

The Cambridge BioResource NEWSLETTER



Bringing together local people and leading research / **Issue 5**

Happy 10th Birthday!

As we reflect on the last 10 years we can see what an amazing journey the Cambridge BioResource (CBR) has had so far. From a small project within a big research group we are now a significant organisation in our own right; recognised for the important contribution we make to the local research community. We now have our own, custom built clinical space and we are the lead site for the National BioResource which currently consists of 8 centres across England.

We are now able to work with an even greater number of research studies which all aim to advance the discovery of new treatments for common diseases, as the recruitment of patients from different clinics in Addenbrooke's Hospital is broadening the types of research we can support.

We are excited for the future of the CBR as we proceed with new recruitment strategies including the national recruitment of 20,000 patients with Inflammatory Bowel Disease and up to 50,000 people who have previously participated in the INTERVAL Study. By increasing our volunteer panel in this way we will be able to provide volunteers for many more research studies.

We are 10 years old, very proud of our accomplishments and of course very grateful for the commitment of our volunteers, without whom none of what we do would be possible.

New Clinic Space for the Cambridge BioResource

June of 2015 saw the opening of the new "NIHR Cambridge BRC Clinical Research Unit" on the Addenbrooke's Campus, which is the new home for the Cambridge BioResource nursing team and our clinical facilities. The Unit offers a professional and user-friendly clinic for our volunteers to visit. The dedicated reception area allows for volunteers to 'check-in' upon arrival, including registration on the Addenbrooke's e-hospital system. This further integration with Addenbrooke's means that we can offer volunteers an improved service and even greater levels of safety. The Unit also offers use of a 'Biometrics' room, which has been designed for studies where measures such as height, weight and blood pressure are required. All the facilities are on the ground level and fully accessible for wheelchair users. The Unit includes an accessible toilet and baby changing facilities. We look forward to welcoming all our volunteers to our new facility.



Prize Draw

To celebrate the 10th birthday of the CBR we are holding a prize draw! Three lucky winners will each win one of the following –

1st Prize: £100 voucher for Marco Pierre White Steakhouse Bar and Grill restaurant in Cambridge

2nd Prize: £60 John Lewis vouchers

3rd Prize: £40 John Lewis vouchers

All current volunteers who complete and return the enclosed Data Collection Sheet, in the freepost envelope provided, by the 1st December 2015 will be entered (for Terms and Conditions see our website). The winners will be notified by the 8th December 2015. Everyone who returns the form will be helping us to update their contact details so that we can continue to send invitations for studies.

Do the changing seasons affect our health?

Researchers from the University of Cambridge have recently published a significant study into the impact of seasonal changes on our immune systems.

The research was conducted using samples from thousands of volunteers in countries both north and south of the equator, including samples from CBR volunteers.

They found that of the nearly 23,000 genes they tested a quarter showed significant differences in their activity at different times in the year. Approximately a half of these genes increased their activity in the summer and half in the winter.

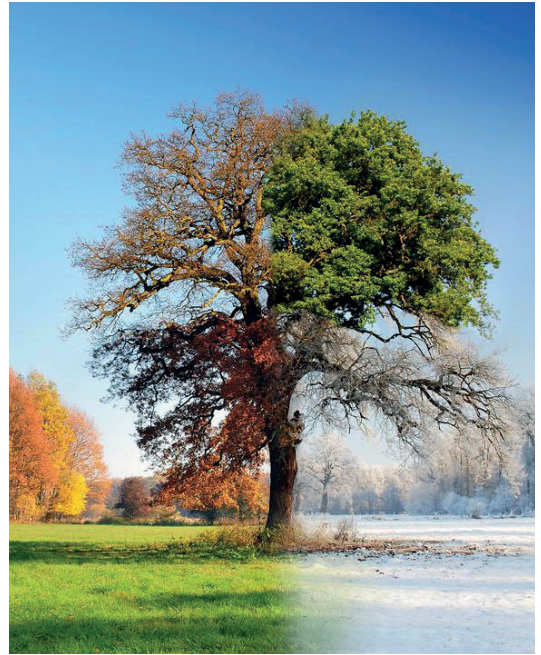
This effect was not limited to samples from the northern hemisphere. Samples from the Gambia in West Africa showed seasonal variation in immune activity related to the rainy season of June to October when diseases such as malaria pose a real challenge to the immune system.

These seasonal changes in the immune system help the body to fight off infections such as flu but they also can lead to harmful inflammation in the body. The researchers suggest that this may be why there are peaks in diagnosis for diseases such as heart disease, diabetes and MS during the winter months.

This study shows that your body changes both the expression of its genes and the make-up of its immune system throughout the seasons to cope with the differing disease challenges during the year. It is not yet fully understood how these changes occur, possibly related to changes in temperature and light levels, but it will be an important area for future research.

You can find the full article at –

Dopico, X.C., Evangelou, M., Ferreira, R.C., Guo, H., Pekalski, M.L., Smyth, D.J., Cooper, N., Burren, O.S., Fulford, A.J., Hennig, B.J., Prentice, A.M., Ziegler, A.G., Bonifacio, E., Wallace, C., Todd, J.A. (2015). Widespread seasonal gene expression reveals annual differences in human immunity and physiology. *Nat Commun.* May 12;6:7000. doi: 10.1038/ncomms8000.



(Mr Red is one of the members of our logo. He has taken time out of his busy schedule to answer a common question)

Ask Mr Red!



Q. The study information says that my sample will be used as a 'healthy control'. What does this mean?

A. We use the term 'healthy control' to describe volunteers who do not suffer from the particular condition or group of conditions being studied. For example, in a study investigating Multiple Sclerosis (MS), all volunteers without MS would be categorised as 'healthy controls', even though they may have other medical conditions.

It's important for researchers to study healthy controls to understand how different genes influence normal body responses. This information can help researchers to better understand a given medical condition and to discover ways to improve treatments and develop screening tools.

Volunteer Experience Survey Feedback

It is very important to us to ensure that our volunteers have the best possible experience when taking part in our studies and we try to ensure that their needs are accommodated wherever possible. We want to understand the factors that are most important to our volunteers when they are deciding whether or not to take part in our studies. With this in mind we invited a randomly selected portion of our panel to complete a survey regarding the factors that inform their decisions to take part in our studies.

The 3 most important factors were the location of the appointment, personal and/or work commitments and the level of commitment required to take part in the study.

We appreciate that it is not always easy for people to travel to Addenbrooke's Hospital for appointments and our research nurses will sometimes visit volunteers at their home or work, however this is not always possible. With this in mind, we would like to introduce alternative venues as we have a mobile unit that can be used for appointments. Please see below for details about suggesting venues for us to take our Health Research Unit.

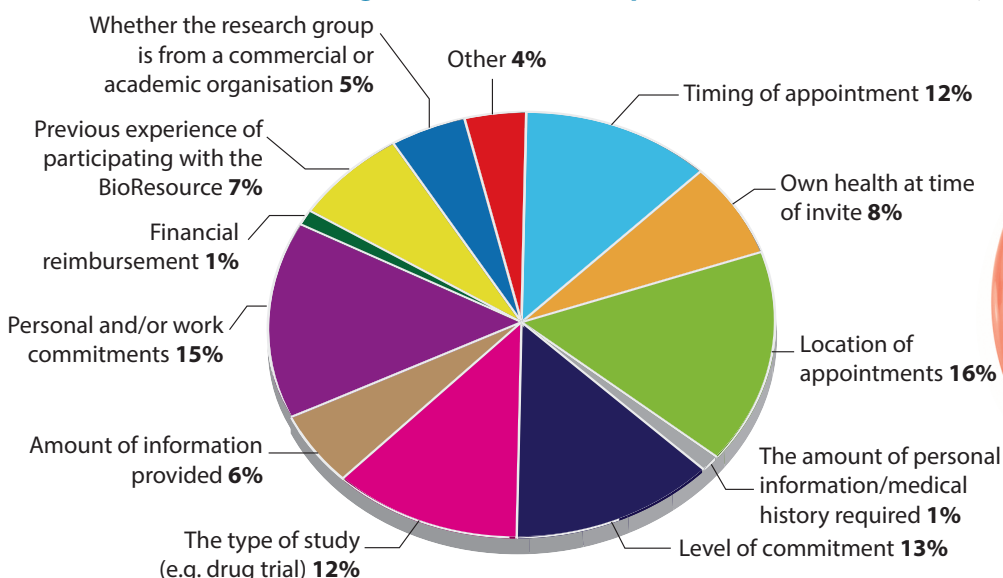
Volunteers have also reported that they would like to be informed about the outcome of the research they participate in. We are very keen to provide this information to our volunteers and in the future will be providing feedback about studies as research groups publish their results. This information will be available on our website but we will also contact those volunteers who have participated in studies where research has been published.

A full analysis of the Volunteer Experience Survey will be available on our website in the next couple of months. Your feedback about your experiences is always greatly appreciated and you are welcome to provide information about your decisions to take part in studies on the participation forms that we send out.



Factors influencing the decision to take part in studies

Thank you to all the volunteers who took the time to complete the survey.



Do you know of a suitable place for us to park our Health Research Unit?

We would love to hear from volunteers who have any suggestions about where would be a good place to park our Health Research Unit (HRU). We have successfully recruited many volunteers in the past by booking a weekly slot at a local venue. The constant recruitment of volunteers is vital to our continued success. Suitable venues could include busy areas outside places of work or shopping centres. Any ideas would be very welcome.

Please contact Alison Hayday on **01223 748409** or e-mail alison.hayday@bioresource.nihr.ac.uk



National BioResource Update

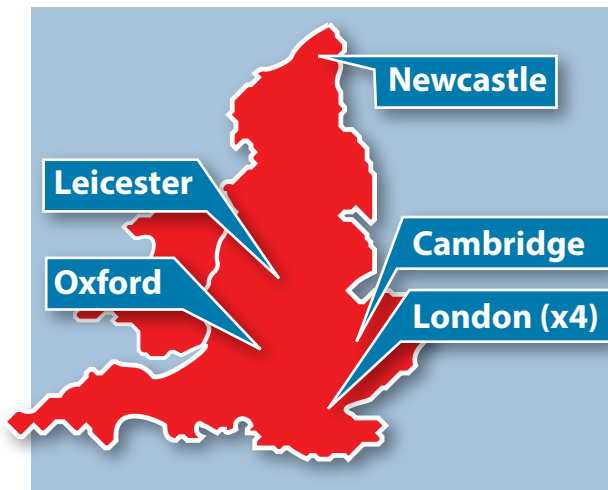
The National BioResource is growing and it currently consists of 8 centres around England.

As the NIHR BioResource grows, opportunities for participation will open up to more volunteers around the country and it will be possible to make further advances in research and improve our understanding of the genetics underlining many conditions.

A new National Coordinator for the NIHR BioResource has been appointed to help to drive this exciting project.



*Left: Ana Boshoff, National Coordinator for the NIHR BioResource
Right: Nathalie Kingston, Associate Director of the NIHR BioResource*



Newcastle BioResource (Opened recently)

Leicester BioResource (~ 3,500 volunteers)

Cambridge BioResource (~ 15,000 volunteers)

Oxford BioBank (~ 8,000 volunteers)

London:

1. Guys and St. Thomas' King's College London BioResource (~10,000 volunteers)
2. South London and Maudsley BioResource (~8,000 volunteers)
3. Imperial College London BioResource (~ 6,000 volunteers)
4. University College London BioResource (~ 3,000 volunteers)

Overall, the National BioResource has recruited approximately 50,000 volunteers, a mix of healthy volunteers and patients.

A number of Cambridge BioResource studies have already benefited from the national initiative, and Cambridge BioResource volunteers may be contacted for studies that are run on the other BioResource sites.

CAMBRIDGE BIORESOURCE - AWARD NOMINEES!

The CBR Nursing Team have been nominated for the prestigious Nursing Times Clinical Research Award for our work in facilitating wider participation in research. The Nursing Times Awards – known as “The Oscars of the Nursing Profession” – take place each year, to celebrate and reward work that raises the standard of nursing practice.

At the CBR, we pride ourselves on having a ‘volunteer-centric’ approach to engaging volunteers, in particular, we are proud of the efforts that we make to act as volunteer advocates. Entering this award we wanted to focus on our nursing activity and highlight how we make it easy for people to participate in research. Volunteers give their time to take part so we want to make it as accessible and enjoyable as possible. We feel that if we didn't use a volunteer-centered approach we wouldn't have so many valuable volunteers on the CBR panel.

When asked about this nomination, Professor John Bradley, director of Research & Development at Addenbrooke's hospital, said: “The scientific impact of the Cambridge NIHR BioResource has been acknowledged internationally; for Kelly and the nursing team who have made it all possible to be recognised in this way is absolutely fantastic.”

The awards ceremony takes place in London on 12th November 2015, where the winner will be announced.



OPEN DAY

We will be holding an Open Day in celebration of our 10th birthday early next year. Look out for more details about this event towards the end of the year! If you have any suggestions for activities or talks that you would like to see at the Open Day please contact us at the usual email address.

The Cambridge NIHR BioResource

Tel: **01223 769 215** Email: cbr@bioresource.nihr.ac.uk Website: www.cambridgebioresource.org.uk