

Providing Biospecimens for Translational Research

Dr Anne Thompson
Executive Officer

History

- 2001 large scale tissue banking with clinical data conceptualised
- 2003-4 Seed funding provided and standard protocols and data sets developed
- 2006 Victorian Government provided funding through the STI Grant Scheme
- Biobank Consortium was established.

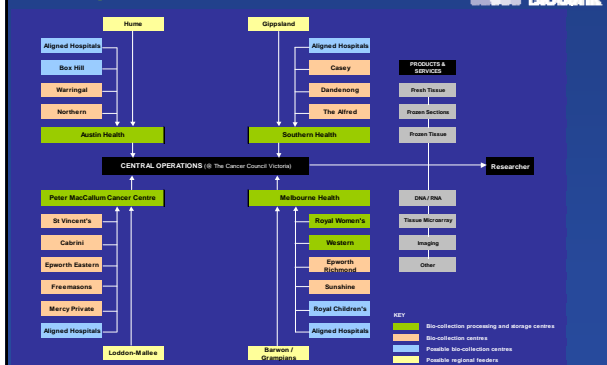
Consortium Members

- Austin Health
- Melbourne Health
- Peter MacCallum Cancer Centre
- Southern Health
- The Cancer Council Victoria (Lead Agency)

Objectives

- provide researchers in academia and industry with high quality clinically annotated cancer specimens
- streamline access to biospecimens; reduce duplication of resources for collection and administration
- support molecular pathology research to facilitate the development of targeted therapies
- link with national and international tissue banks and clinical trial activities

Operational Model



Funding allocation

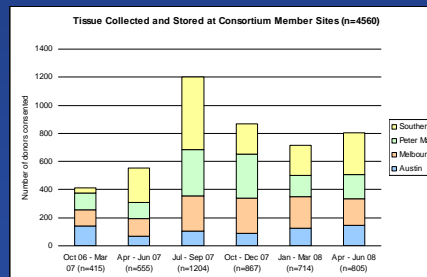
Grant agreements

- Tissue Collection, 3 staff per site (12), equipment and consumables
- Data Management (4 from Oct 2007)
- Pathology Registrars (4), 2007 - 2009
- Facility Development (AH & SH)

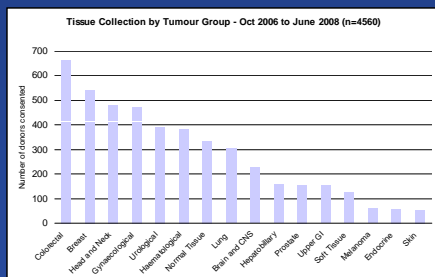
Collection

- Pre-operative and/or post-operative blood
- Cancer and matched adjacent normal tissue
- Non-cancer tissue (where possible)
- Project specific collections (clinical trial or academic research projects)

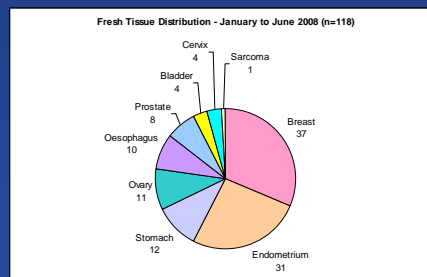
Biospecimen Collection



Biospecimen Collection



Fresh Tissue Distribution



Patient Consent

Please read carefully and tick either YES or NO or NA (Not applicable)

1. I give permission to have 25 to 50 ml of my blood collected.	<input type="checkbox"/> YES <input type="checkbox"/> NO	MEDICAL RESEARCHERS ONLY
2. I give permission for an additional 25 to 50 ml of blood to be collected at follow up visits.	<input type="checkbox"/> YES <input type="checkbox"/> NO	
3. I give permission for cells obtained from my blood or tissues to be used to establish cell lines. (A cell line is comprised of cells that have been allowed to grow indefinitely).	<input type="checkbox"/> YES <input type="checkbox"/> NO	
4. You may use my samples to conduct studies that identify genes or diseases that run in families for example, diseases that can be passed on (through DNA) to blood relatives.	<input type="checkbox"/> YES <input type="checkbox"/> NO	
5. I give permission for health information to be collected from my doctor, medical records or through ethically approved health databases or cancer registries.	<input type="checkbox"/> YES <input type="checkbox"/> NO	
6. You may use my archived tissue paraffin (wax) blocks for research.	<input type="checkbox"/> YES <input type="checkbox"/> NO	
7. You may contact me in the future to take part in other research projects or surveys.	<input type="checkbox"/> YES <input type="checkbox"/> NO	
8. I give permission to have an additional 10 mls of bone marrow collected	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NA	
9. I give permission for bone marrow to be collected at follow up visits	<input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> NA	
10. I give permission to release my identity to ethically approved researchers.	<input type="checkbox"/> YES <input type="checkbox"/> NO	

Minimum data set

Demographics	Age; sex
Surgery details	Anatomic site of cancer
Pathology	Diagnosis; differentiation, grade and/or stage; nodal status
Patient status	Age and cause of death
Follow up	Recurrence
Biospecimen handling	Method of preservation; matched samples

- Additional data can be obtained on a project specific basis
- Biospecimen number linked to BioGrid Australia for FU clinical data through

Accessing biospecimens and services

1. Researcher obtain HREC approval to conduct research / discuss needs with Biobank staff
2. Download forms from website, complete and submit
3. Approx 30 day turn around time *
4. Signing of MTA or SA
5. Biospecimens dispatched

* Dependent on number and availability of samples requested

Applying for clinical trial support

Part A: Application for Biospecimens

Part B: Application for Fresh Tissue

Part C: Application for Archival Biospecimens

Part D: Application for Clinical Trial Support

Part E: Application for Project Specific Collection

Cost Recovery Model

COLLECTION + PRIMARY PROCESSING + STORAGE + RETRIEVAL + SECONDARY PROCESSING + ORDER PROCESSING x COST FACTOR + FREIGHT = TOTAL COST

Features:

- Sliding scale for researcher group and sample number (cost factor)
- Task based model allows for flexibility

Assumptions:

- Standard blood component volume 250ul
- Standard tissue size 25mg / 5mm³

Future Developments

- Balance the collection to meet researcher needs
- Develop an IT platform that supports operations
- Increase value added reagents and services to meet evolving needs
- Expand to regional sites
- Cost recovery and funding for sustainability

Acknowledgements

Consortium Committee

Assoc-Prof G Lindeman	Melbourne Health (Chair)
Prof A Burgess	Independent Member (research)
Assoc-Prof I Campbell	Peter MacCallum Cancer Centre
Mr David Fogarty	The Cancer Council Victoria
Prof A Landgren	Independent Member (pathology)
Mrs A Macphee	Independent Member (consumer advocate)
Prof P Rogers	Southern Health
Prof A Scott	Austin Health
Ms M Thiagarajan	Independent Member (ethics&legal)

Central Operations

Anne Thompson	Executive Officer
Zoe Squire	Quality & Operations
Noellyn Ngo	Administration & Communications

Tissue Bank Managers

Carmel Murone	Austin Health	Pathology, Medical and Nursing staff at each site
Matthew Chapman	Melbourne / Western Health	
Sam Cauberg	Peter MacCallum Cancer Centre	
Pam Marners	Southern Health	Tissue Bank staff at each site

Victorian Cancer Biobank

www.viccancerbiobank.org.au