

BCNetter

Issue No. 23, February 2024



Hands-on training at Kanti Children's Hospital in Kathmandu, Nepal.

Dear **BCNet Members**,

The need for strengthening the research utilizing biological samples and associated data from population cohorts has become clear during the COVID-19 pandemic and this need remains unabated since. However, the competition for resources remains severe, in particular as the post-pandemic recovery is slower than predicted. As the WHO Director General, Dr. Tedros Adhanom Ghebreyesus, has stated in December 2023, the resilience of individuals in healthcare services and research is "keeping the hope for health alive".

Following in this mindset, the biobanking community continues to demonstrate exceptional resilience to the challenges of our times. We had the opportunity

to consider how far biobanking has come, and how the field has matured over the last 10 years, during a dedicated event organized by the BBMRI-ERIC in Brussels and hosted by the permanent representation of Austria to the European Commission. Being able to reflect, even if briefly, allows one to consider things from a different perspective, and a wider horizon. For example, 10 years ago there were no EU-wide guidelines or regulations for the collection and use of paediatric samples. There were national regulations within the EU that were not harmonized, involved different rights at different ages for different parts of the same continent. Since that time a unified ethical framework has been proposed (BCNetter 16), a set of harmonized guidelines has been produced and implemented by the member states.



Presenting the importance of Ethical Aspects of Biobanking to the 10-year BBMRI-ERIC anniversary event in Brussels.

Additional information of another impactful meeting in Cairo Egypt is provided in the current volume, as well as two updates. One for the Egyptian Biobanking Alliance that continues to pioneer biobanking in Egypt and North Africa, as well as a reflection point from the biobanking developments in China, showcasing that the strain and input required

for standardized recording of information is starting to provide a positive impact through the implementation of Artificial Intelligence.

These are just some of the many examples through which Biobanking adds value to research and creates impact for healthcare research and society as a whole. Therefore, we anticipate the interest and attention to the field of biobanking to remain, and for the field itself to continue to conduct interesting research – as in the highlighted publications within each BCNetter.

We would like to welcome the four new members to BCNet, and as always invite you to share your thoughts, ideas and opportunities within the network:

1. Noguchi Memorial Institute for Medical Research, University of Ghana, Accra, Ghana
2. Indus Hospital & Health Network, Karachi, Pakistan
3. Ahrum Canadian University, Giza, Egypt
4. Biobank India Foundation, New Delhi, India

Zisis Kozlakidis and Tracy Wootton

BCNet Coordinators

News from our Members



Establishing Working Groups and the Steering Committee for the Egyptian Biobank Network

Dear BCNet Colleagues,

It is with great pleasure, that the Egyptian Biobank Network, now known as the Egyptian Biobank Alliance (EBA), announces the establishment of working groups and the creation of a steering committee. This significant step marks a pivotal moment in our collective efforts to advance research and collaboration within the biobanking community, by providing a defined structure and dedicated contact points.

The Steering Committee, comprised of esteemed leaders in the field, will provide strategic guidance and oversight to ensure the effective operation and development of the Biobank Network.

Their expertise and dedication will be crucial in shaping the future direction of the Egyptian Biobank Alliance. In addition, the construction of working groups will facilitate focused initiatives in key areas such as sample collection, data management, ethical considerations, and outreach. These groups will serve as platforms for innovation and knowledge exchange, driving the advancement of biobanking practices and standards.

We extend our sincere gratitude to all those who have contributed to the establishment of these essential components. Your commitment to the success of our Egyptian Biobank Alliance is truly commendable, and we look forward to the impactful outcomes that will result from our collective endeavors.

Further details regarding the roles and responsibilities of the steering committee and working groups will be communicated in the next BCNet newsletter. We encourage all members to actively engage with such initiatives and contribute to the continued growth and success of our Biobank Network and others in the field.

Thank you for your ongoing support and dedication.

Warm regards,

[Dr. Amany Maher]

[Steering Committee Member, Chair of the Quality WG]

[Egyptian Biobank Alliance-EBA]

Late Prof. Dr. Sameera Ezzat
(Ex- Chair of the Egyptian Biobank Alliance-EBA)

Prof. Dr. Iman Gouda Farahat
Present Chair of the Egyptian Biobank Alliance-EBA

The Steering Committee Alphabetically:

- ❖ Prof. Dr. Ahmed Samir
- ❖ Prof. Dr. Azza Saleh
- ❖ Prof. Dr. Hany Selim
- ❖ Prof. Dr. Wafaa Abdel Aal
- ❖ Prof. Dr. Amany M. Maher
- ❖ Prof. Dr. Douaa M. Sayed
- ❖ Prof. Dr. Sally Waheed El-Khadry
- ❖ Prof. Dr. Wagida Anwar

News from our members (continued)



An overview of the latest biobank developments in China

Io Hong Cheong¹, Yingyan Yu², Weiye Charles Wang³, Hui Wang¹

¹ School of Public Health, Shanghai Jiao Tong University School of Medicine, Shanghai, China

² Ruijin Hospital, Shanghai Jiao Tong University School of Medicine, Shanghai, China

³ Xinhua Hospital Affiliated to School of Medicine, Shanghai Jiao Tong University, Shanghai, China

In the past two decades, the biobanking landscape in China has evolved from biobanking with very limited resources to more mature, digitized biobanks. We have experienced many common issues that most developing countries had, many that will resonate with the BCNet members, in particular in the pursuit of sustainability. The recent COVID-19 pandemic has also changed our perspective towards the positioning of biobanks as part of the national infrastructure fabric.

For example, during the pandemic the need was evident to set out technical guidelines for low-temperature preservation of pathogenic microorganisms for prophylactic biological products. This is to ensure the quality and the biosafety of these materials. As a result, the China Association for Vaccines and China Association for Standardization have produced a recommended guideline (Document Number: T/CAV 002—2023 T/CAS 714—2023) for storage facilities to follow.

Significant advancements have also been made in living biobanks, case example is Professor Yingyan Yu's team establishing stable organoid lines of gastric cancer study, these have proven desired both for personalized medicine and translational use.

In another example, Dr Weiye Charles Wang has initiated forum discussions to the necessity and feasibility of implementing Artificial Intelligence (AI) in biobanking. Here are some of the questions raised: Is AI assistance necessary in the realm of biobanking? What are the primary application scenarios of AI in biobanking? And how can we structure biobanking operations in conjunction with AI to enhance decision-making capabilities and predictive development? In addition, he addresses the questions also by the creation of a series of data metrics pertinent to biobanking, laying the groundwork for the future digitization of biobanking infrastructure.

It is clear in our experience that biobanking is both a necessary infrastructure and an impactful one, and despite the many challenges relating to sustainability, the contribution of biobanks to the development of the national research and development sector remains an undeniable fact.

Opportunities for funding, training & collaboration



CanSERV Call – just released.

Provided for free by the European Union for well-specified scientific questions, researchers from across the world can request the services of one or more European Research Infrastructures. In most cases the results will be provided to the scientific community in an open access format, so that the data obtained through this process can be used numerous times and support current as well as future research.

The submission deadline is the **21st of May 2024**, further details at [canSERV - Current Calls](#)

Meetings and conferences



The conference this year was very well attended and brought together all of Egypt's biobankers and experts. It sets Egyptian biobanks on the path towards creating an Arab Biobank Network analogous to the Egyptian Biobank Alliance, which has been highly successful thus far in harmonizing processes and protocols, promoting educational activities and knowledge transfer, and supporting biobank accreditation initiatives.

MASRI Biobank Conference -16th BGICC

For the seventh year in a row, the Faculty of Medicine Ain Shams Research Institute (MASRI) Biobank conference was conducted simultaneously with the 16th Breast, Gynecological immunooncology and International Cancer Conference (BGICC) with the participation of several national and international authorities.

IARC/WHO and BCNet were invited to share knowledge and insights on 'Biobanking Networks' at the conference presented by Dr Stephanie Villar. Additionally, ISBER was represented by two distinguished speakers, Dr Alison Parry-Jones, Operations Director, Wales Cancer Bank, Cardiff University, and current President of ISBER, who shared her background in Biobanking standard procedures under the title of "Quality Biobanking and The ISBER tools that can help" and Dr Emma Snapes Editor-In-Chief, ISBER Best Practices 5th ed., under the title of "The latest ISBER Best Practices Edition for Biorepositories".

With a focus on the role of digitization in biobanking, Dr Amany Maher's presentation of the conference's scientific program aimed to provide attendees with up-to-date knowledge on emerging trends and techniques in biobank science.



ISBER's 25th Anniversary and Annual meeting 2024 will be hosted in Melbourne, Australia. ISBER is the leading global forum for likeminded individuals to network, collaborate and advance the future of biospecimen science. Entitled "Dreaming Beyond Barriers: The Future of Biobanking", this anniversary meeting will reflect and celebrate the impact of the biobanking community, its innovation and resilience in overcoming barriers, and its shared dreams for the future.

This meeting will closely follow the publication of the fifth edition of ISBER's Best Practices, a key document providing guidance, recommendations, and procedures for our members.

Reminder: BCNet members are eligible for free ISBER organizational membership:
<https://www.isber.org/>.

If you would like more details, please contact Elizabeth Sun: elizabeth.sun@malachite-mgmt.com, [cc. info@isber.org](mailto:cc.info@isber.org)

Recent publications from our members



Best practices: recommendations for repositories, Fifth Edition. ISBER, 1 December 2023: (<https://www.isber.org/general/custom.asp?page=BPR>)

As part of their membership benefits, ISBER Members are eligible to download, free of charge, the digital copy of ISBER Best Practices, Fifth Edition: [download it here](#).

Building blocks for better biorepositories in Africa. Croxton T, Jonathan E, Suleiman K, et al. Genome Medicine, 6 November 2023, 15(1):92 (https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10626646/pdf/13073_2023_Article_1235.pdf)

Improved biorepository to support sickle cell disease genomics and clinical research: a practical approach to link patient data and biospecimens from Muhimbili sickle cell program, Tanzania. Masamu U, Sangeda RZ, Mgaya J, et al. Biopreservation and Biobanking, 9 November 2023. <https://www.liebertpub.com/doi/epub/10.1089/bio.2023.0060>

Lessons learned on data collection for a digital health intervention-insights and challenges from Nigeria. Umoh E, Isiguzo C, Akwaowo C, et al. SAGE Open Med, 18 December 2023, <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC10729616/>

Ethical navigation of biobanking establishment in Ukraine: learning from the experience of developing countries. Sulaieva ON, Artamonova O, Dudin O, et al. Journal of Medical Ethics, 9 November 2023. <https://jme.bmj.com/content/early/2023/11/09/jme-2023-109129>

Kozlakidis Z, Catchpoole D. Highlights from 2023: Innovations in Digital Health, Diagnostics, and Biomarkers. Innovations in Digital Health, Diagnostics, and Biomarkers. January 2024 18;3(2023):54-5. https://www.researchgate.net/publication/377508972_Highlights_from_2023_Innovations_in_Digital_Health_Diagnostics_and_Biomarkers

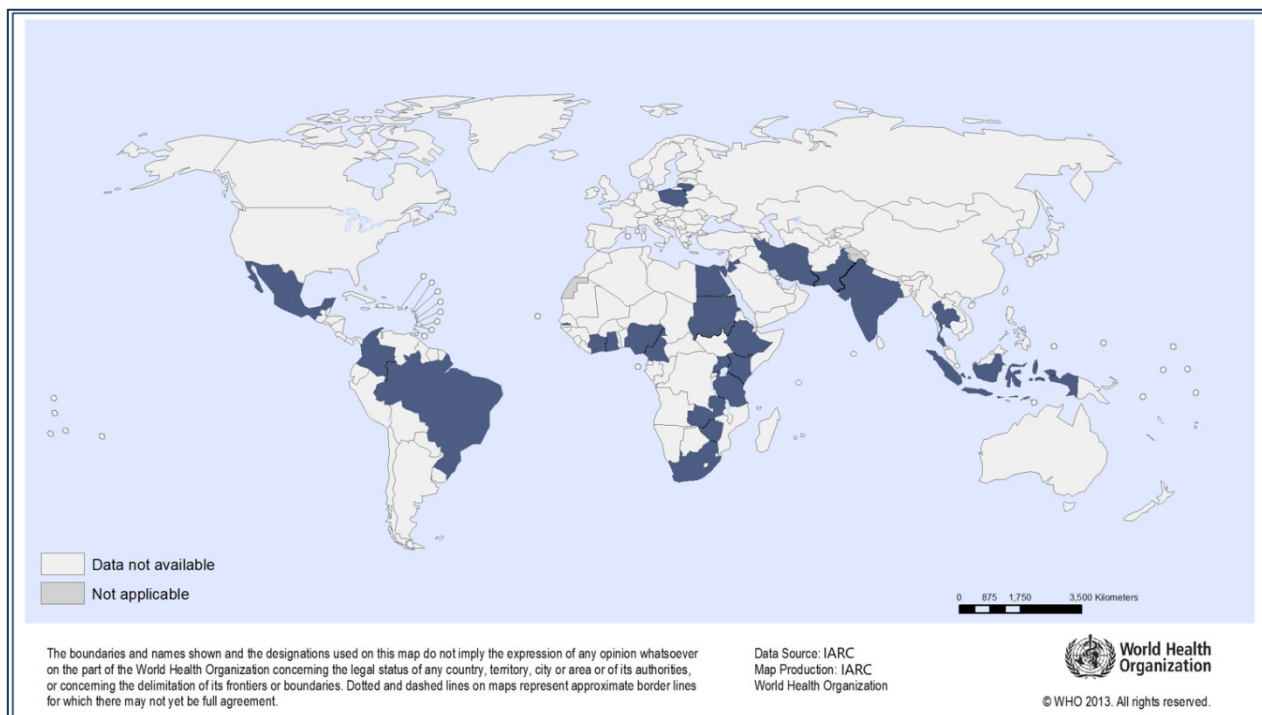
**HAVE YOU
GOT YOURS?
BEST PRACTICES:
FIFTH EDITION**



*Available for purchase worldwide on the isber.org website and on Amazon



BCNet Members



BRAZIL: Banco de Células do Rio de Janeiro; Barretos Cancer Hospital; Instituto do Câncer do Estado de São Paulo/Fundação Faculdade de Medicina **CAMEROON:** Faculty of Medicine and Biomedical Sciences, Université de Yaoundé; Université des Montagnes; **COLOMBIA:** Clinica de la Costa Ltda; **CÔTE D'IVOIRE:** Institut Pasteur de Côte d'Ivoire; **EGYPT:** 3. Ahram Canadian University; Aswan University; Children's Cancer Hospital Egypt – 57357; Faculty of Medicine, Cairo University; Integrated Biobank of Mansoura, School of Medicine, Mansoura University; Medical Research Institute, Ain Shams University; Medical Research Institute, Alexandria University; National Cancer Institute; National Liver Institute; Shifaa Al Orman Hospital, Luxor; South Egypt Cancer Institute, Assiut University; **ETHIOPIA:** Jigjiga University; **GHANA:** Breast Care International, University of Health and Allied Sciences; Noguchi Memorial Institute for Medical Research, University of Ghana; **INDIA:** Biobank India Foundation; **INDONESIA:** Faculty of Medicine, Universitas Gadjah Mada; **IRAN:** Golestan Cancer Biobank; **JORDAN:** King Hussein Cancer Center Biobank; **KENYA:** Ampath Reference Laboratory; Maseno University; **LITHUANIA:** National Cancer Institute; **MEXICO:** Instituto Nacional de Cancerología; **NIGERIA:** College of Medicine, University of Ibadan; Irrua Specialist Teaching Hospital; Obafemi Awolowo University Teaching Hospitals Complex; **PAKISTAN:** Indus Hospital & Health Network; Liaquat University of Medical Health and Sciences; Shaukat Khanum Memorial Cancer Hospital and Research Centre; **POLAND:** Biobank Lab, Department of Molecular Biophysics, University of Lodz; Wrocław Research Centre EIT+ Biobank; **SOUTH AFRICA:** National Health Laboratory Service, NHLS/Stellenbosch University Biobank; **SUDAN:** Institute of Endemic Diseases (IEND), University of Khartoum; Radio-Isotope Centre Khartoum; **THAILAND:** National Cancer Institute; **THE GAMBIA:** Medical Research Council (MRC) The Gambia Unit; MRC International Nutrition Group; **UGANDA:** Makerere University College of Health Sciences; **UNITED REPUBLIC OF TANZANIA:** Kilimanjaro Clinical Research Institute; **ZAMBIA:** Centre for Infectious Disease Research in Zambia; **ZIMBABWE:** African Institute of Biomedical Science & Technology; University of Zimbabwe College of Health Sciences.

BCNet Partners



Contacts:

Dr Zisis Kozlakidis
KozlakidisZ@iacr.who.int

Ms Tracy Wootton
WoottonT@iacr.who.int

+33 4 72 73 80 35

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