

COMMUNITY

Positive development

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ABOUT THE CRICK

The Francis Crick Institute (formerly UKCMRI), is a new medical research institute being built at Brill Place, Somers Town.

It's named after one of the UK's greatest scientists, who co-discovered the structure of DNA.

The Institute is a partnership between the Medical Research Council, Cancer Research UK, the Wellcome Trust, UCL (University College London), Imperial College London and King's College London.

Discoveries made in the laboratories will speed up the development of treatments for major diseases such as cancer, heart disease and stroke.

The Francis Crick Institute will bring new jobs, community facilities and other benefits to Somers Town.



Above: Work starts inside as concrete frames are completed.

The building of the Francis Crick Institute has reached an exciting stage. The concrete frames of two of the four interconnecting blocks are finished, the third is almost there, and the final one will be completed by June.

Henry Robinson, Assistant Construction Director, said: "We started building the Institute in April 2011, nearly two years ago. Progress has been steady and works are running to schedule.

"It's all coming together now. As each of the concrete frames is completed we fit the glass and terracotta cladding and carry out other work to make the blocks wind and watertight. This allows us to get on with the inside of the building, putting up partition walls and installing pipes and ducting for building services.

"Installing the service facilities is a mighty task. We'll be using approximately 120km of pipework – that's roughly the distance from London to Dover – and 100km of mains power cables."

Skilled steelworkers are also starting to construct the distinctive curved roof. This feature of the building is both good-

looking and practical: it will conceal much of the mechanical and electrical equipment essential to creating and operating a modern and comfortable working environment.

The south-facing roof will be fitted with 1800m² of solar panels which will generate some of the electricity needed to run the Institute and contribute to keeping its environmental impact as low as possible.

The Institute is now taking shape and it won't be too long before people see the beautiful building envisaged by the architects.



Fit for modern scientific research



Above: Computer generated image showing the interior of the Institute

The structure of the building that will house the Francis Crick Institute is nearing completion, but that is only part of the story. Advances in medical science are only made possible by people, so we are creating a modern, light-filled working space for about 1,200 scientists and 300 support staff.

The working environment will play a key role in achieving the Institute's vision of collaborative medical research, so a team of scientists who will work in the new building are currently involved in planning the layout of the rooms. The aim is to find the best way to share equipment and laboratories while creating space for scientists from various disciplines to meet each other and discuss different approaches to research.

Logistics Manager, Suzanne D'Souza, describes it as putting together a giant jigsaw puzzle. She said: "We want to put people closest to the equipment they need and use the most, whilst also mixing everyone up. It's going to be a complicated task, but an exciting one."

The Francis Crick Institute also aims to increase public interest in science so the building will have a 450-seat auditorium, a public exhibition area, and a teaching laboratory. These facilities are in addition to the Living Centre which will provide services to support a healthy lifestyle.

To see how the inside of the Institute will look, go to www.crick.ac.uk/news/news-archive/2012/07/20/views-of-the-crick/

WANTED: KEEN APPRENTICES

As work begins on the inside of the building, more apprenticeships in carpentry, joinery and tiling will be available on the Crick site. Apprenticeships are paid, last two years and include on-the-job training, as well as day release study at college.

To apply for an apprenticeship, you should be aged 18-24, live in Camden, and want to work in the construction industry. To find out more call the King's Cross Construction Skills Centre (KCCSC) on 020 7974 5161.

KCCSC also handles recruitment for other jobs on the Crick construction site. Contact them for information on any jobs available on site now.

Talking about careers

Students had a chance to talk about a future in science with staff from the Francis Crick Institute at the Camden-wide post-16 careers fair held at Westminster Kingsway College in February.

A range of organisations including London colleges, construction firms and the Army attended the event to give information and guidance.

While some students discussed future opportunities at the Institute, others took the opportunity to find out more about current apprenticeships available with Laing O'Rourke at the Crick construction site and the firm's nationwide Cadet scheme.

The Crick is also in the early stages of planning apprenticeships schemes in a number of areas for when the Institute opens in 2015. Details will be available on our website and via Camden Apprentices when the Institute opens.

For information on current job vacancies at the Francis Crick Institute and its partner organisations visit our website www.crick.ac.uk.



WANT TO FIND OUT MORE?

If you'd like to know more about what's happening at the Crick you can now sign up for our email bulletin, Crick News. Published every two months, the bulletin includes news and features on the construction of the Crick, our research plans, and our public engagement with science activities. To sign up, email info@crick.ac.uk.



The world's most successful parasite?

Dr Eva Frickel is a research group leader at the Medical Research Council's National Institute for Medical Research (NIMR). She is fascinated by a tiny, one-celled parasitic organism that likes to hide in the brain. We asked her to tell us a bit more...

A parasite is an organism that cannot survive on its own. It latches on to a separate organism of a different species – the host. The parasite will feed and breed on or within the host and usually do it some harm as well. Common parasites include fleas, tapeworms and mistletoe.

Toxoplasma gondii is arguably the most successful parasite in the world. It affects between three and five out of every ten people. In some geographical areas, the infection rate is 100 per cent.

Most people with normal immune systems will not know they have been infected, though some may experience flu-like symptoms. However, in those with a weakened immune system, for example due to HIV, *Toxoplasma gondii* can cause a condition called Toxoplasmosis which may be fatal. The unborn foetus is also at risk if a woman becomes infected during pregnancy, potentially leading to birth defects such as intellectual disability or blindness later in life. Currently there is no cure or vaccine.

Cats are the main carrier of *Toxoplasma gondii*; it thrives in the cat's intestine and is excreted in its faeces, which can contaminate the surrounding soil and remain infectious for several months.

Tell us a bit about your research

Parasites need to strike a delicate balance between living off the host and hiding from its defence system. *Toxoplasma gondii* is a master at this and we want to find out why this parasite is so successful. My research has two strands.

Firstly, once in the body of its host *Toxoplasma gondii* lives in its own vacuole, a bubble-like structure. This vacuole resists lysosomes, the little organs (organelles) in our bodies that specialise in identifying and sweeping away harmful bacteria. Yet the vacuole gets destroyed by other mechanisms in the host cell which means the parasite is destroyed too. Our research aims to find out which cellular mechanisms get rid of *Toxoplasma gondii* in host cells.

Secondly, but equally important, we are looking at the immune system. Most people infected with *Toxoplasma gondii* aren't aware of it because we produce CD8 T cells. These cells experience the infection, learn about it, use this information to control it, then make more copies of themselves and stop the parasite multiplying. Since



Toxoplasma gondii in the long term lies dormant in the brain, we are specifically studying these CD8 T cells in the brain.

Studying these two opposing strands will help us gain a better understanding of *Toxoplasma gondii* and may contribute to the search for cures for other diseases such as malaria.

Will the Crick benefit your research?

Bringing together the knowledge and experience from the Medical Research Council's National Institute for Medical Research (NIMR) and the London Research Institute will extend the breadth of research.

At the NIMR we cover a wide range of research – and we're already very good at collaborating – but the Crick will present opportunities to diversify and expand major biological topics. Everybody there will be able to collaborate more, learn more and contribute more.

Its central location will be hugely advantageous because it is close to hospitals and related institutions. Being able to work alongside medical professionals to progress my laboratory results would help move things forward.

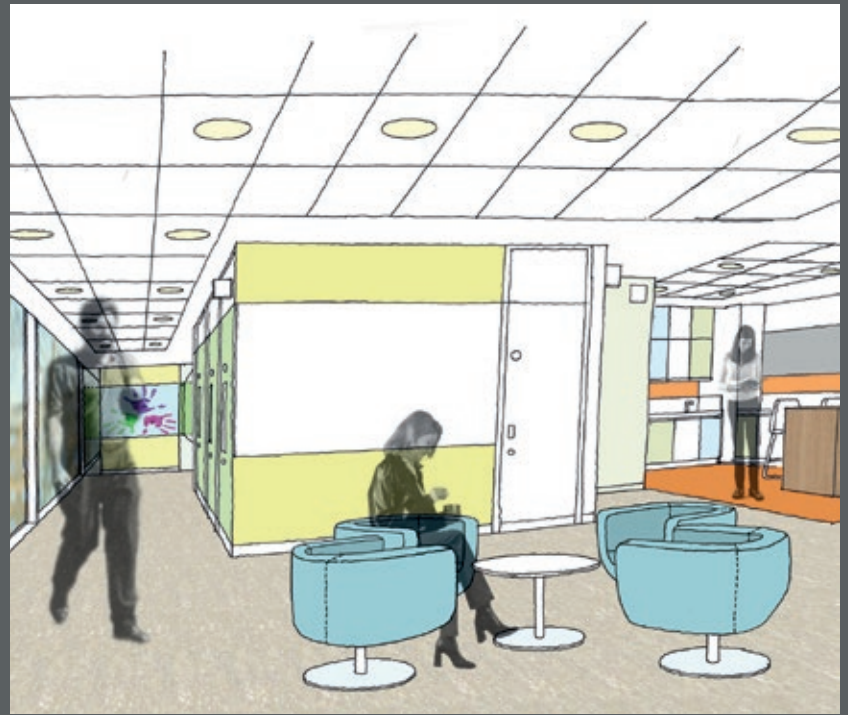
Students and post-doctorate researchers will also have easy access to seminars at nearby universities, giving them a much better sense of how the multitude of medical research disciplines fit together.

www.nimr.mrc.ac.uk/research/eva-frickel/

USEFUL INFORMATION ABOUT TOXOPLASMOSIS

- Animals and plants exposed to contaminated soil could carry *Toxoplasma gondii*, so cook meat well and wash fruit and vegetables.
- Wear gloves when gardening.
- Empty cat litter trays daily (*Toxoplasma gondii* only becomes infectious in cat faeces after 24 hours).
- House cats will only be infectious for about two weeks after infection.

For more information go to www.nhs.uk/conditions/Toxoplasmosis



Above left: We're making good progress constructing the Living Centre. Above right: Artist's impression of the Living Centre interior.

DEVELOPING LIVING CENTRE SERVICES

As the construction of the Living Centre progresses, we are getting on with working out exactly what services this community facility will offer. Well London, an award-winning organisation that improves communities' health and wellbeing, is helping us.

The Living Centre is a two-floor, 450m² building attached to the Francis Crick Institute on the Ossulston Street side. When it is finished it will include a large space for sports and exercise activities, two meeting/training rooms, and smaller rooms for one-to-one sessions. The services it will offer are being discussed, but could include health checks, exercise classes, adult education and training, and advice.

Katie Matthews, the Crick's Head of Communications and Engagement said: "It is important that our Living Centre provides services tailored to local people's wants and needs in terms of healthy living. Well London will help us do this and we are excited to have them as a partner on this project."

Well London is now working with local community organisations including Somers Town Community Association and St Pancras Community Association, and residents. It is also looking at the health needs of Somers Town residents and what is available locally, to make sure that the Living Centre's services will integrate with and add value to those already in the area.

After Easter, Well London's team of volunteers from Somers Town will start consulting local residents on their vision for the Living Centre. There will also be a number of community events taking place.

To find out more about the Living Centre and how you can take part in the consultation, go to www.crick.ac.uk/community/local-community/living-centre.

To learn more about Well London, go to www.welllondon.org.uk.

More activity in the community

The latest local organisation to get a boost from the Crick's community chest fund is Hopscotch Asian Women's Centre.

This organisation provides support and advice on a wide range of topics from housing to health. We are supporting their latest project – running weekly exercise classes and awareness sessions on a range of health-related issues for Asian and Bangladeshi women over 50.

Guljabeen Rahman, Hopscotch Director, said: "We want to engage local Asian women in activities that help them reduce isolation and stay healthy. Cultural and language barriers often prevent women in this community from taking part in other exercise classes available in the area. This project will remove these barriers and provide a safe environment for people to do exercise which will help them stay mobile and independent."

If you want to know more about Hopscotch Asian Women's Centre or the new exercise class email: info@hopscotchawc.org.uk; call 020 7388 8198; or go to www.hopscotchawc.org.uk.

The Crick's community chest provides small grants to local community organisations and groups for projects that help improve health and wellbeing in the local area. To be eligible for funding the project must take place within a one-mile radius of the Crick's site on Brill Place NW1 1HG.

For more information about the community chest, please call 0800 028 6731 or email info@crick.ac.uk.

Inspiring young minds



Satisfying young people's curiosity is not easy, but the Francis Crick Institute's Education Strategy will help answer some of their questions in innovative ways and generate more interest in medical research.

We have already started bringing science education to life through projects such as A-Level Masterclasses, our Ask a Nobel Scientist event, and a Science Week at a local primary school, all of which were well received.

Alexis Mannion, the Crick's Education and Outreach Manager, consulted with head-teachers, science teachers, Camden Council and education organisations to make sure the education strategy was relevant and built to enhance the school curriculum.

She said: "The strategy focuses on making our education programme inclusive, innovative, and inspiring. We will put the wheels in motion by building more formal partnerships with our local schools. Soon we'll establish cluster groups of teachers who will work with our scientists to explore and design exciting practical activities that can take place in school classrooms and in our own teaching laboratory to enthuse students about the world of biomedical science. We'll also be looking at developing work experience schemes for when the Crick opens in 2015."

If you would like to be involved, or would like to find out more about our education strategy, please email education@crick.ac.uk.

FOLLOW US ON 

For news about the Francis Crick Institute follow [@thecrick](https://twitter.com/thecrick).



Everybody loves a good story

Over the next few months, children and their families from Somers Town will be producing three short books aimed at other young people. Each of the books will tell a story, in words and pictures, about something related to the Francis Crick Institute.

Groups from the Working Men's College, One KX, and Somers Town Community Centre all started work on their unique books in March. Sponsored by the Institute, each group will have six half-day sessions with a writer and an illustrator who will give guidance and advice on creating the stories. A scientist and an architect will also be on hand to help with more technical aspects of the stories.

The youngest group, aged 7 to 12, will explore the difference between infection and diseases, such as malaria and cancer. They will hear from scientists about what it's like to work in a laboratory, and how their research is helping to find better cures and treatments.

Those a bit older, 10 to 16 years, are tasked with learning all about the design, construction, and the purpose of the Crick building. They will explore 3D models of the building and find out about its sustainable features from our architects.

The third group, which is a mixed group of children and their families, will explore six artefacts from the Wellcome Collection that connect to themes and ideas associated with the Crick, such as the discovery of DNA.



Above: Sketch of the DNA double helix by Francis Crick. © Wellcome Library, London

We are running this project in partnership with Pop Up Projects, a not-for-profit organisation that inspires children, families, and communities through books and stories.

Once published, the books will be distributed to local schools and community groups.



CONSTRUCTION UPDATE



© Wellcome Images

The construction of the Francis Crick Institute is progressing well.

The frame of the North West block (Ossulston Street/Brill Place) was finished in early March and the glass on the side facing Brill Place has been fitted. Work on the inside of this block has started.

On the South West block (Ossulston Street/British Library) Level 6 has been completed and we are installing windows.

The South East block (Brill Place/Midland Road) has now progressed to Level 6 and cladding works started during March.

The North East block (Brill Place/Midland Road) is now at Level 3, following completion of the large span steel trusses.

With the main concrete structure completed on the North West block, we are making the building waterproof and will shortly start installing the steel for the curved roof.

As a result of the different types of work we are now doing there are more trades on site, and more job and apprenticeship opportunities.



OUTLINE TIMETABLE

Early Summer 2011

Building work started.

Summer 2013

External work completed, internal fit-out starts.

Summer 2015

Internal works completed.

The building is ready for use and staff move in.

Construction questions? Call the construction hotline free on 0808 165 0180, or email projectinfo@laingorourke.com

GET IN TOUCH

If you have any questions, please contact us.

Email: info@crick.ac.uk

Web: www.crick.ac.uk

Phone: 0800 028 6731

Facebook: facebook.com/theFrancisCrickInstitute

Twitter: @thecrick

Post: The Francis Crick Institute
Gibbs Building
215 Euston Road
London, NW1 2BE

Visit: The Crick Visitor Centre, Ossulston Street (opposite Hadstock House), NW1 1HG

Staff will be on hand to answer your questions and you will be able to see the latest designs and plans for the building.

OPENING TIMES

Thursdays: 14.00-18.30

We can also open the Visitor Centre for groups on request.

This newsletter tells you about the Francis Crick Institute and its plans to build a medical research centre on Brill Place, Somers Town. If you would like a copy in Bengali, please send your name and address to The Francis Crick Institute, Gibbs Building, 215 Euston Road, London, NW1 2BE or email info@crick.ac.uk.

এই সংবাদপত্রিকাটি আপনাদের দ্য ফ্রান্সিস ক্রিক ইন্সটিটিউট এবং ব্রিল প্লেস, সমারস টাউনে তাদের দ্বারা একটি মেডিক্যাল গবেষণা কেন্দ্র তৈরি করার পরিকল্পনার বিষয়ে আপনাকে জানায়। যদি আপনি বাংলায় একটি অনুলিপি চান, অনুগ্রহ করে The Francis Crick Institute, Gibbs Building, 215 Euston Road, London, NW1 2BE ঠিকানায় বা info@crick.ac.uk-তে ইমেইল করে আপনার নাম আর ঠিকানা পাঠান।

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