School of Cardiovascular and Metabolic Medicines & Sciences South Bank Section, Academic Department of Vascular Surgery



Cardiovascular Biobank

Newsletter Issue 2, June 2025

Welcome to the 2nd edition of the Cardiovascular Biobank Newsletter!

We are a King's Health Partners (KHP) initiative with funding from the Centre for Translational Medicine (CTM).

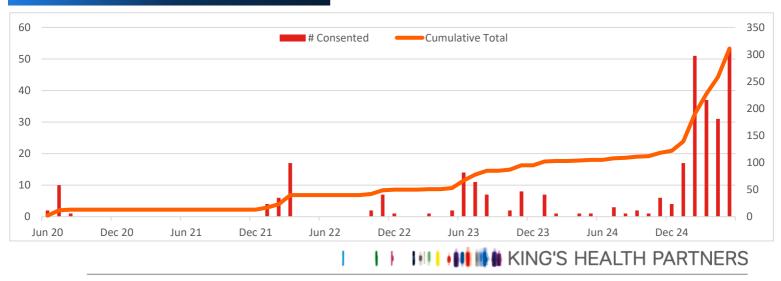
Our aim is to facilitate the advancement of translational research in cardiovascular and metabolic medicine.

In this edition we will provide an update on our activities, spotlight one of our researchers and share patient feedback.

Cohort collection At a glance

Intermittent claudication bloods Dilated cardiomyopathy bloods Aortic aneurysm bloods Septal myocardium tissue Covid bloods Healthy control bloods Venous stenting bloods Aortic aneurysm tissue Diabetes bloods Critical limb ischaemia tissue

We are grateful for the ongoing support from clinicians and their patients across KHP sites. This support has led to a rapid expansion in the number of patients consented and samples collected in the biobank.



Number of samples acquired

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Pioneering better health for all

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Researcher Spotlight Meet Dr Samuel Watson NIHR Cardiology Academic Clinical Fellow



What is your research focus?

We are developing novel gene-editing medicines to treat hypertrophic cardiomyopathy (HCM), a genetic heart condition where the heart muscle thickens and can lead to serious complications, including heart failure and sudden death. These personalised treatments are designed to correct the exact genetic mutation a patient carries, with the aim of providing a cure. We test these therapies on heart tissue removed during surgery, which we keep alive in the lab to assess how well the treatments work.

This project brings together clinical experts across KHP, gene-editing researchers at King's College London (KCL), and the Cardiovascular Biobank to pioneer curative therapies for inherited heart conditions.

How has the biobank supported your research?

The biobank has been essential in launching this project quickly by enabling tissue collection through existing ethical approvals. The biobank research nurses also assist with patient consent and tissue collection, which is especially valuable given my competing clinical commitments. Thanks to this partnership, we are now leading one of the first programmes in the world testing gene-editing therapies in live human heart tissue.

What advice would you give to a researcher/ clinical academic who is considering using the biobank to support their project?

Reach out early to explore available samples and ongoing studies. If you are a lab-based researcher, use the biobank to connect with clinical teams to streamline patient identification, consent, and sample collection. Collaboration with the biobank can enhance the translational impact of your research and is a highly efficient and costeffective way to access high-quality human samples.

Behind the scenes

Our biobank team has been featured in a short film produced in collaboration with KHP. The video offers a behind-the-scenes look at our lab, showcasing the vital work we do to support cardiovascular research and improve patient care. It is also a great opportunity to get to know the people behind the samples – our dedicated scientists, nurses and data manager who make it all possible. Watch the video here to step into our lab and meet the team: <u>https://youtu.be/Kn4h7vnybql?feature=shared</u>



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Patient's perspective

At the Cardiovascular Biobank, patient experience is central to how we shape and deliver our services. Over the past few months, we have been actively gathering feedback through a patient questionnaire aimed at better understanding the needs, concerns, and experiences of those approached to donate to our biobank.

We are grateful to everyone who has taken the time to share their thoughts. The responses have been incredibly valuable – highlighting what we can do well and where we can improve.

In addition to the questionnaire, we have extended an open invitation for patients to join our **Patient and Public Involvement (PPI) Group.** This group plays a vital role in ensuring that our research and initiatives are designed *with* and *for* the people they impact. We are pleased to welcome several new members for our first meeting to be held in June.

We remain committed to listening, learning and continuously evolving our services in partnership with our patients and communities. If you are interested in getting involved or would like more information about the PPI Group, please get in touch.

