

Frequently asked questions about the ASPREE Healthy Ageing Biobank

Where were samples collected?

In Melbourne and Adelaide, many of the samples were donated at Healthscope pathology clinics (now known as Clinical Labs Pathology). Samples were also processed at laboratories at The ASPREE National Co-ordinating Centre near the Alfred Hospital, Melbourne, The Monash Biomedical Imaging Centre (MBI) in Clayton, Melbourne, The Menzies Institute for Medical Research in Tasmania, The Clinical Trials Unit at the Canberra Hospital, ACT, The Illawarra Health and Medical Research Institute, Wollongong and St. John of God Pathology in Warrnambool.

To reach participants outside these areas, Biobank staff collected and processed samples in a mobile laboratory called the 'ASPREE Biobus'.

What is the ASPREE Biobus?



Participants from all ASPREE sites have been able to donate blood to the Healthy Ageing Biobank thanks to ASPREE Biobuses (pictured left). Up to 45% of ASPREE Biobank volunteers were from towns and cities in regional Victoria, Tasmania, Southern NSW and Southern SA.

Given each sample must be taken, processed and stored within a strict four hour time limit, this quick turnaround presented quite a challenge!

The solution: an ingenious vehicle, the ASPREE Biobus (left).

The ASPREE Biobank team designed the Biobus to become a mobile laboratory; equipped to collect, process and store biospecimens (blood and urine) over several days at a time using a portable -80°C freezers. (Pictured right: processing biospecimens inside the ASPREE Biobus.)

All samples were de-identified. The blood was separated into various components – white blood cells, red blood cells, plasma and serum and stored at ultra-low temperatures; all within four hours of the donation. None of the sample was wasted.



Biospecimens were then safely transported back to the main holding freezers in central locations. The biospecimens are now housed in a large Biorepository near the ASPREE National Co-ordinating Centre in Melbourne.

The ASPREE Biobuses take research to the people – from Melbourne into regional Victoria, up into southern NSW, north Victoria and across the west Victorian border to Mount Gambier in South Australia. The Tasmanian Biobus travelled around the north western of the state near Launceston and Burnie.

In the future, the ASPREE Healthy Ageing Biobank could lead to the identification of specific blood components to predict good health or disease, to evaluate the effectiveness of treatments and the discovery of new diagnostic procedures..... a resource certainly worth traipsing south eastern Australia to capture.

What happens to samples after they are taken?

Biospecimens are barcoded and prepared for long term storage in a purposed built Biorepository in Melbourne.



Pictured above and right: As cold as Neptune - long term storage of participant's plasma and serum samples at -190°C in the nitrogen tanks in Melbourne.

How long will my samples be kept in the Biobank?

Samples will be stored for many years after the completion of the collection process.

Future researchers must have human research ethics approval to access samples from the ASPREE Healthy Ageing Biobank. A special Bio-specimen Access Committee governs the use of ASPREE's stored bio-specimens for genomics, biomarkers and any other analysis. No individuals will ever be identified in published results.