

Biobanking In the Pink...

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A personal journey. 1999 What can I offer?

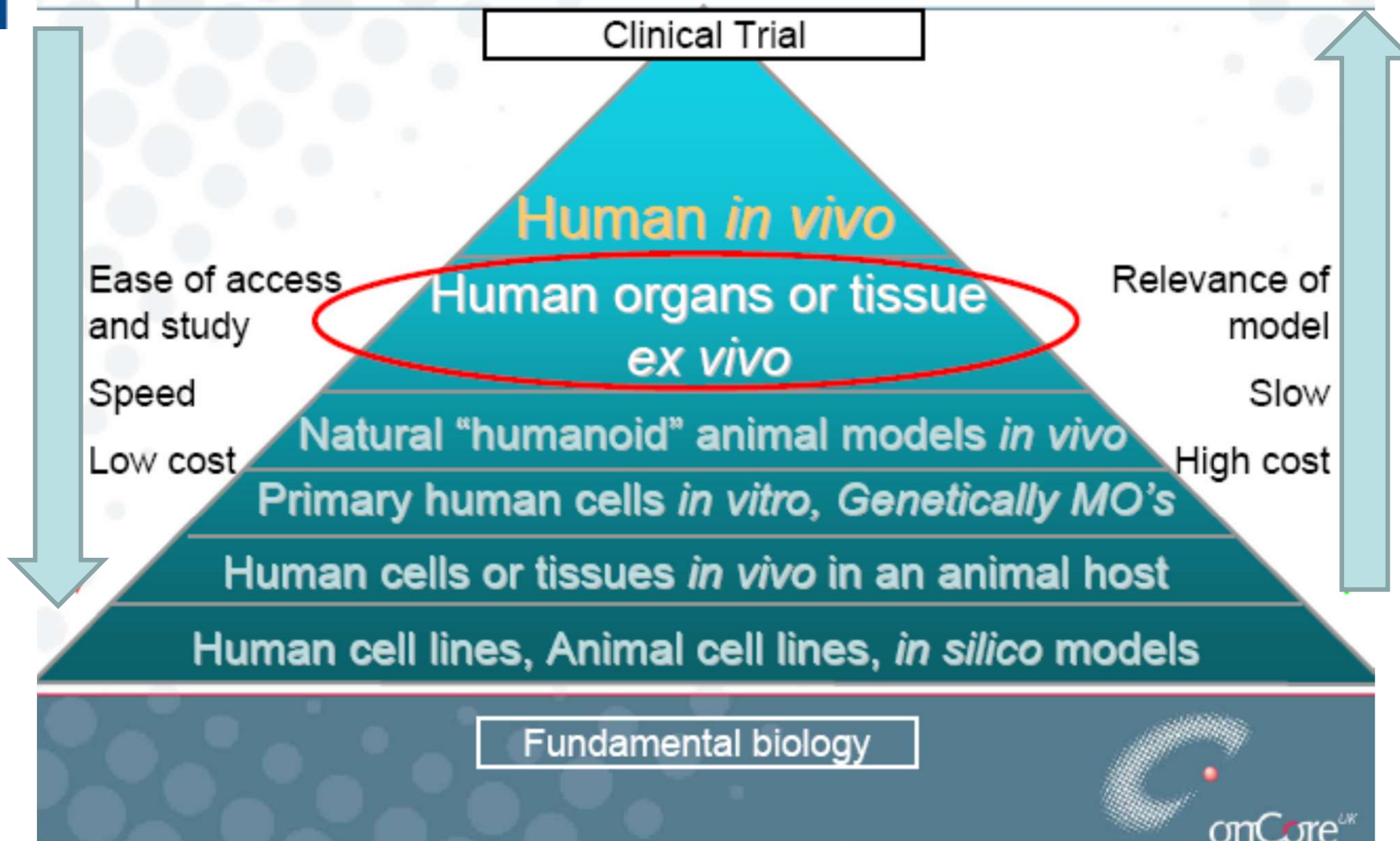
- Access to:
 - primary tissue
 - clinical information
- Prospective collection of tumour/lesional tissue, control tissue, blood
- Frozen, cultured cells, paraffin blocks

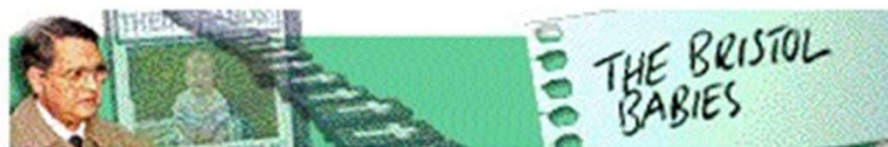


Why ?

- Patients and relatives want to help and should be offered the opportunity.
- Brain tumours have a dismal outcome.
- Neurodegenerative diseases need biomarkers
- Need to promote research, recruit young academics to work with primary tissues and have clinical links
- Not ethical to have tissue sitting in wax for 30 years
- Push collaborative research, Pharma and HEI links.
- Generate grants and income

Models for human disease



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Organ scandal doctors 'presumed too much'



Some parents only found out after the inquiry was launched

Doctors who took the hearts of children who had died during surgery "presumed too much", a leading doctor has said.

SPECIAL REPORT
BRISTOL
BACKGROUND

Professor Robert Anderson of Great Ormond Street Hospital, London, was giving evidence to the public inquiry into child heart surgery at the Bristol Royal

Relevant Stories

21 Sep 99 | The Bristol heart babies
Parents blast hospital over missing organs

21 Sep 99 | The Bristol heart babies
'Hospital gave me baby's heart in box'

11 Feb 99 | The Bristol heart babies
Bristol inquiry to look into child organ removal

Internet Links

Great Ormond Street
Children's Hospital

Bristol Royal Infirmary
Inquiry

United Bristol Healthcare
Trust





Human Tissue Act 2004

2004 Chapter 30

- Created the Human Tissue Authority & DIs
- Introduced criminal sanctions
- Defined “Relevant Material/Scheduled purpose”
 - anything that contains human cells except hair, nails and cell lines
 - includes urine and faeces
- + Created “Research Tissue Banks” for proxied ethics
- + Regulated mortuaries



The view from LTH...

- 2000-03 Frustration... all ethics refused
- 2003 BTNW collaborative research group
- 2005 generic banking ethics for 25yrs!
- Rosemere £50k to establish TC lab
- Sidney Driscoll NF £183k for tissue bank
- 2006 Ethics rescinded & HTA licence application
- 2010 HTA license supported by ISO15189
- 2010 CNS generic RTB co-term with Walton



IT ADVANCES: Tim Dawson and Paul Bradley check out the web-based system designed for the Brain Tumour North West initiative.

SPECIAL FEATURE

**IT
innovations**

Brain bank is set up to save lives

Donated tissue helps tumour research

A BRAIN bank has been launched at the Royal Preston Hospital to tackle brain tumours with new drugs and techniques.

The venture will allow research tissue to be collected from patients with brain tumours. These will be stored and distributed throughout the North West to establish an effective research data base.

The brain bank is part of a new alliance involving the Lancashire Teaching Hospitals NHS Foundation Trust, the University of Central Lancashire and the University of Wolverhampton to form Brain Tumour North West.

The initiative aims to develop and deliver significant research programmes into brain tumours

by Asma Day
Health Reporter
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in the region. More than 7,000 people a year in the UK are diagnosed with brain cancer and it is the 10th most common cancer for men and the 13th most common cancer for women.

The brain bank at the Royal Preston Hospital has been funded by the Sydney Driscoll Trust which was set up in memory of a Blackpool entrepreneur who died of a brain tumour.

Dr Timothy Dawson, consultant neuropathologist at Lancashire Teaching Hospitals NHS Foundation Trust, said: "Before we treat patients with brain tumours with novel drugs, we have to try the drugs in the laboratory. Rather than trying them on animal cells, actually working with brain tissue gives a better

idea of whether these drugs will work on real brain tumours.

"One of the most restricting factors in brain tumour research is getting hold of tumour tissue from patients.

"When we make a diagnosis of a brain tumour, we have to take tissue. Only a little bit of the tissue is needed for the diagnosis and the rest is usually wasted.

"But now we ask patients if we can use any leftover tissue for research in our brain bank."

Des Grant, father of 12-year-old Melanie, the face of the LEP's Melanie's Magic Wand Appeal which raised £463,000 for brain tumour equipment for the Royal Preston Hospital, today said: "Going through a brain tumour is an extremely difficult and harrowing time.

"Allowing doctors to use brain tissue to make treatment better for people in the future is an exceptional thing to do."



NEW FACILITY: Tim Dawson carries out research

NEWSBRIEF

A night for anti-fascists

AN Anti-Fascist Social at Gregson Community Centre, Moor Lane, Lancaster, takes place on Friday April 13.

RednBlack Collective presents the event featuring Tracey Curtis, Eastfield, Chris Butler and DJ Gez - Acme Bass Company.

There will be a late bar with anti-fascist and Palestine Solidarity information and a Zayoun olive oil sale.

Derbyshire protest folk singer Chris Butler supported Chumbawamba at The Platform in Morecambe last year. He returns to sing his own brand of political folk music including the songs Don't Vote BNP and The Council Workers Strike.

Take a look at Easter gifts

AN EASTER craft fair takes place at the RSPB Leighton Moss nature reserve in Silverdale, near Carnforth.

Cumbrian crafts and gifts and will be on sale and a Made in Cumbria market will be open.

The event runs from 10am until 4pm on Sunday April 8 and Monday April 9.

Admission is free and for more information call 01524 701601.

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Early brain cancer diagnosis hopes pinned on blood test

Researchers at the University of Central Lancashire (UCLan) believe they have found a way to cut the time it takes to diagnose brain tumours.

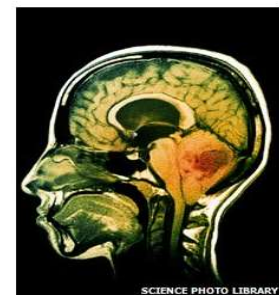
Patients currently require intrusive surgery for tissue sample testing.

Scientists in Preston say they have now developed a way to detect a tumour by analysing blood, cutting diagnosis from weeks to under an hour, it is hoped.

Dr Matt Baker said the test could help relieve "emotional stress patients experience waiting for test results".

Regular health screening

He said: "Statistics have shown us that more children and



SCIENCE PHOTO LIBRARY

Cancer Research UK said more than 6,000 people were diagnosed with

Cultural Changes - Clinical

Formalin



Chlorhexadine



In "Pink" DMEM
transport medium



Pre- & post-op
Heparin & EDTA

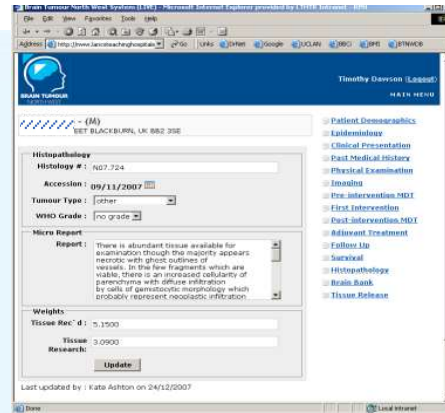
Cultural Changes - Lab



Expedite transport
and handling



Spin bloods,
chase FUs



Collect data



+ Communication

Progress...

- RTBs:

Estbl.	Discipline	Samples
2010	CNS (oncology and neurodegenerative)	5300
2011	Genitourinary (oncology)	1075
2013	Gastrointestinal (oncology)	583
2019	Cardio-thoracic (oncology and obstructive airways)	127
2024	Melanoma (oncology)	

?? Immunology, hepatobiliary

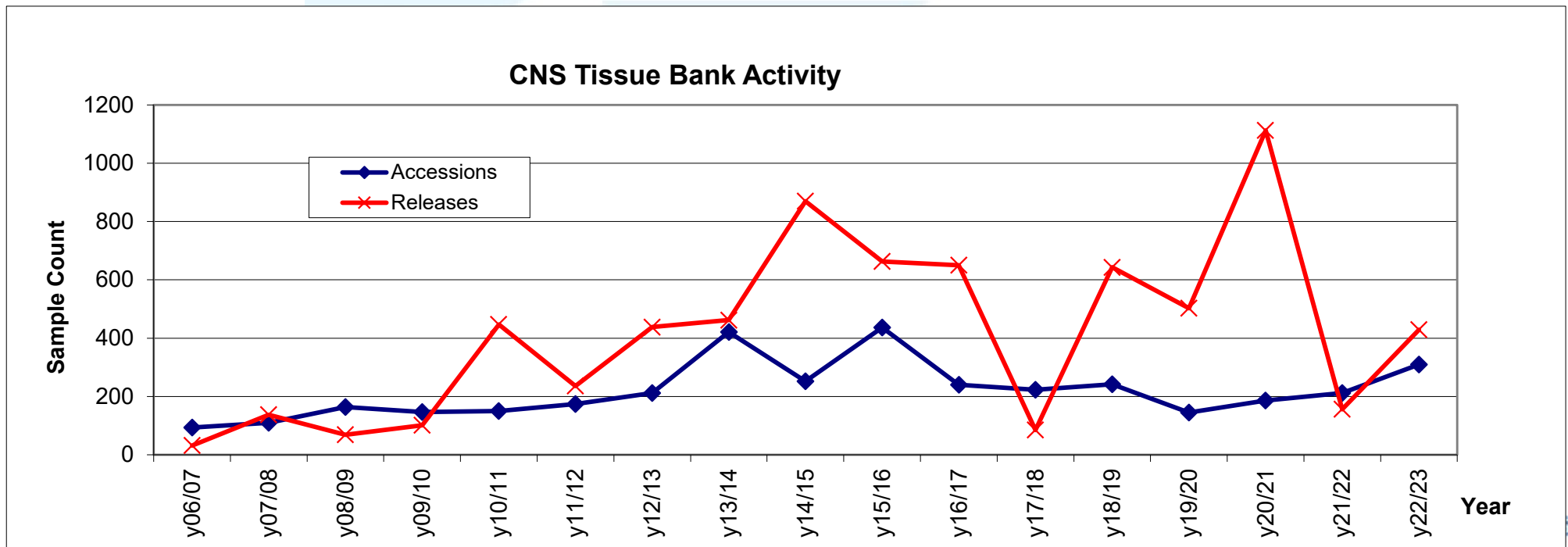
- Tissue (FF, cells, PE), tears, urine, saliva, stool, effusions, BAL
- Automated serum collection



BTNW Research Tissue Bank

(Supported by Sidney Driscoll Neuroscience Foundation)

- Dedicated BMS and RTB support team at LTH
- Extended ethics 2014 to include all archival FFPE tissues
- Extended ethics 2016 to include neurodegenerative bloods & CSF
- Tariff free access for BTNW researchers & collaborators



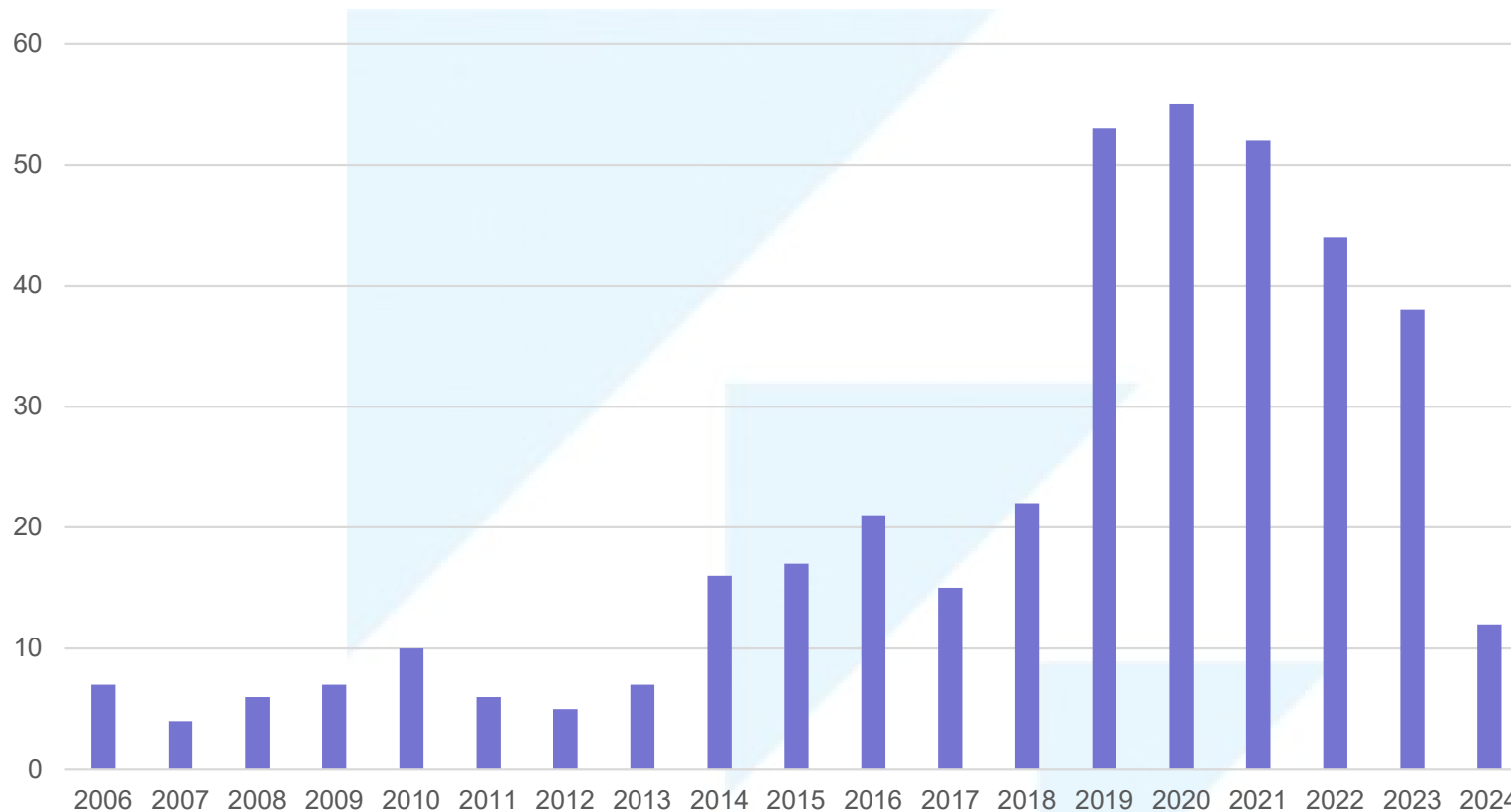
Web Databases

- Need audit trail for HTA
- Need good clinical data for specimens
- Web DB based accessible thro Trust
- Screen based, pick list, free text & images
- Auto-import of demographics from EPR
- Can be anonymised and user auditable
- Excel data export option



BTNW Publications

www.BTNW.org.uk



BTNW groups from:

- LTH
- U Lancashire
- U Wolverhampton
- U Liverpool
- Walton Centre
- Lanc Uni
- Leeds Uni
- U Manchester
- Hull Neuro
- 5+8 PhDs and 3+4 MScs +BScs

Maintaining and Expanding RTBs ?

- Clinician/researcher demand ?
- Infrastructure ?
 - Storage, freezers
 - Manpower (ResNurse, BMS, Pathologists, RTB Leads)
 - IMT, database and administrative support
- Ethics application management 5 yearly
- RTB application peer review
- Research aspirations of LTH/ICB
- Developing HEI and Pharma/industry contacts
- Funding sources – NHS, charities, pharma, HEIs

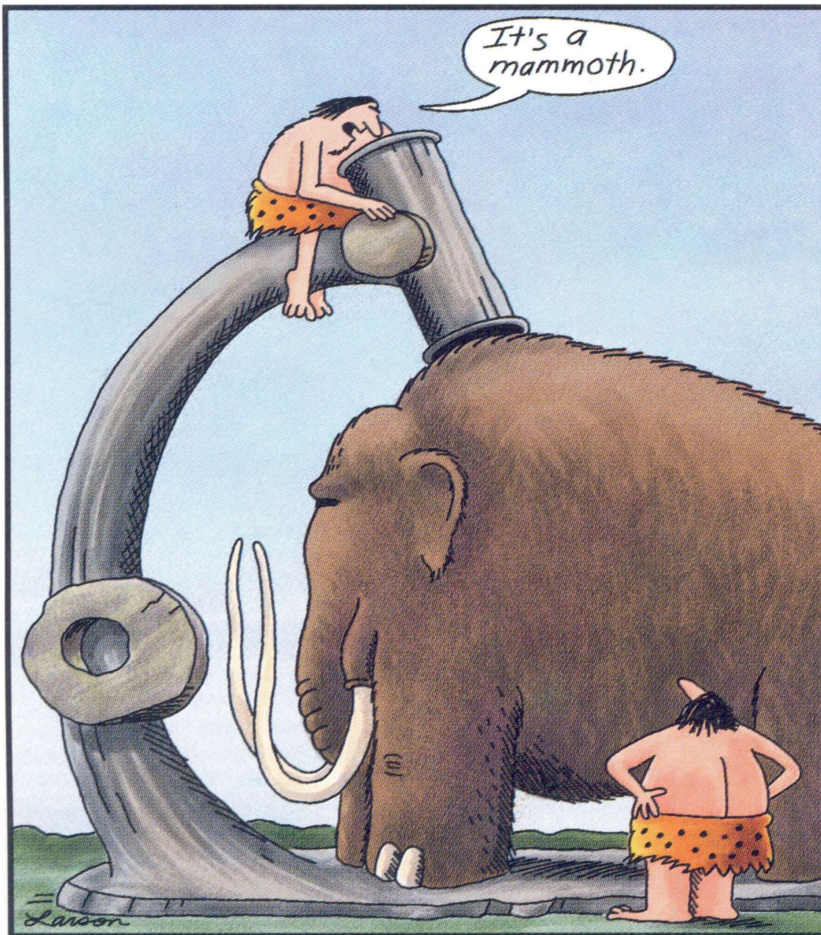


With thanks
to...



Tissue Bank Team
John Proctor
Lydia Finlay
All RTB Leads

LTH R&I
Prof Martin-Hirsch
Paul Brown



Early microscopes

Questions ?