FEBRUARY 2024



dustralasian ABNA EXCHANGE

OFFICIAL NEWSLETTER OF THE AUSTRALASIAN BIOSPECIMEN NETWORK ASSOCIATION

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Duncan Villanueva,

Annual Conference update:

The 2024 Conference Organising Committee has been working hard behind the scenes and is excited to reveal that this year's conference venue has been confirmed. ABNA looks forward to welcoming delegates to the 21st Annual Conference at the <u>Stamford Grand Adelaide</u> located in beautiful Glenelg. The conference Networking Dinner will be held at the <u>National Wine Centre of Australia</u>, the only city based vineyard.



Above: The Stamford Grand from the Glenelg Pier Below: The National Wine Centre of Australia



Embracing Biobanking with Love

VICE PRESIDENT: Louise Ludlow

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Welcome to your February edition. We are thrilled to announce the return of our ABNA seminar series, and this time, we're diving deep into the theme of "Revolutionising Biobanking Models: Centralised, Distributed, Harmonised." Our first seminar will kick off in April, marking the beginning of this engaging four-part series. Stay tuned for more details, including how you can participate in our online sessions culminating in the final in-person seminar event at ABNA's Annual Conference. Updates are on the way - keep an eye out.

In this edition, we are proud to share accolades for the exceptional work of Helen Morrin, shedding light on her remarkable contributions to the field of Biobanking. Read on for ABNA's feature article, "Banking from the Heart," very topical for our St. Valentine edition as well as an enlightening chat with Dr. Gregory Grossman in "5 Minutes with a Biobanker".

As always, we have curated a list of upcoming conferences and seminars to keep you informed and engaged, including an update about the locations for ABNA's 2024 Annual Conference.

Remember, don't hesitate to reach out to us with any ideas you'd like to see featured in ABNA's newsletter. We value your input and look forward to incorporating your suggestions into our upcoming editions!

Georget

ABNA 2024 SEMINAR SERIES

Revolutionising Biobanking Models: Centralised, Distributed, Harmonised





Banking from the Heart

By Cassandra Griffin

For the month of love we thought we'd bring you a look at some of Australasia's cardiac biobanks and best known biobanked cardiac samples.

The Sydney Heart Bank

The Sydney Heart Bank (SHB), located at the Charles Perkins Centre, University of Sydney, is the largest repository of human hearts globally. With a collection of over 18,000 samples it was established in 1989 by Emeritus Professor Cris Dos Remedios and the late Victor Chang AC.

The collection is primarily comprised of failing hearts relating to a myriad of pathologies but also of healthy controls stored for comparative purposes. More recently the collection protocols were expanded to include heart tissue from patients undergoing cardiac surgery at the Royal Prince Alfred Hospital. The goal of this new collection is to undertake one of the worlds largest multi-sequencing studies of human heart failure – covering gene, protein, enzyme and metabolite studies.

To learn more please visit https://bairdinstitute.org.au/baird-news/the-sydney-heart-bank-news/

Pathologies and samples represented in the Sydney Heart Bank include;

- Ischaemic Cardiomyopathy
- Dilated Cardiomyopathy
- Hypertrophic Cardiomyopathy
- Restrictive Cardiomyopathy
- Alcohol induced Cardiomyopathy
- Virus induced Cardiomyopathy
- Peripartum Cardiomyopathy
- Adriamycin induced Cardiomyopathy
- Thoracic aorta
- Vascular (Carotid, Abdominal Aorta)
- Coronary arteries
- Myomectomies

The Victorian Heart Institute Biobank

The Victorian Heart Institute (VHI) Biobank is a biorepository of imaging, clinical data and tissue samples from patients within the Victorian Heart Hospital. The Victorian Heart Hospital is Australia's first dedicated cardiac hospital, providing tailored cardiovascular care. Once fully operational the hospital is forecast to conduct 28,000 emergency assessments, 10,000 interventional cardiac procedures and 2,000 open heart surgeries each year – providing a exceptional source of clinical sample and data for biobanking. The VHI has 3 key aims:

- 1. Investigation of biological factors associated with adverse cardiovascular outcomes
- 2. Definition of biological factors associated with identifying patients with different therapeutic response to a range of interventions
- 3. Development of novel analytical approaches which seek to integrate information from a range of sources (imaging, clinical demographics, biomaterials) to determine novel algorithms for prediction of risk and potential modifiability

Cardiovascular disease (CVD) is the leading cause of death in Australia and is responsible for the greatest amount of health care expenditure. The VHI have established a cardiovascular biobank to link biospecimens and cardiac imaging with clinical information and outcomes - ultimately improving outcomes for CVD.

For more information: https://www.monash.edu/vic-heart-institute/research/vhi-biobank

Kids Heart Biobank

The Kids Heart Biobank is a facility based at the Children's Hospital at Westmead coordinating the collection, storage and distribution of paediatric samples. Operating in close collaboration with the <u>Heart Center for Children</u> and <u>Kids Heart Research</u> the program works closely with both clinicians and researchers for the maintenance of the collection.

The bank combines whole genome sequencing data from families with congenital heart disease with cases from the cardiovascular genetic disorders flagship, with the goal of understanding the complex genetic landscape of congenital heart disease.

https://www.schn.health.nsw.gov.au/clinical-hub/laboratory-services/kids-heart-biobank

The Sydney Heart Valve Bank

Sydney Heart Valve Bank (SHVB) is an independent program embedded within the heart lung clinical stream at St Vincent's Hospital. The SHVB is a TGA licensed cardiovascular bank which produces homograft cardiovascular tissues such as aortic and pulmonary values, thoracic and abdominal vessels and pericardium patches.

The SHVB is one of many homograft banks globally established for clinical use. The impossibility of obtaining an ideal prosthetic cardiac valve has maintained interest in the use of homografts. Donors of tissue used for homografts can be live following a heart transplant, multiorgan donors following neurological death or cadaver donors with asystolia of less than 8 hours. Homograft cardiac valves are the substitute of choice in aortic valve endocarditis, especially in patients with counter indications for anticoagulation, though factors tissue banking techniques are of great influence on the long term results emphasising the need for stringent protocols and adherence to best practice.

For more information visit

https://www.svhs.org.au/our-services/list-of-services/sydney-heart-valve-bank

A Giant Heart

Phar Lap is a legend of Australian sporting history. Rising from humble beginnings he captured the publics imagination and instilled belief during the challenging years of the 1930s depression. Winning 37 races from 51 starts his death in 1932 triggered an outpouring of grief nation wide. 16 days after winning a lucrative race in Tijuana, Mexico, the richest race in the world at that time, Phar Lap suddenly died under mysterious circumstances in San Franscisco.

Rumours spread quickly that Phar Lap had been poisoned and his heart was sent to the University of Sydney for examination. At this time his heart was noted to be unusually large and it was suggested that it be biobanked and housed in the Institute of Anatomy in Canberra. Weighting 6.35kgs his heart remains part of the national museums collection and to date, debate continues as to whether his death was caused by an acute infection or by arsenic poisoning.



Image credit: National Museum of Australia

Dual awards recognise Helen Morrins work

After more than two decades as the Curator of Otago University's He Taonga Tapu Cancer Society Tissue Bank (HTTCSTB), Helen Morrin has been given the Bridget Robinson Award for her exceptional career in translational cancer research. She has also been awarded a Kiwibank 2024 New Zealand Local Hero of the Year Te Pou Toko o te Tau medal for her 23 years of unwavering service in transforming the campus's tissue bank into an internationally renowned facility.

The Bridget Robinson Award given by the New Zealand Society for Oncology, was established last year with the recipient selected through community nominations and a curated selection committee, and so Helen says she was surprised to have been selected at all, much less win the award. Helen has actively shaped the careers of generations of cancer researchers since her role began in 2000 and she was first charged with fulfilling the vision of the same Bridget Robinson who this award is named after. Robinson's vision was for a biobank of stored cancer samples that was open to New Zealand researchers to apply for use. When Helen started back in 2000, there was no guidance, policy or legislation to help turn this into a reality.

In the citation accompanying her Kiwibank 2024 New Zealand Local Hero of the Year Te Pou Toko o te Tau medal, the award judges praised Helens exceptional dedication, declaring that her work has provided patients the opportunity to donate surplus tumour material for the benefit of future research. They said that amidst major challenges such as the Ōtautahi Christchurch earthquakes, Helen managed to keep the HTTCSTB operational, regularly entering the Red Zone-stickered medical school building to maintain and service the tissue bank's freezers.

In a statement, Kiwibank Chief Executive Steve Junkovich said Helen's tireless commitment to community service and research advancement is truly remarkable, not just locally but internationally.

Helen is familiar to ABNA members being a past executive member, she is also an active ISBER member, currently chairing the Science Policy Advisory Committee. She is a member of the University of Otago's Human Ethics Committee, regularly providing guidance to researchers and postgraduate students on biobanking to ensure that only necessary and appropriate samples are used, enabling efficient and quality research outcomes.

Helen Morrin pictured with her Kiwibank 2024 New Zealand Local Hero of the Year Te Pou Toko o te Tau medal.

Image credit: University of Otago

Congratulation Helen, these awards are very well deserved!



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 with Dr. Gregory Hobart Grossman, PhD, CCRP, BCMAS, CEBT. Greg is the Chief Scientific Officer of Advancing Sight Network, Executive Director of <u>Precision Ocular Biobank</u>, co-chair of the <u>2024 ISBER Annual Meeting</u> to be held in Melbourne, April 9-12 and a candidate for ISBER <u>President-Elect</u>



THE QUICK QUESTIONS

Chilli on food?

None for me thanks

What is better the book or the movie?

Book - I actually like each for their own artform

Is it football or soccer?

Football - As an Ohio boy, I love American College Football (Go Ohio State). I am intrigued, but perplexed by Australian Rules Football. Love the grit and tenacity though!

Are you usually 5min early or 5min late?

5 minutes early

1. How long have you been working in biobanking?18 years

2. What has shaped your views on biobanking?

I first encountered biobanking as an end-user of biosamples during my fellowship at the Cleveland Clinic. Frustrated with the lack of quality samples, I was inspired to become the clinical manager of a local eye bank. From there, I became the research director of an international eye banking group and joined ISBER and CTRNet.

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

During a snowstorm (3 feet drifts), the power went out at my eye bank in Cleveland. It knocked out the generator, so at 2am I had to scramble to transfer research tissue to temporary storage, carefully documenting IDs and times, by the light of a flashlight...held in my teeth. Another time, a patient suffered a chemical burn to his eyes late at night. He was facing enucleation of the eye if the cornea could not be replaced within 2 hours. I drove into our clinical eye bank, evaluated a post-mortem eye, prepped and cleared the medical case, drove to the hospital and ran into the operating room. I would call that saving the sample, as it saved this man's vision. The other harrowing stories of biobanking will be reserved for my memoir.

4. What has been your favourite moment (so far) in your biobanking career?

I am proud of the accomplishments I have had the privilege of playing a role in. On a personal level, the ISBER Annual Meetings are among my most cherished moments, as I get to see dear friends and collaborators from across the globe. As an Associate Editor of the ISBER Best Practices, finishing off the 5th Edition was an important milestone for the editorial board, and seeing it launched was a celebratory moment for me and my team. I would also say that seeing the results of a pilot using Al and blockchain at our biobank will be a memory I won't forget as I forge ahead.

5. What was the last conference you attended and where was it?

As CSO, I attend a lot of conferences (spent 130 nights on the road last year), with focuses from ophthalmology to biobanking to economic development. The last conference I attended was an invited summit on retinal degeneration. The next conference will be in beautiful Melbourne, Australia! I am a Co-Chair, along with Cassandra Griffin and Amanda Moors of the 2024 ISBER Annual Meeting. I'd love to meet you there, and love to have you explain Australian Rules Football to me.

Upcoming Conferences & Seminars



Professor Jennifer Byrne invites you all to attend the upcoming "Something EPIC" seminar hosted by the Evidence, Policy and Influence Collaborative (EPIC).

When: Friday 8 March 2024, from 12:00 to 1:00 pm AEDT at the Charles Perkins Centre (Mackenzie Room, level 6), University of Sydney

Zoom link: https://uni-sydney.zoom.us/j/89245914291

Meeting ID: 892 4591 4291

Professor Avenell is Clinical Chair in Health Services Research at the Health Services Research Unit, University of Aberdeen, Scotland. Her research focuses on systematic reviews with economic evaluations, and clinical trials, mainly related to nutrition and weight management for people with obesity. She is an NHS Consultant in Clinical Biochemistry, co-leading the hospital nutrition team. For over 10 years, Alison has worked with Andrew Grey, Mark Bolland and Greg Gamble from the University of Auckland to investigate publications with research integrity issues. They have developed statistical methods for assessing publications, and an assessment tool: Check for publication integrity before misconduct (nature.com).

One of their biggest investigations was featured in Science.

Alison will talk about their experiences attempting to correct publications with integrity issues and suggest some solutions.



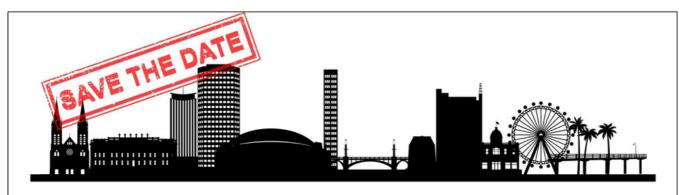
This congress will be held in Vienna from 14-17 May and will highlight state-of-the-art biobanking innovations and research. This action-packed congress will feature keynote presentations, panels and workshops organised by ESBB and BBMRI-ERIC.

Registration and abstract submission is now open.



Accreditation Matters 2024 NATA's event shaping the future of conformity assessment program spans two full days. Explore and choose from multiple streams and multiple themes including keynotes, subject matter presentations and panel discussions and highly relevant content.

Of interest to biobankers: New Standards for Biobanks: Biospecimens as the New Currency of Research – discover the world of biobanks, what are they, why do they matter, how they are evolving to be the currency of the future and the value and benefits of accreditation in this important emerging area. This session will feature representatives from Australia's first NATA accredited (ISO: 20387) facility Monash University and Daniel Catchpoole from NSW Health.



ABNA 2024 - GLENELG, ADELAIDE

BIOBANKING: SHAPING THE FUTURE TOGETHER 16 - 18 OCTOBER 2024



The ISBER 2024 Program Co-Chairs hosted a live webinar to give a sneak peek at this year's special program, topics, sessions, 25th Anniversary celebration, and destination. If you missed it and you are curious about #ISBER2024 in Melbourne, Australia, view the On-Demand webinar now:

Watch it HERE.

Lessons Learned

The Karolinska Institute faced a dreaded scenario recently when, in the days leading up to Christmas, a blackout caused a disruption in liquid nitrogen supply to the Neo building on their Flemingsberg Campus. Due to the holiday season, no technicians were present to oversee the freezers and samples were inadvertently exposed to elevated temperatures for 120 hours, resulting in irreversible damage. Despite having an automated alarm system, a malfunction which caused delays in alert notifications has now exposed gaps in their laboratories' oversight. An internal investigation has been launched at the university.

This unfortunate event highlights the pressing need for enhanced monitoring and proactive protective measures for sample storage.

Decades of research destroyed after freezer fails at Swedish university

Estimated value of the samples thought to be in the millions as incident reported to police



If you have any suggestions for a short article for ABNA Exchange, please contact: info@abna.org.au Content deadline for March edition: 22.03.24





