Roundtable Report: Enhancing Visibility of Biobanks for Greater Research Impact
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Facilitated by members of the ABNA Clinical Trials and Cohort Studies Special Interest Group.

Introduction

Biobanks play a crucial role in medical research by providing high-quality, well-characterised biological samples linked to clinical and phenotypic data. These resources are essential for understanding disease mechanisms, identifying biomarkers, and developing new treatments. Despite their importance, biobanks face challenges in accessibility, collaboration, and visibility, limiting their full potential[1] [2] [3]. To address these issues, the ABNA Clinical Trials and Cohort Studies Special Interest Group conducted a roundtable discussion at the 2024 ABNA conference, attended by representatives from various biobanks, including population, cohorts, trials and disease-specific biobanks.

Cohort studies biobanks collect and store data and samples from large groups of individuals over a long period of time. They are particularly valuable for conducting large-scale observational health and disease studies; e.g. longitudinal cohort studies may provide critical baseline samples collected decades before major disease pandemics. By analysing these data and samples, researchers gain a better understanding in prevalence and can also uncover factors that contribute to diseases, providing insights into common conditions such as cancer, cardiovascular diseases, and diabetes and helps understand how these diseases develop and progress in different populations.

Clinical trials biobanks, on the other hand, focus on collecting data and samples from participants in specific trials. These biobanks are essential for advancing translational research, which bridges the gap between laboratory discoveries and clinical applications. Data and samples stored in clinical trials biobanks can be used to validate findings from basic research and test new drugs or interventions in preclinical and clinical trials. This helps accelerate the development of new treatments and ensures that they are safe and effective before being introduced to the market.

This report underscores the importance of biobanking in advancing medical research and innovation.

Key Discussion Points

1. Establishing a Central Biobank Database

A national specimen-finding platform could improve access and collaboration by allowing researchers to search for and request samples efficiently. However, its feasibility depends on active researcher engagement and resource pooling among biobanks.

Additionally, regular newsletters featuring available biobanks and key contacts would further enhance awareness and engagement.

2. Raising Awareness and Promoting Visibility

While biobanks excel in sample collection, stronger promotion efforts are needed to enhance their visibility. Strategies discussed include:

- **Public Relations & Community Engagement:** Promoting biobanks through news articles, highlighting major research breakthroughs, patient stories, and case studies. For example, the Victorian Cancer Biobank has been featured in medical journals and news reports, showcasing its impact on cancer research. Fundraising events, such as marathons or charity

drives, can also generate public interest and financial support. Collaborations with organisations like Breast Cancer Network Australia help increase credibility and reach.

- **Digital Platforms:** Establishing a dynamic online presence is essential. Biobanks should maintain up-to-date websites with sample availability, research use cases, and testimonials. The Australian Health Biobank (AHB) uses an online research portal to publish abstracts from research conducted on biobank samples, making resources more discoverable. Social media platforms (X, LinkedIn, Facebook) can be leveraged for engagement, with regular posts on new collections, researcher testimonials, and upcoming events.
- **Research Community Engagement:** Active participation in scientific conferences, workshops, and webinars helps biobanks reach a targeted audience of researchers. The U.S. National Cancer Institute's Specimen Resource Locator serves as an example of how a centralised database combined with conference participation can drive engagement.

Developing promotional materials, including brochures and case studies, further supports outreach efforts.

Furthermore, educating the stakeholders/funding bodies (e.g. NHMRC and researchers) on the true cost for biobanking is essential to allow benchmarking across collections/biobanks and justify the inclusion of such cost within research budget. The Busselton Health Study has engaged a consultant to work on developing a business model on how much time and cost savings can be achieved by researchers using data and specimen from an existing biobank.

- **Collaborations & Research Partnerships:** Strengthening collaborations increases biobank visibility. Co-authorship in research publications, acknowledgment in studies, and citation of specimen sources ensure that biobanks receive due recognition.

  In addition, collaboration among biobanking/cohort initiatives would also foster visibility and research collaborations. The Busselton Health Study, Raine, and Origin cohorts in WA are creating a turnkey platform and methodology for harmonising their data to enable large-scale, cross-study analyses, further promoting their biobank resources. Similarly, the Victorian Cancer Biobank's partnership with the Singapore Translational Cancer Consortium created a cross-border specimen catalogue, expanding its impact[4].

3. Considerations for a National Biobank Infrastructure

A long-term vision for a national biobank infrastructure would require significant investment. However, concerns remain about state participation and financial sustainability. Effective coordination, promotion and collaboration are key to ensuring success. There is a potential investment opportunity for the National Collaborative Research Infrastructure Strategy (NCRIS), as highlighted in previous National Research Infrastructure (NRI) roadmaps. However, increased advocacy is necessary to emphasise the importance of biobanking as a national research infrastructure, especially with the development of the new NRI roadmap 2026[5] currently underway.

Conclusion

Enhancing biobank visibility and accessibility requires a multi-faceted approach. Key recommendations include establishing a national biobank database, raising awareness through digital and community engagement, and fostering collaborations to increase research impact. ABNA can play a pivotal role in advancing these initiatives.

References

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[4] https://www.linkedin.com/feed/update/urn:li:activity:7194569014134599680 as of 1st April 2025
[5] https://www.education.gov.au/national-research-infrastructure/2026-national-research-infrastructure-roadmap as of 1st April 2025

Appendix: Contributors – SIG members

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