



ARISE

African Research And Innovative
Initiative For Sickle Cell Education

ARISE - African Research and Innovative Initiative for Sickle cell Education: Improving Research Capacity for Service Improvement

ARISE project coordinators

F. Duccio Bonifazi

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Benzi Onlus

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Guy's & St. Thomas' Hospital NHS Foundation
Trust

This project has received funding from the European Union's Horizon 2020 research and innovation programme under the Marie Skłodowska-Curie grant agreement No. 824021





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African Research And Innovative
Initiative For Sickle Cell Education

ARISE - African Research and Innovative Initiative for Sickle cell
Education: Improving Research Capacity for Service
Improvement

webinar “MRI diagnostics of iron
overload using the affordable, AI-
trained method FerriSmart”

28 Sept. 2023

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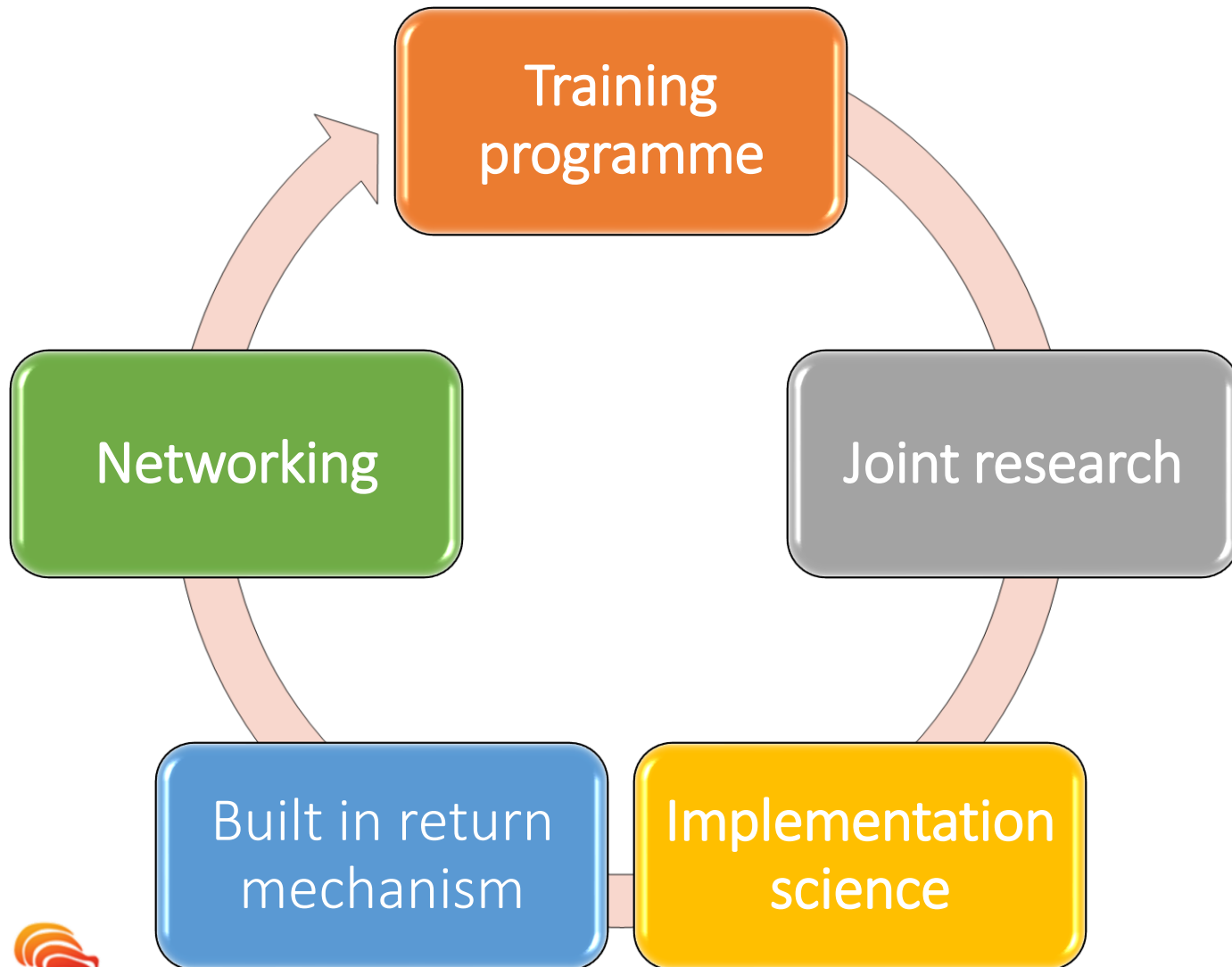


Agenda

- **Introductory remarks** - Baba Inusa & F. Duccio Bonifazi
- **MRI diagnostics of iron overload using the affordable, AI-trained method FerriSmart-** Tim St Pierre
- **Q&A session**
- **Final remarks**



Domains of the ARISE action and main aims



An EU funded project launched in 2019 with the aims:

- to have a **universal newborn screening and early infant diagnosis programme** successfully implemented and effectively embedded within regional and national policies in SSA
- to **build capacity of personnel** to achieve excellence in clinical practice and research using SCD projects as learning laboratories



The partnership



Baba Inusa



F. Duccio Bonifazi



Paul Milligan



Maddalena Casale



Fenella Kirkham



Marina Kleanthous



Raffaella Colombatti



Jaques Elion, Mariane de Montalembert



Miguel Brito



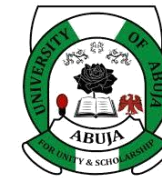
Wale Atoyebi



Paola Cogo



Jocelyne Neto de Vasconcelos



Ramsey Yalma



Moses Mamman



Benhards Ogutu



Miguel Abboud



Ijeoma Diaku-Akinwumi



Catherine Chunda



Lewis Hsu

19 Institutions from 11 countries



Staff exchange program

458 exchange months by Oct. 2024



- ✓ Visa
- ✓ Travel plan
- ✓ Accommodation
- ✓ Activity program



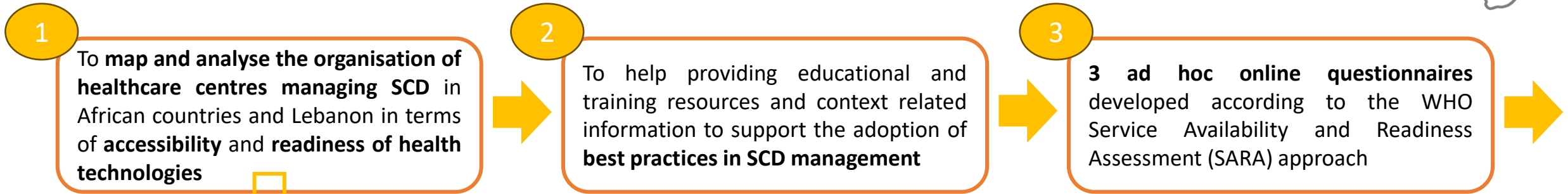
- Early-stage/experienced researchers
- Technical and administrative staff



Health technologies to manage SCD complications – questionnaire for healthcare facilities

Joint research

Questionnaire-based study, developed in Task 2.2 **Healthcare policies and centres organisation analysis** designed by Kaduna State University (ARISE fellow A. Sunday) and Benzi Foundation in collaboration with the [Consortium for Advancement of MRI Education and Research \(CAMERA\)](#)



- **Blood transfusion**
- **Magnetic Resonance Imaging**
- **Transcranial Doppler**

WHO Service availability and readiness assessment (SARA).
[https://www.who.int/data/data-collection-tools/service-availability-and-readiness-assessment-\(sara\)](https://www.who.int/data/data-collection-tools/service-availability-and-readiness-assessment-(sara))

Topics		Parameters/Tracer indicators
Access	Availability	<ul style="list-style-type: none"> • Facility information • Technology description • Technology density
	Affordability	<ul style="list-style-type: none"> • Funding to sustain the technology costs
Readiness		<ul style="list-style-type: none"> • Specialised health workers density • Usage, indication and frequency • Maintenance, servicing access and frequency • Basic amenities • Equipment & supplies • Personnel Training and education • Standard precautions
Research Translation		<ul style="list-style-type: none"> • Capacity for use of technologies in clinical trials and large population studies • Networking and access to research networks



Health technologies to manage SCD complications – questionnaire for healthcare facilities

Joint research

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4

4 reference centres in Nigeria volunteered for a **pilot phase** to test the feasibility of the surveys

5

Surveys will be sent to **reference persons** with request to complete (or forward to the most appropriate colleagues)

6

Extension to all the ARISE and CAMERA countries

State	City	Institution
Kaduna	Kaduna	Kaduna State University
Kaduna	Zaria	Ahmadu Bello University Teaching Hospital
Lagos	Ikeja	Lagos State University Teaching Hospital
Federal Capital Territory	Abuja	Abuja University Hospital

START: Autumn 2023

END: Summer 2024



First webinar

“Iron overload: an elusive complication in sickle cell disease and thalassaemia” - 13th September 2023

Teaching material and videorecording available at:

<https://www.ariseinitiative.org/education-training/arise-webinars-on-iron-overload-and-mri-in-scd/>



Educational training courses



today's webinar

- **MRI diagnostics of iron overload using the affordable, AI-trained method FerriSmart**
- **Professor Tim St Pierre**
 - He is a biomedical physicist who has a strong research interest in the form and properties of iron in the human body and has helped develop diagnostic tools for the non-invasive measurement of iron levels in human tissues.
 - He is a Senior Honorary Research Fellow at The University of Western Australia and has a part time position as Chief Research Scientist at Resonance Health Analysis Services Pty Ltd

