Recent Achievements: launch of CODONET

An interview with Dr Shannah Secret

Could you introduce CODONET and it's purpose?
CODONET is a blood sample archive that will help us check the spread of new infections in the general population. CODONET will act as an early warning sign for infections for if/when they arrive here in the UK and we can also check that a virus is not present in the blood donor population, which can guide future testing strategies. It's an exciting collaboration with UK Health Security Agency, Oxford University and NHS Blood and Transplant; only possible thanks to the hard work of Janie Olver, Eilish Hart, Amanda Semper, Heli Harvala, Peter Simmonds and many others!

What makes CODONET uniquely positioned to help study emerging infections in the UK?
By combining testing the samples from donors with their travel and vaccination history, provided in the survey, we can determine if people got their infections in the UK, or antibodies from vaccination or travel-related infections we pick up. Analysing the detailed information provided by participants may also reveal behaviours or activities that increase risk of getting these infections.

How has being a blood donor shaped your perspective towards this research?
Having experience as a donor has allowed me to understand the whole process a CODONET participant will go through. From meeting other blood donors I know that, by nature, blood donors are altruistic and are often very willing to help contribute to scientific research. This gives me faith that we will achieve our ambitious target to recruit 5000 participants!

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How has the PPI group contributed to your research?
So far the PPI group have advised us on the questions included and helped test out the questionnaire that we are sending to donors to complete, which covers many different aspects, including the participants travel history and vaccination history. We also have a PPI member on our management group to help us decide on the most appropriate ways to use the valuable donor samples.

CODONET is still in it's early stages – do you have an update for us on recruitment so far?
Absolutely – **663 donors** have kindly agreed to take part in our study! Over the next 6 months, we'll collect each donor's sample during their regular blood donations and match them to their survey responses. Many more invites are yet to go out, so watch this space!

Brenda features on BBC's Casualty Christmas Special

Brenda Smith, one of our amazing Public and Patient Involvement Committee members, features on the BBC's Casualty Christmas episode about blood donation. ***Christmas Special: All I Want for Christmas*** *(linked here)* Brenda appears at 45:17.

Congratulations Brenda for doing your bit to encourage even more people to give blood!

Beta Thalassaemia and Beyond: A Patient's Perspective on Scientific Innovation

By Saj Hussain, Patient and Public Contributor

As someone living with Beta Thalassaemia Major, I had the privilege of joining the BTRU GEMS team as a patient representative in their PPI (Patient and Public Involvement) team for **a lab tour at University College London**. The day was packed with insights into groundbreaking research, vibrant discussions, and awe-inspiring lab tours that brought science closer to life.

The morning kicked off with **engaging talks** from Oscar, Naomi, and Cristina, each sharing their unique research focus. Oscar introduced us to metagenomics, an exciting field that studies all organisms in a sample, explaining how this concept is shaping clinical services. Naomi shed light on anelloviruses—ubiquitous yet harmless viruses—and how they can be used to indicate the effectiveness of immunosuppression after transplantation. Cristina's presentation delved into the practical applications of genetic sequencing, including predicting viral complications and tailoring personalized treatments. Their passion was infectious, sparking thoughtful questions and discussions.

The lab tours were a revelation. At UCL, Oscar showcased cutting-edge technology like the MinION pocket sequencer and the MiniSeq, marvels of modern sequencing. The **Zayed Research Centre** tour highlighted robot pipette machines and large-scale sequencing devices that process up to 300 samples simultaneously. The glowing purple interface of the Illumina machine truly was **the "Apple Mac" of sequencing technology**. At **Great Ormond Street Hospital's microbiology services**, we observed traditional diagnostic methods, like growing pathogens on agar plates, juxtaposed with the promise of metagenomics, which revolutionizes how unknown pathogens are identified.

Patient involvement in research is vital because it ensures that scientific advancements align with real-world needs and perspectives. By contributing our lived experiences, we help shape research to focus on meaningful outcomes that directly improve quality of life.

Reflecting on the day, one thought resonates deeply: **Science is not just about understanding the world—it's about improving it for everyone**. On my train back to Yorkshire, I felt inspired by the team's dedication and hopeful for a future where science and patient voices work hand in hand to revolutionise healthcare.

Lab tour photo reel

Did you know that J.M. Barrie, the author of Peter Pan, donated the rights to Great Ormond Street Hospital, helping to raise millions each year?

Pictured above: The team enjoying a festive moment beside a Peter Pan-themed tree. Below: Brenda spotted a 'Peter Panbulance' out and about!

Pictured above: Oscar bringing the lab to life. Below: Brenda and Saj examining a pocket-sized sequencer from Nanopore Technologies

Upcoming events

18 March 2025
PLAIN ENGLISH TRAINING SESSION

Date TBC in Sept/Oct
Annual Meeting