

BCNetter

Issue No. 9, June 2019



*Zisis Kozlakidis and Marianne Henderson at the ISBER
2019 Annual Meeting in Shanghai, China*

Message from Zisis Kozlakidis

Biobanking is increasingly maturing as a field both in terms of biospecimen science research as well as servicing precision medicine research in general. Our aim remains to promote the biobanking activities of BCNet broadly and provide consistent high-level education and standards by uniting the LMIC biobanking community in the largest LMIC forum. The first half of 2019 saw a great many biobanking activities for BCNet members, as you can read in the following articles, including the launch of the e-Biobank Learning platform; the ECOWAS Biobank inauguration; the 1st Latin-American Symposium and Training in Biobanking; the extension of the biobank mission in UGM, now establishing a population cohort, and many others. It demonstrates the dedication of the BCNet partners and members to initiating and delivering high-impact projects globally.

The BCNet was presented in a number of conferences and meetings, including the 11th Annual Biobank Branch, China Medicinal Biotech Association (BBCMBA); the International Biobanking Conference (IBCO) in Doha, Qatar; the 1st National Symposium on Bio-resource Management and Utilization in Beijing, China; and of course at the ISBER 2019 Annual Meeting in Shanghai, China, where ISBER celebrated its 20th year anniversary.

It is paramount that the BCNet voice continues to be heard loud and clear as an integral part of the global biobanking and scientific community. It is therefore with great honour that we welcome in this first half of 2019 one additional member, the Clinica de la Costa, Barranquilla, Colombia. Dr Andres Cadena is a nephrologist and the director of the Clinic. Dr Marianne Henderson and I had the opportunity to meet him in person during the IBCO conference.

BCNet is inclusive, and all of our colleagues should feel free to reach out to us, so that the member needs are always understood and presented clearly on the world stage. There will be email communication when opportunities appear and of course our lines of communication remain open at all times.

Zisis Kozlakidis
BCNet Coordinator

Inauguration of the Economic Community of West African States Biobank, Côte d'Ivoire



BCNet member, Dr Simini Doumbia, reports on the recent inauguration ceremony of the ECOWAS Biobank in Côte d'Ivoire.

Report by Simini Doumbia, Institut Pasteur de Côte d'Ivoire Biobank Coordinator

The entire ECOWAS (Economic Community of West African States) region will benefit from better preparation and better response to health crises, said the Ambassador of France in Côte d'Ivoire, Gilles Huberson, at the inauguration of the ECOWAS Biobank, located on the site of Adiopodoumé (Abidjan-Dabou axis) of the Institut Pasteur of the Côte d'Ivoire (IPCI). At a cost of 2.5 billion CFA francs, financed by Côte d'Ivoire with the support of France, this biobank has been designated Biobank of the 15 ECOWAS countries. For Francophone members, Simini's full article is on the next page.

Collage of photos from the inauguration event



CEREMONIE D'INAUGURATION DU CEREB/BIOBANQUE REGIONALE DES PAYS DE LA CEDEAO

Une Biobanque, c'est le partage. Merci à la Côte d'Ivoire pour ce partage, car au-delà de la Côte d'Ivoire, c'est la CEDEAO (Communauté économique des Etats de l'Afrique de l'ouest, Ndlr) qui bénéficiera d'une meilleure préparation et d'une meilleure réponse aux crises sanitaires.

Hommage vibrant rendu, hier, par l'ambassadeur de France en Côte d'Ivoire, Gilles Huberson, lors de l'inauguration de la Biobanque de la CEDEAO, située sur le site d'Adiopodoumé (axe Abidjan-Dabou) de l'Institut Pasteur de Côte d'Ivoire (IPCI). D'un coût de 2.5 milliards de francs Cfa, financé par la Côte d'Ivoire avec l'appui de la France, cette Biobanque, en raison de son haut niveau de technologie, a été désignée Biobanque des 15 pays de la CEDEAO. Sa réalisation, entamée en 2009 et achevée en 2017, s'inscrit dans la dynamique globale d'émergence de la Côte d'Ivoire. Etablissement de haute sécurité, elle permet de conserver dans des conditions de sécurité les micro-organismes à hauts risques, pour les besoins de recherche.

Présidée par le ministre de l'Enseignement supérieur et de la recherche scientifique, Abdallah Toikeusse Mabri, qui avait à ses côtés son homologue de l'Environnement et du Développement durable, Joseph Séka Séka, la cérémonie a enregistré plusieurs allocutions. La première fut celle de Jean Claude Kouassi, président de la Commission de la CEDEAO, lue par le représentant résident de l'organisation à Abidjan, Babacar Carlos. Ensuite a pris la parole le représentant résident de l'organisation mondiale de la santé (OMS) en Côte d'Ivoire, Jean Marie Yaméogo, suivi de l'ambassadeur de France tous ont souligné le rôle avant-gardiste et d'intégration de cet outil qui confère une souveraineté à la sous-région en matière de recherche épidémiologique.

Outre la Biobanque, les chantiers du Centre d'étude des pathogènes émergents à risque infectieux sévère (Cepri), en construction sur le site, ont été visités par les autorités. Il s'agit d'un laboratoire de haute sécurité qui va permettre de manipuler des échantillons d'origine humaine, environnementale ou animale, susceptibles de constituer des pathogènes hautement virulents. Laboratoire de niveau 4, il va compléter le dispositif de sécurité en Côte d'Ivoire.

«Ces installations, se félicitera le ministre Abdallah Toikeusse Mabri, sont le symbole du dynamisme et de la soit d'entreprendre et de l'anticipation de l'Institut Pasteur de Côte d'Ivoire sur les capacités de riposte aux épidémies. Ils sont aussi le reflet de la nécessaire coopération à laquelle le président Alassane Ouattara attache beaucoup de prix ». Se félicitant du dynamisme de la coopération entre la Côte d'Ivoire et la France, il a souligné que la sous-région ne doit plus se contenter d'une « approche aléatoire de la sécurité sanitaire », car nul ne peut parier que les épidémies de l'ampleur de celles qu'ont connu les pays de la sous-région sont à jamais écartées.

Dans son discours de bienvenue, le directeur de l'IPCI, le Pr Mireille Dosso, a souhaité que ce projet puisse « s'épanouir et se renforcer »

For more information, contact [Simini Doumbia](#).

What's On ?



June

[VII Congress of Vavilov Society of Geneticists and Breeders](#)

St Petersburg, Russia

18 - 22 June 2019

August

[5th African Conference on Emerging Infectious Diseases & Biosecurity](#)

Abuja, Nigeria

7 – 9 August 2019

October

[Europe Biobank Week 2019](#)

Lubeck, Germany

8 - 11 October 2019



Preliminary Study for a Population-based Cohort Biobank: collaboration of HDSS and UGM Biobank, Yogyakarta



The Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada (FK-KMK UGM) Yogyakarta Indonesia, has several core facilities including a Biobank and an HDSS (Health Demographic and Surveillance System). The biobank for research has been in operation since 2018; while the HDSS has completed four yearly survey cycles among 5,000 households in Sleman Municipality, Yogyakarta Special Province.

To elaborate the possibility for the establishment of a population-based cohort biobank, HDSS and FK-KMK UGM Biobank underwent a preliminary study among HDSS participants, in collaboration with Sleman Municipality. The preliminary study tested protocols for recruiting, informed consent, questionnairing and blood sample collection. In return, participants received basic health monitoring (including blood glucose, cholesterol, BMI, and ECG) and health education about taking precautions against NCDs and a medical consultation.

The study was conducted for 2 weeks in May 2019. By the end of the study from a total of 240 invitations, 135 came to the recruitment points, with 95% of participation rate. In the consenting process, only a few subjects did not agree to have their information shared with parties outside UGM. All data is further amended to the HDSS database, while blood samples are stored in the Biobank. Evaluation of the activity is ongoing to further decide the best approach for the establishment of a cohort biobank.

For further information on HDSS :

<https://hdss.fk.ugm.ac.id/en/about-hdss-sleman/>

Biobank: <https://research.fk.ugm.ac.id/biobank/>

Reporter: [Jajah Fachiroh](#)

Launch in one of four districts included in the study



Informed consent process, done 1 on 1



Blood Sample Collection for medical tests and Biobanking



1st Latin-American Symposium and Training in Biobanking



Barretos Hospital's Marcia Marques Silveira and IARC's Elodie Caboux report from the first Latin-American Symposium and Training in Biobanking.

The Barretos Cancer Hospital (BCH), founded in November 1967 by Dr Paulo Prata, is located in the city of Barretos, Sao Paulo, Brazil. The philosophy of this institution is to focus on the low-income population; giving care and compassion to the cancer patient and their family. Caregivers integrate the best of oncology prevention, treatment, teaching and research strategies.

The Biobank-BCH (BB-BCH) was founded in 2006 to store and process patients' biological material, such as tumour tissue, normal tissue, blood and derivatives, cytological material and other secretions or body fluids, for research purposes. Besides cancer patients' specimens, the BB-BCH also stores biological material of healthy individuals as control for several studies.

The first Latin-American Symposium and Training in Biobanking from Barretos Cancer Hospital was organized by researchers from the Molecular Oncology Research Center and pathologists from Barretos Cancer Hospital Pathology Department. The symposium took place on 16th and 17th May 2019 at Barretos Cancer Hospital. Elodie Caboux, from IARC participated in the workshop, along with Lise Matzke from the Office of Biobank Education & Research, University of British Columbia, Canada.

The aim of the meeting was to allow interaction, discussions and training between biobankers, professionals from national and international biobanks and researchers dedicated to translational medicine. In addition, the symposium enabled discussions on how to promote sharing of national and international guidelines, protocols and experience in this area which will contribute to the consolidation of good practices to be developed in Biobanks in Brazil and Latin America.

Seventy participants from seven countries attended the symposium which was divided into four sessions during the two days:

- Introduction (2 lectures)
- Session 1: The importance of pathology in biobanking (3 lectures)
- Session 2: Quality management of biological samples for molecular downstream analysis (3 lectures)
- Visit to the Biobank and Biocentre for research
- Session 3: Ethical and Legal Aspects in Biobanking (2 lectures)
- Session 4: Best practice: ensuring quality in biobank (3 lectures)

The symposium emphasized the benefit of dedicated time for exchange and discussions which was much appreciated by the participants and the speakers.



From left: Dr Antonio Huertas Salgado, Instituto Nacional de Cancerologia, Colombia, Dr Luz Maria Ruiz Godoy Rivera, Mexican National Cancer Institute Biobank, Dr Elodie Caboux, IARC, Dr Marcia Marques Silveira, Barretos Cancer Hospital, Brazil, MSc Lise Matzke, University of British Columbia, Canada, Dr Julie M. Gastier-Foster, Biospecimen Core Resource Nationwide Children's Hospital, USA)

For more information, contact [Marcia Marques Silveira](#) and [Elodie Caboux](#)

See more photos [here!](#)

Top-Consulted Resources on the Biobank Learning Platform



Since its official launch on 27 February 2019, the Biobank Learning platform attracted more than **27,000 visits** from over **8,000 visitors** connecting from **118 countries**.

What is attracting professionals to the online learning platform?

Here a list of top-consulted resources by Biobank Learning users:



1) Lecture: Introduction to Biobanking (42:17)

Lecture recorded during the IARC-BCNet – BBMRI-ERIC Training in Biobanking for Pathologists and Pathology / Histology Technicians, organized in Egypt from 22 – 23 May 2017.

Speaker: Dr Maimuna Mendy

[Consult the resource](#)



2) Video Tutorials: Setting-Up Your Baobab LIMS & Using Baobab LIMS

These two resources are composed of short (1-8 minutes) video tutorials. It is based on the Baobab LIMS documentation and will guide you through the setup and use of your Baobab LIMS.

[Consult the resources](#)



3) Recorded Webinar: Mobile Data Collection, Part I (71:30)

Picture credit: International Livestock Research Institute

This video provides an introduction to mobile data collection using the ODK Collect and Azizi AMP applications/tools.

Trainer: Wangoru Kihara (International Livestock Research Institute)

[Consult the resource](#)



4) Templates: Material Transfer Agreement and Data Transfer Agreement

Developed by partners of the project "Bridging Biobanking and Biomedical Research across Europe and Africa (B3Africa)", these templates are available in Word format to be customized to local needs.

[Consult the resources](#)

Starting a Biobank?

We have selected resources that might be of interest to you. Click [here](#) to see more.

About Biobank Learning

The IARC Biobank Learning platform is a **freely-accessible** resource that provides biobanking infrastructure information for low- and middle-income countries (LMICs). It caters to the range of professionals involved in biobank-based research, including **more than 80 learning resources** tailored to help specialists contribute to efficient and impactful analysis.

Visit the Biobank Learning platform:

<http://biobanklearning.iarc.fr/>

BCNet member Universitas Gadjah Mada is published in Biopreservation & Biobanking



Development of a Biobank from a Legacy Collection in Universitas Gadjah Mada, Indonesia: Proposed Approach for Centralized Biobank Development in Low-Resource Institutions

The Biobank at the Faculty of Medicine, Public Health and Nursing, Universitas Gadjah Mada (FK-KMK UGM) opened for service in 2018.

The process of biobank development was based on a model developed using a legacy sample collection, in 2015-2016.

Using this approach it was possible to identify resources that were both available and required; while at the same time this exercise provided non-technical information for further development of a centralized biobank.

The biobank modelling was carried out in 2015. The model included clinical legacy specimens from one -80°C freezer. The associated data included were demographic, clinical diagnosis, and physical sample information. Samples came from six studies, collected between 2001 and 2014. A web-based database was built based on the MySQL programming system. All technical procedures were built into standard operating procedures.

Around 4,000 subjects collected in ~11,000 vials were entered into the database, following physical rearrangement of vials in the -80°C freezer with one-dimensional barcodes taped to vials, boxes, and racks. A validation test to check the concordance between the database and physical arrangement of the samples showed no discrepancies.

The article published in Biopreservation & Biobanking further discusses ethical and social issues pertaining to biobank development in Indonesia.

For more information, and to request a pdf of the full article, please contact [Jajah Fachiroh](mailto:Jajah.Fachiroh).

Cuarto Curso Taller de
Biobancos
como Plataforma de
Investigación Biomédica

INSTITUTO NACIONAL
DE CANCEROLOGÍA

Del 3 al 7 de
junio de 2019
Aula 3 de la NTH

Curso teórico de 8 a 11 horas
Curso práctico de 11 a 14 horas
(Lunes a viernes)
Duración 30 horas

Inscripción: \$500.00
Pago en:
Banco Santander Surfi, No. Cuenta
8000170602, C/Avda. de los Heróicos 2865, C.
a nombre del Instituto Nacional de
Cancerología.

Taller: \$10,000.00
Pago en:
Banco Banamex, Sucursal 241, No. Cuenta
79151945, Calle 202 #1000 241/131402
a nombre de Sociedad Médica del Instituto
Nacional de Cancerología, A.C.

Informes: Banco de Tumores, NCI
Biobanco (Banco de Tumores) Silvia García Hernández 5626-0400 Ext. 14451 Correo
Electrónico: bancodetumores@incan.edu.mx

**ISCB-Africa ASBCB
Conference on Bioinformatics
Kumasi, Ghana
November 11-15, 2019**

CONFERENCE TOPICS

- Data governance
- Challenging traditional research ecosystems in Africa
- Data for OneHealth
- Open Science and Open Data
- AI in genomics and precision medicine
- Informatics for Biobanks
- Pathogens genomics
- Metagenomics
- Population Genetics, Variation and Evolution
- Plant genomics (foris)
- Biomedical Ethics
- Drug design and discovery
- General Bioinformatics and Computational Biology
- Bioinformatics Education

WHEN
November 11-15, 2019

WHERE
KNUST
Kumasi, Ghana

COST*
ISCB & ASBCB Members
Professional \$250 | Student & Post Doc \$150
Non-Members
Professional \$350 | Student & Post Doc \$200

<https://www.iscb.org/iscbafica2019>

SUBMISSION DEADLINES

- Abstract Submission August 30, 2019
- Poster Submission September 30, 2019

National Biobank in South Africa achieves ISO9001:2015 Certification



Bonginkosi Duma from the NHLS in South Africa reports

NHLS Biobank Staff

Front Row: Sam Gumede, Naledi Mangqalaza, Glen Mashele, Musa Mokolokolo

Back Row: Kebareileng Mogari, Celeste Ruiters, Lehlohonolo Matabane, Mandile Thobela, Mantombi Maseme; Bonginkosi Duma



The NHLS Biobank was established in response to the growing burden of communicable and non-communicable diseases not only in South Africa, but globally. The main purpose of the National Biobank is to manage and secure biomaterial collections and storage for research purposes. The NHLS Biobank is a human biobank with a wide variety of sample collections and the associated data. The storage capacity is relatively large with a total of 1,2 million samples and storage needs depend on the requirements of the various interested parties and stakeholders.

A quality management system (QMS) is important in any organization as a means of ensuring quality of the products and service(s) rendered.

Since its inception, the overarching objective for a sound and effective QMS at the NHLS Biobank has been to ensure service delivery compliance in accordance with international standards, particularly ISO 9001 and the resultant aim of certification and maintenance of certification henceforth.

The NHLS Biobank has been certified for ISO 9001:2015 since April 2019. Biobank Staff were trained on Quality Management System (QMS). The gap analysis and internal audit proved to be a success for preparation of ISO 9001 certification by SGS certification company (3rd party auditors) with all of the non-conformities being resolved.

Services rendered include specimen collection, receipt into the biobank, processing and storage for biobanking purposes as well as sample reception for NIOH departments which have been accredited for ISO 15189, 17020 & 17025 on other different laboratories. Other NHLS medical laboratories have been accredited for ISO 15189.

For more information, contact [Bonginkosi Duma](#).

More articles



AAS Open Research: [Model Framework for Governance of Genomic Research and Biobanking in Africa – a content description.](#)

Biobanking & Biopreservation: [Critical Financial Challenges for Biobanking: Report of a National Cancer Institute Study](#)

Call for interest.....



BAM is a new project from VizzDAT with roots at Karolinska Institutet aimed for LMIC but we need biobanks to test it.

BAM is a user friendly mobile application for logging and storing biological samples, both liquid and tissue. It is available as a mobile app, compatible with all devices, as well as a web-based desktop program.

BAM grew out of a project headed up by Prof Jan-Eric Litton, Karolinska Institute, to help Swedish researchers administrate complex biobank projects.

BAM's main features include:

- biobanks and research groups that handle biological samples can log and store information about samples, projects, freezer positions, storage structures, etc
- Phone camera reads barcodes (1D and 2D)
- Available as a desktop program or mobile app compatible with Android, iOS, Windows.
- Keystroke and user behavior logging
- GPS information can be added upon request, to log the exact position of the mobile device when working with BAM
- flexible and scalable data storage, secure login with one or two factor authentication as well as encryption of all data traffic
- Ability to integrate BAM with other solutions for data collection, storing and analysis (including VizzDAT's self-developed visualization tool VIZ for superior overview)

- VizzDAT conforms to the European Data Protection Regulations (GDPR)
- Can be 100% customized for each biobank/research group upon request with transparent methods for developing and customization together with client
- Currently available in English, Swedish, German, Spanish, Russian, and Ukrainian.
- Delivered by a company with relevant background from Karolinska Institute, one of the world's leading medical universities
- BAM will come in three versions: BAM Light, BAM Standard and BAM Custom.

If you are interested in testing BAM, please contact Sally Moldan at bcnet@iarc.fr

More articles



Biopreservation & Biobanking: [Advancing Professionalization of Biobank Business Operations: A Worldwide Survey](#)

Biopreservation & Biobanking: [RNA and DNA Integrity Remain Stable in Frozen Tissue After Long-Term Storage at Cryogenic Temperatures: A Report from the Ontario Tumour Bank](#)

Who Are We?

BCNet is the Low- and Middle-Income Countries (LMIC) Biobank and Cohort Building Network, which was established in 2013 to provide a platform for collaboration between its members, partners, IARC, and the international community. BCNet aims to support biobanking and cohort-building activities and to develop sustainable infrastructures for the management of high-quality biological samples and data for research, using best practice principles and guidelines.

