

WOAH's Laboratory Twinning Programme

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Department



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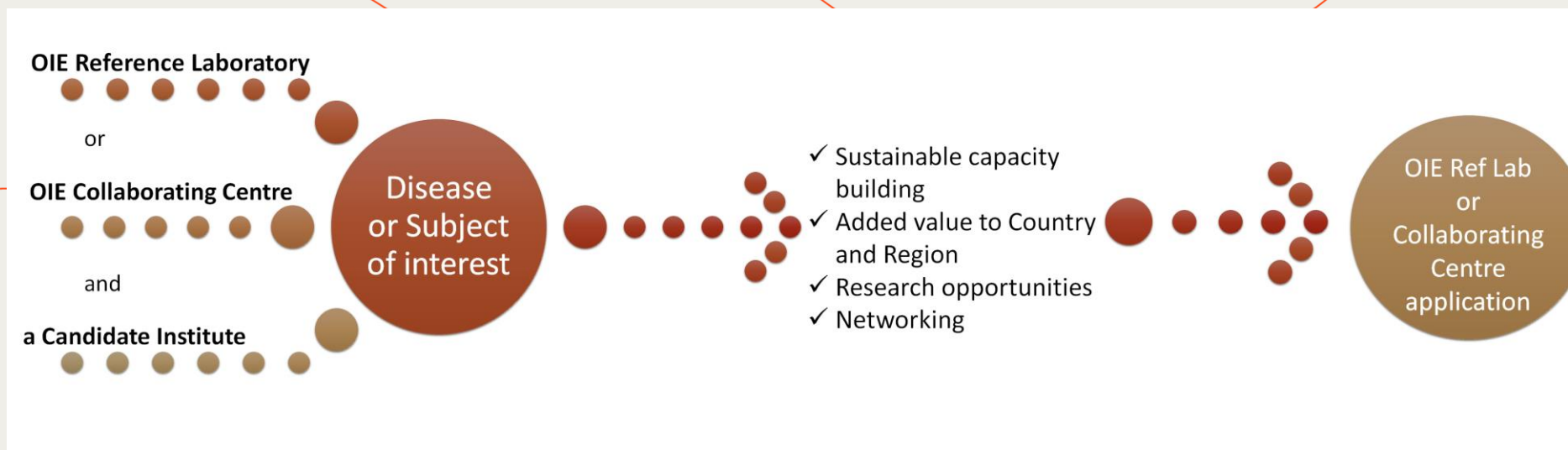
1. Presentation of the Lab Twinning Programme





Background

- Created in 2006
- It is a solidarity based, technical assistance and training programme
- Not meant to make infrastructural investments in the candidate laboratories
- 2 or 3-year contract, median project duration of 3 years, fixed reported schedule
- The lead lab is always a WOA Reference Centre
- The Candidate Institute can be a national laboratory, university, private laboratory, government agency, etc.
- Both WOA Delegates and both lab directors must support the project





'Expression of interest' evaluation

- Does the project focus on building technical capacity and expertise for a **WOAH listed disease or a relevant topic**?
- Is the Parent Laboratory a **WOAH Reference Centre with expertise relevant to the twinning project**?
- Will the project **improve compliance with WOAHS Standards**?
- Does the Candidate Laboratory intend to provide **support to other countries**?
- Will the project **extend or strengthen specific scientific networks**?
- *Is the intended outcome for the Candidate laboratory to become a WOAHS Reference Laboratory?*

The project must be relevant for the WOAHS



Twinning proposal submission

1. Expression of interest

- 1 or both partners send expression of interest to the WOAH. If only 1 party, WOAH will help with matchmaking.
- Identification of **funds** to support the project

2. Development of the project proposal

- The WOAH template for the project plan is filled out by the partners in a collaborative manner. The WOAH Programme Manager (Mariana) helps the partners at this stage to ensure that all the necessary information is in the document.
- The budget is drafted and submitted in accordance with the contents of the project plan/ The Twinning Financial Coordinator (Ingrid) will exchange with the partners to ensure that the budget respects the [Guide to WOAH Laboratory Twinning projects](#)

3. Dossier + Presentation to the WOAH Biological Standards Commission

- Once the project plan and budget are finalized and agreed by WOAH, the proposal can be submitted to the Biological Standards Commission. The Commission meets twice per year, in September and February.
- While waiting for the Commission to assess the project, 4 support letters should be prepared: 2 WOAH Delegates and 2 lab directors, plus the CVs of the lead scientists from both sides.

4. Contract signature

- Once the project has the support of the BSC and all 4 letters are received, the partners can proceed with signing the project contract. The signatures can be digital and the DG signs in last, marking the start date of the contract

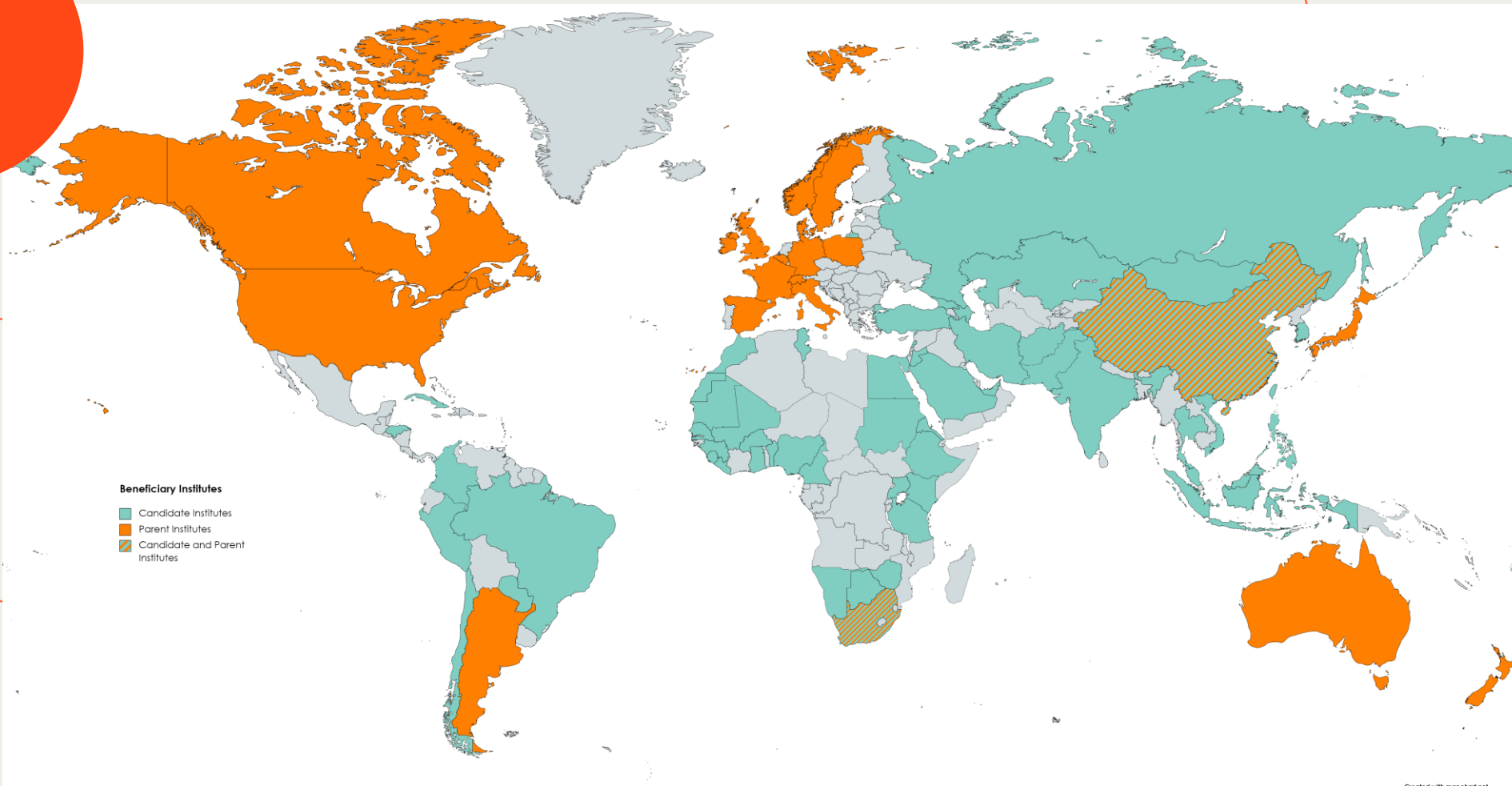


2. Implementation facts and figures





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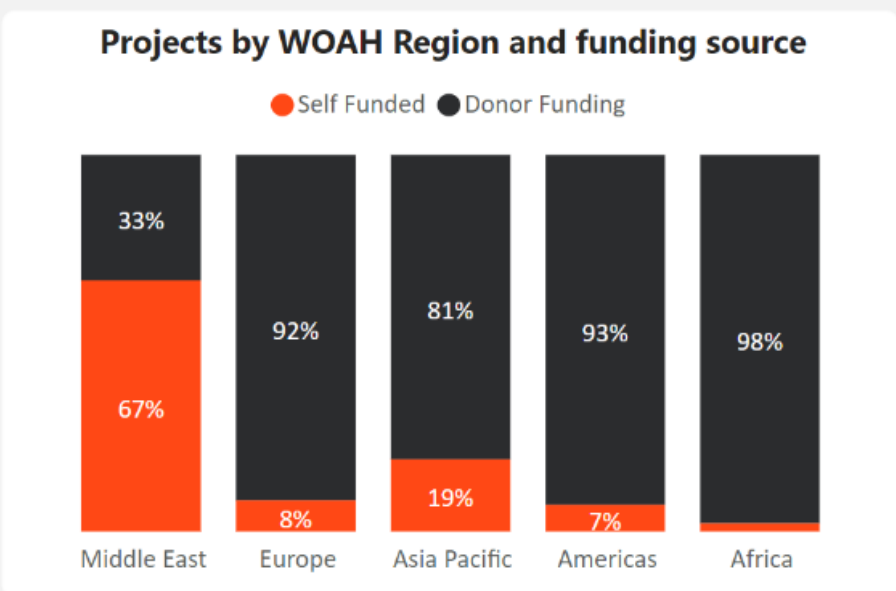
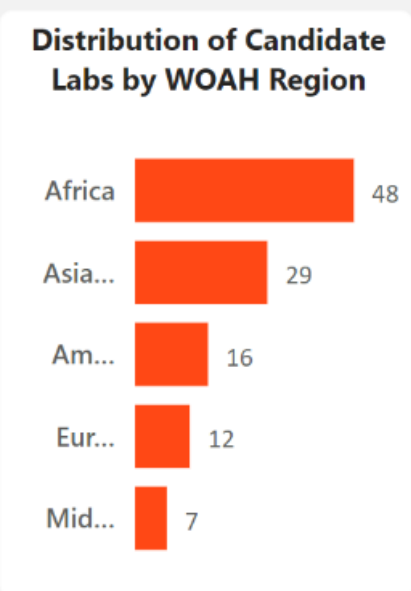
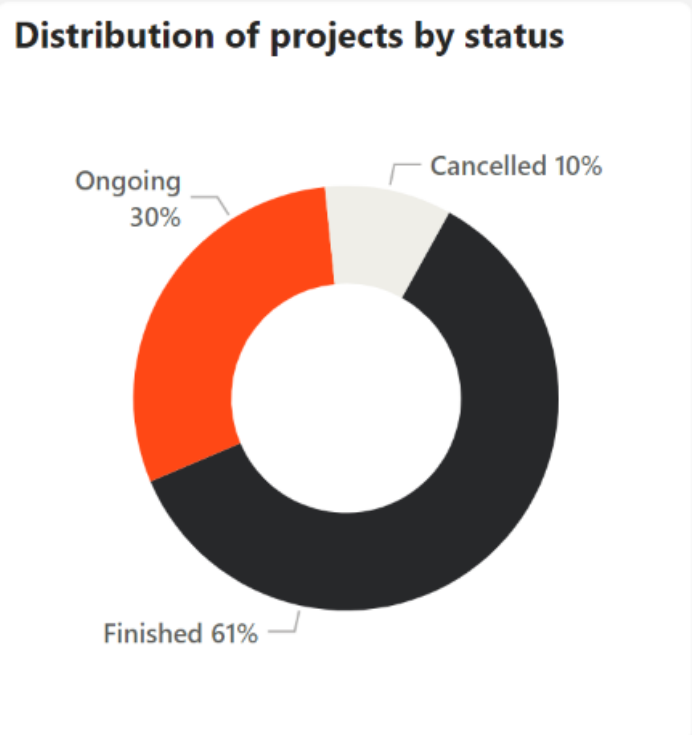
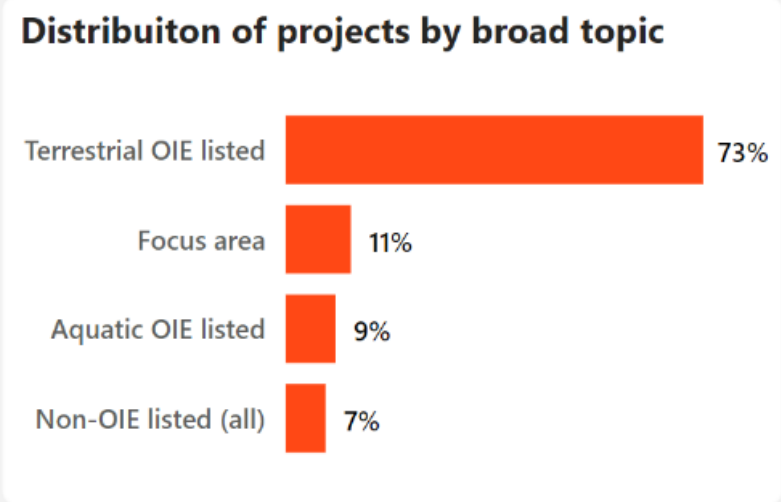
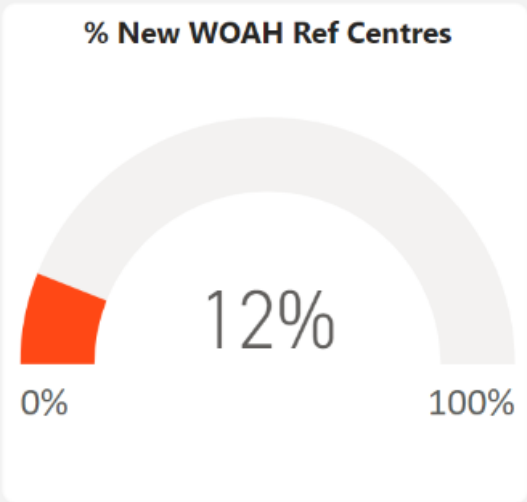


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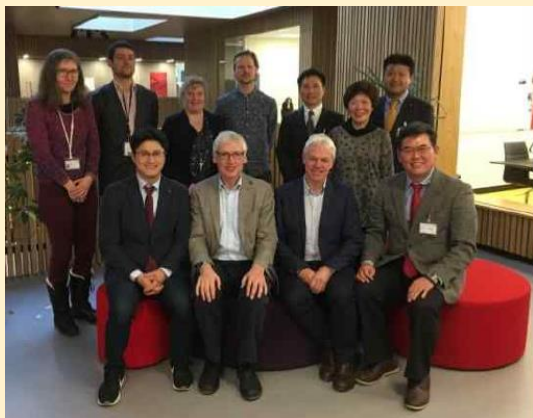
114
Total Projects

23
Parent Countries

60
Candidate Countries



Evaluation of the WOAH twinning programme



Closing meeting of the project between Denmark and the Rep. of Korea



Training: France and Thailand on Brucellosis



Closing meeting of the project between Italy and China on GIS

- Started in September 2021 through a doctoral research project based between WOAH and the University of Liverpool
- Aims to create a system to monitor the implementation of projects and to evaluate the impact and changes caused by WOAH twinings as well as the sustainability of its outcomes
- Results and evaluation system will be used to better plan future capacity building interventions and to restructure the programme as needed

Thank you

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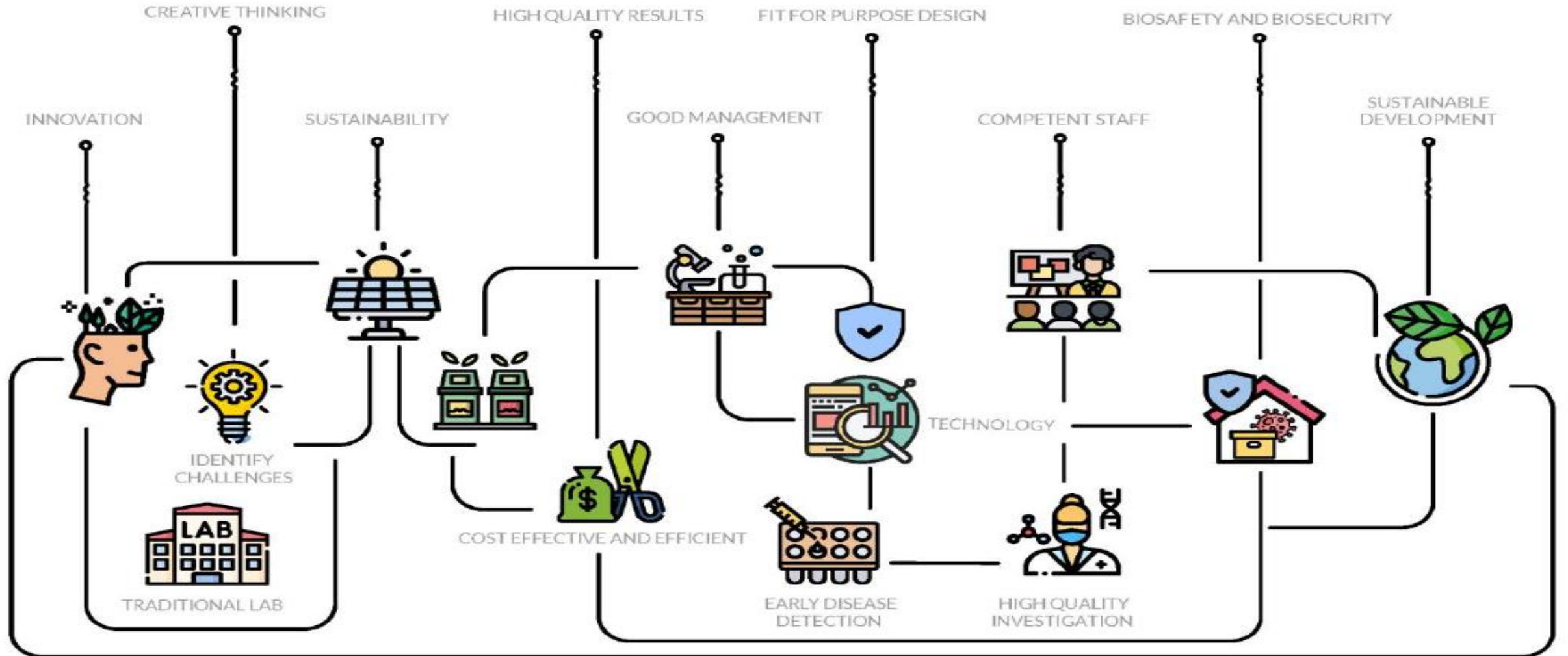




A Grand Challenge to improve the sustainability of laboratories



SUSTAINABLE LABORATORIES





Challenges to sustainability

- Highly engineered laboratories are **expensive to run**, sometimes **insufficient operating budget**, not always 'fit for purpose'
- **Difficulties** to maintain continuous **power**, clean **air** in the laboratory, clean **water**, safe **waste disposal**, access controls, **cool storage**, and the physical integrity of the building.
- Barriers to the supply chain for **equipment spare parts**, **reagents and consumables** prevent continuous functioning of laboratories
- Laboratories in remote areas are **not easily accessible by transport networks** (needed for sample submission/shipment, supply chain, technicians etc.).
- Wide fluctuations in the number of samples submitted to the laboratory (low level of submission with periodic surges), leaving the lab inactive for extended periods of time and **unable to cope during times of high demand**.
- Limited **local expertise available for risk assessment** needed to support laboratory biological risk management .
- Local **expertise for certification, calibration and maintenance of equipment is also often lacking**.
- Lack of **structured continuing education /training for staff** and have difficulty retaining some of their highly skilled and experienced staff.



What is a Grand Challenge?

- A competition with a prize
- Aims to seek innovative solutions to complex problems
- The develop those ideas into reality

What is this Grand Challenge looking for?

- It seeks to reimagine the physical laboratory infrastructure in order to:
 - to reduce ongoing operational costs
 - ensure safe and secure handling of high consequence pathogenic materials, including 'disease X',
 - whilst maintaining core functions of a diagnostic lab in low- and middle-income countries.



Grand Challenge Feasibility Study

- Validating the hypothesis that there are untapped innovative solutions in the landscape with high potential to address the challenges of sustainable diagnostics labs
- Developing and embarking on a clear fundraising strategy
- Determining the optimal structures for any future funding of subsequent phases
- Develop a governance framework

More info

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<https://www.woah.org/en/article/launch-of-the-grand-challenge-for-sustainable-laboratories/>



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Grand Challenge for Sustainable Diagnostic Laboratories



The Challenge

Infectious disease laboratories play a central role in supporting animal health and public health services. However, complex and persistent barriers, both technical and systemic, hinder the sustainable operation of diagnostic laboratories in low- and middle-income countries. Innovation designed to sustain the functions of a diagnostic laboratory safely and securely in low-resource settings would not only reduce risks to global health security but also support agricultural productivity, food security and safety, livelihoods, economic prosperity and animal and human health.

The Solution

The World Organisation for Animal Health (WOAH), with funding from Global Affairs Canada's Weapons Threat Reduction Program and technical support from The Pirbright Institute, are collaborating with Grand Challenges Canada and their implementation partners at Science for Africa Foundation to explore the application of a Grand Challenge approach to identify innovation that seeks to reinvent the laboratory, making it fit-for-purpose in resource-limited contexts globally.

A Grand Challenge for Sustainable Diagnostic Laboratories will seek to reimagine the physical laboratory infrastructure in order to reduce ongoing operational costs and ensure safe and secure handling of high consequence pathogenic materials, including 'disease X', whilst maintaining core functions of a diagnostic lab in low- and middle-income countries.

WE SEEK INNOVATION IN

- End-to-end laboratory concepts and design, including those that limit resource-intensive components (energy, clean water and air, waste disposal, equipment maintenance) of current diagnostic laboratories.
- Laboratory operation to meet the functions required for high-consequence pathogens to be handled safely and securely, bridging the need for high-intensity operation in crisis times with standard operations.
- Business models for ownership and utility of laboratory functions sustained by local leadership.

ROLLING OUT A PHASED APPROACH

Outcomes of the Phase I feasibility study will inform development of a full Grand Challenge for Sustainable Diagnostic Laboratories programme in Phase II where top innovations are considered for potential funding.



With the financial support of



With the technical support of



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This project builds upon over a decade of collaboration between Global Affairs Canada, the World Organisation for Animal Health, Chatham House, the UK International Biosecurity Programme and the World Health Organization. It is undertaken with the financial support of the Government of Canada, provided through Global Affairs Canada's Weapons Threat Reduction Program.

Thank you

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