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ABSTRACT SUBMISSIONS CLOSING SOON!

It's only 47 sleeps until ABNA's 20th Annual Meeting Biobanking on Record. While that number might strike fear into the heart of the organising committee, the truth is that we're well underway and bursting at the seams to bring you this anniversary event! Abstracts are closing soon with the first round ending at 5pm tomorrow and late breaking closing 5pm 15 September. After this date, no further abstracts will be considered so please don't miss out! Final decisions will be communicated to primary authors by 5pm Friday 22 September with notifications of successful posters, presentations and invitations for the elevator pitch competition.

Given the anniversary nature of the event we're highly encouraging past presenters of rapid fire presentations or posters to submit an update on previously presented work for our dedicated session History: Past, Present and Future. The goal of this session is to look at the growth and development in the work of ABNA members and shine a spotlight on the success and learnings... as well as a 'word to the wise' with respect to lessons learnt.

Numbers for this years event are increasing rapidly and at present it's looking to be our largest event yet. Accommodation bookings on site are limited so if you're planning on attending, please don't leave it till the last minute!

As a general reminder, the closing date for Special Interest Group proposals is quickly approaching, please get in contact if you have an idea or would like to submit a proposal. This is an exciting new chapter in ABNA's history and we look forward to shaping the next 20 years with these priorities in mind.

KEY DATES

- Tuesday 5 September 12pm AEST – ABNA 2023 Seminar 3 Technology and Diversity – Innovation and New Frontiers
- Friday 1 September – 5pm AEST First round abstract submission closes
- Tuesday 5 September – 5pm AEST Special Interest Group Applications close
- Friday 15 September 5pm AEST – Final closing date for ABNA Abstracts



Important
Dates

5 MINUTES WITH A BIOBANKER

We approach a different professional in the biobanking arena with the same five questions each month.



This month we speak to Rufus Akinyemi, Professor of Geriatric Neurology and Translational Neuroscience from the IBADAN Brain Bank and the SIREN/SIBS - Genomics Biobank in Nigeria.

THE QUICK QUESTIONS

Red or white wine?

None for me thanks

Mac or PC?

PC

Batman or Superman?

Superman

Lord of the Rings or Harry Potter?

LOTR

1. How long have you been working in biobanking?

About 9 years altogether.

2. Which advance in science/research do you think has had the most impact on you as a biobanker?

The differential impact of APOE ε4 allele on the risk of Alzheimer's disease in different racial populations and the discovery of an ancestry-specific protective allele in individuals of African ancestry.

3. In retrospect, given the experience you have now, what one piece of advice would you give to yourself at the start of your biobanking career?

Be focused, resilient and persistent to overcome the several hurdles on the way.

4. What is the craziest thing you have done to save a sample/s?

Staying overnight at work to transfer samples during a power outage.

5. Your career on record: name 3 songs/albums that best tell the story of your biobanking career:

A local track - Igbagbo mi duro lori.....(meaning - my hope is built on.....)

Looking for More?

There are several opportunities for online learning and engagement available to ABNA members and those engaged with our community

- [ISBER Webinars](#) on Demand - available free of charge or for a small fee for non-members
- ABNA Seminar Series - seminar 3 is being held 5 September 12pm
- [NSW Statewide Biobank Seminar Series](#) - next session 13 September 12pm



BIOBANKING IN AFRICA

By Dr Anusha Hettiaratchi

Africa is the world's second-largest and second-most populous continent after Asia in both respects. At about 30.3 million square kilometers including adjacent islands, it presents the greatest genomic diversity on the planet and represents an incredible resource of information to advance fundamental understanding of health, disease and the environment.

An article published in *The Lancet* on 13 July 2019 features 54gene, an Africa-focused genomics start-up that began in Nigeria, reporting it as the first and largest pan-African biobank which aimed to address the issue that Africa only contributes 2% of the data used in genome-wide association studies. In 2020 the company saw an opportunity to be a first-line responder to the pandemic in Nigeria. This revenue was ephemeral and by the end of 2021, it became obvious that the COVID business was not sustainable. More recently, the now Washington-based 54gene has undergone a leadership change that positions the company to pursue new strategic partnerships and raise additional capital. The company's 600,000-sample capacity biobank, which already holds 130,000 samples, is often touted as the largest commercial biobank in Africa and one of the most diverse in the world.



The lost Ebola bloods

Where are the samples extracted from patients during the 2014–2016 Ebola outbreak in West Africa?

Over 269,000 samples were taken from patients to test for Ebola, those who tested positive were taken for treatment and the others were sent home. Whether cured or not, it has been reported that these patients did not know that their blood would be used for research, they had not given their consent to it.

Ebola's lost blood: row over samples flown out of Africa as 'big pharma' set to cash in

By Emmanuel Ekenobiala
6 February 2019 - 1:07pm



Health workers take a patient to a treatment centre during the 2014 Ebola epidemic in Liberia. | Credit: Steve Trehan-Winter Photo

Regardless, their samples were sent all over the world: US, France, Germany, UK, Hungary, Australia, Canada, Russia and China. Today, they are being studied in high-security labs to develop treatment and vaccines against Ebola.

Many of the researchers from the countries affected by Ebola are upset that the samples have left because they cannot use them for their own research. In many cases it is not clear whether any products developed with these patient samples will benefit the countries (and patients) that contributed them.

These Ebola blood samples once again underline the complex questions of consent and equal access to treatment.

Whilst the recent expansion of genomic research on the African continent will begin to address the underrepresentation of Africans in international research studies, there are challenges in governing the collection, storage, use, and re-use of biological materials and regulations developed elsewhere cannot simply be adopted and applied in the African context. Regulations developed elsewhere may fail to consider the different values that permeate African societies and potentially need to be revised to guard against exploitation, while fostering research that has the potential to help remedy health inequity. One such document that reflects this change in values is the [San Code of Research Ethics](#) which was developed in response to exploitative and discriminatory research published in *Nature* involving members of the San peoples, indigenous hunter-gatherers from Southern Africa. This Code focuses on respect, honesty, justice, and fairness, care and due process as key values to be considered when engaging with the San. Further, a 2020 paper in the [Journal of Law and the Biosciences](#) has identified the benchmarks of legislative framework, stakeholder engagement, institutional responsibility, community engagement that need to be addressed as part of this process in order to ensure good governance and better regulation.

In 2020 the Africa Centres for Disease Control and Prevention (Africa CDC) launched the African Collaborative Initiative to Advance Diagnostics. Under this initiative, the Africa CDC proposes building on existing structures to establish a network of biobanks that facilitate and accelerate development, evaluation and research on the diagnostics required for disease control and prevention programs in the region. The document presents a sustainable model for a regional network of country-owned biobanks incorporating standardised methods for collection, characterisation and archiving of specimens, and characterisation of isolates to facilitate and accelerate diagnostics development and evaluation for COVID-19 and other diseases of epidemic potential. This Biobanking Network is to be managed according to the guiding principles of transparency, equitable access, ethics, and respect for national laws that support country ownership and sustainability. By adapting the Nagoya Protocol on access to genetic resources including the fair and equitable sharing of benefits arising from their utilisation, to the convention on biological diversity, sharing of specimens from national biobanks can be rewarded through mechanisms such as equitable access to diagnostics.

There have been several initiatives to develop biobanking networks in Africa – we highlight a few of these below; this is by no means an exhaustive list, but rather intended to showcase the depth and breadth of African biobanks.

The collage features logos for the Albany Museum, Amathole Museum, Bayworld, Ditsong, Iziko Museums of South Africa, National Museum, SANBI, and the University of the Witwatersrand. It also includes the ARC • LNR logo and the Natural Science Collections Facility South Africa logo. A photograph shows a large animal skull with prominent teeth, several smaller skulls, and a row of insects (possibly bees or wasps) on a yellow flower.

An integrated collections facility for South Africa and proud custodians of South Africa's natural heritage for future generations.

The **Natural Science Collections Facility (NSCF)** was established as part of the **Department of Science & Innovation's (DSI)** Research Infrastructure Roadmap and is coordinated by the **South African National Biodiversity Institute (SANBI)**.

For further details, please contact the NSCF Hub Office at nscf@sanbi.org.za, or visit the website www.nscf.co.za.



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REPUBLIC OF SOUTH AFRICA

SANBI
Biodiversity for Life
South African National Biodiversity Institute

The South African **Natural Science Collections Facility (NSCF)** is a virtual facility, comprised of a network of institutions dedicated to the preservation, upgrade and promotion of research on natural science collections and associated data, that are made accessible to external researchers. The overall aim of the NSCF is to ensure collections and data are used for high quality research and decision making to address issues of socio-economic importance, achieved through 5 strategic objectives:

- Collections secured and accessible physically and virtually for research
- Data from specimens in collections accessible and used for managing collections, research and decision-making
- Research on collections and associated data addresses issues of national and global relevance
- Collections and associated research provide services to identify natural science specimens for a range of stakeholders including in the agriculture, health, environmental management and academic sectors
- Collections used for serving the broader society through education, citizen science and public understanding projects with emphasis on inspiring young scientists and promoting South Africa's unique biodiversity assets.



The **Human Heredity and Health in Africa** (H3Africa) consortium facilitates fundamental research into diseases prevalent on the African continent while also developing infrastructure, resources, training, and ethical guidelines to support a sustainable African research enterprise. The initiative consists of 51 African projects that include population-based genomic studies of common, non-communicable disorders such as heart and renal disease, as well as communicable diseases such as tuberculosis. These studies are led by African scientists and use genetic, clinical, and epidemiologic methods to identify hereditary and environmental contributions to health and disease.

Ref: <https://h3africa.org/>

The consortium also supports many crucial capacity-building elements, such as: ethical, legal, and social implications research; training and capacity-building for bioinformatics; capacity for biobanking; and coordination and networking. The program currently supports three biorepositories in Uganda, Nigeria, and South Africa through funding from the National Institutes of Health in the United States while the H3Africa Biospecimen and Data Catalogue offers researchers the ability to search information about H3Africa studies.

The **Stroke Investigative Research and Educational Network** (SIREN) project was initiated in 2014 with support and funding from H3Africa. The SIREN Biobank currently has 3015 brain images, 92,950 blood fractions (serum, plasma, red cell concentrates, and buffy coat) accrued from 8450 recruited subjects, and quantified and aliquoted good-quality DNA extracts from 6150 study subjects. The project is a transnational, multicenter, hospital and community-based study involving over 3000 cases and 3000 controls recruited from 16 sites in Ghana and Nigeria. SIREN aims to explore and unravel the genetic and environmental factors that interact to produce the peculiar phenotypic and clinical characteristics of stroke as seen in people of African ancestry and facilitate the development of new diagnostics, therapeutics, and preventative strategies. See the '5 Minutes with a Biobanker' segment in this edition for a profile on SIREN's Professor Rufus Akinyemi.



The **Biodiversity Biobanks South Africa** (BBSA) is one of the projects initiated through the South African Research Infrastructure Roadmap of the Department of Science & Innovation. The main aim of the BBSA is to increase the range and quality of biodiversity samples stored, and to increase and improve access for research and development.

South Africa is one of the world's most biodiverse countries, with an estimated 100,000 plant, animal and fungi species. Ensuring that this biodiversity is represented in national biobanks is important so that it can serve as a resource for research in a wide range of fields, including crop and livestock improvement, in the development of new medicines or foods, or industrial products, and in the conservation of iconic and highly threatened species. South Africa already has a wealth of biobank samples, many of which have been collected over a period of 20 or more years, and if these are appropriately secured, they could be used to create a time-series of biomaterials that will help us understand change, and allow us to predict how this change will play out into the future.

UPCOMING CONFERENCES

2023 Meeting of Asian Network of Research Resource Centers

The Asian Network of Research Resource Centers (ANRRC) was founded in 2009 to share knowledge and accelerate the use of research resources including microbes, plants, animals, and human materials to advance science and technology. The current President of ANRRC is Toshihiko Shiroishi, Director of the RIKEN BioResource Center in Japan. Membership has grown to 200 members from 18 countries and regions, including China, Japan, Australia, Thailand and South Korea.

The 2023 meeting of ANRRC will be held this year in Beijing from 10-11 October and will be hosted by the Institute of Microbiology, Chinese Academy of Sciences.

"The conference will have in-depth discussions on how to promote academic exchanges among participating scientists from Asian countries, enhance understanding, and actively explore cooperation in the field of microbial resources on the basis of the multilateral exchange platform of ANRRC." Source: <https://anrrc2023.casconf.cn/>



GGBN International Conference on Biodiversity Biobanking



The Global Genome Biodiversity Network (GGBN) is an international network of institutions that share an interest in long-term preservation of genomic samples representing the diversity of non-human life on Earth. Since the Network's conception in 2011, GGBN has grown to include 92 members from 32 countries, with the network providing the primary benefit of making members' DNA and tissue collections discoverable for research through a networked community of biodiversity biobanks.

The 4th International GGBN Conference will take place from 17-20 October 2023, and is being hosted by the Universidad Autónoma de Aguascalientes in the city of Aguascalientes in central Mexico. Abstracts are still being accepted until 31 August. General registration closes August 31st, late registration is open from September 1 - October 1.

Please refer to the conference website for further details: <https://ggbn2023.weebly.com/>





NATA's continued signatory status of ILAC and APAC officially reconfirmed

The National Association of Testing Authorities (NATA) is well known in the field of biobanking. However, you may not know that every four years, NATA's competence as an accreditation provider is evaluated. This ensures its operations remain consistent with international practices. This is assessed by NATA's signatory status to both the ILAC (International Laboratory Accreditation Cooperation) and APAC (Asia Pacific Accreditation Cooperation) Mutual Recognition Arrangement (MRA).

In March this year, NATA underwent its re-evaluation for testing which included medical, calibration, inspection, proficiency testing providers, reference materials producers and biobanking. The continued signatory status of ILAC and APAC was reconfirmed by the APAC MRA Council which was extended to include biobanking making NATA only the second Accreditation Body in the world to be recognised for biobanking.



If you have any suggestions for a short article for Bio-Babble, please contact: abna.biobabble@gmail.com

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