

Banking Live Tumour For Maximum Flexibility In Future Research

- A Pilot Investigation With Paediatric Brain Tumours

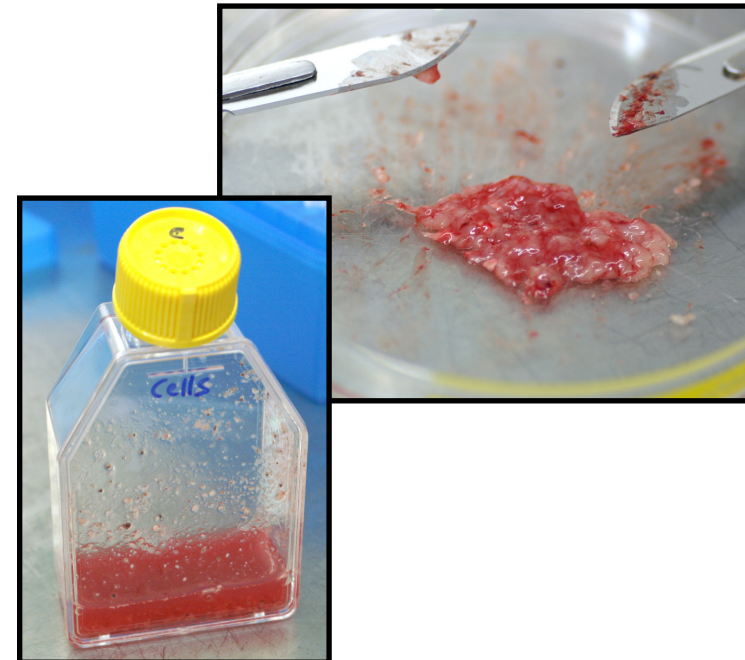
Wendy Ingram

*Brisbane Royal Children's Hospital Tumour Bank/
The University of Queensland*

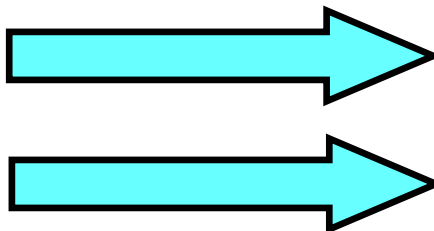


Live Non-cultured = Huge Flexibility For Future Research

*Tumours can be **mosaic** for:
mutation spectrum,
chromosomal status,
epigenetics,
gene expression,
levels of differentiation...*



Live “minimally processed” tumour



Sub-populations

biology of living proliferating cells

Pilot Study: Live Banking Paediatric Brain Tumours

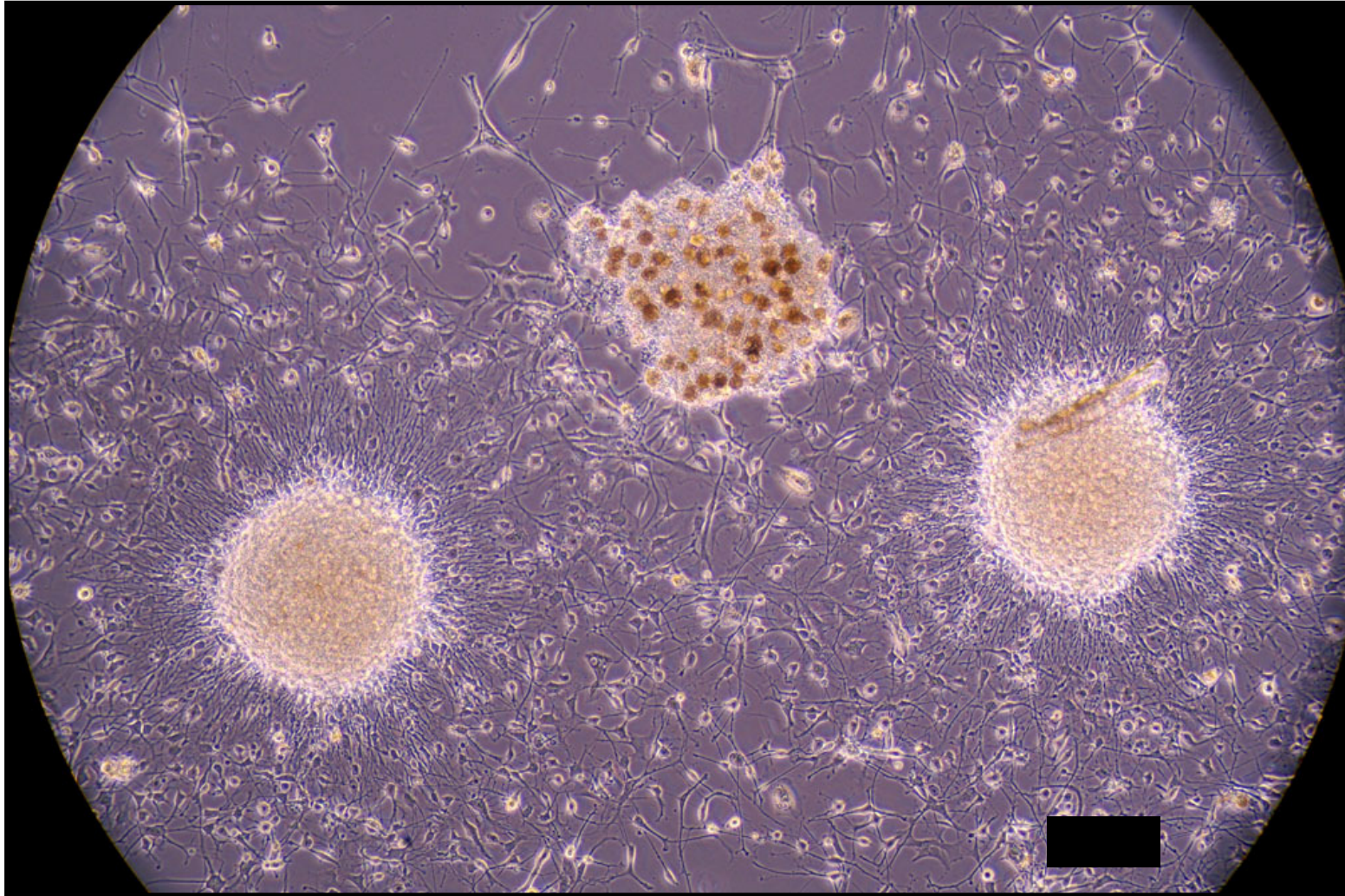
Aim: Explore **Live storage as a routine format for tumour banking**



- *“Minimal Manipulation”, No Culture*
- *Simple well established methods, modified for rapid banking*
- *8 Paediatric Brain Tumours, stored 1 to 2 years, 8/8 viable*
- *Confirmed CNS*

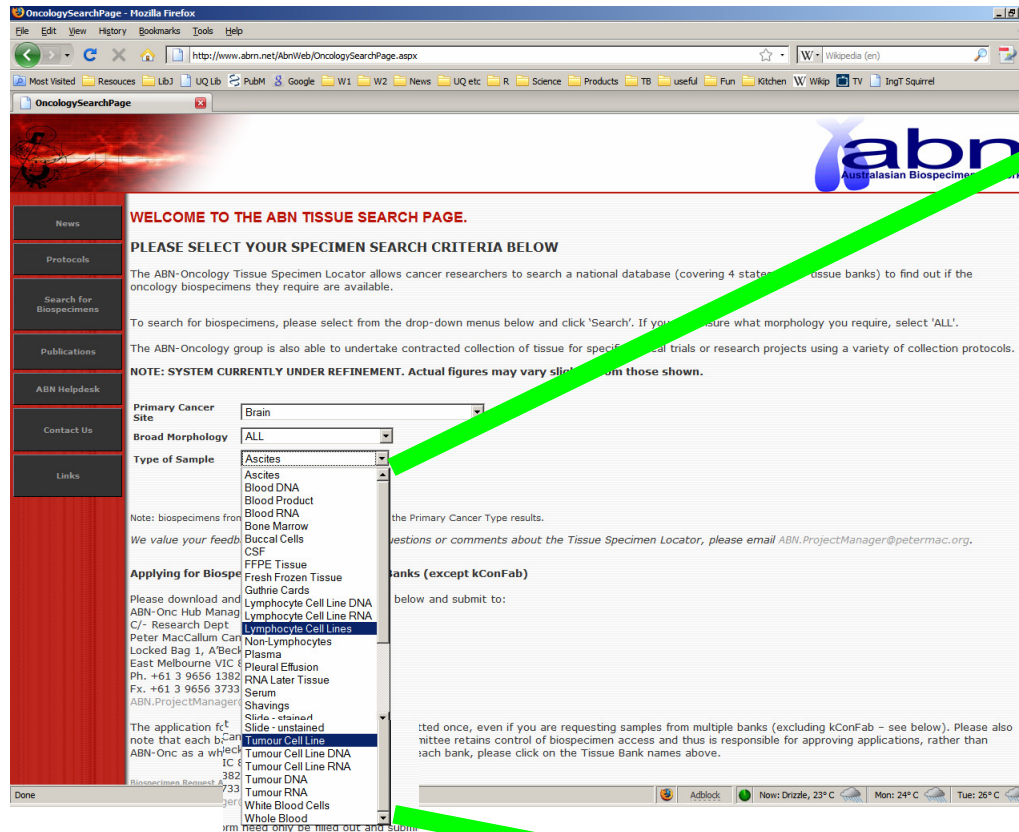
Conclusion: Well **worthwhile; enormous flexibility in future analyses, be they at the **“whole tumour”** or **“sub-population”** level.**

Fresh Human Brain Tumour – Explant Growth



R006 9 days - Glioblastoma multiforme (GBM)

Non-cultured Live Format – Often Neglected but so Useful!



- Ascites
- Blood DNA
- Blood Product
- Blood RNA
- Bone Marrow
- Buccal Cells
- CSF
- FFPE Tissue
- Fresh Frozen Tissue
- Guthrie Cards
- Lymphocyte Cell Line DNA
- Lymphocyte Cell Line RNA
- Lymphocyte Cell Lines**
- Non-Lymphocytes
- Plasma
- Pleural Effusion
- RNA Later Tissue
- Serum
- Shavings
- Slide - stained
- Slide - unstained
- Tumour Cell Line**
- Tumour Cell Line DNA
- Tumour Cell Line RNA
- Tumour DNA
- Tumour RNA
- White Blood Cells
- Whole Blood