#### *Funder initiatives*

- GloPID-R is not a funder itself but a global network of funding agencies.
- While capacity strengthening is key for GloPID-R, it cannot itself finance its own programme. Instead it can influence through provision of evidence and guidance for members (and beyond) on identified funding priorities/gaps.

---

<sup>1</sup> WGRI - Working Group on Review of Investments

<sup>2</sup> FIC/NIH - Fogarty International Center, U.S National Institutes of Health

<sup>3</sup> SAMRC - South African Medical Research Council

- Key to this is the planned establishment of joint funding calls on specific topics, which will involve capacity strengthening.
- The development of regional hubs, currently underway for Asia-Pacific and the African continent, will strengthen the voice and ownership of LMICs.
- There will be many changes in 2023 including moving from just being a convening entity to an enabling platform, focusing on developing tools and instruments to assist membership achieving improved funding efficiency.
- As of January 2023, GloPID-R's Secretariat will operate from its new host organization, the Charité University Medicine in Berlin, embedded in their new Centre for Global Health, having successfully secured three more years of upstream funding from the European Commission.

b. [Coalition for Epidemic Preparedness Initiatives](#) (CEPI) - **Paul Oloo**

The workings of CEPI was put in perspective within the domain of its work towards a state where epidemics and pandemics are no longer threats to humanity through accelerating the development of vaccines and other biologics against pandemic and epidemic threats.

*Funder strategies*

- CEPI is funding the **ENABLE** multisite prospective cohort studies on Lassa fever in 5 West African countries to support readiness for future advanced stage vaccine trials through improving infrastructure, developing and training of staff at the sites, as well as promoting south to south collaborations and discussions.
- Through the **ENABLE** study strengthening of existing capacity, local leadership and ownership of country studies and supportive collaboration with community and national authorities are a priority. There has been significant investment in the clinical trial sites.
- Capacity building is a component of the diverse calls for proposals issued by CEPI.
- In considerations for future outbreaks in the areas with lower capacity, CEPI has clinical trials that are ongoing in LMICs in Asia and in Latin America to further build capacity in readiness for the next epidemic or pandemic.

*Future initiatives*

- In the short-term, preparations for West African Lassa Phase 3 efficacy trials would include identification of trials sites fit for purpose, identifying suitable partners to support operational activities and capacity building and to fit this concept into the existing ecosystem and networks.
- Long-term Research preparedness would ensure strategic site readiness to support the 100 days mission with a broader focus on portfolio diseases and any other future outbreaks using sites identified as best positioned for long-standing self-sustained partnership, through relationships with well-connected hubs, and sustainability of the efforts to be implemented.
- CEPI has an aspiration to develop safe and effective vaccines in 100 days from the moment a pathogen is sequenced or a vaccine is recognized, to initial availability for use.
- To achieve this aspiration, CEPI is investing in understanding the pathogens and developing vaccine libraries through having preliminary investments related to collecting data around them. This would enable it and its partners to activate clinical trials or other efforts to expedite vaccine developments.
- CEPI is also keen to support vaccine manufacturing initiatives in LMICs with an initial focus on vaccine manufacturing and tech transfer initiatives in Africa

c. [UK Collaborative on Development Research](#) (UKCDR) - **Daniela Toale; Adrian Bucher**

**Daniela and Adrian** presented a brief introduction to UKCDR, its effort in bringing together major UK government departments, and other players in international development research.

#### *Funder strategies*

- UKCDR cannot speak on behalf of the UK funders but works closely with them in their areas of pandemic funding, and research capacity strengthening.
- In partnership with GloPID-R, UKCDR set up the COVID CIRCLE programme with the intention of coordinating effort, connecting networks of researchers, and collating learnings to inform future epidemic and pandemic responses with a focus on lower-resource settings.
- A key component of the programme is the [COVID-19 Research Project Tracker](#), housing the databases of funded projects that addresses COVID-19.
- It consists of about 20,000 research projects worth at least \$7.2 billion, and of which 17 ESSENCE members or observers have projects worth at least \$2.2 billion.
- See the COVID CIRCLE report looking at funding and undertaking research during the first year of the pandemic – lessons for funders [here](#). The report is currently being updated to look beyond the first year and that will be published in January 2023.

#### Key issues – PART 1

- How UKCDR was able to track the research capacity strengthening programmes as standalone, as well as capture grants with capacity strengthening as embedded in the projects. This was in consultation with the funders and the programme teams.
- The issue of vaccine equity as part of the lessons learned from covid-19 outbreak, and what mechanisms are being put in place by CEPI to avert such in the near future.
- CEPI has put in place mechanisms prior to the funding development activities to assure that the developers contracted would make certain that the vaccines they produce will be given to those who need them during pandemic or an epidemic.

---

### 3. [Funder strategies and future initiatives for research capacity strengthening for pandemic preparedness in LMICs – PART 2](#)

Session moderated by **Linda Kupfer**, *Co-Chair ESSENCE, FIC/NIH*.

---

#### a. [Fogarty International Center, U.S National Institutes of Health](#) (FIC/NIH) - **Barbara Sina**

The presentation focused on NIH's efforts in building emerging viral research capacity in West African Countries affected by the Ebola epidemic in 2014. As a biomedical research funder rather than an international development agency, priority was to focus on Liberia, Guinea and Sierra Leone after the pandemic in 2014.

#### *Funder strategies*

- NIH builds capacity on what already exists through equipping a fantastic research facility in Liberia, collaborating with the Lassa Fever research lab in Sierra Leone, and investing in a research center, as well as building a training programme in Guinea.
- It also builds capacity through collaborative research and training grants, of which research capacity building is a high priority.
- Use available exceptional mechanisms by setting up specifically targeted funding opportunities that were limited to building research capacity in the three countries.

- NIH works with many organizations in West Africa and the US Government that have ongoing research projects in the countries, and put together the critical people who are willing to work on building capacity for a long time, especially the LMIC leaders with the vision for research capacity to be built in their institution.
- Gather together research collaborators regularly, have frequent sharing meetings to solve problems, and involve other groups to contribute whatever they can.

**b. [Bill & Melinda Gates Foundation](#) (BMGF) - *Thy Pham***

BMGF is a grant-making organization and a private funder that works with many of the groups at this meeting. More than 1 Billion in capacity building investments (also sometimes referred to as health systems strengthening and human resources for health) have been made from 2004-2017 including training institutions, finance/budget, policy, infrastructure, supplies, equipment, training, and information systems; the focus of this presentation is a small sampling of current investments. Two illustrative examples of investments include: [CDT-AFRICA](#) and [CTC-AFRICA](#).

*Funder strategies*

- Within Global Health, the foundation makes capacity building investments in support of product development and research networks, which are important implementers for products in the pipeline.
- Its approach around capacity strengthening include:
  1. Engagement across partners (e.g. consortia, coordination mechanisms).
  2. Prioritization is based on burden of disease.
  3. Engage directly with local leaders; build from existing, remove barriers to access and increase data insights.

**c. [European and Developing Countries Clinical Trials Partnerships](#) (EDCTP) - *Thomas Nyirenda***

EDCTP has 4 major areas of focus related to capacity development: (i) support to develop research governance at a country level in collaboration with WHO Afro, (ii) improvement of regulations and ethics composite, (iii) development of researchers as future leaders, and (iv) the development of networks. The summary of achievements, 2014-2021 can be found [here](#).

*Funder strategies*

- Up to 1 billion Euro has been spent in the last 8-10 years in supporting clinical research. Embedded in them are other issues of institutional support including infrastructure, development, and learning by doing in sub-Saharan Africa.
- Funds are also invested in separate clinical research capacity grants related to the development of networks and future research leaders with a focus on fellowship programmes.
- These networks are working on preparedness for epidemics and creation of networks of excellence for South-South/South-North collaborations.
- The PANDORA-ID-NET and ALERRT consortia have helped build platforms as part of EDCTP's contribution to preparedness for future outbreaks of epidemics.

*Future initiatives*

- EDCTP3 programme was launched in May 2022, building on the first and second funds activities (2004-2024) for research capacity building in Africa.
- The focus of EDCTP3 would be centered on the implementation of programmes similar to the past two programmes, though roles of participants may be a bit different due to the legal framework under which EDCTP3 is implemented.
- There will be a lot more input to the work programme, especially with additions of epidemics preparedness work and anti-microbial resistance.



d. [German Federal Ministry of Education and Research](#) (BMBF) - **Andrea Spelberg**

One of BMBF's flagship programmes in the area of research capacity strengthening in LMICs is the Research networks for health innovations in sub-Saharan Africa (RHISSA). The networks contribute much to capacity building through the provision of excellent training for students, and conduct of excellent research.

*Funder strategies*

- The research topics are chosen based on the local needs in sub-Saharan Africa.
- The networks have African scientists as the main coordinating PIs who receive direct funding from Germany.
- The three key success factors for RHISSA are:
  1. Excellent research with local leadership
  2. Interdisciplinary networking,
  3. Part engagement as early as possible.

*Future initiatives*

- BMBF has been supporting EDCTP previously, and will continue for the third funding programme phase.
- The first funding phase for RHISSA is finishing, but the ministry will continue to fund more networks for the next 5 years (2023 – 2028).
- BMBF is a founding member of CEPI, and are happy to be able to continue with the support as well.
- Product development is an important part of BMBF portfolio, it will continue to support product development partnerships (PDPs).
- Currently in the selection process of a new funding phase for PDPs starting in 2023.

Key issues – PART 2

- In response to the question about how the current and new capacity being built can be maintained in order to be prepared for the next round of outbreaks, it was noted that it is up to NIH grantees to make the argument that it would be necessary to continue to build the capacity, and decide on what they want to do next.
- With regard to whether the agencies referenced (BMBF, NIH, and EDCTP) underscore the importance of scientific capacity building explicitly in their calls, it was underlined that BMBF does not call explicitly for capacity building in each and every proposal. It is up to the applicants to show or make a case for what will go to research and capacity building.
- On how EDCTP ensures equity in engagement in sub-Saharan Africa, it was mentioned that EDCTP balances excellence and needs, as well as ensures that the networks of excellence show in their deliverables that they are bringing in, and collaborating with the weaker countries.
- The agenda of the dialogue around issues of building capacity especially in the countries at the lower levels and how funders do that practically is deepening.
- ESSENCE is playing a significant role in bringing together relevant funders to openly have the discussion of what some of the challenges are, and how they are addressing them.
- While ensuring equity in engagement might be a difficult area to navigate, groups such as ESSENCE should attempt to come up with recommendations of standards for funders to uniformly enrich and measure up to the diseases that the world faces.
- Common solutions are needed to address and overcome the challenges raised at this meeting and many more, using platforms such as ESSENCE in order to be able to answer the question, "What next".

4. [Report out and discussion](#)

Session moderated by **Peter Kilmarx**, co-chair WGRJ

### Highlights from breakout groups deliberation

- There is an appetite for more discussion even though a lot of ground was covered by the presenters and across the four breakout groups.
- How to support and work with the countries with lower levels of capacity, strengthen mentoring, support the South-South interactions, provide the infrastructure, and engage the government and local partners in their role, are critical issues for further discussion.
- More time for more interaction is needed to have better coordination, reducing the duplication, and being more effective and more equitable.
- Does a larger coordination mechanism exist at the moment that ESSENCE needs to be a part of? Is there room for the funders at this meeting to argue for such?
- The World Health Assembly (WHA) is calling for a consultation for broader coordination. This provides an important opportunity for funders to think of how to have different kinds of themes around areas of capacity development that matter to clinical research and development of interventions.
- It is essential to elevate the need for funders to have more of this kind of interactions in a framework related to what are the actual key building blocks that funders think should be part of capacity, and who is doing what and where, and mapping of all of that.
- ESSENCE will continue to play a role around the focus on the capacity per se, and not around the content of the research.

### 5. AOB

- As part of the work of WGRI, ESSENCE is zooming to a country level from the broader mechanism in 2023. The working group has looked at Senegal and Bangladesh, and so far have made better progress with Senegal. At the moment, ESSENCE is in the process of planning the visit of funders or those who are interested or funding things in Senegal in February of 2023. Participants who are interested in joining the interest group of Senegal should reach out to Garry Aslanyan at [aslanyan@who.int](mailto:aslanyan@who.int).
- U.S. NIH/NIAID has a staff member in Senegal who would be willing to join the Senegal discussion. WGRI Co-Chairs and ESSENCE Secretariat to reach out to Joyelle Dominique at [dominiquejk@niaid.nih.gov](mailto:dominiquejk@niaid.nih.gov).

### 6. Closing remarks

- Thabi thanked all the presenters and the working group members for a great gathering and discussion, as well as all the participants for their time and valuable insights. It is important to work through a language that is the same to every funder to better define what capacity building means. She concluded that all the issues discussed at the breakout session loosely falls under equitable partnerships, as such further work of the working group will be more of putting emphasis on this aspect. The co-chairs look forward to welcoming everyone again.

### 7. Meeting adjourned at 17:03 Central Eastern Time.

**Annex 1: *Addition background on WGRI and other components of the ESSENCE Mechanism***

As part of the [ESSENCE on Health Research](#) initiative, the Working Group on Review of Investments (WGRI) was formed to improve coordination and collaboration among funders of health research capacity strengthening following a report sponsored by the World Bank and the Coalition for Epidemic Preparedness Innovations titled [Money and Microbes](#), which was launched at the World Health Assembly in 2018. The report's key recommendation was that clinical research capacity should be considered an essential element of pandemic preparedness. The Working Group was established with more than a dozen ESSENCE members, including diverse representation by geography, country income level, the public sector, and philanthropy. In the first year, the [framework for a coordination mechanism](#) was established whereby funders would use data from the World Health Organization (WHO) [Global Observatory](#) on Health Research and Development (R&D) to help guide their activities for the greatest impact. Funders are encouraged to coordinate activities with each other to increase their effectiveness and equity, decrease duplication of effort, and prioritize capacity strengthening in countries with the greatest need. The overall goal is increased research on national health priorities as well as improved pandemic preparedness, and, ultimately, fewer countries with very limited research capacity. To date, the Working Group has developed and disseminated a basic set of [metrics for national health research capacity](#), assessed different models of coordination and collaboration, and is identifying opportunities to better coordinate investments in partnership with national health authorities, researchers, and other stakeholders.



Annex 2: *Breakout deliberations*

Group	Output of the breakout sessions
1	<ul style="list-style-type: none"> <li>How do funding agencies access local needs and investments when it comes to capacity strengthening programs? Variety of responses: haphazardly, by chance, through networks, or fit into partnerships agreement</li> <li>Are there restrictions for the science funding agencies moving away from simply funding excellence in science research?. How do funding agencies accommodate research capacity strengthening needs and goals? Variety of responses: some are standalone programs, some are partnership programs.</li> <li>Types of capacity building outside of the research space, and do other funding agencies look at administrative supply chain issues as key components of research capacity outside of threshold research space? Two approaches were identified: embedded in research capacity approach and the reinforcing approach</li> <li>Evaluation and measuring of the impact of capacity strengthening programs and continued support of these program outcomes space - how do funders measure these outcomes?</li> <li>Experience with coordination mechanisms, and the inherent challenges with the distributed decision making at science funding agencies when it comes to coordination at LMICs.</li> </ul>
2	<ul style="list-style-type: none"> <li>The focus should be around sustainability issues and how funders can engage with country partners, especially governments.</li> <li>There is a lot of brain drain/circulation/poaching. A lot of funders and private institutions even though do a lot of training, many are not seeing the crucial role of government in creating a career pathway and retention for people. That is going to be an ongoing concern.</li> <li>Some other models of funders have clear long pathways for funding not just one fellowship or training, but support that really helps to retain people over a long-term.</li> <li>There is currently a disjointed system and a leaky pipe that need more focus on building mentoring in the academy institutions and supporting and providing mid training career and support</li> <li>Emphasis on thinking about, and supporting peer networks</li> <li>A lot of interactions and discussion among funders is around products or disease areas. Funders need to spend more time talking about capacity per se, and strengthening the metrics used or common framework, and the vocabulary used for organizing work.</li> </ul>
3	<ul style="list-style-type: none"> <li>Do funders have the actual narrative of where people are funding in pandemic preparedness, and where are the major gaps? And what should be included in those narratives?</li> <li>Grassroots networks and ownership in the global South, so things are not just coming from the North. The discussions also focused on the difficulty in identifying sites to do clinical trials, and the potential for ceding collaborative studies between countries during the pandemic</li> <li>A need for a rapid funding mechanism that can respond more rapidly than most of the current funding mechanisms' normal paces.</li> <li>Fostering South-South training programs, not just more to the South, and what would be required, as well as having a low engagement government, which will form the basis of their response and the capacity that is chosen.</li> <li>Importance of data exchange during epidemics and pandemics, and how that can effectively be done.</li> </ul>

- 4
- Avoid duplication and focus on collaboration to address the issue of resources.
  - Focus on equity during capacity building
  - Funders should better define what capacity building means; what are the best practices, and what are some of the gaps.
  - How can funders empower some countries at the lower level or sites without the capacity, diversification of funding, and infrastructure funding.

Annex 3: **AGENDA**

Time	Subject	Presenter/Moderator
<b>Friday, 18 November</b>		
<b>13:55</b>	Participants to connect at least 5 minutes in advance.	
<b>14:00</b>	Welcome and background on ESSENCE	Thabi Maitin, SAMRC, co-chair
<b>14:10</b>	Meeting overview and background	Peter Kilmarx, FIC/NIH, co-chair
<b>14:20</b>	<p>Part 1. Funder strategies and future initiatives for research capacity strengthening for pandemic preparedness in LMICs</p> <ul style="list-style-type: none"> <li>▪ <b>Hans Hagen</b>, Global Research Collaboration for Infectious Disease Preparedness (GLoPID-R)</li> <li>▪ <b>Paul Oloo</b>, Coalition for Epidemic Preparedness Initiatives (CEPI)</li> <li>▪ <b>Daniela Toale</b>, UK Collaborative on Development Research (UKCDR)</li> <li>▪ <b>Adrian Bucher</b>, UKCDR</li> </ul> <p>Q&amp;A</p>	Garry Aslanyan, TDR and ESSENCE Secretariat, moderator
<b>15:10</b>	BREAK	
<b>15:20</b>	<p>Part 2. Funder strategies and future initiatives for research capacity strengthening for pandemic preparedness in LMICs</p> <ul style="list-style-type: none"> <li>▪ <b>Barbara Sina</b>, Fogarty International Center, U.S National Institutes of Health (FIC/NIH)</li> <li>▪ <b>Thy Pham</b>, Bill &amp; Melinda Gates Foundation</li> <li>▪ <b>Thomas Nyirenda</b>, European and Developing Countries Clinical Trials Partnerships (EDCTP)</li> <li>▪ <b>Andrea Spelberg</b>, Head of Division “Global and Public Health Research” at the German Federal Ministry of Education and Research (BMBF)</li> </ul> <p>Q&amp;A</p>	Linda Kupfer, FIC/NIH, moderator
<b>16:10</b>	<p>Breakout discussions (12-15 participants per room)</p> <p>Discussion topics:</p> <ul style="list-style-type: none"> <li>• What actions can funders take together and individually to be more effective and equitable in strengthening research capacity for pandemic preparedness in LMICs?</li> <li>• What is the easiest way for funders to coordinate their future plans?</li> </ul>	

	<ul style="list-style-type: none"> <li>– Should the horizon of planning be next 2-3 years? Is there a way to change/revise plans of funding agencies based on what others are planning and if yes, how best can it be done?</li> <li>• Is it feasible or desirable to establish metrics, targets, a road map, and budgets for strengthening research capacity for pandemic preparedness in LMICs?</li> </ul>	
<b>16:30</b>	Report out and discussion	Peter Kilmarx, moderator
<b>16:55</b>	Closing remarks	Thabi Maitin
<b>17:00</b>	Adjourn	

Annex 4: **Participants**

<b>Organization</b>	<b>Participant</b>	<b>Email address</b>
Bill & Melinda Gates Foundation (BMGF)	Thy Pham	<a href="mailto:thy.pham@gatesfoundation.org">thy.pham@gatesfoundation.org</a>
Birat Nepal Medical Trust	Maxine Caws	<a href="mailto:mcaws@hotmail.com">mcaws@hotmail.com</a>
Canadian Institutes of Health Research (CIHR)	Fatma Boulouednine	<a href="mailto:Fatma.Boulouednine@cihr-irsc.gc.ca">Fatma.Boulouednine@cihr-irsc.gc.ca</a>
	Marisa Creatore	<a href="mailto:Marisa.Creatore@cihr-irsc.gc.ca">Marisa.Creatore@cihr-irsc.gc.ca</a>
Coalition for Epidemic Preparedness Initiatives (CEPI)	Bola Jones	<a href="mailto:bola.jones@cepi.net">bola.jones@cepi.net</a>
	Neren Rau	<a href="mailto:neren.rau@cepi.net">neren.rau@cepi.net</a>
	Paul Oloo	<a href="mailto:paul.oloo@cepi.net">paul.oloo@cepi.net</a>
Deutsche Gesellschaft für Internationale Zusammenarbeit (GIZ)	Karen Gosch	<a href="mailto:karen.gosch@giz.de">karen.gosch@giz.de</a>
DLR-Project Management Agency	Detlef Boecking	<a href="mailto:Detlef.boecking@dlr.de">Detlef.boecking@dlr.de</a>
	Theresa Kobe	<a href="mailto:theresa.koebe@dlr.de">theresa.koebe@dlr.de</a>
European and Developing Countries Clinical Trials Partnership (EDCTP)	Thomas Nyirenda	<a href="mailto:nyirenda@edctp.org">nyirenda@edctp.org</a>
	Moses Bockarie	<a href="mailto:bockarie@edctp.org">bockarie@edctp.org</a>
Fogarty International Center, U.S National Institutes of Health (FIC/NIH)	Peter Kilmarx, Co-Chair WGRI	<a href="mailto:peter.kilmarx@nih.gov">peter.kilmarx@nih.gov</a>
	Linda Kupfer, Co-Chair ESSENCE	<a href="mailto:Linda.kupfer@nih.gov">Linda.kupfer@nih.gov</a>
	Christine Sizemore	<a href="mailto:christine.sizemore@nih.gov">christine.sizemore@nih.gov</a>
	Barbara Sina	<a href="mailto:sinab@mail.nih.gov">sinab@mail.nih.gov</a>
	Geetha Bansal	<a href="mailto:geetha.bansal@nih.gov">geetha.bansal@nih.gov</a>
	Unja Hayes	<a href="mailto:unja.hayes@nih.gov">unja.hayes@nih.gov</a>
	Judith Coan-Stevens	<a href="mailto:judith.coan-stevens@nih.gov">judith.coan-stevens@nih.gov</a>
Gawani Africa	Martin Egbike	<a href="mailto:Martin.egbike@outlook.com">Martin.egbike@outlook.com</a>
German Federal Ministry of Education and Research (BMBF)	Andrea Spelberg	<a href="mailto:Andrea.Spelberg@bmbf.bund.de">Andrea.Spelberg@bmbf.bund.de</a>
Global Health Research, University of Southampton	Martin Mulenga	
Global Research Collaboration for Infectious Disease Preparedness (GloPID-R)	Hans-Eckhardt Hagen	<a href="mailto:hans-eckhardt.hagen@fondation-merieux.org">hans-eckhardt.hagen@fondation-merieux.org</a>
Institut Pasteur (IP)	Kathleen Victoir	<a href="mailto:kathleen.victoir@pasteur.fr">kathleen.victoir@pasteur.fr</a>
MRC UKRI	Hannah Boycott	
NIH/OD	Michael Cheetham	<a href="mailto:michael.cheetham@nih.gov">michael.cheetham@nih.gov</a>
NIH/NIAID	Lucas Buyon	<a href="mailto:lucas.buyon@nih.gov">lucas.buyon@nih.gov</a>
	Joyelle Dominique	<a href="mailto:dominiquejk@niaid.nih.gov">dominiquejk@niaid.nih.gov</a>
	Sudha Srinivasan	<a href="mailto:sudha.srinivasan@nih.gov">sudha.srinivasan@nih.gov</a>
OGR/NIAID/NIH	Karthik Yarlagadda	<a href="mailto:karthik.yarlagadda@nih.gov">karthik.yarlagadda@nih.gov</a>
	Lucy Ruderman	<a href="mailto:lucy.ruderman@nih.gov">lucy.ruderman@nih.gov</a>
Oswaldo Cruz Foundation (Fiocruz)	Rodrigo Correa	<a href="mailto:rodrigo.correa@fiocruz.br">rodrigo.correa@fiocruz.br</a>
The Research Council of Norway (RCN)	Karine Kålsås	<a href="mailto:kka@forskningsradet.no">kka@forskningsradet.no</a>
Swedish International Development Cooperation Agency (Sida)	Maria Teresa Bejarano	<a href="mailto:maria-teresa.bejarano@sida.se">maria-teresa.bejarano@sida.se</a>
	Kerstin Jonsson Cisse	
	Lisa Roman	



The Association of Commonwealth Universities (ACU)	Beate Knight	<a href="mailto:beate.knight@acu.ac.uk">beate.knight@acu.ac.uk</a>
The South African Medical Research Council (SAMRC)	Thabi Maitin, Co-Chair ESSENCE, Co-Chair WGRI	<a href="mailto:Thabimaitin@gmail.com">Thabimaitin@gmail.com</a>
UK Collaborative on Development Research (UKCDR)	Daniela Toale Adrian Bucher	<a href="mailto:D.Toale@ukcdr.org.uk">D.Toale@ukcdr.org.uk</a> <a href="mailto:a.bucher@ukcdr.org.uk">a.bucher@ukcdr.org.uk</a>
UK National Institute for Health and Care Research (NIHR)	Doreen Tembo	<a href="mailto:D.Tembo@soton.ac.uk">D.Tembo@soton.ac.uk</a>
United States Agency for International Development (USAID)	Margaret M. McCluskey	<a href="mailto:mmccluskey@usaid.gov">mmccluskey@usaid.gov</a>
Wellcome	Bethnan Hamilton Branwen J. Hennig Jonathan Underwood Mark Whittaker Titus Divala	<a href="mailto:B.Hennig@wellcome.org">B.Hennig@wellcome.org</a> <a href="mailto:J.Underwood@wellcome.org">J.Underwood@wellcome.org</a> <a href="mailto:M.Whittaker@wellcome.org">M.Whittaker@wellcome.org</a>
WHO/TDR	Chris Coze Gildas Yahouedo Michael Mihut Sarah Charnaud Cathrine Thorstensen	<a href="mailto:cozec@who.int">cozec@who.int</a> <a href="mailto:yahouedo@who.int">yahouedo@who.int</a> <a href="mailto:mihutm@who.int">mihutm@who.int</a> <a href="mailto:scharnaud@who.int">scharnaud@who.int</a> <a href="mailto:thorstensenc@who.int">thorstensenc@who.int</a>
WHO/TDR and ESSENCE Secretariat	Garry Aslanyan Kemi Oladapo	<a href="mailto:aslanyang@who.int">aslanyang@who.int</a> <a href="mailto:kemioladapo@gmail.com">kemioladapo@gmail.com</a>



# **Funder strategies and future initiatives for research capacity strengthening for pandemic preparedness in LMICs: GloPID-R**

**Dr Hans Hagen**  
**Director of Scientific & Advocacy**  
**GloPID-R**

**Meeting of the ESSENCE  
Mechanism**  
**18 November 2022**

# Short introduction

---

- **Global alliance funding organizations** investing in research related to new or re-emerging infectious diseases in order to **increase reparedness** and **facilitate rapid research response**
- Three main objectives:
  - To support development of **research preparedness** activities in order to reinforce rapid response capacities
  - To facilitate **rapid and aligned funding** of research in an emergency
  - To reinforce GloPID-R's **visibility and capacity** for influence
- **GloPID-R not a funder, therefore no central budget**
- Influence through provision of evidence and guidance for members (and beyond) on identified funding priorities/gaps

# Strategy

- Scientific Advisory Board in 2021
- Scenario planning method in collaboration with the Oxford Saïd Business School
- Mid-term horizon
- Key considerations:

## **Coordination of funding and funding initiatives is a key priority**

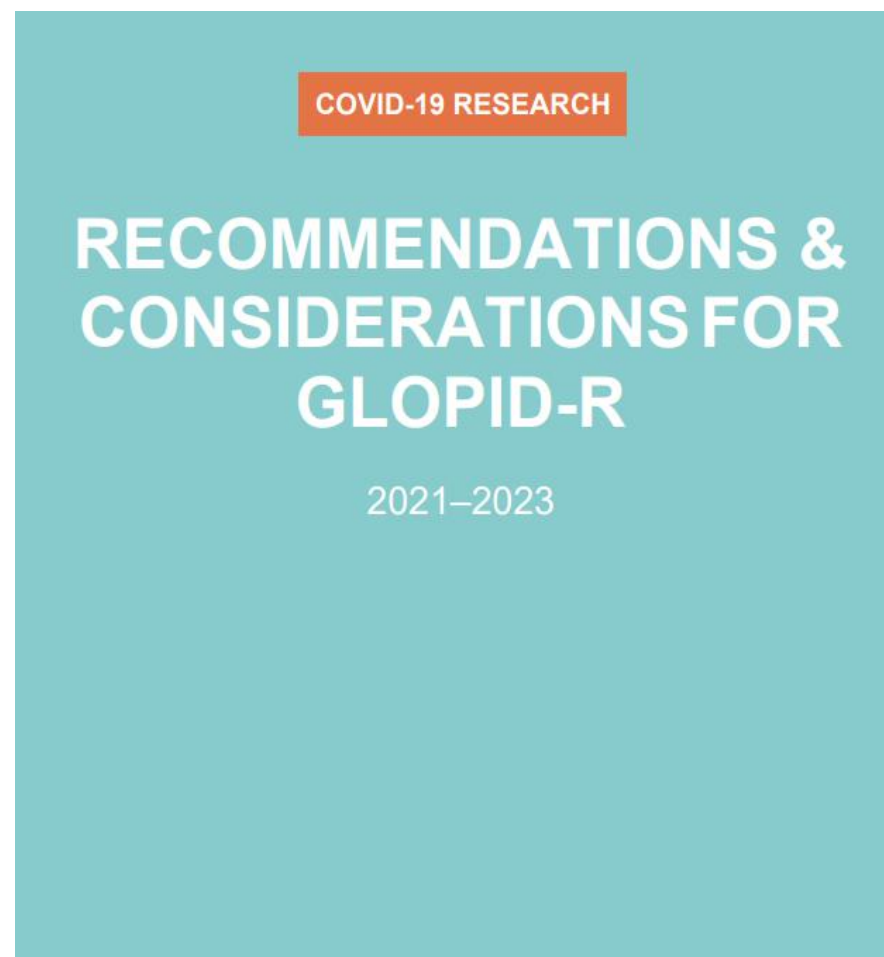
- How & What to fund
- Greater efficiency of research funding
- Common funding mechanisms

## **GloPID-R to focus on research preparedness and response**

- Focused budget & prioritize research beyond COVID-19
- Apply a “filling the gaps” strategy to identify areas for consideration
- Implement GloPID-R regional hubs strategy
- Re-think IP and data right conditionalities & data sharing

## **Support better preparedness through research capacity strengthening**

- Regional preparedness platforms
- One Health approach
- Expand membership to LMICs to address inequity in funding distribution
- Consider for funding a range of policy & economy related measures



**GloPID-R Scientific Advisory Group – June 18, 2021**

# Translation into specific projects

---

- Regional hub development
- Developing a platform for Coordinated Funding
- Pandemic PACT
- GloPID-R Funders Clinical Trial Coordination Roadmap
- Launching a One Health Working Group with STAR-IDAZ
- Plus: Strengthening GloPID-R's governance



# Capacity strengthening

- Expanding membership of LMICs and provide stronger regional ownership (priority setting etc.)
- Coordinated funding will focus on capacity strengthening: addressing specific research gaps relevant to LMICs
- Evidence on funding pattern key to identify research gaps, in particular across LMICs
- Current focus on clinical trials: Living funders roadmap for clinical trials coordination to be published early 2023 includes key considerations for capacity strengthening for clinical trials.
- Governance: Stronger integration of issues concerning the research priorities of LMICs



# Looking to the future

- Three more years of funding secured from the European Commission
- GloPID-R 3.0: Moving from Fondation Mérieux to a new host organisation: Charité Universitätsmedizin
- Increasingly moving from a convening to an enabling role
- Focus on developing tools and instruments to assist membership achieving improved funding efficiency
- Plans to develop a longer-term strategy from 2023 onwards
- Development of a more sustainable business model:
  - Fundraising strategy
  - Secondment model
  - Fee structure





Global Research Collaboration for Infectious Disease Preparedness

[www.glopid-r.org](http://www.glopid-r.org)



The GloPID-R Secretariat is a project which receives funding from the European Union's Horizon 2020 research and innovation programme under grant agreement No 874667.

CEPI

# Global Health Research Capacity Strengthening

Third Meeting of the ESSENCE Mechanism for Review of Investments in Research Capacity Strengthening in LMICs

18 Nov 2022

Paul Oloo- CEPI Clinical Development Lead

# CEPI 2.0

## Vision statement

A world in which epidemics and pandemics are no longer a threat to humanity

## Mission statement

Accelerate the development of vaccines and other biologic countermeasures against epidemic and pandemic threats so they can be accessible to all people in need



## Prepare

for known epidemic and pandemic threats



## Transform

the response to the next novel threat



## Connect

to enhance and expand global collaboration

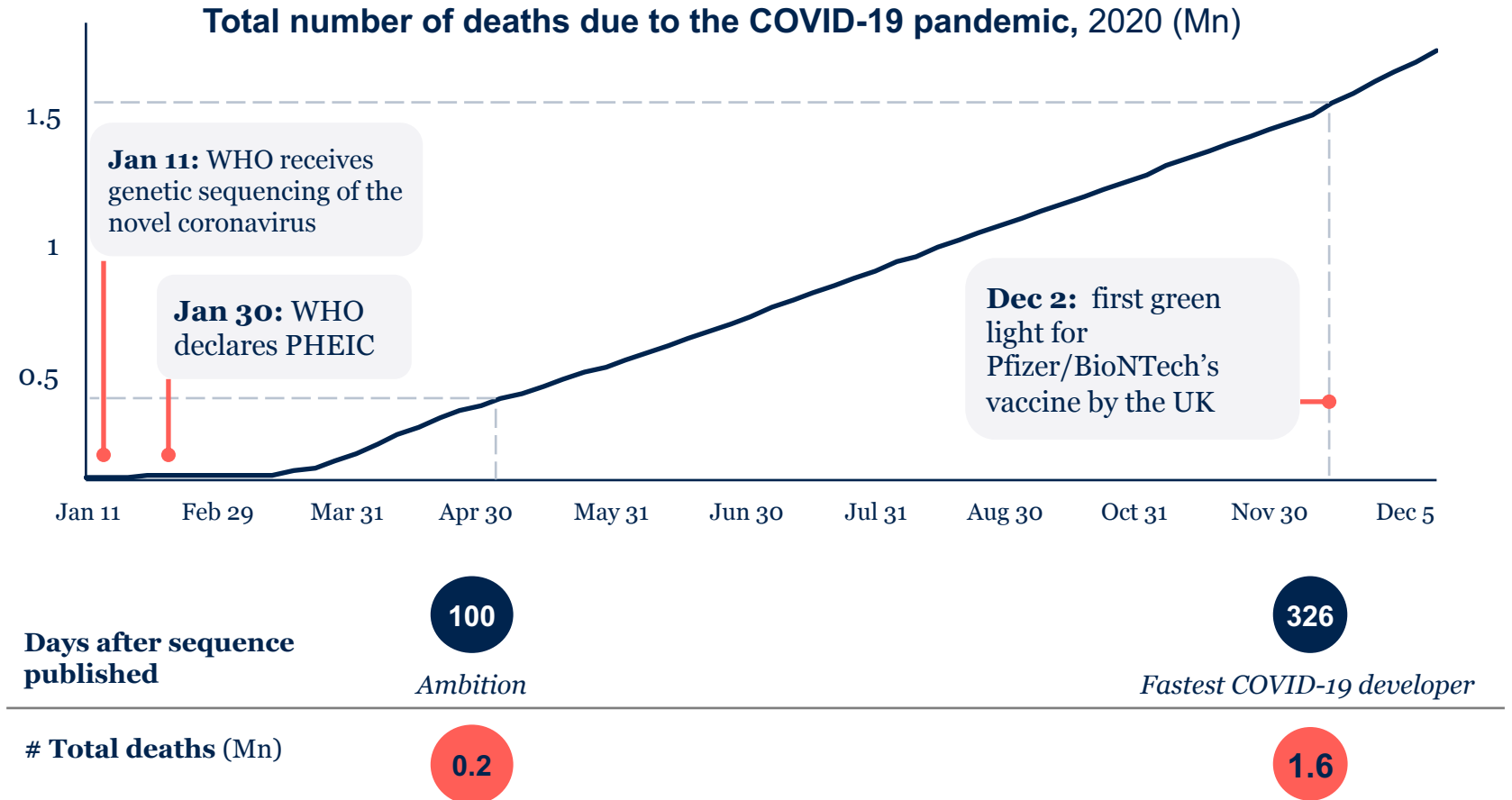
**100**  
**day**  
**aspiration**

To develop a safe and effective vaccine in 100 days from the moment that a pathogen is sequenced and/or the need for a vaccine is recognised to initial availability for use.



## During COVID-19, it took **326 days** for development to EUA by stringent regulatory authority

Further reducing development time to 100 days could significantly reduce the humanitarian and economic burden of future epidemics and improve the world's ability to prevent an epidemic becoming a pandemic altogether.



# CEPI Portfolio Awardees

- CEPI's portfolio comprises a global base spanning multiple continents
- Vaccine developer partners in North America and Europe
- Increasing number of planned and confirmed clinical studies in sites in affected countries across Africa, Asia and Latin America
- Centralized Laboratory initiative to harmonize assays and standards to include laboratories in Africa and Asia

# ***ENABLE* study capacity strengthening**

- **To inform future late-stage efficacy trials, CEPI is funding multisite prospective cohort studies - the *ENABLE* Lassa Research Programme in West Africa - in Benin, Guinea, Liberia, Nigeria, and Sierra Leone**
- **Strengthening existing capacity**
  - Support readiness for future vaccine clinical trials as well as clinical research and public health generally
  - Capacity strengthening activities include infrastructure improvement, staff development, clinical research trainings
  - Promote and facilitate building a community of practice - Inviting site investigators to collaborative discussions, to exchange knowledge, practices and research tools
- **Leadership and ownership by researchers in affected countries**
  - Each country study is led by a local principal investigator (PI), supported by international partners and experts playing advisory/support roles
  - Country PIs are members of the Programme Steering Committee, responsible for successful implementation of the programme
- **Engagement from community to national level**
  - Implementation partners to be used in this study were required to provide letters of support from appropriate local/regional/national authorities as a prerequisite for selection
  - Community engagement is a priority for the programme and all sites have local community engagement expertise

# Evidence generation to support CEPI's 100 days mission

## Research preparedness

... tailored to CEPI's portfolio and regional needs

**2** strategies

### Workstream 1



Support advanced clinical development of portfolio vaccines

e.g. Lassa fever

Operational site readiness for Ph 3 Lassa fever vaccine trials

### Workstream 2



Support multi-regional concepts and ecosystems to tackle the unknown

e.g. Disease X

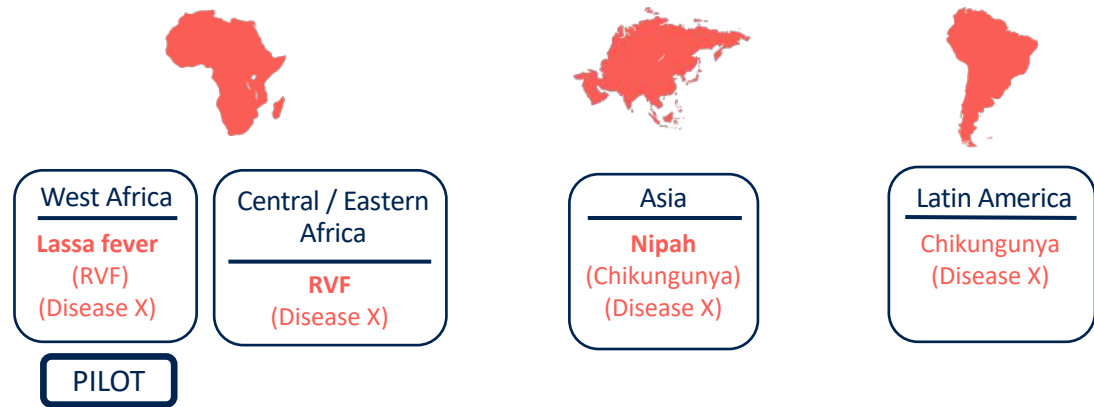
Long-term research preparedness to ensure site readiness for future outbreaks

## Principles...

- ... existing trial capacity must be leveraged, duplication of existing initiatives must be avoided
- ... scientific excellence and local ownership will be key
- ... sustainability of investments will be of utmost importance
- ... all programs will be aligned with national health priorities of governments in target countries

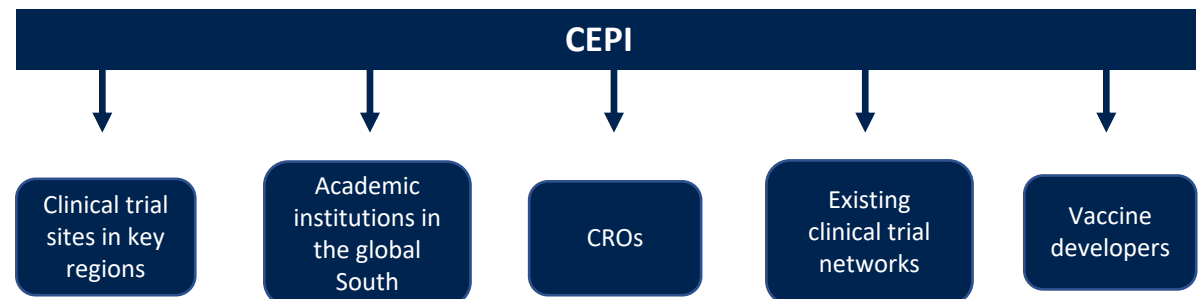
## Multi-regional approach

... based on key geographies for priority diseases



## Multilateral approach

... choosing the best partners to achieve our goals



# Research Preparedness Objectives



## Short term objectives

→ *prepare for Ph3 clinical trials*

### Advanced-stage clinical development

#### Operational readiness for Ph III trials

- Governance/Oversight infrastructure
  - Clear R&Rs and Accountabilities
  - Tiered a/c Regional/Local, etc.
- Regulatory Pathway Mapping/Advance Prep
  - Connect to NRAs (Reg) to identify processes/pathways
  - Develop clinical trial protocols, etc.
- Imp Partner/CRO – leverage scope, expertise and technology
  - CRO capacity-building
  - Introduce novel clinical trial tools
- Site/Study Staff readiness to conduct GCP trials
  - Physical resources and Infrastructure but.....
  - Training, skills, capacity and quality

## Long term objectives

→ *prepare for future outbreaks*

### Research preparedness

#### Research preparedness for future outbreaks

- identify experienced, well-connected hubs to enter a long-term relationship with
- Establish/support local governance to work on joint objectives
- Develop preparedness framework (mock-up trial protocols, regulatory agreements) to be able to quickly adapt them in case of emergencies
- Facilitate sustainability: implement peacetime research, support career development of young scientists at the selected hubse
- Connect hubs on a regional and international basis



# The challenge

## Pilot region: West Africa

### Workstream 1

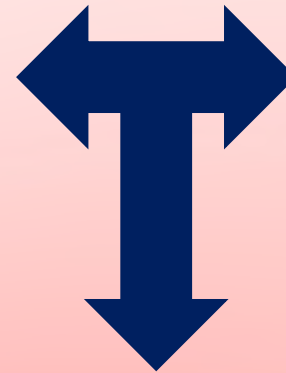
#### Phase III Lassa fever vaccine efficacy trials

- **Short-term**
- To identify trial sites fit for purpose (epidemiology, capacity, incl. GCP capabilities) in West Africa
- To identify best suitable partner to take on operational activities and capacity building
- To apply a multi-lateral, holistic approach
- To fit our concept into the existing ecosystem (not duplicating existing initiatives, but leveraging on existing networks)

### Workstream 2

#### Research preparedness (Site readiness to support 100 days mission)

- **Long-term**
- Entails portfolio diseases **AND** any other future outbreak (see MPX), where Lassa fever may not serve as a good case study
- To identify trial sites in West Africa best positioned for long-standing, self-sustained partnership
- To develop a holistic concept to be able to conduct clinical trials at those sites on short notice (from mockup trial protocols to pre-agreements for sample shipment, etc.)
- To identify strategies to enable hubs to self-sustain over time
- „Riskier investment“ – will only pay off in case of new outbreaks



### Ecosystem

- Existing trial capacity must be leveraged
- Exploring links to other stakeholders (e.g. other funders, facilitators, etc.)

- Engagement with governments and alignment with national health programs and priorities

# CEPI



[www.cepi.net](http://www.cepi.net)



@CEPIvaccines



@cepivaccines

# Research Capacity Strengthening for Pandemic Preparedness in LMICs: UKCDR Reflections

**Third Meeting of the ESSENCE Mechanism for Funder  
Coordination**

18th November 2022

**Adrian Bucher**

Senior Data Analyst

**Daniela Toale**

COVID CIRCLE Programme Manager



# UKCDR: Who we are

To amplify the value and impact of research for global development by promoting **coherence**, **collaboration** and **joint action** among UK research funders

## Core members



Mapping, analysis and foresight



Convening for collaboration and joint action



Sharing information, learning and best practice



A collective voice to shape policy



# COVID CIRCLE – COVID-19 Research Coordination & Learning

- Partnership between UKCDR & GloPID-R
- Set up early on in the COVID-19 pandemic

To coordinate funding effort, connect networks of researchers, and collate learnings to inform future epidemic and pandemic responses with a focus on lower-resource settings.

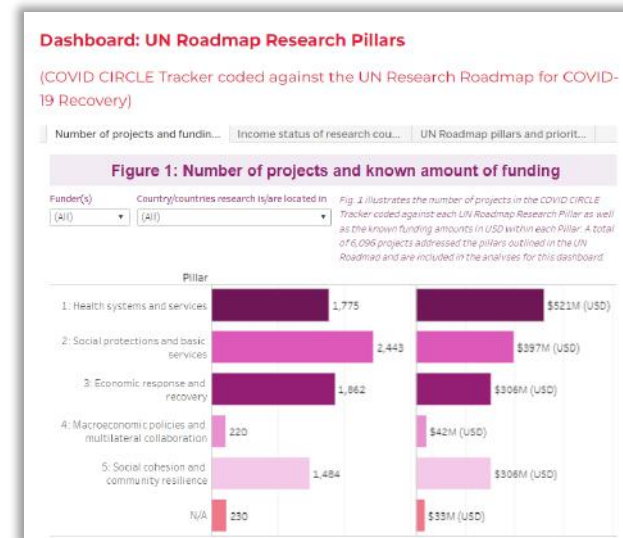
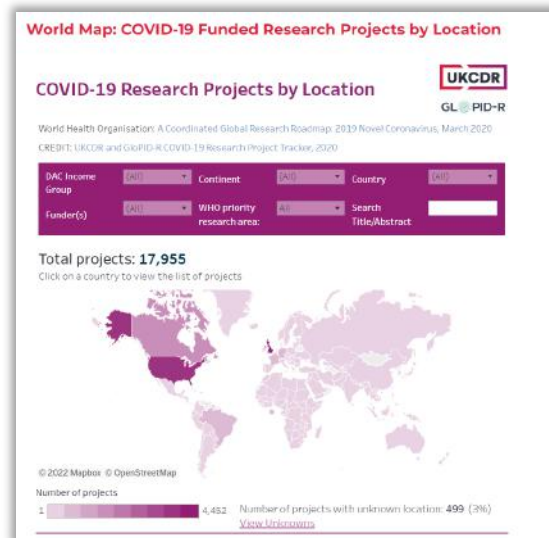
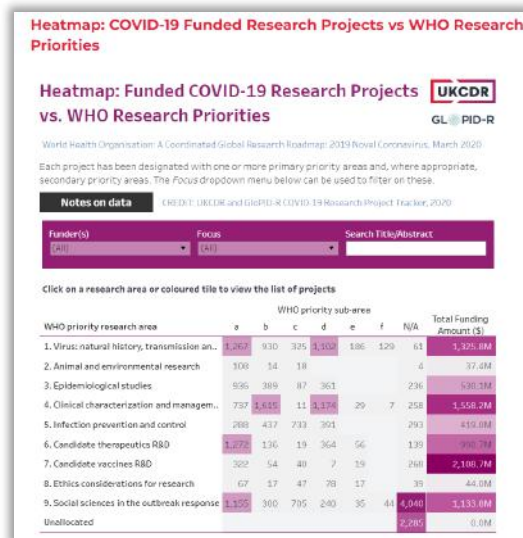
- Programme will be ending in the New Year



# COVID-19 Research Project Tracker

*One of the most comprehensive databases, covering a wide breadth of research disciplines*

- Projects mapped against WHO and UN research frameworks
- Data from 360+ funders from 60+ countries around the world
- Research taking place across 157 countries
- Almost **20,000 projects** worth (at least) **\$7.2 bn\***
  - Includes 5,586 projects worth at least \$2.2 bn\* by ESSENCE members/observers (17 on tracker)



\* Financial information available for 61.2% of projects in the tracker



# COVID-19 Research Project Tracker

Wellcome Open Research

Wellcome Open Research 2022, 5:209 Last updated: 22 MAR 2022

Check for updates

SYSTEMATIC REVIEW

**UPDATE** A living mapping review for COVID-19 funded research projects: one year update [version 5; peer review: 2 approved]

Previously titled: 'A living mapping review for COVID-19 funded research projects: nine month update'

Alice Norton<sup>1,2</sup>, Adrian Bucher<sup>1</sup>, Emilia Antonio<sup>1,2</sup>, Nicole Advani<sup>1,3</sup>, Cathryn Johnston<sup>4</sup>, Henrike Grundl<sup>1</sup>, Sheila Mburu<sup>1</sup>, Emma Clegg<sup>1</sup>, Marguerite Gollish<sup>1</sup>, Sara Sahota<sup>1</sup>, Nusrat Jabin<sup>1</sup>, Laura Scott<sup>1</sup>, Genevieve Boily-Larouche<sup>5</sup>, A. Morgan Lay<sup>4</sup>, Gail Carson<sup>2</sup>, Marta Tufet Bayona<sup>1</sup>

<sup>1</sup>UK Collaborative on Development Research, London, UK  
<sup>2</sup>GloPID-R Secretariat, Centre for Tropical Medicine and Global Health, University of Oxford, Oxford, UK  
<sup>3</sup>Centre for Tropical Medicine and Global Health, University of Oxford, Oxford, UK  
<sup>4</sup>Institute of Population and Public Health, Canadian Institutes of Health Research, Toronto, Canada  
<sup>5</sup>Institute of Infection and Immunity, Canadian Institutes of Health Research, Hamilton, Canada

**v5** First published: 08 Sep 2020, 5:209  
<https://doi.org/10.12688/wellcomeopenres.16259.1>  
Second version: 18 Dec 2020, 5:209  
<https://doi.org/10.12688/wellcomeopenres.16259.2>  
Third version: 01 Apr 2021, 5:209  
<https://doi.org/10.12688/wellcomeopenres.16259.3>  
Fourth version: 01 Jul 2021, 5:209  
<https://doi.org/10.12688/wellcomeopenres.16259.4>  
Latest published: 22 Mar 2022, 5:209  
<https://doi.org/10.12688/wellcomeopenres.16259.5>

**Abstract**  
**Background:** The coronavirus disease 2019 (COVID-19) has resulted in an unprecedented research response, demonstrating exceptional examples of rapid research and collaboration. There is however a need for greater coordination, with limited resources and the shifting global nature of the pandemic resulting in a proliferation of research projects underpowered and unable to achieve their aims.  
**Methods:** The UK Collaborative on Development Research (UKCDR) and Global Research Collaboration for Infectious Disease Preparedness (GloPID-R), two funder coordination groups have collaborated to develop a live database of funded research projects across the world relating to COVID-19. Drawing data continually from their members and further global funding bodies, as of 15<sup>th</sup> July 2021 the database contains 12,419 projects, funded by 255 funders, taking place across 149 countries representing an investment of at least \$4.9 billion. To our knowledge it is one of the most comprehensive databases. The database is aligned to the World Health Organisation and GloPID-R Global Research Roadmap: 2019 Novel Coronavirus. It is being used by the WHO, governments and multi-lateral policy makers, research funders and researchers.

**Open Peer Review**

Approval Status

version	1	2
version 5 (update) 22 Mar 2022		
version 4 (update) 01 Jul 2021		
version 3 (update) 01 Apr 2021		
version 2 (update) 18 Dec 2020		
version 1 (update) 08 Sep 2020		

1. David Vaughn<sup>1</sup>, Bill and Melinda Gates Foundation, Seattle, USA  
2. Peter Smith<sup>1</sup>, London School of Hygiene

Page 1 of 38

COVID-19 FUNDED RESEARCH PROJECTS IN FOCUS

UKCDR GLPID-R

Issue date: July 2021

**Key Findings:** Long Covid

Since the coronavirus pandemic began, there has been a growing concern in the scientific community, and the public, about the long-term effects of COVID-19. This includes the possibility of long-term health problems, known as 'Long Covid'.

COVID-19 FUNDED RESEARCH PROJECTS IN FOCUS

UKCDR GLPID-R

Issue date: July 2021

**Key Findings:** Indirect health impacts

To date, the COVID-19 pandemic has claimed over a million lives and devastated health systems across the globe. However, the true scale of the impact of this pandemic remains underestimated as a result of limited evidence on the indirect health impacts on people and the global pandemic response.

COVID-19 FUNDED RESEARCH PROJECTS IN FOCUS

UKCDR GLPID-R

Issue date: July 2021

**Key Findings:** New variants

To date, the world has seen nearly 600 million known cases of COVID-19 and the pandemic has claimed over six million lives. All viruses, including SARS-CoV-2 (which causes COVID-19), evolve over time. Some of these changes affect

COVID-19 FUNDED RESEARCH PROJECTS IN FOCUS

UKCDR GLPID-R

Issue date: July 2021

**Key Findings:** Research capacity strengthening

The coronavirus pandemic has triggered an unprecedented global research response across multiple disciplines to gain insights into this novel infection and its impacts. To date, thousands of research activities have been embarked on with a preponderance of research projects in higher income countries.

## Ad Hoc Analyses

- G20 Health Working Group
- GCRF Board
- ARMA Conference

## Regular Analyses

- Living Mapping Review (updated quarterly)
- Tracker Highlights (x4)





# COVID-19 Research Project Tracker

Wellcome Open Research

Wellcome Open Research 2022, 5:209 Last updated: 22 MAR 2022

Check for updates

SYSTEMATIC REVIEW

**UPDATE** A living mapping review for COVID-19 funded research projects: one year update [version 5; peer review: 2 approved]

Previously titled: 'A living mapping review for COVID-19 funded research projects: nine month update'

Alice Norton<sup>1,2</sup>, Adrian Bucher<sup>1</sup>, Emilia Antonio<sup>1,2</sup>, Nicole Advani<sup>1,3</sup>, Cathryn Johnston<sup>4</sup>, Henrike Grundl<sup>1</sup>, Sheila Mburu<sup>1</sup>, Emma Clegg<sup>1</sup>, Marguerite Gollish<sup>1</sup>, Sara Sahota<sup>1</sup>, Nusrat Jabin<sup>1</sup>, Laura Scott<sup>1</sup>, Genevieve Bolly-Larouche<sup>5</sup>, A. Morgan Lay<sup>4</sup>, Gail Carson<sup>2</sup>, Marta Tufet Bayona<sup>1</sup>

<sup>1</sup>UK Collaborative on Development Research, London, UK  
<sup>2</sup>GloPID-R Secretariat, Centre for Tropical Medicine and Global Health, University of Oxford, Oxford, UK  
<sup>3</sup>Centre for Tropical Medicine and Global Health, University of Oxford, Oxford, UK  
<sup>4</sup>Institute of Population and Public Health, Canadian Institutes of Health Research, Toronto, Canada  
<sup>5</sup>Institute of Infection and Immunity, Canadian Institutes of Health Research, Hamilton, Canada

**V5** First published: 08 Sep 2020, 5:209  
<https://doi.org/10.12688/wellcomeopenres.16259.1>  
Second version: 18 Dec 2020, 5:209  
<https://doi.org/10.12688/wellcomeopenres.16259.2>  
Third version: 01 Apr 2021, 5:209  
<https://doi.org/10.12688/wellcomeopenres.16259.3>  
Fourth version: 01 Jul 2021, 5:209  
<https://doi.org/10.12688/wellcomeopenres.16259.4>  
Latest published: 22 Mar 2022, 5:209  
<https://doi.org/10.12688/wellcomeopenres.16259.5>

**Open Peer Review**

Approval Status ✓✓

version 5 (update) 22 Mar 2022 ✓

version 4 (update) 01 Jul 2021 ✓

version 3 (update) 01 Apr 2021 ✓

version 2 (update) 18 Dec 2020 ✓

version 1 (update) 08 Sep 2020 ✓

1. David Vaughn<sup>1</sup>, Bill and Melinda Gates Foundation, Seattle, USA  
2. Peter Smith<sup>1</sup>, London School of Hygiene

Page 1 of 38

COVID-19 FUNDED RESEARCH PROJECTS IN FOCUS

UKCDR GL PID-R

Issue date July 2021

**Key Findings:** Long Covid

Other reviews: Post-acute COVID, Post-COVID syndromes, Chronic COVID and Long-haul COVID, Post-Acute Sequelae of SARS-CoV-2 Infection (PASC)

In the perspective, patients, evolves, there is increased interest in the emergence of a new phase.

COVID-19 FUNDED RESEARCH PROJECTS IN FOCUS

UKCDR GL PID-R

Issue date July 2021

**Key Findings:** Indirect health impacts

To date, the COVID-19 pandemic has claimed over a million lives and devastated health systems across the globe (11). However, the full scale of the impact of this pandemic remains underestimated as a result of limited evidence on the indirect health impacts secondary to the global pandemic response.

COVID-19 FUNDED RESEARCH PROJECTS IN FOCUS

UKCDR GL PID-R

Issue date July 2022

**Key Findings:** New variants

To date, the world has seen nearly 600 million known cases of COVID-19 and the pandemic has claimed over six million lives (1). All viruses, including SARS-CoV-2 (which causes COVID-19), evolve over time. Some of these changes affect

COVID-19 FUNDED RESEARCH PROJECTS IN FOCUS

UKCDR GL PID-R

Issue date July 2021

**Key Findings:** Research capacity strengthening

The coronavirus pandemic has triggered an unprecedented global research response across multiple disciplines to gain insights into this novel infection and its impacts. To date, thousands of research activities have been embarked on with a preponderance of research centres in higher income countries.

## Ad Hoc Analyses

- G20 Health Working Group
- GCRF Board
- ARMA Conference

## Regular Analyses

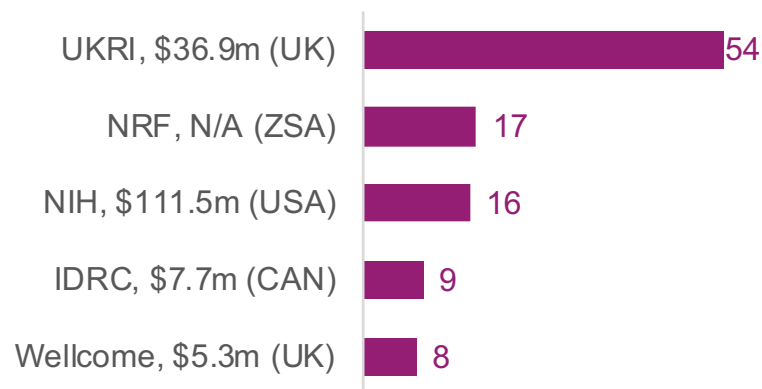
- Living Mapping Review (updated quarterly)
- Tracker Highlights (x4)



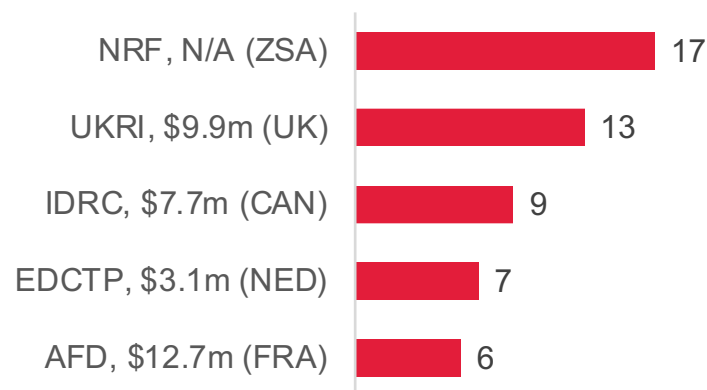
# COVID-19 Research Project Tracker:

## *Research Capacity Strengthening Projects*

### *Funders with most RCS projects on tracker*

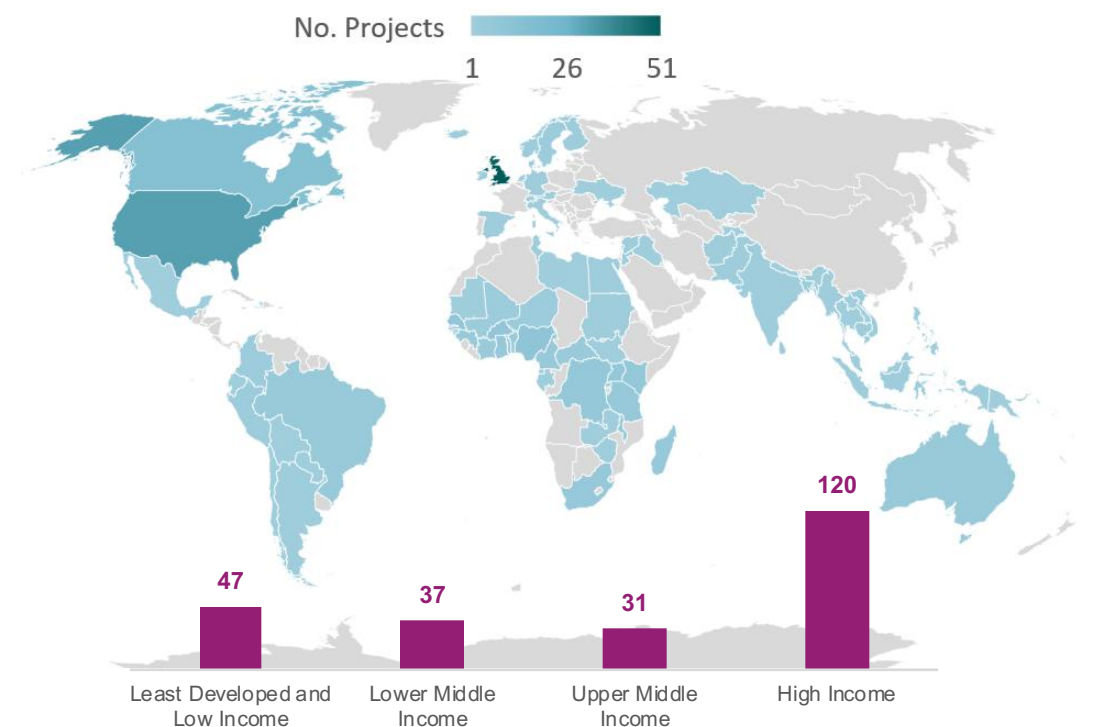


### *Funders with most RCS LMIC projects on tracker*



- 200 projects worth at least \$214m\* from 59 funders

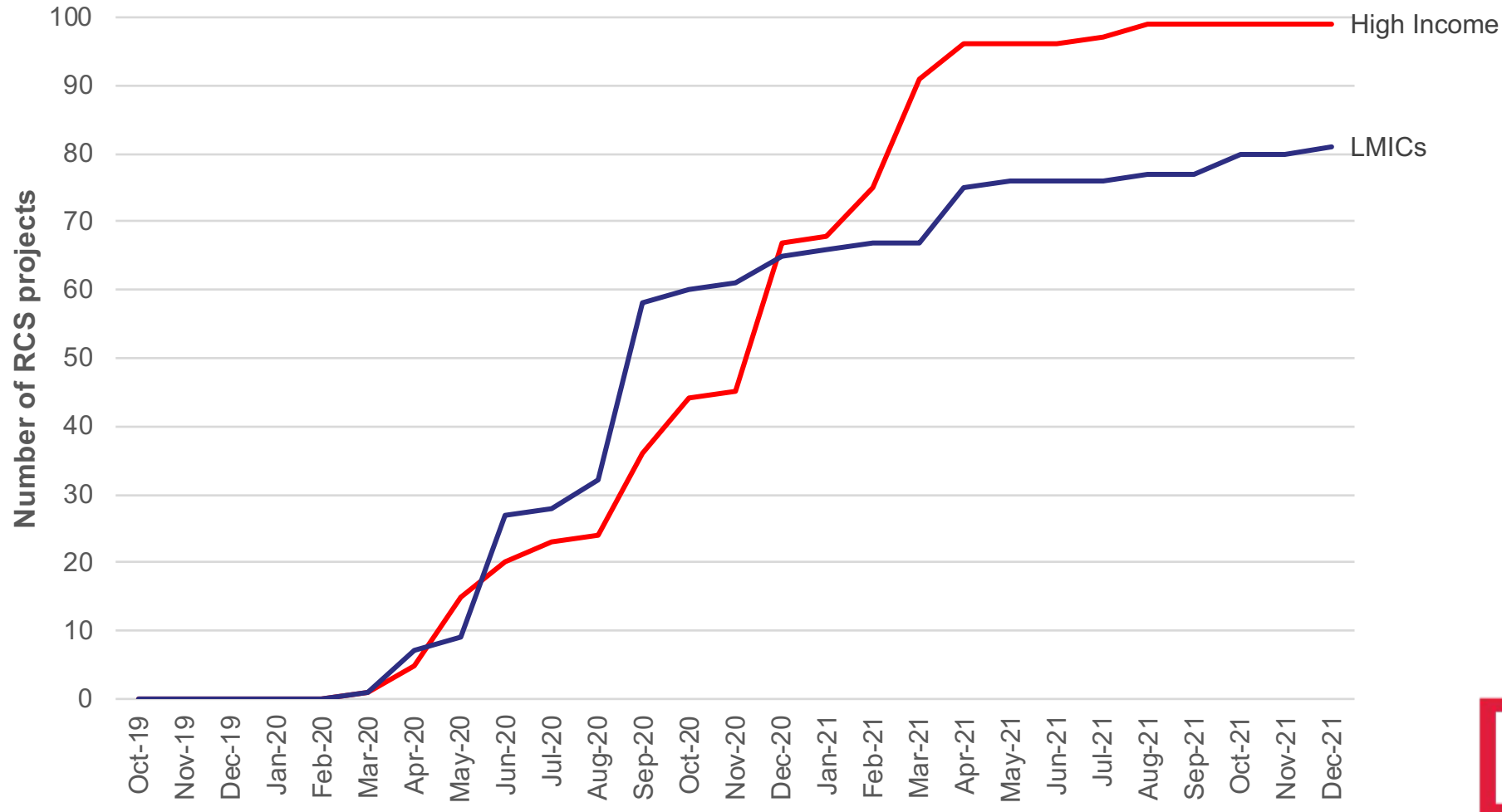
- Includes 86 projects worth at least \$81.1m\* by ESSENCE members/observers



\* Financial information available for 64.0% of research capacity strengthening projects in the tracker. Data on individual countries available for 98.5% of RCS projects on tracker.

# COVID-19 Research Project Tracker:

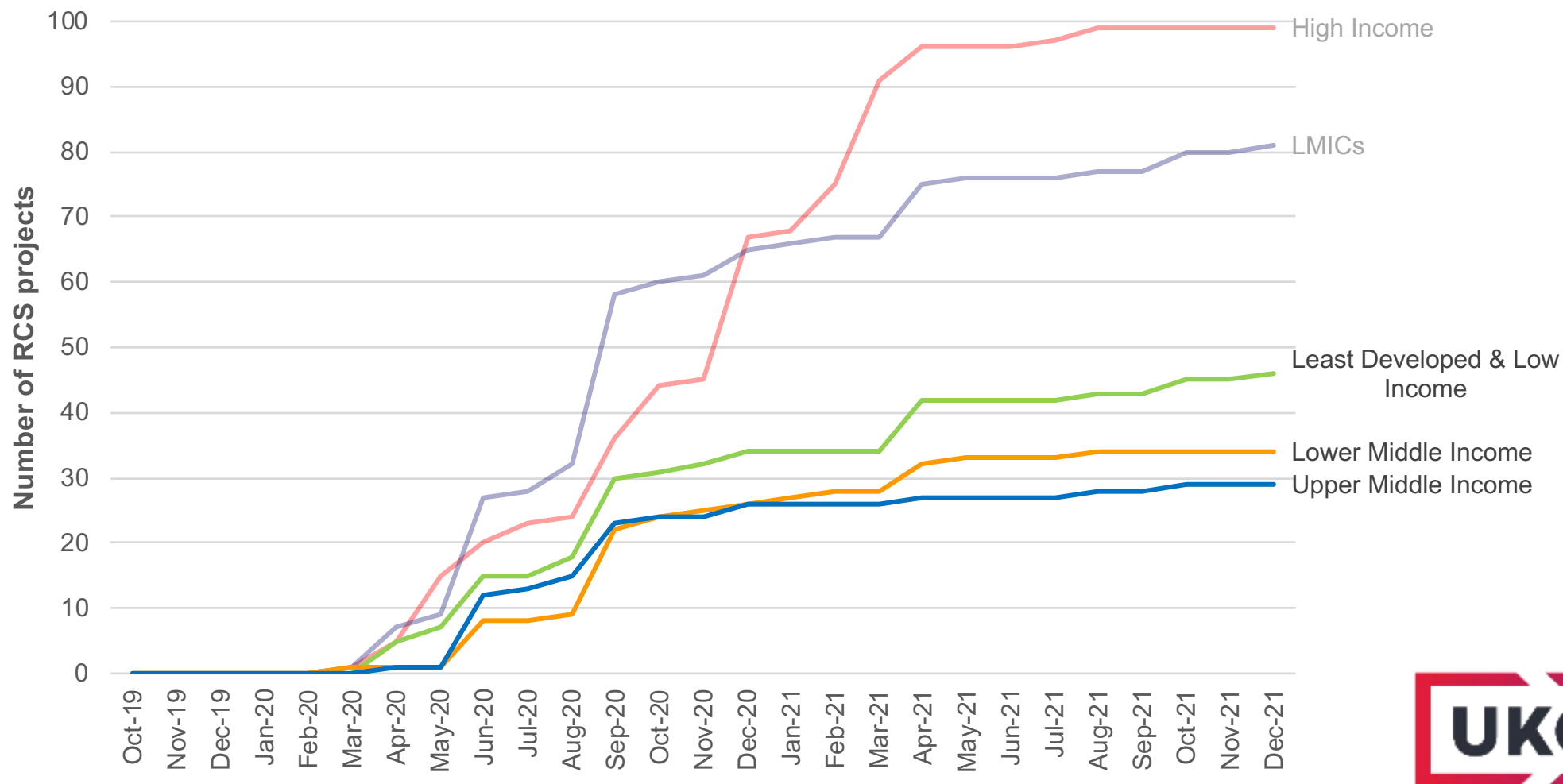
## *Research Capacity Strengthening Projects*



\* Date information available for 74.0% of research capacity strengthening projects in the tracker . Data on individual countries available for 98.5% of RCS projects on tracker.

# COVID-19 Research Project Tracker:

## *Research Capacity Strengthening Projects*



\* Date information available for 74.0% of research capacity strengthening projects in the tracker . Data on individual countries available for 98.5% of RCS projects on tracker.

# COVID-19 Research Project Tracker:

## *Research Capacity Strengthening Projects*

Area of Capacity Strengthening	Number of Projects
Laboratory capacity in LMICs	52
Research and Skill Development Training	41
Digital transformation and learning	19
Data Management	18
Clinical Management	17
Pandemic Preparedness	14
Surveillance	13
Infection Prevention	13
Policy Response	10

# COVID-19 Research Project Tracker:

## *Research Capacity Strengthening Projects*

Area of Capacity Strengthening	Number of Projects
Laboratory capacity in LMICs	52
Research and Skill Development Training	41
Digital transformation and learning	19
Data Management	18
Clinical Management	17
Pandemic Preparedness	14
Surveillance	13
Infection Prevention	13
Policy Response	10



### DIAGNOSIS

26 projects



### ADVANCED LABORATORY PROCEDURES

20 projects



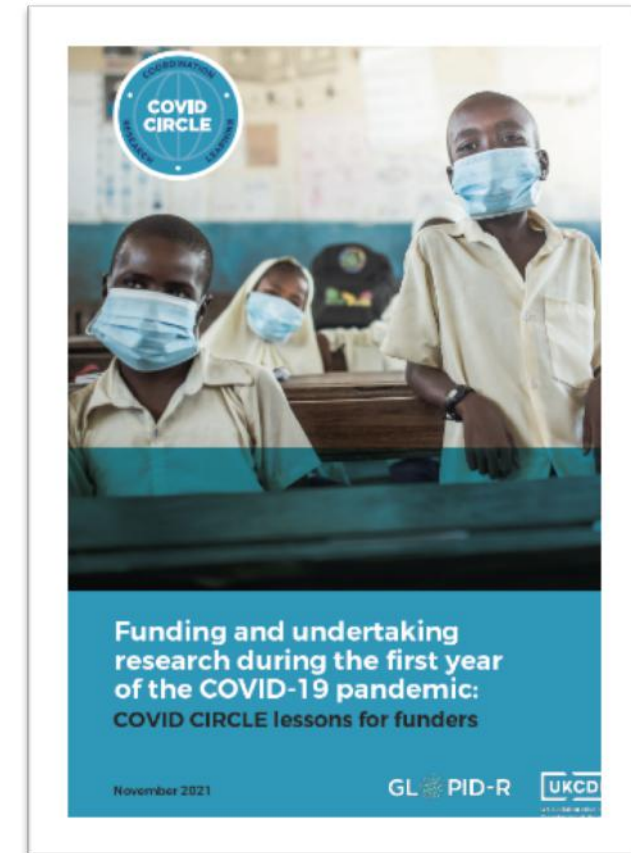
### GENETIC SEQUENCING

1 project



# COVID CIRCLE Lessons for Funders Report: RCS

- Demand for researchers with particular expertise in LMICs outstripped supply, further inhibiting rapid research
- Challenge to obtain new funding and reliant on funding already in place to initiate new COVID-19 research
- Rapidly mobilised research response where established, trusted and effective working relationships were already in place, along with existing staff capacity.
- Existing successful networks need sustainable funding between epidemics to build capacity & partnerships
- Preparedness planning include provision of contingency funding, so resourcing decisions can be made at research group level, in event of outbreak





# UKCDR RCS Report

- Data from a cross-UK funder review of RCS programmes in LMICs from 2016-2021
- From 2016-2021: UK funders invested £873 million in standalone RCS programmes and £1.2 billion in programmes with a significant embedded component
- Not discipline specific, team moving beyond health when collecting data as often RCS evidence is health-centric
- Enablers of effective RCS:
  - 1. LMIC ownership of design and delivery
  - 2. Long-term approach to support sustainability
  - 3. Coordination across funders and programmes
  - 4. Partnerships & collaboration to design and deliver RCS
  - 5. Understanding impact of RCS initiatives



# Resources

## Research Capacity Strengthening:

### Resource Hub:

<https://www.ukcdr.org.uk/guidance/research-capacity-strengthening-resources-tools-and-guides/>

### Good Practice Document:

<https://www.ukcdr.org.uk/resource/research-capacity-strengthening-lessons-from-uk-funded-initiatives-in-low-and-middle-income-countries/>

## COVID CIRCLE:

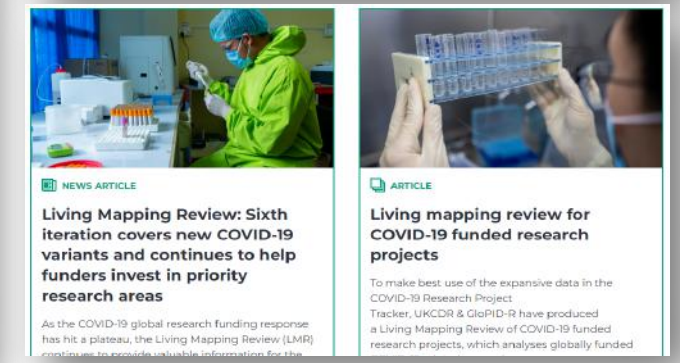
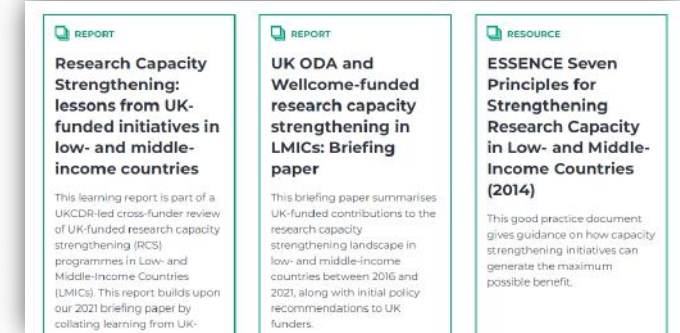
### Resource hub:

<https://covidcircle.org/>

<https://www.ukcdr.org.uk/covid-circle/>

### COVID CIRCLE Lessons for Funders Report (to be updated soon):

<https://www.ukcdr.org.uk/resource/funding-and-undertaking-research-during-the-first-year-of-the-covid-19-pandemic/>





**Making research work  
for global development**

**Thanks for Listening!**

Daniela Toale – [d.toale@ukcdr.org.uk](mailto:d.toale@ukcdr.org.uk)

Adrian Bucher – [a.bucher@ukcdr.org.uk](mailto:a.bucher@ukcdr.org.uk)



@UKCDR



info@ukcdr.org.uk

**ukcdr.org.uk**

# Fogarty International Center Building Emerging Viral Research Capacity in West African Countries Affected by 2014 Ebola Epidemic

Barbara Sina Ph.D. ([sinab@mail.nih.gov](mailto:sinab@mail.nih.gov))  
Program Officer  
Division of Training and Research



Fogarty International Center



# Challenges of NIH Grants System

---

- Biomedical research funder, not international development agency
  - FIC building research capacity via LMIC-US collaborative research & training grants
- Very competitive application system funding determined by overall scientific merit:
  - Scientific significance, investigators, innovation, approach & environment
  - FIC applications- additional review criteria: Impact on building research capacity
- Peer Reviewers
  - Generally, required to have NIH grant experience
  - FIC applications- US researchers with LMIC research experience

# Challenges of NIH Grants System for Building Research Capacity

---

- In Liberia, Guinea & Sierra Leone:
  - Few researchers
  - Few research facilities
  - Few graduate research degree programs
  - Little research support structure
- In the US:
  - Few US researchers worked in these countries
  - Several US academic & NGO infectious disease experts assisted with Ebola epidemic
  - Few potential applicants familiar with FIC

## Use of Available Exceptional Mechanisms

---

- Specifically targeted funding opportunity
  - Planning grants for research training program development
  - Limit collaboration to Liberia, Guinea & Sierra Leone
  - Offered RFA twice to allow revised applications
- Used FIC specific secondary review criteria (consideration of programmatic & geographic distribution) for funding decision for non-funding range scoring research training grant applications
- Conversion to cooperative agreements
  - Allows direct FIC program staff assistance to grantees



## Build Capacity on What Exists

---

- Liberia
  - NIAID-equipped & trained JFK Hospital for Ebola vaccine and survivor studies
  - USAID- project to rebuild medical school faculty
- Sierra Leone
  - NIAID supported Lassa Fever Research Lab at Kenema Government Hospital
- Guinea
  - Collaboration with NIAID malaria, TB, HIV research center at U. Bamako, Mali
  - Participates in FIC Mali research training program including MPH program

# Research Capacity is More Than Researchers

---

- Research training + simultaneously improve:
  - Research environment- labs, equipment, electricity, internet access, etc.
  - Research support systems- administrative & financial management
  - Ethical review of research
  - Full scientific/medical training & career pipeline
  - Research Culture- seminars, journal clubs, conferences, sample sharing, joint research proposals

# Work with Organizations that Can Do Things You Can't Do

---

- West African Region (West African College of Physicians, U. Ghana, U. Bamako, FHI)
  - Medical School faculty training & credentialing
  - Higher Education Teacher training
  - REC training
  - Research management training & SOPs
- US Government (NIAID/NIH, USAID, NAS, CDC, DOD)
  - Medical school curriculum development & revision
  - Medical specialty residency program revision + clinical research
  - Research Infrastructure & research training project collaboration
  - Local coordination-training courses, research seminars/webinars

# Gather Coalition of the Willing for the Long Term

---

- Who?
  - Critical LMIC Leadership with vision for research capacity to be built & their essential team members
  - Research & research training collaborators
  - Partner org. representatives & essential staff in LMIC
  - Next generation- stepping up
- What do you do together?
  - Regular, frequent sharing meetings- updates, track progress, solve problems, generate ideas
  - Keep reaching out to include those who can assist
  - Build trust & connections
  - Communicate & coordinate everything
  - Annual scientific & research training meetings

# Questions?

---

Thank you to all who have been on this journey with me since 2014.

# ESSENCE WORKING GROUP

---

November 18, 2022

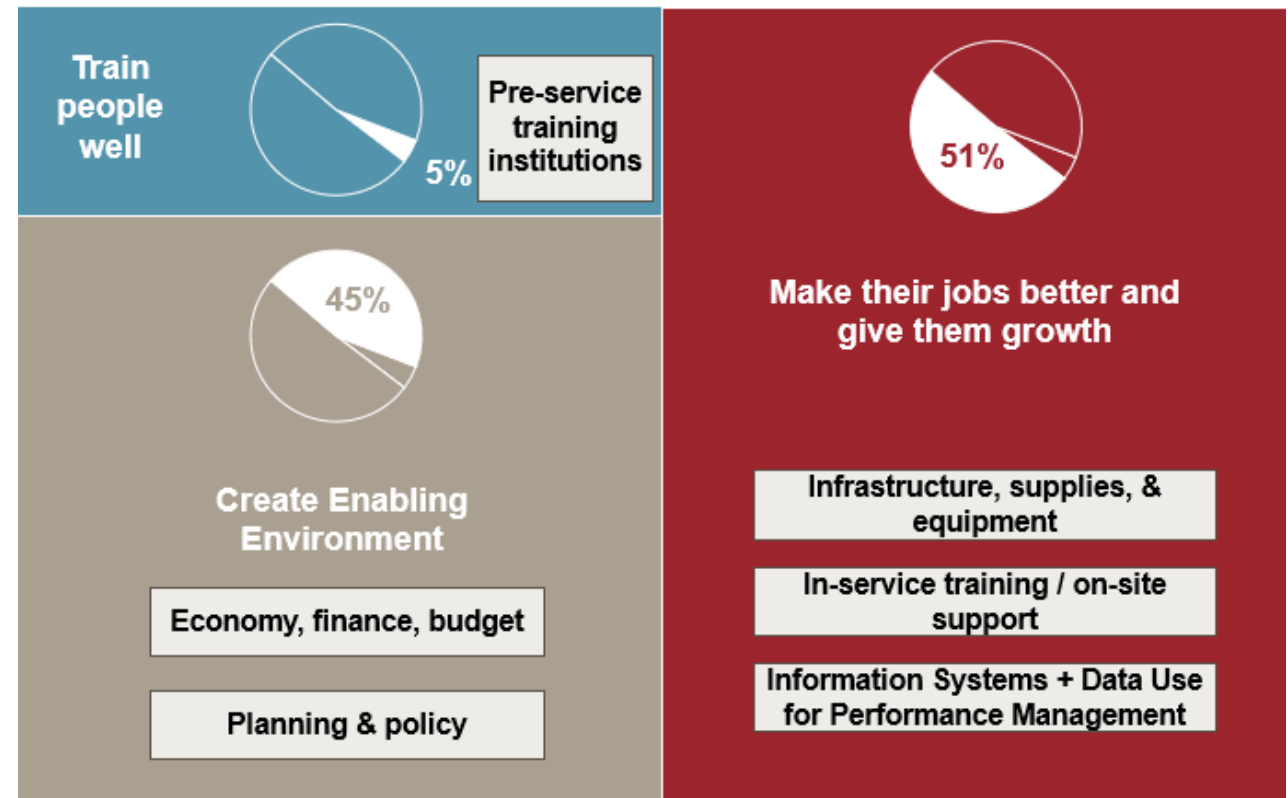
Thy Pham  
Senior Program Officer, Strategy, Planning and Management

# CAPACITY BUILDING BY MANY DIFFERENT NAMES

## Foundation-wide review in 2017-18

More than \$1B in investments since 2004 towards -

- Capacity Strengthening
- Health Systems Strengthening
- Human Resources for Health



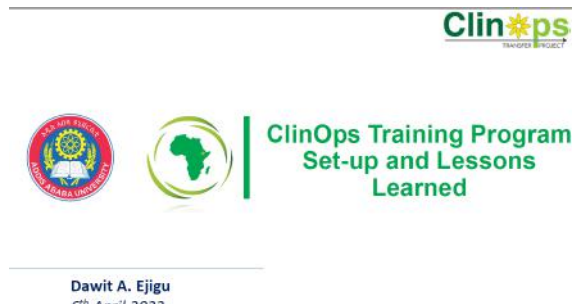
# CAPACITY STRENGTHENING EXAMPLE INVESTMENTS

## In Support of Product Development and Clinical Site Networks -

### (1) Training and Fellowships



Fellowship  
Schemes

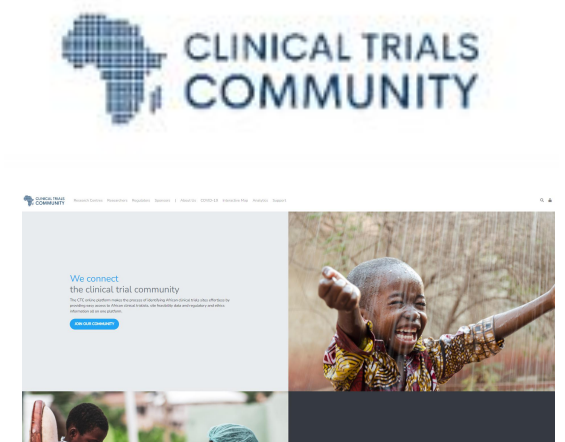


Fit-for-Purpose  
Training  
Programs

### (2) Address barriers to access



Self-Paced  
Training, Shared  
Resources

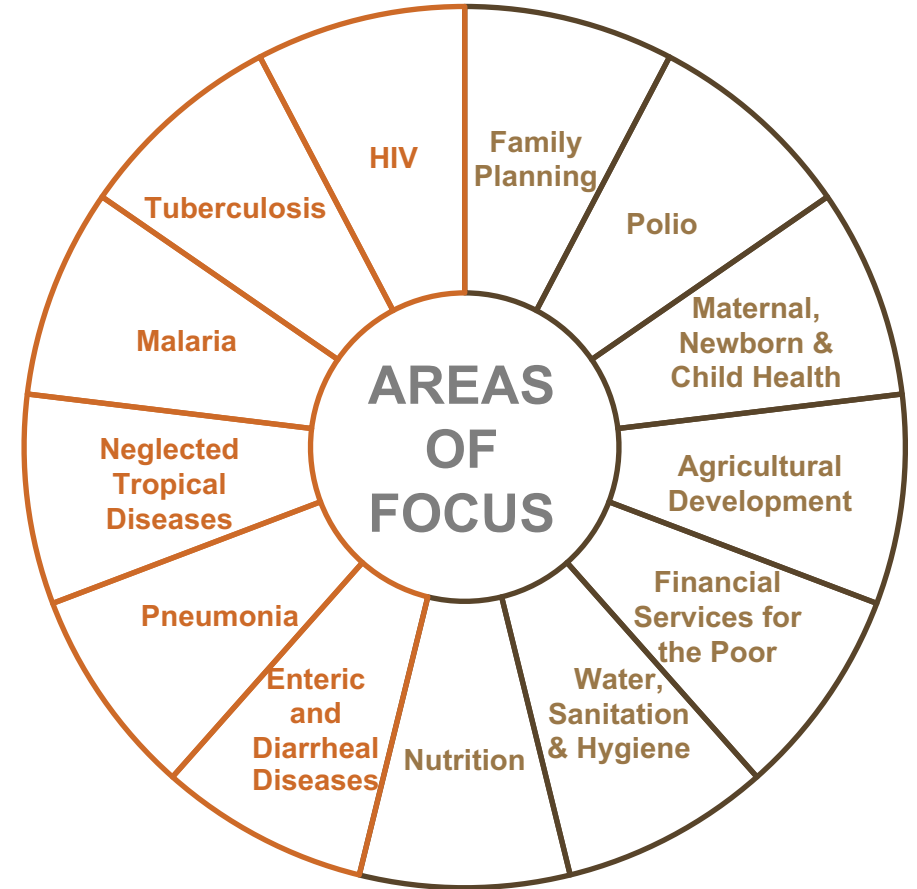


Research Center  
Capabilities and  
Study Feasibility



# STRATEGY / APPROACH

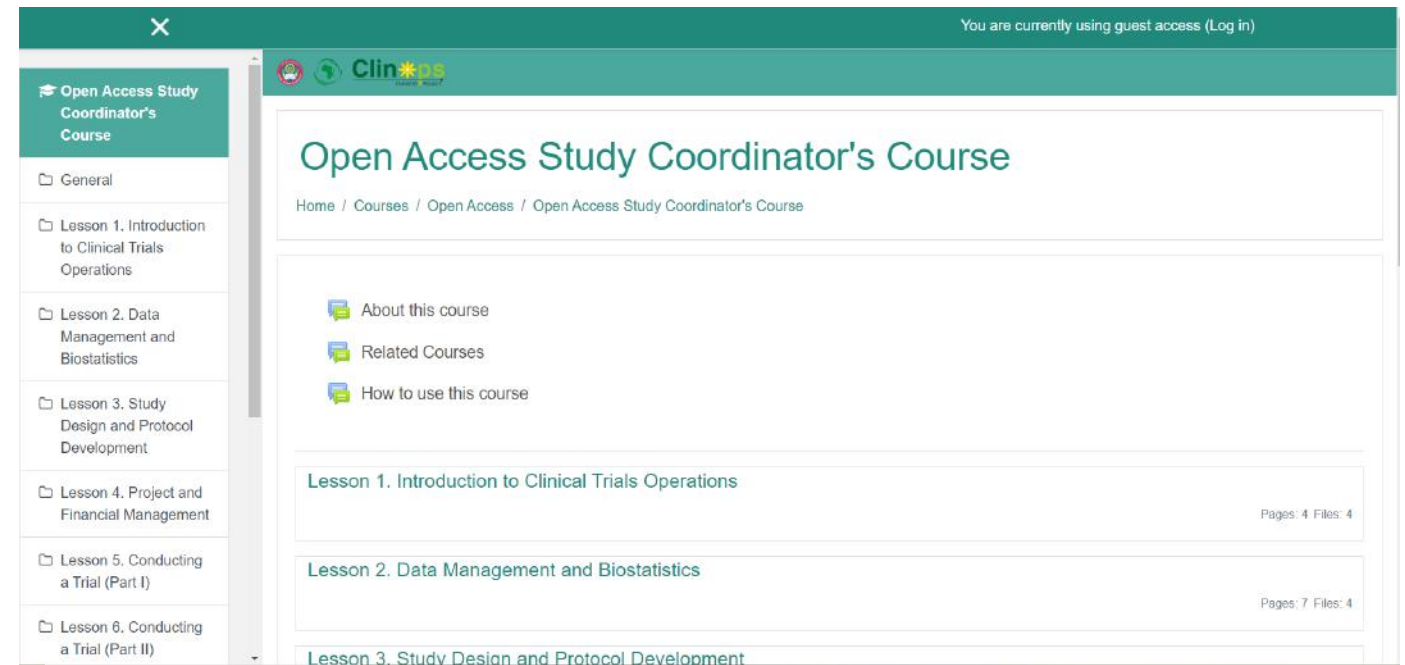
- Engage across partners
  - Global Health Clinical Consortium (GHCC)
  - Global Health Regulatory Team (GHRT)
- Capacity in support of programs, projects
- Coordination to increase efficiency
- Geography guided by burden of disease: incidence and prevalence, both now and forecasted
- Proximal leadership
- Leverage/build from existing
- Increase access to resources, data, insights



# CDT-AFRICA

**[HTTPS://LMS.CDT-AFRICA.ORG/COURSE](https://lms.cdt-africa.org/course)**

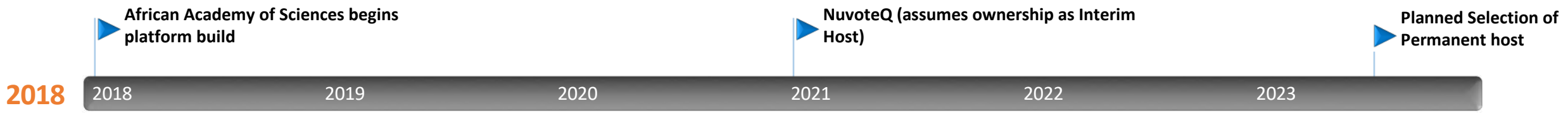
- Leadership from In-Region Partner (supported by eight Product Development Partners, WHO TDR Clinical Research and Development Fellows, Faculty for Capacity Development)
- 10-week Intensive, with Measurement & Evaluation component
- Institutional Support (manager endorsement)
- Research readiness for research coordinators and teams with ongoing or planned trials
- Best Practices/Lessons Learned
  - Individuals work within teams (i.e. helping one helps the other)
  - Application of training is essential
  - Prioritize, focus, measure, report/disseminate



# CLINICAL TRIALS COMMUNITY

- Burden data overlayed with research center location
- Capabilities through robust feasibility data
- Displays current trials through ICTRP and clinicaltrials.gov registries
- Increase visibility for less represented sites
- Could be a mechanism for funders to coordinate investments
- Best Practices/Lessons Learned
  - Establish and preserve trust
  - Maintain flexibility
  - Explore opportunities

**WEBSITE IS CTC.AFRICA**



THANK YOU

# ADDITIONAL

# THE SCOPE OF OUR WORK

We work with partner organizations around the world to reduce inequity

Program  
Strategies

41



Total Charitable  
Support

\$6.7B



Countries

144



Employees

1,736



Grantees

1,381



No. of Grants

2,051



U.S. States

50



Alumni

2,106





# GLOBAL HEALTH DIVISION | PURPOSE

- The foundation's Global Health Division aims to harness advances in science and technology to save lives in developing countries.
- We work with partners to deliver proven tools—including vaccines, drugs, and diagnostics—as well as discover pathbreaking new solutions that are affordable and reliable.
- Equally important is innovation in how we bring health interventions to those who need them most.
- We invest heavily in vaccines to prevent infectious diseases and support the development of integrated health solutions for family planning, nutrition, and maternal and child health.





# GLOBAL HEALTH DIVISION: PROGRAMS

## ENTERIC & DIARRHEAL DISEASES

**GOAL:** End diarrheal disease deaths in children under 5 by 2030 and eliminate typhoid as a public health problem by 2035.



## HIV & TUBERCULOSIS

**GOALS:** Accelerate the decline in HIV infection worldwide and save lives by ensuring expanded and simplified HIV treatment and improved and effective use of interventions to prevent new infections. Accelerate the global decline tuberculosis incidence.



## MALARIA

**GOAL:** A world free of malaria

## NEGLECTED TROPICAL DISEASES

**GOAL:** Reduce the burden of neglected tropical diseases on the world's poorest people through targeted and effective control, elimination, and eradication efforts.



## PNEUMONIA

**GOAL:** Significantly reduce childhood deaths from pneumonia.

## MNCH DISCOVERY & TOOLS

**GOAL:** Ensure that women and newborns survive and remain healthy before, during, and after childbirth by identifying and addressing underlying biological vulnerabilities.

# GLOBAL HEALTH DIVISION: FUNCTIONS

## DISCOVERY & TRANSLATIONAL SCIENCE

**GOAL:** To catalyze innovation for the discovery and translation of transformative solutions to global health and development inequity.



## IDM

**GOAL:** To support global efforts to eradicate infectious diseases and achieve permanent improvements in health by developing, using, and sharing computational modeling tools and promoting quantitative decision-making

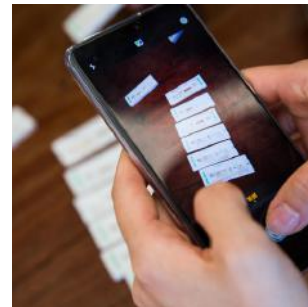
## INNOVATIVE TECHNOLOGY SOLUTIONS

**GOAL:** Identify emerging technologies that have potentially transformative applications for global health.



## INTEGRATED DEVELOPMENT

**GOAL:** Strengthen regulatory systems and expedite the development, regulatory approval, and manufacturing of innovative new drugs, vaccines, diagnostics, and devices that advance global health.



## VACCINE DEVELOPMENT & SURVEILLANCE

**GOAL:** Advance public goods for global health through technological innovation. We do this by accelerating the development and commercialization of novel vaccines and the sustainable manufacture of existing vaccines, defining the global disease burden through better primary data and world-class modeling, and reducing the threat of epidemics through the development and use of innovative tools.

## INNOVATION INTRODUCTION

**GOAL:** Drive product launch, commercialization plans and activities, aimed at bringing new interventions and products in support of our global health program teams.



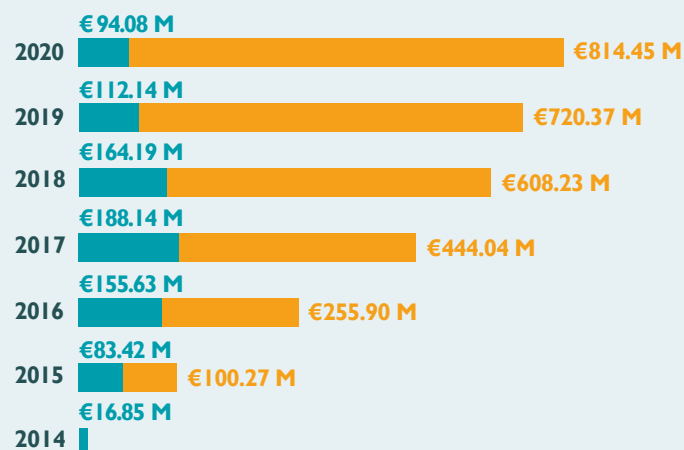
**EDCTP**

*The power of sharing science*

# Summary of achievements 2014–2021



## Investments in calls for proposals



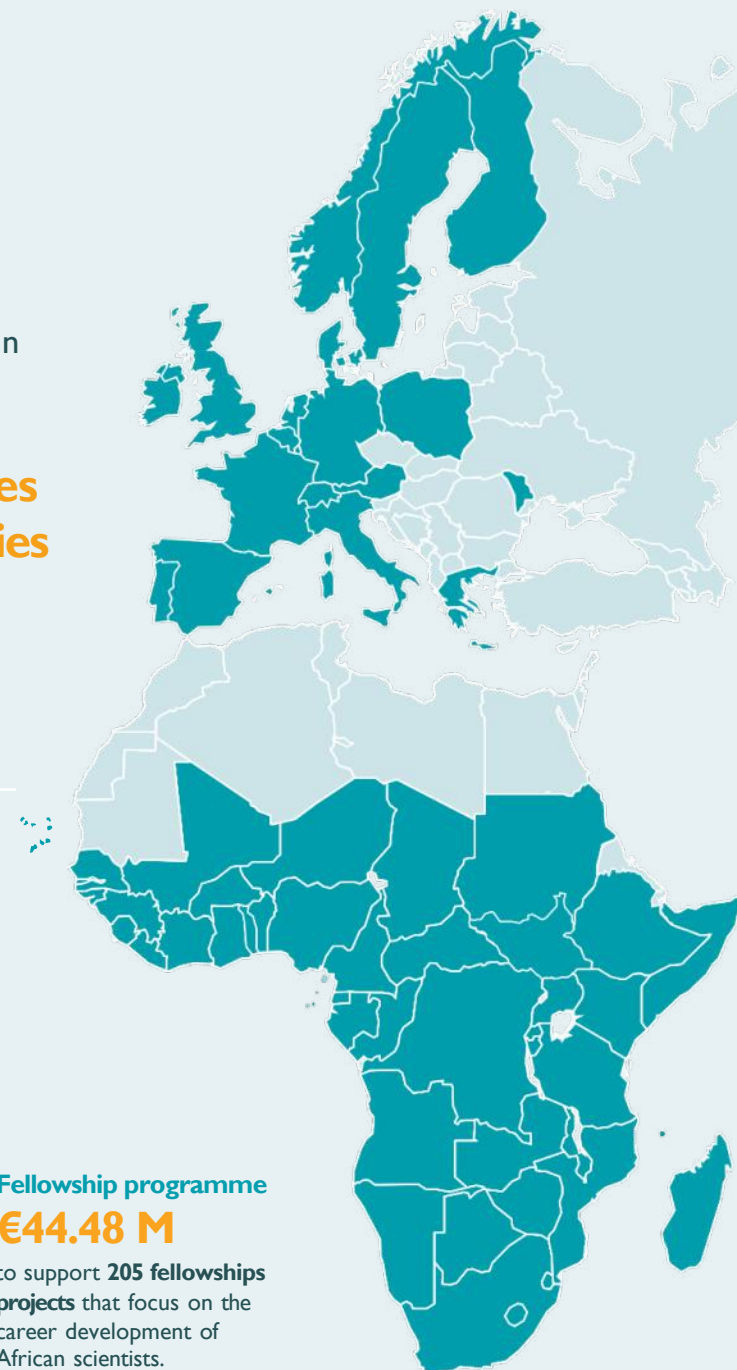
- Investment to call for proposals by year
- Cumulative investment to call for proposals by year

(Indicative amounts based on signed grant agreements and proposals approved for funding)

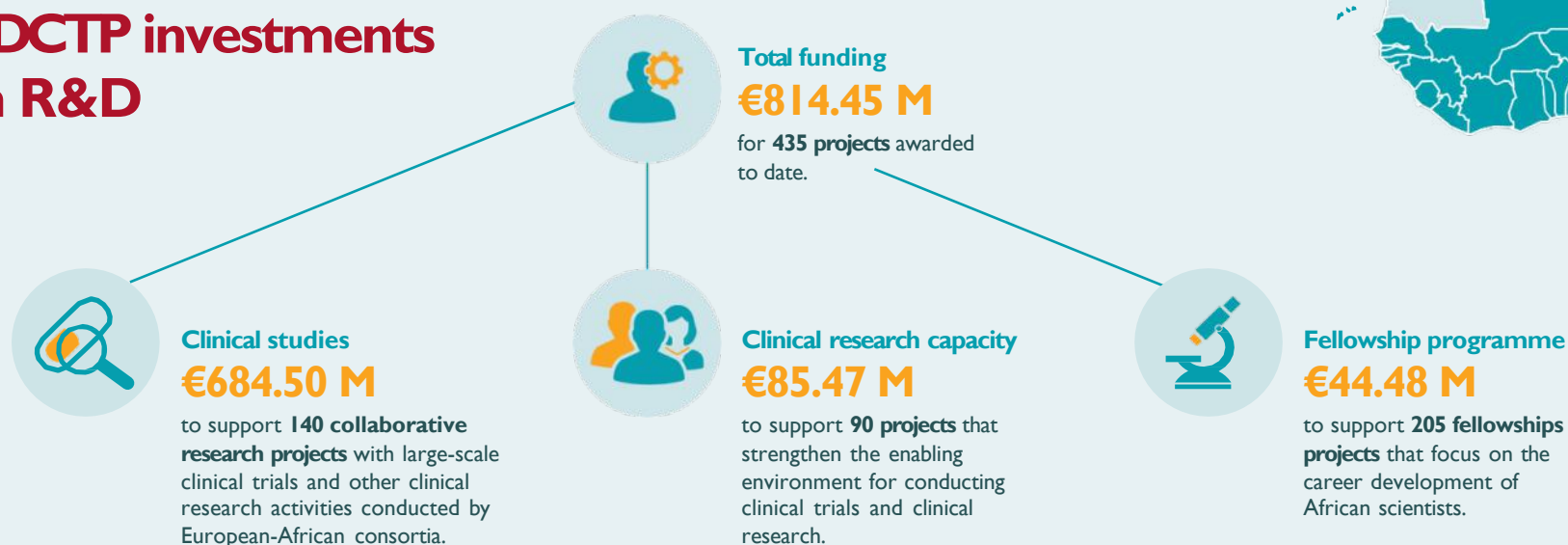
## Participation in EDCTP activities

**63 countries** participate in EDCTP-funded activities:

**19 European countries** and **44 African countries**



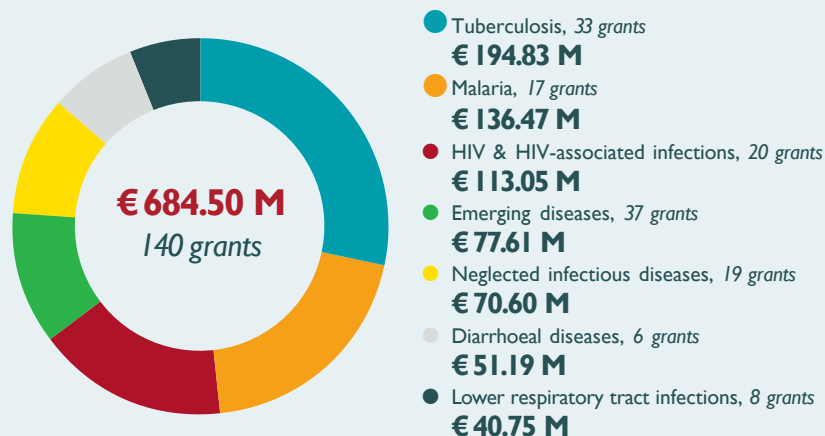
## EDCTP investments in R&D



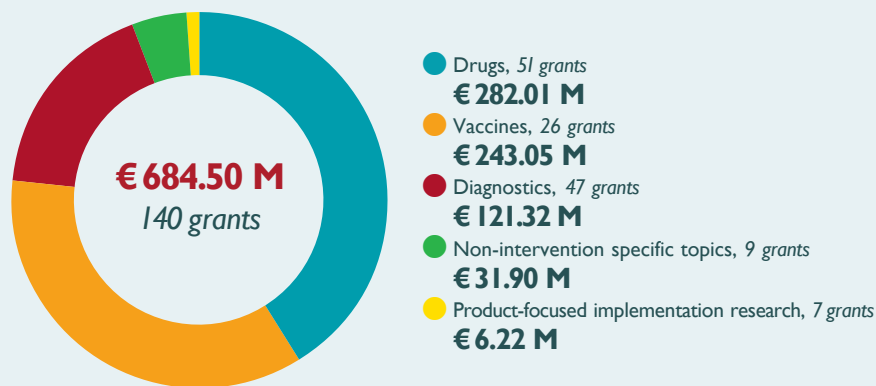


# Medical interventions

## Collaborative research projects by disease



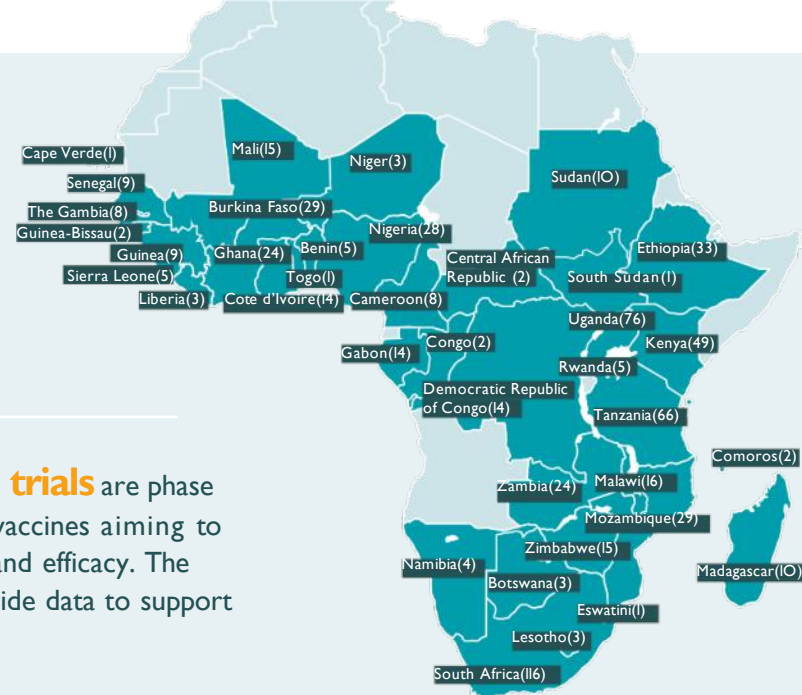
## Collaborative research projects by intervention



**332** is the total number of clinical studies awarded by EDCTP since 2014. Of these, **64% (213)** are interventional (clinical trials) studies of drugs and vaccines, diagnostic testing and evaluation studies, and **36% (119)** are non-interventional studies (observational studies of drugs and vaccines, diagnostics and prognostics, and other studies).

## Research centres and clinical trial sites involved in clinical research

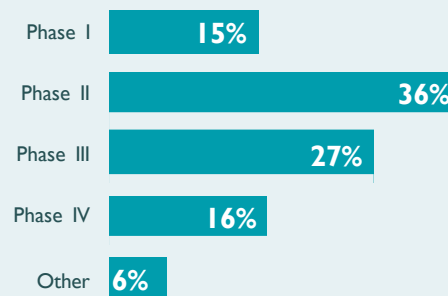
**38** sub-Saharan African countries host recruitment sites of EDCTP-funded collaborative clinical studies.



**63% (91)** of the clinical trials are phase II and III studies of drugs and vaccines aiming to deliver key evidence on safety and efficacy. The phase III trials also aim to provide data to support product registration.

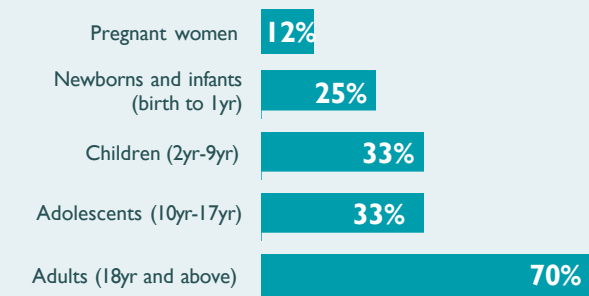
## Clinical trials of drugs and vaccines by phase

**16% (23)** of the trials involve post-license (phase IV) studies aiming to influence health policies and practice, and optimise the delivery of medical interventions for the wide-range of sub-Saharan African health systems and diverse populations.



## Population in clinical studies

**12% (37)** of all studies target pregnant women and their children. Other key populations are also involved in the studies, such as newborns and infants (77; 25%), children (103; 33%) and adolescents (102; 33%).





## Epidemic preparedness and response

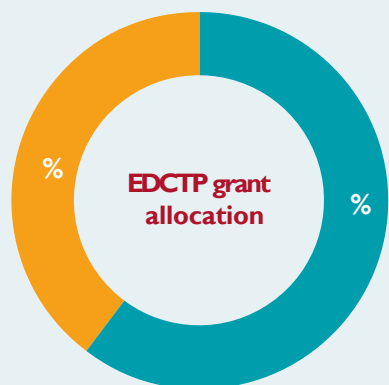
**€13.11 M** invested to support **27 projects** in sub-Saharan Africa aiming to manage and/or prevent the spread of the current COVID-19 outbreak.

COVID-19 research response is also carried out by the two consortia, PANDORA-ID-NET and ALERRT, funded by EDCTP through earlier investments of **€21 M** in epidemic preparedness research.

A total of **105 institutions** from **12 countries** in Europe and **26 countries** in sub-Saharan Africa participate in EDCTP's COVID-19 projects. Fourteen projects are coordinated by entities based in sub-Saharan Africa.

## Collaboration and capacity development

EDCTP projects involve **308** sub-Saharan African institutions. These account for **60%** of total EDCTP funding.

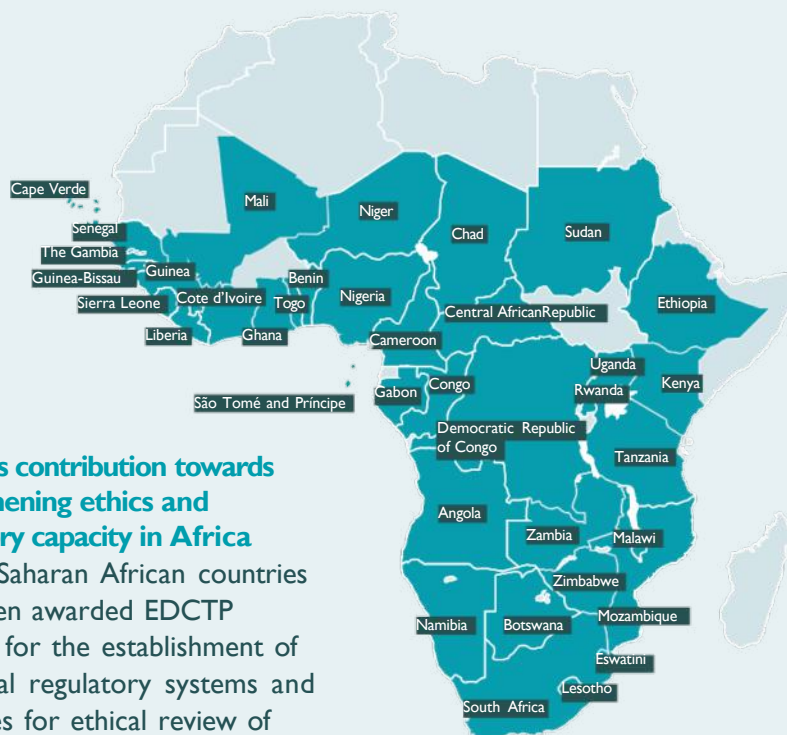


● Africa  
€ 2.3 M

● Europe  
€ 322.13 M

### EDCTP's contribution towards strengthening ethics and regulatory capacity in Africa

**37** sub-Saharan African countries have been awarded EDCTP funding for the establishment of functional regulatory systems and capacities for ethical review of clinical research.



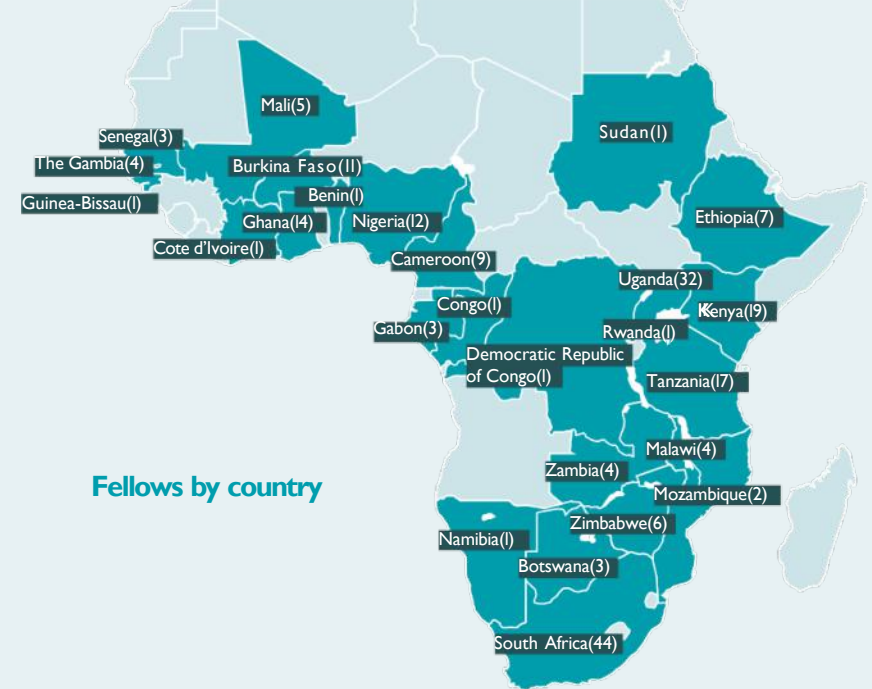
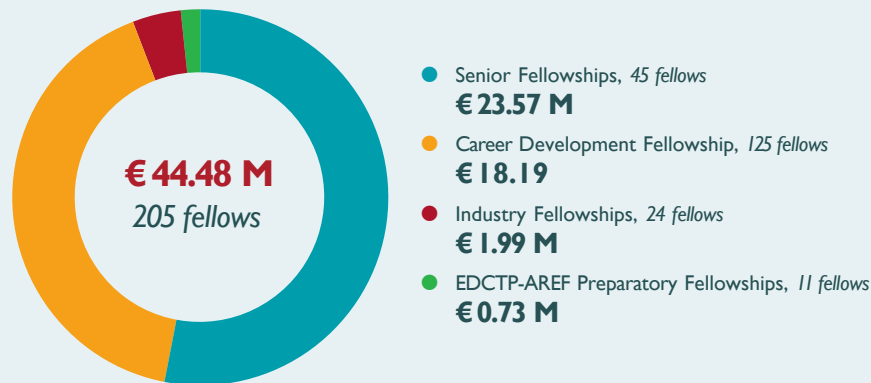
### 18 sub-Saharan African

countries are members of the EDCTP Association. In the EDCTP 2014-2020 work plans, 16 members have submitted **120 Participating States'** Initiated Activities (PSIAs) of total committed value of **€67 M**.

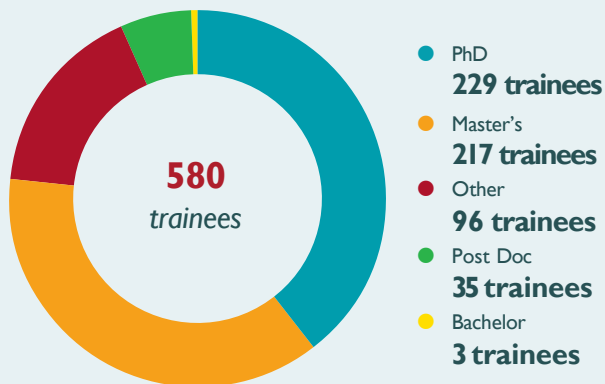


**205 fellows** from 24 African countries are supported with the potential to become research leaders. Furthermore, EDCTP has supported **580 trainees** on EDCTP projects from 33 sub-Saharan African countries (including 217 Master's and 229 PhD students).

#### Fellows by type of fellowship



#### Trainees on EDCTP grants by type

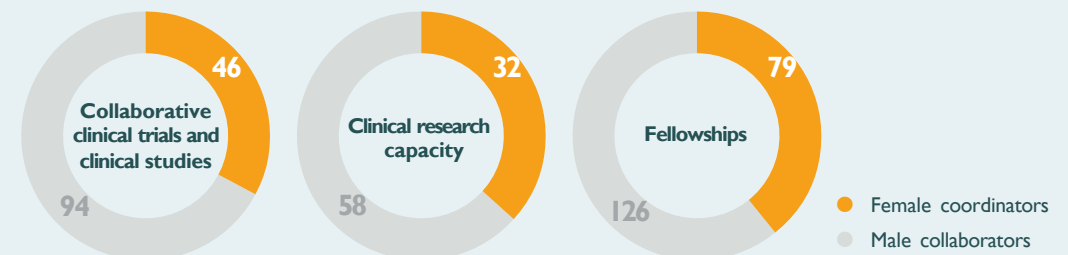


Of the **academic trainings** (Bachelor's, Master's and PhD) of African researchers, **78%** are pursued at academic institutions in Africa.

**150 epidemiologists** and **biostatisticians** across Africa funded through an EDCTP-Africa CDC joint initiative.

#### Gender equality in science

**37% of the projects** in the EDCTP2 portfolio are led by a female:



**46%** of the 580 African academic trainees are female.

**39%** of the members of expert review committees for EDCTP calls evaluations are female.



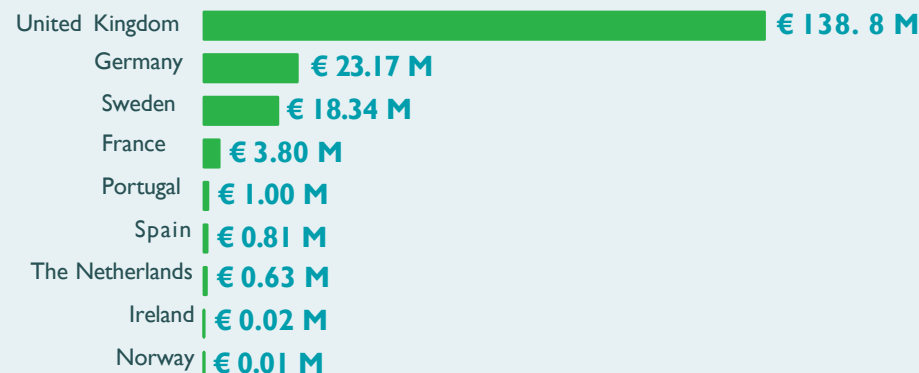
## European coordination



**14 European countries** are members of the EDCTP Association. In the EDCTP 2014-2020 work plans, these members have submitted 301 Participating States' Initiated Activities (PSIAs) of total committed value of **€ 1.157 billion**. PSIAs are research activities within the scope of the EDCTP programme that are funded and implemented by one or more member countries.

**€186.77 M** is the total cash received from the European member countries to the EDCTP programme.

### European member countries cash contribution to the EDCTP programme



## Partnerships



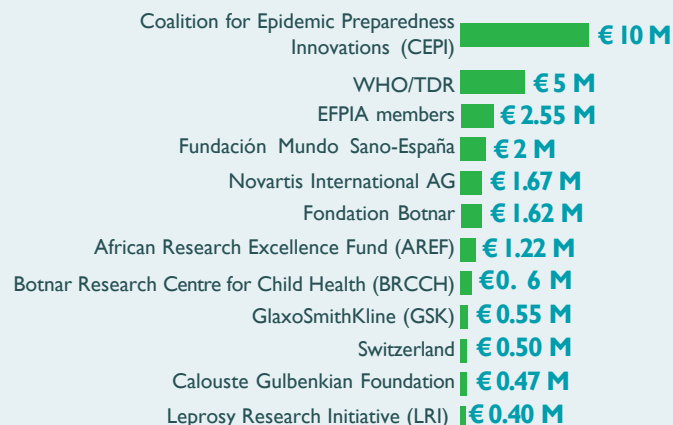
**15% (338 out of 2231)** of all participations in EDCTP-funded projects involve private-sector institutions.

They include private not-for-profit entities (245 or 11%) such as foundations and product development partnerships, private-for-profit institutions (29 or 1%) such as pharmaceutical companies and small-and-medium enterprises (64 or 3%).

Private sector institutions were awarded **€176.30 M** by EDCTP in 2021.

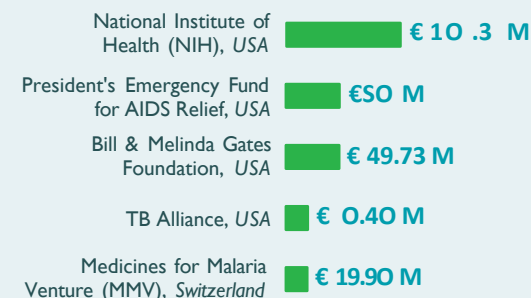
**€26.84 M** has been leveraged from partners for the launch of joint or coordinated calls for proposals.

### Partner contributions to joint initiatives launched with EDCTP



**€373.95 M** has been leveraged as co-funding to EDCTP projects through the EDCTP strategic calls for proposals (€271.58 M in cash and €102.37 M in-kind).

### Co-funding in EDCTP projects (top 5 funders)



Updated on 16 May 2022.

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



[www.edctp.org](http://www.edctp.org)  
[info@edctp.org](mailto:info@edctp.org)



edctpmedia



@EDCTP



Federal Ministry  
of Education  
and Research

# German Funding for Global Health Research Capacity Strengthening in LMICs

**Andrea Spelberg**

Head of Division “Global and Public Health Research” at the  
German Federal Ministry of Education and Research (BMBF)

[www.bmbf.de](http://www.bmbf.de)

## Research Networks for Health Innovations in Sub-Saharan-Africa (RHISSA)

- **1<sup>st</sup> phase (2016-2022):** 5 African-German research networks financed with 55,8 Mio. €
  - Continuous support by launching the **2<sup>nd</sup> funding phase (2023-2028)** with 50 Mio. €
- ❖ **Excellent Research** on infectious and non-infectious disease according to high local need
  - ❖ **Africa Leadership** and **Capacity Building** for young researchers, administrative staff and leaders
  - ❖ **Interdisciplinary Networking** and multilateral partnerships
  - ❖ **Research Uptake:** policy engagement, patient advocacy, effective dissemination



Contribution to improved health care in SSA & achievement of the UN SDGs

KEY  
PILLARS  
&  
SUCCESS  
FACTORS



## European and Developing Countries Clinical Trials Partnership (EDCTP)

- **Aim:** Collaborative **clinical research**, **capacity** building, individual **fellowships** since 2003

currently running:

- **EDCTP2 (2014-2024):**

- ❖ Topics include: HIV, TB, Malaria, NTDs, diarrheal diseases, lower respiratory tract infections, (re)emerging infectious diseases

- **Global Health EDCTP3 JU (2021-2031):**

- ❖ Germany contributes 125 Mio € (40 Mio. € cash, ~ 85 Mio. € in-kind contribution)
- ❖ Topics include, in addition to EDCTP2: climate crisis-related infectious diseases, AMR



## Product Development Partnerships (PDPs)

- **Aim:** R&D on products for the prevention, diagnosis and treatment of neglected and poverty-related diseases

currently running:

- **2<sup>nd</sup> funding phase (2016-2023)**, ~ 88 Mio. €
  - ❖ DNDi, FIND, IPM, MMV, TB Alliance, PATH Malaria
  - ❖ Further capacity building: support of PANTHER (PANdemic preparedness plaTform (for) Health and Emerging infections' Response) (~ 2.5 Mio. €) and additional 15 Mio. € for clinical COVID-19 research in Africa (ANTICOV)
- **3<sup>rd</sup> funding phase (2023-2028)**, ~ 50 Mio. €
  - ❖ Call was published in April, selection process is currently running