CGA/19/56 - Early detection of cardiovascular graft degeneration in children and adults with congenital heart disease using 18F-sodium fluoride (18F-NaF) positron emission tomography (PET)

People born with serious heart conditions commonly require life-saving surgery early in life. As part of this surgery, surgeons often implant new arteries and valves made of natural (e.g. human or animal) or man-made (synthetic) materials. Sadly, these implants are prone to degrading over time and complete failure can be lifethreatening. Being able to identify implants that are degrading earlier could therefore be critical to improving how doctors and surgeons manage these patients. We plan to use a new scanning technique to explore whether we can identify early degradation on implants removed from children and adults born with heart conditions.