



ARISE Train-the-Trainer Workshop

Abuja, Nigeria

August 2nd – 4th 2022

(this document is produced in the framework of the
ARISE project)

Start date
01/01/2019

Duration
70 months

Project Coordinator
Fedele Bonifazi

**FONDAZIONE PER LA RICERCA
FARMACOLOGICA GIANNI
BENZI onlus (FGB)**



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1. Project Leads

		
<p><u>Professor Baba Inusa</u></p>	<p><u>Fedele (Duccio) Bonifazi</u></p>	<p><u>Dr Wale Atoyebi</u></p>
		
<p><u>Dr Jacques Elion</u></p>		<p><u>Mrs Bola Ibilola Ojo</u></p>

2. Meet the ARISE Team

Steering Committee

1. F. Bonifazi (FGB) - Project Coordinator
2. S. Ottomano (FGB) - WP1 Leader
3. L. Ruggieri (FGB) - WP2 Leader
4. E. Elion (INSERM) - WP3 Leader
5. B. Inusa (GSTT) - Project Scientific Coordinator and WP4 Leader
6. M. Kleanthous (CING) - WP5 Leader (replaced by Carsten Lederer in May 2023)

7. P. Milligan (LSHTM) - WP6 Leader
8. B. Inusa (GSTT) - Project Scientific Coordinator and WP4 Leader
9. A. Landi (FGB) - WP8 Leader
10. L. Hsu (UIC) US representative
11. B. Ogutu (SU) Kenya representative
12. M. Abboud (AUB) Lebanon representative
13. J. Olufunke Lawson (UA) Nigeria representative
14. S. Scott (LSHTM), UK Representative
15. R. Yalma (UA), Nigeria Representative

Project Management

1. Professor Baba Inusa, Scientific Coordinator
2. Fedele (Duccio) Bonifazi, Project Coordinator
3. Serena Ottomano, Project Manager
4. Olawale Tijani, Scientific Programme Manager (left in July 2023 and replaced by Ioannis Mavridis in December 2023)
5. Lucia Ruggieri, Project Management Team member
6. Antonella Didio, Project Management Team member (left in February 2024)

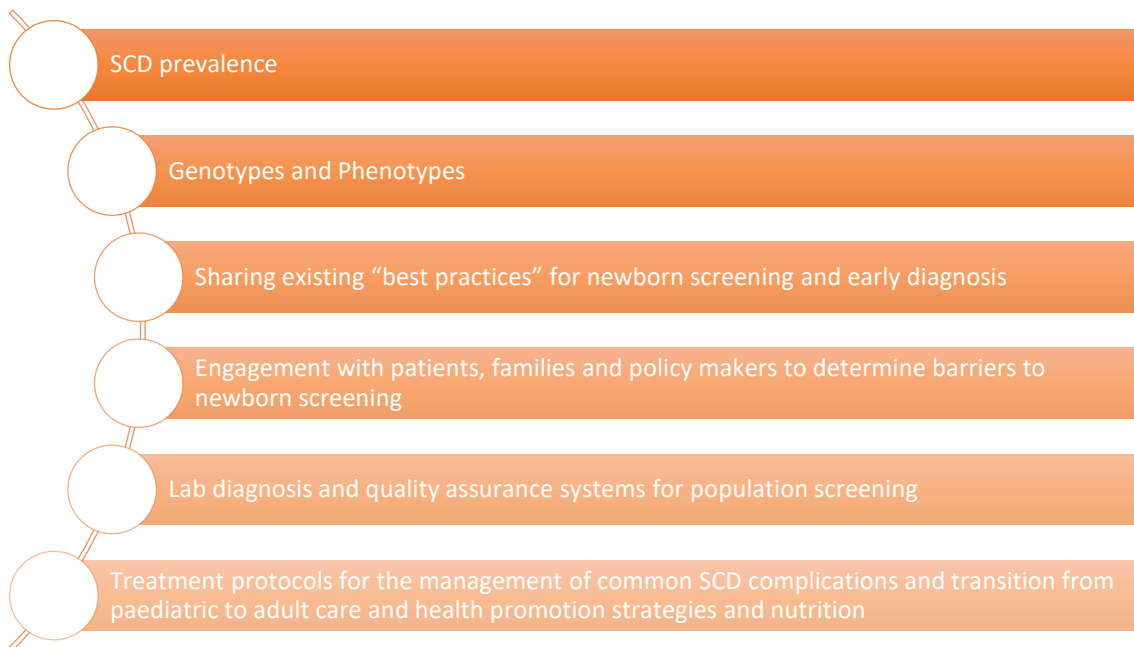
The Partner Organisations as of October 2024

1. Fondazione per la Ricerca Farmacologica Gianni Benzi onlus (FGB, Italy)
2. Guy's and St Thomas' NHS Foundation Trust (GSTT, UK)
3. Institut National de la Sante et de la Recherche Medicale (INSERM, France)
4. The Cyprus Institute of Neurology and Genetics (CING, Cyprus)
5. University College London (UCL, UK)
6. The Royal College of Pathologists (RCPath, UK)
7. London School of Hygiene and Tropical Medicine (LSHTM, UK)
8. Lagos State University (LASU, Nigeria)
9. University of Abuja (UA, Nigeria) and its affiliated entities:
 - a. University of Ilorin (ILORIN, Nigeria)
 - b. International Foundation Against Infectious Diseases in Nigeria (IFAIN, Nigeria)
 - c. Zankli Medical Centre (ZMC, Nigeria)
 - d. Sickle Cell Cohort Research Foundation (SCORE, Nigeria)
10. American University of Beirut (AUB, Lebanon)
11. University of Illinois at Chicago (UIC, USA)
12. Strathmore University (SU, Kenya)
13. Ahmadu Bello University (ABU, Nigeria) and its affiliated entities:
 - a. Kaduna State University (KASU, Nigeria)
 - b. Kaduna State Assembly (KSA, Nigeria)
 - c. PANAF schools (PANAF, Nigeria)
 - d. Barau Dikko Teaching Hospital (BDTH, Nigeria)
14. Università degli Studi di Padova (UNIPD, Italy)
15. Università degli Studi di Udine (UNIUD, Italy)
16. Università degli Studi della Campania Luigi Vanvitelli (UNICA, Italy)
17. Instituto Politecnico de Lisboa (IPL, Portugal)
18. MINISTRY OF HEALTH (MoH_UTHS-CH, Zambia)
19. INSTITUTO NACIONAL DE INVESTIGACAO EM SAUDE (CISA, Angola)

3. Introduction to ARISE

The African Research and Innovative Initiative Education for Sickle Cell (ARISE) project is an EU funded programme. The aim of the project is to create an interagency and multidisciplinary staff exchange programme between researchers, early start investigators and other relevant staff members of the partner institutions to share best practices in newborn screening, diagnosis and treatment of sickle cell disease (SCD), leading to improvement in overall disease outcome.

After its official launch in 2019, the project steamed ahead with its goals of enabling collaboration and encouraging training and learning opportunities between EU and non-EU countries via secondments with researchers, doctors, nurses and other relevant individuals. The project covers the following topics through the 8 work packages.



As with most things, secondments and planned activities came to a halt during the covid-19 pandemic. We found ourselves in a situation where those who were already on secondments had to extend this for many months and those who had planned their secondment periods were forced to cancel plans as nations tightened border control and began introducing travel restrictions.

Gauging the situation, a number of virtual training and learning opportunities were delivered but once the covid-19 situation subsided, thoughts into face-to-face sessions were started again. Following on from the pandemic, the project officially restarted again in February 2022, revitalised from the time-away plans were underway on delivering in-person learning opportunities again. The Train-the-Trainer 2022 event was a product of this.

Learn more about the project and resources hosted on the official ARISE website by visiting our website <https://www.ariseinitiative.org/arise-project/project-description/>, and by following us on Twitter @_Project_ARISE or LinkedIn ARISE initiative.

4. Workshop Executive Summary

Following on from the successful Train-the-Trainer programme delivered in 2019, The ARISE project delivered a successive workshop in Abuja, Nigeria. Teaming up with partner organisations Guy's and St Thomas' NHS Foundation Trust (GSTT), the Royal College of Pathologists (RCPATH), INSERM and the Benzi Foundation, the subsequent Train-the-Trainer Workshop was a 3-day event aimed to follow on from the objectives from the first event whilst improving the experience for the delegates and providing content for personal and professional growth.

Whilst the objectives from the initial workshop was to enhance the knowledge and skills of professionals focusing on the objectives of Work Package 3 & 4, we sort to do this whilst bringing in elements and topics that were new to the programme. As the first face-to-face event planned since the start of the pandemic, the aim was to ensure more medical professionals were reached and more topics were addressed.

Similarly, to the first event Work Package 3 (WP3) programme consisted of theoretical laboratory lectures and laboratory practical sessions aimed at improving laboratory diagnostics and quality assurance within newborn screening programmes. Work Package 4 (WP4) focused on the management of SCD and the importance of practical protocols for the screening of SCD. The wonderful additions to this workshop were the hand-on training on Transcranial Doppler (TCD) screening with Dr Soundrie Padayachee, lead trainer for children's sickle cell TCD screening (Guys and St Thomas Hospital) and the participation from members of the African Society of Blood Transfusion (AFSBT) who delivered a series of sessions on a range of topics.

The laboratory practical sessions took place on the 2nd – 4th August at the International Foundation against Infectious Disease (IFAIN) Laboratory. A total of 19 delegates had the opportunity to receive hands-on practical laboratory techniques workshop with Sarah. Due to its popularity and high engagement an additional session was organised. There were twenty-seven members of speakers, renowned for their expertise and contribution to improving lives of patients living with Sickle Cell disease who delivered lectures.

4.1. Key Outcomes of the Workshop

The event hosted approximately 151 delegates from around 22 different institutions across Nigeria fostering networking between different departments and states. A number of ARISE faculty members were available to attend in person and spend the time in Abuja with the delegates and there were speakers invited who were able to virtually attend.

The workshop focused on medical professions including Laboratory Scientists, Nurses, Medical Doctors, Community Workers and Traditional Birth Attendants (TBAs) .

4.2. Goodwill Messages



Prof. Abdullahi Musa Ashafa

We were honoured to receive a message from Professor. Abdullahi Musa Ashafa, Vice Chancellor, Kaduna State University, to announce the workshop as well as increase anticipation about what would be delivered.

Unfortunately, he was not able to attend in person but he provided a recorded message relaying his appreciation for the ARISE programme, Professor Inusa and the work the project has done so far in the country. He reiterated the work that needs to be done in the country with regards to SCD management and awareness in the community and spoke to the delegates, thanking them for attending from

their various institutions and sending hope that all they learn in used in best practice in their institutions.

The workshop was also attended by the First Lady of Niger State, Dr Amina Abu

bakar Bello, who was present on both Day 1 and Day 3 of the conference. She delivered a speech on Day 1, addressing the delegates as a fellow clinician and advocate for health regimes in the country. On Day 3, she and along with Professor Jacques Elion, presented the delegates with their certificates of attendance. Her interaction with the speakers and delegates was welcomed.



From the left: Dr Funke Lawson, Prof. Baba Inusa, Dr Amina Abubakar Bello and Professor Jacques Elion

4.3. Main Conference Highlights

Among the many sessions, lecture and discussions that took place at the workshop, there were highlights that remain in everyone's mind and has brought about much discussions and possible changes in their institutions.

4.4. Day 1 – Session Summaries

4.4.1. *Welcome & Institutional Updates*

What better way to open up the workshop than to receive a grand welcome from the Project Scientific Coordinator and esteemed paediatric consultant Professor Inusa. As he addressed the room, he prepared all the delegates to begin to absorb the information, learning and advice that would follow. Following this the conference started with updates from a few of the institutions invited to the workshop. This was the opportunity to provide data and details on their patient pool, facilities, patient care and future plans with regards to SCD management.

Presentations were delivered by:

- Niger State – Dr Aisha Musa and Dr Makusidi Mohammed
- Kaduna State- Dr Livingstone Dogara (CONSA)
- University of Ilorin- Professor Kolade Ernest
- University of Abuja – Dr Ramsey Yalma

Each institution highlighted provided data on their state's and institutions including populational data, the number of SCD patients, the ages of patients and treatment plans in use. It was also an opportunity for them to share with medical professions not from their state, how they manage their clinics, equipment they do or do not have as well as plans in the future. Examples of topics covered were new-born screening programmes, children to adult transition and blood transfusion.

4.4.2. *ARISE Secondment Session*

Due to covid-19, secondments had all but come to a standstill as travel restrictions prevented individuals from visiting other countries for training. As restrictions lifted, we wanted to invite individuals to amend old secondment plans and encourage those who had not considered completing a secondment to do so. This session was very popular and informative. The Fondazione per la Ricerca Farmacologica Gianni Benzi onlus team (Fedele Bonifazi, Serena Ottomano and Lucia Ruggieri) were able to answer all the questions individual had and as result, we received a number of requests to restart planning on secondments that were paused and new secondment plans.

4.4.3. *Logistics of Blood and Data Collection at Clinical Level*

For some states, the prospect of rolling out a new-born screening programme has been a key step in the providing adequate care to their patients. The ARISE programme has been assisting with this and so the three ladies from Kaduna State (Mrs Gloria Bahago, Mrs Monica Stephen & Mrs Janet Waje) shared with the delegates a presentation detailing the process of dried blood spot sample collection in their respective institutions. They talked over the correct way to collect samples, the required information that must also be collected from the child as well as the packaging and transporting of samples to the lab for analysis. Though they have doing this diligently at their respective sites, they shared some of the set-backs they have experiences as well as feedback from the parents/guardians.

4.4.4. *Demographics, Transportation & Storage at Laboratory level*

Following on from the lecture on sample collection, Mohammed Aminu provided an excellent lecture on the logistics from sample transportation to sample analysis at the lab. He educated the group on the

importance of correctly labelling samples with identifiers and the mandatory data needed for each sample at each site. Mohammed Aminu also demonstrated the many errors that could occur, where they occur and the risk this could cause to the patients.

4.4.5. New-born Screening App & Database Development

Though not able to attend in person, Emma Proctor, from Guys and St Thomas NHS Foundation Trust, recorded her lecture on the NHS New born screening app and database developed to streamline the process of identifying new-borns with SCD and referring them to a hospital for care.

4.4.6. Confidentiality & Sharing Information (Newly Diagnosed and Counselling) – Hosted by Mrs Kemi Ajamufua, Mrs Linda Yari & Mrs Victoria Odesina

Sometimes overlook, Mrs Kemi Ajamufua, Mrs Linda Yari & Mrs Victoria Odesina spoke on confidentiality and how best to share important information to parents/guardians that will allow them to be receptive to the news and encourage them to get the most of the time. They provided practical skills and tips that everyone, especially patient facing workers, can use to reduce anxiety and preconceptions in parents/guardians.

4.5. Day 2 – Session Summaries

The morning of 2nd day of the workshop, delegates were separated into two main groups: the data management/admin delegates and the diagnostic/clinically-based delegated. The two groups moved to different rooms and parallel sessions were held.

4.5.1. General Introduction to Blood Transfusion in Africa

Delivered by Dr Shirley Owusu-Ofori, ISBT Regional Director- Africa. Provided a background to blood availability, blood donors and blood supply in Sub-Saharan Africa (SSA), blood transfusion Service Systems, blood collection and resources in Africa and remedies. Concluding that cost drives decision making instead of safety, regional investment needs to be tailored to resource limitations from the beginning. Region specific research/contemporary surveillance - there is a compelling need for the systematic collection and compilation of data so that situational assessments can be conducted. Policy decisions originating in high income countries (HIC's) may not be locally applicable or may yield potential detrimental effects. Improved laboratory training as a platform from which to build local research capacity to develop context-relevant evidence, introduction of robust quality management systems across all blood transfusion services in SSA would be a great step in enhancing blood safety.

4.5.2. Conversion of Family Donors into Voluntary Donors

Delivered by Dr Shirley Owusu-Ofori explored the definitions and characteristics of donors - Voluntary nonremunerated donor (VNRD), Voluntary non-remunerated blood donation (VNRBD), family replacement donor (FRD), the rationale for blood donation, can FRD become VNRBD looking at the results of a Pilot Study - conversion of FRD in Kumasi. The presentation concluded that the safest blood donor could be unpaid, voluntary or an unpaid family replacement. Repeat donors are generally safer than occasional donors, voluntary donors are more likely to be regular donors and respond better to appeals during emergencies. Promotion of unpaid, regular, voluntary donations is the key to safe blood supply.

4.5.3. Rational use of blood

Hosted by Dr Bodunrin Osikomaiya, the session explored the definitions and characteristics of donors - voluntary nonremunerated donor (VNRD), Voluntary non-remunerated blood donation (VNRBD), family replacement donor (FRD), the rationale for blood donation, can FRD become VNRBD looking at the results of a Pilot Study - conversion of FRD in Kumasi. The presentation concluded that the safest blood donor could be unpaid, voluntary or an unpaid family replacement. Repeat donors are generally safer than occasional donors, voluntary donors are more likely to be regular donors and respond better to appeals during emergencies. Promotion of unpaid, regular, voluntary donations is the key to safe blood supply.

4.5.4. An overview of adverse blood transfusion reactions

Delivered by Dr Bodunrin Osikomaiya supported participants in knowing the classification of adverse blood transfusion reactions, identify the types of adverse blood transfusion reactions, and understand management.

4.5.5. Immuno-Haematology for Clinical Use

Delivered by Femi Ajayi, discussed the pattern and prevalence of alloimmunisation in multiply transfused patients with SCD in Nigeria. It looked at basic blood group serology, differences between Immunoglobulin G (IgG) and Immunoglobulin M (IgM) antibodies as well as antibody responses, ABO systems, ABO antibodies and red cell typing. Additionally, blood group systems, frequency of RH antigens in Nigeria, red cell antibody screening and ABO identical or compatible components and cross-matching. There were also other laboratory-based topics covered by lectures in including good laboratory practice / Quality control/ SOP development (Generic), molecular diagnostics and point of care testing.



Clockwise from left to right: Dr Shirley Owusu-Ofori, Dr Bodunrin Osikomaiya and Dr Femi Ajayi from the African Society for Blood Transfusion (ASfBT) delivering lectures to participants in the blood transfusion workshop.



Above: All participants from the blood transfusion workshop

There were also other theoretical laboratory-based topics covered by lectures in including good laboratory practice and quality control as well as SOP development by Dr Grace Olanipekun, professor Jaques Elion presented a talk on molecular diagnostics Dr Wale Atoyebi on point of care testing.

The Role and Goals of Data Management

Session 1 of the data management/admin sessions saw Mr Isah Habila, the Data Manager from the Kaduna NBS project, share the importance, role and goals of adequate data collection and management. He explained the ways to improve the quality of data and how teams should plan and create systems to correct and maintain data collection. He used his experience as the data manager of the NBS project in Kaduna to effectively explain the process they use to collect, share and provide feedback to the many teams in the project.

Development of Patient Registries/Health Data and Registries

Dr Petros Kountouris and Mr Duccio Fedele Bonifazi both spoke on registries. Whilst Dr Petros Kountouris (in a pre-recorded lecture) described the EU Framework for rare disease patient registries, provided examples and demonstrated the transfer of data, Mr Duccio Fedele Bonifazi spoke on the importance of sharing data, the issues that come about from this and how to mitigate it. He ended on calls for collaboration with ARISE which many were interested in taking up.

After the two separated session, the delegates came together to get an overview of TCD and the importance in stroke prevention via a talk by Dr Soundrie Padayachee (refer to Trans Doppler Scanning Hospital Sessions for more detail). At the end of this joint session, the groups were split again into lab-based worker, clinical based worker and the first set of TCD hand-on teaching.

Primary Health Care - Initial Assessment and Counselling for Sickle Cell Disease

The key takeaway of this session was really highlighting the importance of the Primary Healthcare Centres in ensuring adequate care and education at the community level. Dr Oluseyi Oniyangi and Mrs Kemi Ajamufua, used this session to empower the nurses, traditional birthing assistants and community health workers working in to the community. They demonstrated how the three health care tiers can and should be linked effectively and how the community level workers should be equipped to do more, for example counselling, education, prophylaxis and the management of less severe complications.

Clinical Management Protocols

Dr Hafsah Ahmad (Paediatrics) and Dr Ifeoma Ijei (Adult) discussed care for both children and adults and the importance of having policies and protocols at primary, secondary and tertiary level. This would ensure staff are aware of standard practice and be aware of when to escalate cases.

Patient, Community and Stake Holder Engagement

Miss. N'zallah Zamani represented herself as well as Professor John Dada in discussing their own contributions on patient engagement of community. Using her NGO work for the Saiya Sickle Cell Foundation (SCCF), she spoke to the delegates on the importance of her work, how far their NGO has come, the methods they have used to engage with the community as well as the challenges they have faced. Despite this, they have clear goals on what they want to achieve in the next few years.

Monitoring and Evaluation (M&E)

Mrs Bola Ojo and Ms Kelley Price covered several key topics, including the fundamentals of Monitoring and Evaluation (M&E), how to effectively conduct M&E activities, the benefits of M&E, a model framework to guide these activities, and the application of the ARISE M&E approach to participants' roles and responsibilities. The session also included an interactive audience Q&A.

Epidemiology and Disease Burden

Dr Ramsey Yalma used this opportunity to provide an overview of sickle cell disease, how it is transmitted and provide data on the number of patients living with the disease in Nigeria and globally. He described the burden of disease and their roles in reducing this via NBS, education, counselling and the involvement of the community.

Health and Awareness in Schools

Educating the children was Mrs Nasara D. Ifere message to the delegates. She used her time to demonstrate that the efforts should not only be left to healthcare professionals, and that teachers should also be responsible for educating the children in schools. She explained the essential role schools play in children's lives and presented the ARISE School Programme aims and goals.

Roles & Responsibilities - NBS Programmes

Both Dr Livingstone Dogara and Dr Funke Lawson presented talks on the roles and responsibilities of the teams and individuals within the NBS programmes. They both described the importance of the programme and why it should be standard practice and then lead to demonstrate the importance of each part of the chain. The take home message was that everyone should understand their role, know what they are responsible for and know how each part works together to achieve the end results.

Management of Drug Supply Chain in Sickle Cell Anaemia

Mrs Grace Ebuga, pharmacist, shared the pharmacy perspective to SCD management and treatment. She spoke on the importance of medication such as Hydroxyurea and Penicillin but also about the importance of managing supply. The seven components of supply chain management was described and each point discussed in further detail.

4.6. Day 3 – Session Summaries

Interactive activities to consolidate learning over the last two days.

1. Bola and Kemi - nurses, traditional birthing assistants and community health workers focus group
2. Professor Inusa – clinicians focus group

The clinical group included doctors and pharmacist presentations and discussion on clinical management including i)hydroxyurea therapy in paediatrics and adults; ii) The role of maintaining supply chain iii)Transition from paediatrics to adult care for SCD . This was followed by subgroup discussion

Summary

A formal Transition from Paediatrics to adult policy was established in University of Ilorin following the 2019 train the trainer course in Abuja. Other institutions - Barau Dikko Hospital and Ahmadu Bello University Teaching Hospital Zaria were in preparatory phases of introducing formal programmes.

The Bingham University Hospital discussed the challenges of sourcing Sickle cell treatment drugs especially Hydroxyurea. These challenges include the low demand as a low patient purchasing power, erratic supply.

4.7. Transdoppler Scanning Hospital Sessions – Dr Soundrie Padayachee



An addition to this year’s workshop was the Transcranial Doppler (TCD) ultrasound training provided by Dr Soundrie Padayachee from Guys and St Thomas NHS Foundation Trust. A Consultant Clinical Scientist specialising in vascular ultrasound and ultrasonic angiology, she not only gave an excellent introductory lecture on TCD but also provided hands-on practical experience to those who would benefit from the experience.

Her lecture titled ‘Routine Screening of Children. Using Transcranial Doppler (TCD) Scanning; Introduction’ gave an overview on the prevalence of stroke in children with SCD, the importance of screening early, the machines used in screening as well as data and how individuals can be trained to do the scans.

Her addition was not only informative but she was able to help children and the hospital by providing free TCD scans whilst also providing the opportunity for hands on

training.

Working with the National Hospital of Abuja and Dr Oluseyi Oniyangi, Dr Soundrie Padayachee was able to deliver hand-on training to delegates with experience ranging from complete novice to some experience. A total of eighteen children received free TCD scans during the 2-day sessions. Her interactive session was both theoretical and practical. The sessions were split into experience level determined by a questionnaire completed by delegates interested in being a part of this session. Based on their answers to questions such as the type of machines they have had experience using, the number of scans they have performed in the last year and what their expectations about the session.

The hands-on session, with small groups, allowed the delegates to ask questions, get close with the machine whilst Dr Padayachee was scanning the patients and get clinical experience. A training pack was delivered to all those who attended for review during and after the training, which provided more detail into the practice.

Following on from the workshop, Dr Soundrie Padayachee delivered a summary of her experience at the workshop as well as her thoughts on the TCD sessions.



“The Abuja experience was very positive in terms of being able to deliver the essence of the TCD training programme to a wide range of healthcare professionals. There was a lot of interest in observing and practicing the TCD protocol. Being able to display the procedure in a hospital setting although challenging, provided the perfect back-drop to appreciate the need for robust scanning protocols and development of clinical skills. We were not able to view pre-meeting practitioner background or information on previous ultrasound experience as this would have helped to better refine the training groups.

The practitioners included nurses, Consultant haematologists and a range of technical/diagnostic professionals – would require different levels of instruction. It would be great to have this information in advance of any future programmes of this type, to ensure that attendees obtain the most benefit from this exposure. One of the stand-out feed-back points was the benefit of a live presentation. Attendees were able to understand limitations in the way in which they practised the TCD protocol. Observing the technique closely, alerted them of the need to adhere closely to the SOP to achieve clinically accurate STOP grading.

All together a very positive experience.” Dr Soundrie Padayachee, Guys and St Thomas NHS Foundation Trust.

The aim of the practical laboratory sessions were led by Sarah Asante Adjei Cofie from, the Noguchi Memorial Institute for Medical Research IRB with support from Dr Wale Atoyebi, The Royal College of Pathologists, Clinical Lead for ARISE and Professor Jacques Elion, from INSERM France, Lead for work package 3.

The aim of the practical laboratory sessions was to conduct a real-time, comprehensive demonstration of the isoelectric focusing (IEF) methodology for haemoglobinopathy newborn screening (NBS). These sessions, attended by scientists from various laboratories across Nigeria, provided an opportunity to share best practices among laboratories currently using IEF for NBS.

Participants observed demonstrations of the IEF methodology and actively engaged in various steps of the process under strict supervision. This hands-on experience helped them become more familiar with the technique. The outcome of the sessions was highly successful, providing valuable and fulfilling experiences for the participating scientists.

The interactive nature of the training allowed participants to fully engage and gain a deeper understanding of both the potential benefits and limitations of IEF as an NBS technology. Notably, the sessions resulted in the identification of six affected babies and 23 carriers, further demonstrating the effectiveness and robustness of the IEF approach.



Above: Sarah Asante Adjei Cofie from, the Noguchi Memorial Institute for Medical Research IRB leading the demonstration of running samples on the Isoelectric focusing machine.



Above: Participants and lectures involved in the demonstration of the Isoelectric focusing machine

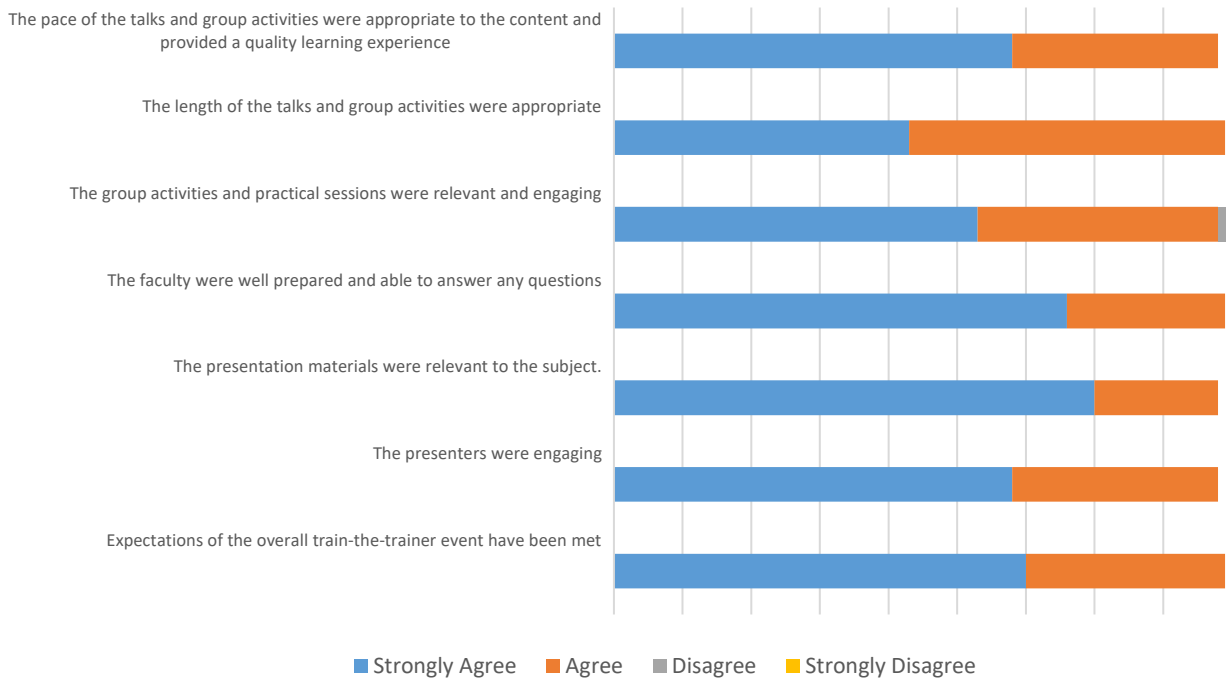
5. Delegate Feedback

Following the workshop, feedback forms were issued to the delegates to complete. Most delegates completed the forms and the few who did not had left the workshop early due to travel issues.

The feedback form was used to gauge how much the delegates took away as well as the overall running of the training session. Overall, every delegate either strongly agreed or agreed with the statements indicated below, which demonstrates the success of the workshop.

- Expectations of the overall train-the-trainer event have been met
- The presenters were engaging
- The presentation materials were relevant to the subject.
- The faculty were well prepared and able to answer any questions
- The group activities and practical sessions were relevant and engaging
- The length of the talks and group activities were appropriate
- The pace of the talks and group activities were appropriate to the content and provided a quality learning experience

Evaluation and Summary ARISE Train-the-Trainer Workshop



1 Appendix 1 – Workshop Programme



African Research and

Innovative Initiative for Sickle cell education (ARISE) www.ariseinitiative.org

Train the trainer programme for capacity building

Jointly with Niger state, ARISE and SCORE

DAY ONE, TUESDAY 2 AUGUST – ALL PARTICIPANTS



SESSION 1	
Chair: Professor Baba Inusa	
09.00 – 09.15	House Keeping Miss Olawale Tijani & Ms. Kelley Price
09.15 – 09.30	Welcome Address Dr Amina Abubakar Bello, 1 st lady Niger state Governor
09:30 – 09:45	Goodwill messages Prof. Abdullahi Musa Ashafa, Vice Chancellor, Kaduna State University
09.30 – 09.45	Updates from Sites Niger State – Dr Aisha Musa and Dr Makusidi Mohammed
09.45 – 10.00	Kaduna State- Dr Livingstone Dogara (CONSA)
10.00 – 10.15	University of Ilorin- Professor Kolade Ernest
10.15 – 10.30	University of Abuja – Dr Ramsey Yalma
10.30 – 10.45	Discussion Forums/Q&A
10.45 - 11.15	Break
Chair- Professor Jacques Elion	
11.15 – 11.30	Updates from Sites University of Maiduguri - Dr Aisha Abba Mohammed
11.30 – 11.45	Bingham University Teaching Hospital- Dr Maryam Shehu (ARISE)
11.45 – 12.00	Liberia (CONSA)?
12.00 – 12.15	Discussion Forums/Q&A
12.15 – 12:45	What can we learn from other programmes worldwide? Professor Jacques Elion
12.45 – 14.00	Lunch
13.15 – 14.00	(Optional) Second Session
SESSION 2	
Chair: Dr Livingstone Dogara	

COUNSELLING, SAMPLE COLLECTION & TRANSPORTATION	
Opportunity to broaden skills on genetic counselling and learn about sample collection, logistics and ethics	
14.00 – 15.00	Logistics including forms, blood sampling (Mrs Gloria Bahago and Mrs Monica Stephen + Mrs Janet Waje), Demographics, Transportation & Storage Mohammed Aminu- Zaria to lead the discussion – Kaduna state NBS
15:00 – 15.30	Newborn screening App & database development Mrs Emma Proctor
15.30 – 16.00	Confidentiality, sharing information –newly diagnosed and counselling Mrs Kemi Ajamufua, Mrs Linda Yari & Mrs Victoria Odesina
16.00 – 16.30	Close of Day 1 (Group Discussion – what have we learnt?) Dr. Wale Atoyebi
16.30 – 16.40	Close Dr Aisha Musa
End of Day 1	

Extra Session for the Lab Team	
17.15 – 17.50	Conversion of Family Donors into Voluntary Donors Dr Shirley Owusu-Ofori, ISBT Regional Director- Africa

DAY TWO WEDNESDAY 3 AUGUST – ALL PARTICIPANTS (Morning)

SESSION 3		
Chair: Dr Wale Atoyebi/ Dr Shirley Owusu-Ofori		
COMPREHENSIVE CARE & FOLLOW-UP CARE CLINICS		
General description of session needed		
08.00 – 09.00	Breakfast & day 2 registration (all participants)	
09.00 – 09.05	Welcome (all participants) Mrs Bola Ojo	
09:05 – 09:10	Parallel Session (data management and admin delegates to move to the break-out session)	
	Diagnostic and Clinical	Data Management – Mr Duccio Fedele (Chair)
09.10 – 09.50	General Introduction to Blood Transfusion in Africa – Current Practices and Challenges Dr Shirley Owusu-Ofori, ISBT Regional Director- Africa	Data Management Mr Isah Habila
09.50 10.20	Rational use of blood Dr Osikomaiva	Development of patient registries Dr Petros Kountouris/ Mr Duccio Fedele Bonifazi
10.20 – 10.50	Routine screening of children. Using Transcranial Doppler (TCD) scanning; Introduction (all participants)	

	Dr Soundrie Padayachee
10.50 - 11.10	Break <i>NB: Delegates registered to participate in the TCD blood transfusion, and Isoelectronic focusing blood transfusion workshops please report to your respective groups</i>

DAY TWO WEDNESDAY 3 AUGUST – NURSES, TRADITIONAL BIRTHING ASSISTANS AND COMMUNITY HEALTHCARE WORKERS ONLY (Afternoon)

SESSION 4	
ESSENTIAL SKILLS	
Enhancing communication skills & gaining a deeper understanding for roles and responsibilities	
11.10 – 11.40	Primary health care first initial assessment and counselling - infrastructure already in place. General hospital. Specialist hospital once a year. How the three tiers can be linked together. Dr Oluseyi Oniyangi/ Mrs Kemi Ajamufua
11.40 – 12.10	Clinical Management protocols Dr Hafsa Ahmad (Paediatrics) and Dr Ifeoma Ijei (Adult)
12.10 – 12.40	Patient, Community and Stake Holder Engagement Professor John Dada & Miss. N'zallah Zamani (discussion on their own contribution on patient engagement of community etc)
12.40 – 13.40	Lunch
13.40– 14.10	Monitoring & Evaluation Ms. Kelley Price & Mrs Bola Ojo
14.10 – 14.40	Epidemiology and Disease Burden Dr Ramsey Yalma
14.40 – 14.55	Break
14.55 – 15.25	Health and Awareness in Schools Mrs Nasara D. Ifere
15.25 – 15.55	Roles & responsibilities - NBS programmes Dr Livingstone Dogara and Dr Funke Lawson
15:55 – 16.25	Managing Supply chain – Hydroxyurea, Penicillin Pharmacists - led by Mrs Grace Ebuga
16.25 – 16.45	Day 2 close Dr Funke Lawson and Mrs Bola Ojo
End of Day 2	

DAY TWO, WEDNESDAY 3 AUGUST – LABORATORY STAFF ONLY (Afternoon)

SESSION 9
Chair: Dr Wale Atoyebi
Blood transfusion safety workshop
Quality and Safety: A Road Map

11.10 – 11.35	Immuno-Haematology for Clinical Care; (Red cell typing, Antibody screening, Cross-matching procedures for Multi-transfused patients) Mr Femi Ajayi; ISBT 'I TRY IT' 2021 Scholar
11.35 – 11.45	Q&A Discussion
Clinical Use of Blood	
11.45 – 12.05	Overview Adverse blood transfusion reactions Dr Badurin Osikomaiba, Ex Dir, Lagos State Blood Service
12.05 – 12.15	Q&A discussion
12.15 – 12.30	Concluding remarks
12.30 – 13.40	Please make your way back to the main event room (Continental Hall) in preparation for lunch.

DAY TWO WEDNESDAY 3 AUGUST – TCD STAFF ONLY (Afternoon)

SESSION 6	
Chair: Dr Soundrie Padayachee	
Transcranial Doppler (TCD) workshop	
11.10 – 17.00	Experienced Group
	Intermediate
	Novice Group
Return to the hotel at the end of the session	
End of Day 2	

DAY THREE, THURSDAY 4 AUGUST – NURSES, TRADITIONAL BIRTHING ASSISTANS AND COMMUNITY HEALTHCARE WORKERS ONLY

SESSION 7	
Chair: _____	
Interactive actives to consolidate learning over the last two days.	
08.00 – 09:00	Breakfast & day 3 registration
09.00 – 09.30	Plenary session - Newborn Outcome Dr Baba Inusa
09.30 – 10.30	E-Learning & Inspirational Video Clips
10:30 – 12.40	Interactive learning group activity Ms Kelley Price/Ms Olawale Tijani and Mrs Falewa Musilimat from ABUTH Zaria
12:40 – 13:40	Lunch
13.40 – 14.10	Summary of the day Dr Baba Inusa

18.00 – 19.00	Presentation of certificates and Closing Remarks Dr Jacques Elion/ Dr Amina Abubakar Bello
19.00 – 20.00	Dinner

DAY THREE THURSDAY 4 AUGUST – LABORATORY STAFF ONLY

SESSION 5 Chair: Dr Wale Atoyebi	
Isoelectric Focusing theory and in lab demonstration	
08.00 – 09.00	Breakfast & day 3 registration
	Travel to the lab to complete lab training
09.00 – 17.00	Principles of IEF for Newborn screening /protocols Mrs Sarah Asante Adjei Cofie & Dr Jacques Elion
	Quality control, good laboratory practice/ SOP development (generic) Mrs Grace Olanipekun
	Setting up IEF and standardisation Mrs Sarah Asante Adjei
	Demonstration of the newborn IEF procedure Mrs Sarah Asante Adjei Cofie
18.00 – 19.00	Presentation of certificates and Closing Remarks Dr Jacques Elion/ Dr Amina Abubakar Bello
19.00 – 20.00	Dinner

DAY THREE THURSDAY 4 AUGUST – TCD STAFF ONLY

SESSION 8 Chair: Dr Soundrie Padayachee	
Transcranial Doppler (TCD) workshop	
08.00 – 09.00	Breakfast & day 3 registration
09.00 – 17.00	Transport to the Hospital to continue training
	Return to the hotel for at the end of the session
18.00 – 19.00	Presentation of certificates and Closing Remarks Professor Jacques Elion/ Dr Amina Abubakar Bello
19.00 – 20.00	Dinner

DAY FOUR, FRIDAY 5 AUGUST – ALL PARTICIPANTS

SESSION 10 Chair: Prof Baba Inusa	
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Debrief and Next Steps	
08.00 – 09.00	Breakfast & day 3 registration
09.00 – 09.15	Blood transfusion Summary from Dr Shirley Owusu-Ofori (presented by Ms Kelley Price and Dr Wale Atoyebi)
09.15 – 09.30	IEF Mrs Sarah Asante Adjei
09.30 – 09.45	Data and Registration Mr Duccio Fedele Bonifazi
09.45 – 10.00	Clinical Management Dr Hafsat Ahmad / Dr Ifeoma Ijei / Dr Wale Atoyebi
10.00 – 10.15	TCD and screening Dr Soundrie Padayachee and Mrs Gloria Bahago
10.15 – 10.30	Stake Holder Engagement and Dissemination Mrs Bola Ojo
10.30 – 11.00	Research opportunities All
End of Workshop	