



LIBRA powers sickle cell research

LIBRA has boosted vital sickle cell research being carried out at King's College Hospital in London, with £10,000 of funding.

The funds which were urgently required will cover the cost of StemSpan™ technology, used for stem cell expansion.

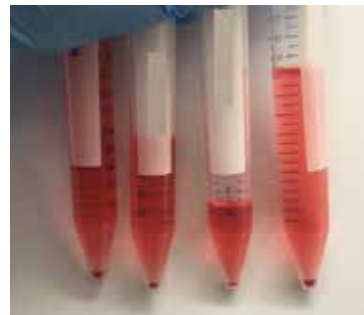
Stephan Menzel MD, who is a Senior Lecturer in Red Cell Haematology and heading up the research project explained:

"We are so grateful to LIBRA for stepping in to help us maintain the momentum of our research, by covering the cost of such a critical reagent.

"StemSpan™ media contains the growth factors required for red blood cells to thrive and develop. The media is very expensive, but a vital fuel which powers our studies.

"Advances in cell technology have made it possible to 'grow blood' in our laboratory - this means that we can isolate stem cells from a donor and then persuade these to form red blood cells in a culture dish.

"These cells give our blood its red colour and serve to transport oxygen from the lungs to other organs and to transport waste carbon dioxide back to the lungs.



"In sickle cell disease, these cells carry a severe genetic defect, leading the 'sickle' deformation and impaired function.

"More recently, the development of genome editing technologies has made it possible to change the genetic make-up of stem and progenitor cells very effectively. This process has been used to develop new gene therapy approaches for sickle cell disease.

"Thanks to the support of LIBRA we can continue to study how blood (haematopoietic) stem cells work and how they respond to disease and treatment."

Tackling sickle cell disease



Leading the way in red cell haematology

King's have recently formed a multidisciplinary Red Cell Haematology team, led by Professor John Strouboulis. It combines the expertise of molecular and cell biologists with that of clinical researchers, such as Professor David Rees and Dr Sarah Stuart-Smith. Human geneticists such as Stephan Menzel also play an important role in the team.

Within the team, students and researchers acquire broad knowledge and study a wide spectrum of scientific methods.

The culture of "erythroid cells", including stem cells and progenitor cells from human donors or from cell lines and the editing of their genetic material is central to much of their research.

Why research is vital

Sickle cell disease is the name for a group of inherited health conditions that affect the red blood cells. The most serious type is called sickle cell anaemia. Sickle cell disease is particularly common in people with an African or Caribbean family background.

People with sickle cell disease produce unusually shaped red blood cells that can cause problems because they do not live as long as healthy blood cells and can block blood vessels.

Sickle cell disease is a serious and lifelong health condition, although treatment can help manage many of the symptoms.

Symptoms of sickle cell disease

People born with sickle cell disease tend to have problems from early childhood, although some children have few symptoms and lead normal lives most of the time.

The main symptoms of sickle cell disease are:

Painful episodes called sickle cell crises, which can be very severe and last up to a week.

An increased risk of **serious infections**.

Anaemia occurs when red blood cells cannot carry enough oxygen around the body, which can cause tiredness and shortness of breath.

Some people also experience other problems, such as delayed growth, strokes and lung problems.

At King's the Red Cell Haematology team are working tirelessly to improve treatments and develop new treatments to benefit sickle cell patients.

If you would like to find out more about our work and the ways you can provide support, please visit libralionscharity.org



LIBRA supporters donned their running shoes and took part in the Hackney Half Marathon on Sunday 26th September, raising around £4,000 for our Going for Gold Campaign.

Joe Cruttwell, Justin Moll and Nicky Lessware, all aged 33, teamed up to run in memory of their dear friend Vanessa Brooke who they lost to leukaemia last year. Following the event, we spoke to the amazing runners to find out more...

How did you hear about LIBRA?

Nicky: In 2019, our amazing friend Vanessa was diagnosed with leukaemia for the second time, aged 32. We visited her when she was undergoing treatment at King's and saw first-hand the amazing care she was receiving. When she tragically passed away in September 2020, her family and husband Tom asked for donations to go to LIBRA in aid of King's haematology department. It sounded like the perfect cause as the money will go directly to where it's needed.

What inspired you all to run for LIBRA?

Nicky: A year after Vanessa passed, it felt like a fitting tribute to try to raise a few bob in her memory. She was an incredible, unique person and she just revelled in life with her friends, family, and her animals.

Sadly enough, my mum was also treated by the same team at King's last year, and it again brought home the tragedy of blood cancer and what an

urgent mission the special team at King's has, especially during Covid. It's just a small gesture, but it felt like a nice tribute to Vanessa to help LIBRA out however we could.

Was this your first half marathon as a group?

Justin: Having known each other since we were around 17, we've been running together since our early 20s and this is the fourth half marathon the three of us have done all together in the last few years, often trying to raise money in the process for a cause, like LIBRA, that's very close to our hearts.

How did you enjoy the event?

Joe: The event was great fun. It was lovely to run together and know we were supporting such an important cause. The Hackney Half has great support all the way round which helped in the tough moments, and the last few miles were pretty tough!

You have raised an incredible amount, how does that feel?

Joe: We've raised close to £4k so far and we are hoping to get over that milestone! Generosity from friends and family has been amazing, so a massive thank you to everyone who has donated. We're just happy to have raised some money for LIBRA and the team at King's who supported Vanessa so well whilst she was ill.

If you would like to take part in a sponsored event for LIBRA, please contact us via info@libralionscharity.org

The East Grinstead 10k



LIBRA supporter and Adur East Lions Club member, David Sluys recently enjoyed taking part in the annual East Grinstead 10K Run (EG10K).

Organised and supported by the East Grinstead Lions, volunteers from East Grinstead Triathlon Club

and the East Grinstead Athletics Club, the popular event attracted many competitors. This year East Grinstead Lions are generously donating their funds raised to LIBRA. Meanwhile, Adur East Lions Club, alongside Club member Lion Richard Behling, kindly sponsored David £300.

Lion David Sluys trained ahead of the event, making for a very good run on the day and he commented: "As the Lions South East District Childhood Cancer officer I was delighted to be able to take part in the 10K to help raise funds for LIBRA. It was well organised, friendly, and the conditions were ideal. Most of the race was off road which I enjoyed. Next year I hope to run with a team and raise more funds to help patients with blood disorders."

LIBRA Chairman Andrew Lodge commented: "The EG10k was a great success and we are grateful to those who ran for LIBRA and everyone involved in the organisation of the event. All funds raised will go to our Going for Gold appeal with a target of £300,000. Now that events like this are back on the calendar, we hope other supporters will go on to take part in fun sponsored activities."



Blood cancer awareness



September marked blood cancer awareness month. We were busy working hard to increase awareness of conditions such as leukaemia and lymphoma.

Throughout the month we shared our inspirational patient stories, which provide an insight into these gruelling blood disorders.

The stories highlight the amazing care that blood cancer patients receive at King's and emphasise why the work of LIBRA is so important.

King's patient Harriet Usher suffered with acute lymphoblastic leukaemia and commented: "The haematology team were amazing and so supportive throughout my treatment.

"I stayed in hospital for the first 8 week phase of my treatment plan but I was allowed home during the second phase of treatment. It was very intense for me as I had to travel to King's every day for chemotherapy, but my family kept me going.

"We didn't know whether the treatment would be successful but it saved my life. After my treatment finished I decided to raise funds for LIBRA as the charity is so close to my heart."