OCTOBER 2024



ABNA EXCHANGE

australasian biospecimen network association

OFFICIAL NEWSLETTER OF THE AUSTRALASIAN BIOSPECIMEN NETWORK ASSOCIATION

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Introducing the 2024/2025 Management Committee

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Roth Caruan





Samanatha Higgins

Chris Gorman



In the blink of an eye!

With just a blink, ABNA 2024 Biobanking: Shaping the Future Together has wrapped up! It was an absolute joy to welcome everyone to Adelaide. We had an amazing time, so keep reading for a fun-filled conference roundup, complete with highlights handpicked by our organizing committee!

VICE PRESIDENT: Louise Ludlow

SECRETARY: Carmel Quinn

EDITOR: Anusha Hettiaratchi

ABNA's 21st annual meeting was a success due to the incredible support from our sponsors and the brilliant contributions from our speakers (check them out on page 3) and our enthusiastic attendees. Thank you!

As always, ABNA loves engaging with the community. This year, we celebrated our stars with prizes for the best oral presentations, best posters, and, for the very first time, a shared prize for the best elevator pitch! Flip to page 2 for more details and some great pics of our winners – read on as I won't spoil it just yet.

We're also thrilled to announce our emerging scholarships, awarded to two outstanding individuals; Emma Dalziell and Beth Caruana – congratulations! and to mark the first anniversary of this initiative, be sure to check out Rose Upton's reflection on her exciting year as an emerging leader in biobanking.

Stay tuned! All permitted presentations, posters, and minutes from the AGM will soon be available in the members' area of ABNA's website, so if you couldn't make it this year, you won't miss out!

Happy reading and we can't wait to see you all at ABNA's 22nd annual conference in Newcastle from 22 - 24 October 2025!



2024 Prize Winners

The quality of the abstract submissions, posters and oral presentations was of a very high standard and our judging panel had their work cut out for them. Congratulations to our prize winners:

Scientifix Oral Presentation Prize

• Alice Owen

Scientifix Elevator Pitch Prize (shared)

• Cassandra Griffin & Emma Dalziell

Poster Prize

• Carina Lauter

Emerging Leader in Biobanking Scholarships

- Emma Dalziell
- Beth Caruana

Games (and bragging rights)

- Megan Clarke Sponsor Peg Game
- Beth Caruana ABNA Dinner Bingo







2024 Prize Winners: 1. Scientifix Oral Presentation Prize winner Alice Owen. 2: Scientifix Elevator Prize joint winners Cassandra Griffin & Emma Dalziell 3: Poster Prize winner Carina Lauter.

A reflection on my year as Emerging Leader in Biobanking

by Dr Rose Upton

Has it really been a year already? I can't be the only person who blinked and found themselves at the tail end of ABNA2024? While I couldn't be there in person this year, I'm so excited that so many useful conversations were continued on Biodiversity Biobanking. Reflecting on my year as the inaugural recipient of the Emerging Leader in Biobanking, this is what strikes me the most. That such a diverse group of people can come together to talk about solutions for biobanking in multiple disciplines (go ABNA!). This year I have co-lead the Special Interest Group (SIG), Banking for Biodiversity and also sat in a few other SIG group meetings and I couldn't be prouder to be part of such a supportive and interactive group. Our SIG (co-led by Emma Dalziell) is now working on a perspectives piece on the state of biodiverse biobanking in Australasia, an idea we've spoken about since ABNA in 2023. If anyone is interested in joining this effort, get in touch!

This year I traveled to Borneo to present on my Biobanking research at the 10th World Congress of Herpetology in a symposium on Developing Global Collaborations for Amphibian Biobanking and Genetic Management. It was great to see representation from Australasia in the symposium. I'll also be travelling to Adelaide next month to present to the Society of Reproductive Biology. This will be a new conference for me and I'm looking forward to making new connections, and potentially finding some overlap (or inspiring some overlap) between SRB and ABNA!

In other exciting news, my newest honours student has begun a project improving biobanking protocols for the threatened Littlejohn's tree frog and my first PhD student has also submitted her thesis. With a multidisciplinary focus, it was exciting to see part of her thesis focus on improving knowledge surrounding collecting quality gametes for biobanking. On the teaching front, this year I delivered a biobanking model to my undergraduates, to positive feedback. I learned very little about biobanking in my undergraduate degree, so I'm excited to be able to expose students to such a cool area of research. With any luck, one day soon, I'll have the pleasure of seeing my students presenting at ABNA and maybe even being awarded the Emerging Leader in Biobanking Award!

Thank you to all the support and encouragement ABNA has provided over the past few years. I look forward to another year of everything Biobanking and am proud to hand over the reins of Emerging Leader in Biobanking to Emma and Beth!

Thank you to our 2024 Sponsors & Invited Speakers













































5 Minutes with a Biobanker

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



This month Dr Laura Klein, National Milk Research Leader at <u>Australian Red Cross Lifeblood</u> answers our questions.

Laura's presentation "Understanding our donors' experiences of donating to a human milk bank" at this years ABNA conference was a fascinating insight into the factors that influence milk donation in Australia.

THE QUICK QUESTIONS
Chilli on food?

Yes

What is better the book or the movie?

Book

Is it football or soccer?

Soccer

Are you usually 5min early or 5min late?

5 minutes early

1. How long have you been working in biobanking?5 years

2. What has shaped your views on biobanking?

I work very closely with our Milk Operations team – they're the champions who screen our breast milk donors, go to donors' homes to collect their donations, process and test the milk, and prepare the donor milk to go to vulnerable babies in hospitals. The whole team is so passionate about caring for our donors and recipients and seeing how they do that day-to-day shapes the way I think about research. We aim for all of our research projects to be able to inform and strengthen our Milk Service.

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

Before my milk bank days, a freezer broke down whilst I was in the middle of some lab work. To make sure I didn't lose all the samples, I had to put a sample in to be analysed, run to move samples from the broken freezer to the backup freezer, run back to the bench to put another sample in, and repeat. I got my steps in that day!

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

Having the opportunity to meet some of our generous milk donors and families of infants who have received donor milk. It is such a privilege to hear their stories, and knowing our work can play a small role in helping them motivates me every day.

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

I've been so lucky to attend two conferences in beautiful beachside locations in the past week. First ABNA 2024 overlooking Glenelg beach in Adelaide, then the Australian and New Zealand Neonatal Network (ANZNN) Clinical Practice Improvement 2024 conference alongside Manly Beach in Sydney.



Clinical Trials & **Population Cohort** Biobanking

> **SIG Chairs** Wayne Ng

Post-mortem Tissue Collection

SIG Chairs Louise Ludlow

Banking for **Biodiversity**

SIG Chairs Emma Dalziell Rose Upton

Quality Management & **Improvement**

SIG Chairs Samantha Higgins Beth Caruana



ABNA SPECIAL INTEREST GROUPS

JOIN NOW

Launching a new ABNA Special Interest Group

The Indigenous Engagement in Culturally Safe Biobanking and Biospecimen Services was announced at the 2024 ABNA Annual Conference, by the two co-chairs, Dr Jessica Buck and Cassandra Griffin.

What does the Indigenous Engagement in Culturally Safe Biobanking and Biospecimen Services SIG cover?

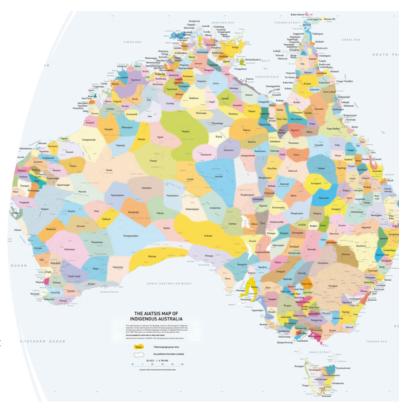
- How can we engage with Indigenous communities?
- What are the ethics and governance concerns?
- What are the cultural considerations associated with biospecimens?

This SIG aims to map areas of concern and uncertainty from a biobanker perspective, and to find answers to the questions raised through collaborative engagement with Indigenous communities

Building on the model of the Guidelines for Biobanking with Maori - He Tangata Kei Tua released in 2016, one of the planned outcomes of this ABNA SIG is to develop a set of national guidelines for biobanking with Indigenous samples.

Please contact the SIG co-chairs for more information: Jessica - <u>jessica.buckethekids.org.au</u>

Cassandra - Cassandra.griffin@newcastle.edu.au



2024 Conference Highlights

As selected by the Conference Organising Committee

WORKSHOP 1A - PATHOLOGY

Pathology services and statewide health providers collaboration and integration to establish effective partnerships

This workshop concurrently kicked off the conference and was chaired by Prof Joy Rathgen. A great deal of legalese speak and exasperation was experienced by all as we undertook the mammoth job of looking at the possibility to harmonise the tissue banking and access policies from across the various states. I was asked to present the QLD perspective as far as tissue banking and access goes. I personally learned a great deal such as: the definitions placed in an act some 50 years ago do not mean much now that the world has moved on – what regenerative tissue referred to in 1979 means something very different now, and groups of people are missing out on the opportunity to be represented in biobanks as the consent limitations are outdated, and as Joy put it, "Acts are not written to be read out in public".

Lively discussion ensued and a promise to meet up again for those interested in pursuing this cause with the possibility of a white paper collaboration there too.

There does seem to be marked differences in the Tissue Acts across different states. To harmonise them will be a huge undertaking and in my humble opinion the group of people who met in this workshop are the best people for the job. Well done to the Workshop organisers for a successful session.

Leanne Wallace

THINKING OUTSIDE THE SQUARE

Session 1: Novel approaches to Consent

An informed consent process underpins many of our biobanking operations and this session aimed to highlight novel approaches. Our first invited speaker was Susan Hume who is the Tissue Bank Manager at Eastern Health, a member of the Victorian Cancer Biobank Consortium (VCB). Sue has held this position for the last 12 years and has offered consent to an estimated 1500 participants. Sue reflected on the informed consent process within a hospital-embedded cancer biobank, described real like experiences and the harmonised consent process utilised at VCB.

Our next speaker was Professor Andrew Pask who heads the Evo-Devo-Repro group and the Thylacine Integrated Genetic Restoration Research lab (TIGRR lab) at the University of Melbourne. Andy presented work being done around indigenous engagement and consent related to the preservation and restoration of Australia's wildlife. Recent work on the thylacine deextinction project, genetic fortification in the Northern quoll, development of marsupial stem cell technologies, advances in marsupial assisted reproductive technologies and biobanking were also discussed.

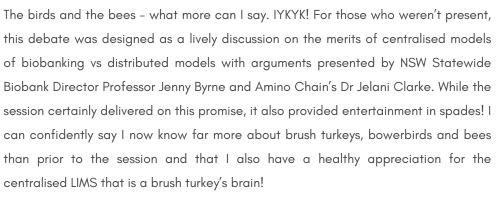
Next we heard from local Biobank Manager and Research Associate Amanda Luck from the Paediatric Neuro-Oncology Group at SAHMRI and the Women's and Children's Hospital. Amanda's presentation outlined the consenting workflows of South Australia's first Paediatric Brain Tumour Biobank. Of particular interest was Amanda's unique perspective on biobanking consent across continents and under different medical disciplines. A lively and engaging panel discussion followed with topics ranging from consent of minors, waivers of consent and indigenous engagement.

Louise Ludlow

BENT OUT OF SHAPE

Seminar 4: Centralised vs Harmonised Biobanking "The Great Debate"





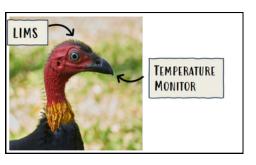


Image credits: Professor Jennifer Byrne

The arguments for a centralised model that is consistent and co-located were certainly compelling. That said, it's hard to argue against the logic of a decentralised model when, as Jelani pointed out – our subsequent discussions were looking at biobanking in space! While the arguments were brilliantly presented by each side and afforded the room much food for thought, the laughs that were had are what most people will take home. Who won? That remains in the court of public opinion!

Cassandra Griffin

SQUARE PEG ROUND HOLE

Session 6: Legacy Biobanks

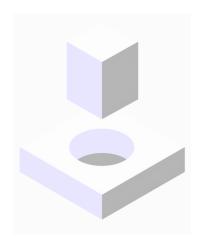
In our Thursday afternoon session, we focused on the unique challenges of managing legacy biobank collections. Three experts shared their insights, case studies, and strategies for handling these complex projects.

Dr. Anusha Hettiaratchi from UNSW's Biospecimen Services presented on her experience integrating three legacy collections into their care. Each collection posed distinct challenges, requiring a collaborative approach that included legal consultations, understanding donor wishes, and leveraging the team's expertise to ensure a smooth transition.

Prof. Mike Gardner of Flinders University's Lab of Evolutionary Genetics and Sociality recounted his experience inheriting the lab and its long-term lizard study following the sudden passing of lab founder Prof. Mike Bull, and soon after, Dale Burzacott, the lab technician. Mike described the task of digitizing decades of handwritten data and his efforts to secure funding for data entry and preservation.

Dr. Sally Norton, head of the Australian Grains Genebank, discussed uniting three distinct grain collections under one organization. Each collection had unique storage histories: one was stored at room temperature, while the others were frozen at -20°C. Sally shared how she applied best practices from each collection to ensure long-term viability across the newly integrated genebank.

This session provided valuable suggestions and strategies for biobankers tackling largescale projects and legacy collections in their own institutions.



Corinne Mensforth

SITE VISIT

Adelaide Zoo

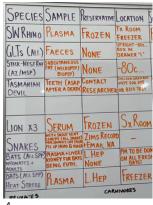
It was an early start on the last day of the conference but worthwhile for a chance of a behind the scenes tour with Mark Smith, Conservation Manager at Zoos South Australia. After a guided walk past fairy penguins, crocodiles, wallabies, meerkats, and giraffes to name a few, we arrived at the zoos health centre where we met head vet, David McLelland. David and his colleague Oliver Funnell took us through multiple spaces showcasing their day-to-day activities, including some of the samples they take and how they are processed and analysed. We were also able to see how they store their specimens and heard about their zoo database (very much akin to a biobanking LIMS we use). We left the facility with very little doubt in our minds that the zoo staff were definitely biobankers with a much cooler workplace compared to us.





1: Walking through the Adelaide Zoo with our guide Mark Smith. 2: Head Vet David McLelland talking the group through some of the regular testing carried out at Adelaide Zoo. 3: Oliver Funnell in the sample storage area (yes that fan is keeping their -80 from overheating). 4: Not your usual list of samples for collection. 5: ABNA delegates at the Giant Panda habitat.







On the way back to the exit we were lucky enough to stop by the panda habitat where Wang Wang and Fu Ni are in quarantine prior to their return to China. As part of the international Giant Panda research, conservation and breeding program designed to preserve this vulnerable species housing the only pair of Giant Pandas in Australasia has led to a completely new set of scientific data highlighting the differences between hemispheres and how it affects pandas' nutritional requirements and reproductive biology. For ABNA delegates this was a rare chance to see all these beautiful animals before the zoo was open to the public when the space would no doubt have been extremely busy and an opportunity to see first-hand some of the work the zoo staff do.

Anusha Hettiaratchi

PANEL DISCUSSION

Session 8: Consumer Barriers to Biobanking

Having to choose one highlight from the conference was a difficult task! But for me, there was one that I found both emotionally and professionally powerful: consumer barriers to biobanking! This discussion was led by three of the most amazing humans, Kate Jennar, Jodie Clarkson and Thomas Tu, all willing to share their personal stories without any reservation, with compelling narratives that underscored how their personal experiences shaped their understanding of biobanking's purpose. They highlighted the profound impact this has had on both the field and the individuals involved.

Each speaker shone a light upon the critical need to return to our roots, emphasising that the core of biobanking lies in benefiting patients and communities. They highlighted how consumer perspectives and concerns can drive innovation and ethical practices in biobanking, ensuring that participant voices are central to the process; evident in initiatives like "Hepbcommunity.org," founded by Thomas which supports patients and participants throughout their journeys, and in the recent amendment to the Human Tissue Act in the Northern Territory, thanks to Jodie, which now permitted the donation of her brain

tissue for research.



From left: Panel facilitator Cassandra Griffin with panel members Kate Jennar, A/Prof Thomas Tu & Jodie Clarkson

By recognising the vital role consumers play, biospecimen scientists and biobankers can better align their efforts with societal needs, ultimately enhancing the relevance and efficacy of biobanking initiatives. This dialogue serves as a reminder of our responsibility to engage with the public, fostering trust and collaboration that can propel biobanking into a future that truly serves the community. A big thank you to the three of you!

Georget Reaiche-Miller

PUZZLE PIECES

Session 9: Qualitative Biobanking

Sadly, I was a late withdrawal from attending the ABNA meeting this year, but I had been particularly keen to attend the 'Qualitative Biobanking' session. As is a hallmark of ABNA meetings, the talks within this session were diverse, incorporating breast milk banking, veterinary biobanking, and identifying family members with a genetic predisposition for ovarian cancer – but all had the common aim of gauging perceptions and attitudes of participants.

Intuitively, biobanking is a mainly quantitative activity, with attention rightly given to management of specimens. However, whatever the area of biobanking, involving human, animal or plant specimens, continued success relies upon trust placed in biobankers by the public at large. It follows therefore that understanding how biobanking is understood in different contexts may reduce possible barriers to consent, ultimately allowing for more ethical engagement with participants and more representative involvement.

The Qualitative Veterinary Research talk discussed how owning a dog is commonly linked to improved human health, but that in some cases the burden of care can actually negatively affect the health of the caregiver. This is a good example of how qualitative research can yield information that can initially seem counterintuitive, reinforcing the importance of this type of research in understanding the motivations of participants. As a great believer in the importance of qualitative research in biobanking, I am hopeful that this will be included in future ABNA meetings – and of course that I will be able to attend to hear the presentations

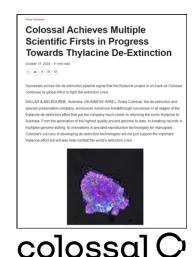
Carmel Quinn

Biobanking in the news

The most complete Tasmanian tiger genome to date

A press release by American company Colossal announced that the newly reconstructed Thylacine genome that is the most complete and contiguous ancient genome of any species to date, estimated to be more than 99.9 per cent accurate. The University of Melbourne's Thylacine Integrated Genetic Restoration Research (TIGRR) Lab, led by Professor Andrew Pask, have partnered with Colossal since 2022. Click on the image to the right to read the full press release while a related story from the University of Melbourne can be read HERE.

ABNA 2024 delegates were given a heads up by Prof Andy Pask that this information was about to be announced as part of his presentation at the conference. We continue to follow this exciting project with interest.



Inside Climate Ne Biobanking Corals: One Woman's Mission to Save Coral Genetics in Turks and Caicos to Rebuild Reefs of the Future

Coral Biobanking in the Carribean

ABNA members who attended our Gold Coast conference in 2023 will be familiar with coral biobanking in Australia. Click on the image to the left to read the story of Alizee Zimmermann's journey to start the coral biobank located at the Southbank Marina on Providenciales, Turks and Caicos. The article includes information about the partnerships formed and how the 180 corals and 11 different species living at the biobank are being used to not only learn about coral diseases but also to save coral species from record breaking ocean temperatures.

Don't miss your chance to present at the ISBER 2025 Annual Meeting: Northern Lights: Impact of the Global Biobanking Spectrum! Whether you're advancing biobank science, ethics, or operations, we want to hear from you!



NEW in 2025: Accepted abstracts will be considered for oral presentations in prestigious plenary symposia sessions in Montreal, providing an exceptional opportunity for presenters to showcase their work to a broad audience of global experts and leaders in the field.

Submit your abstract, workshop and roundtable ideas by Nov 13 HERE and be part of this global event.

If you have any suggestions for a short article for ABNA Exchange, please contact: info@abna.org.au Content deadline for November edition: 22.11.24





