

Science Community Focus

Cancer Research Exhibition to bring Challenges and Experiences to Light

The Francis Crick Institute is to open the UK's first exhibition exploring the trail-blazing research that is turning the tide on cancer with an immersive exhibition on the latest developments taking place at the Crick – Europe's largest biomedical research institute and home to leading cancer scientists from across the world.

Outwitting Cancer - Making Sense of Nature's Enigma, taking place within the setting of a working science laboratory, will run from Saturday 25th September 2021 until July 2022.

Eight specially commissioned films capture conversations between cancer researchers, patients and those with unique personal perspectives on cancer, meeting for the first time to explore some of the big questions driving research.



George Alagiah in conversation with scientist Vivian Li outside a laboratory at the Crick

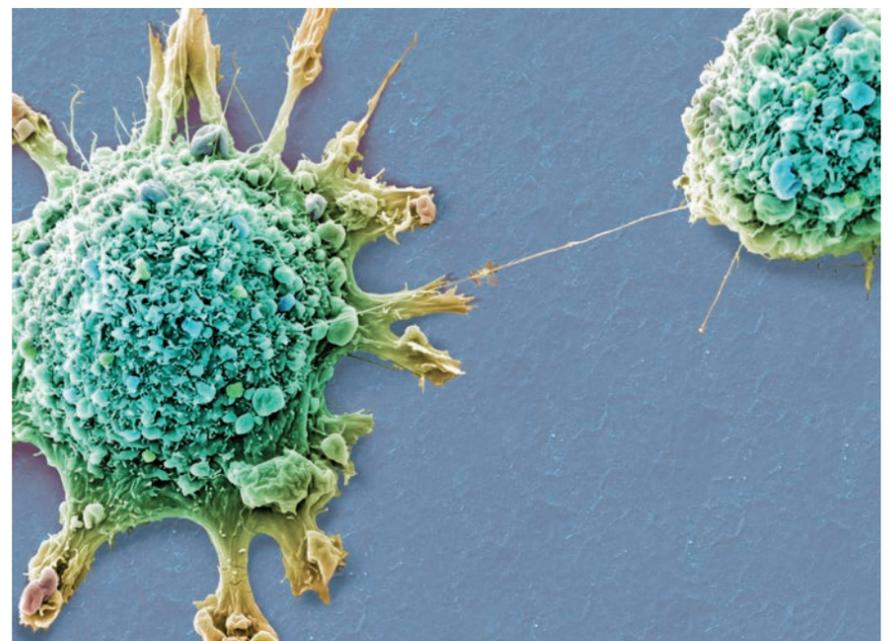
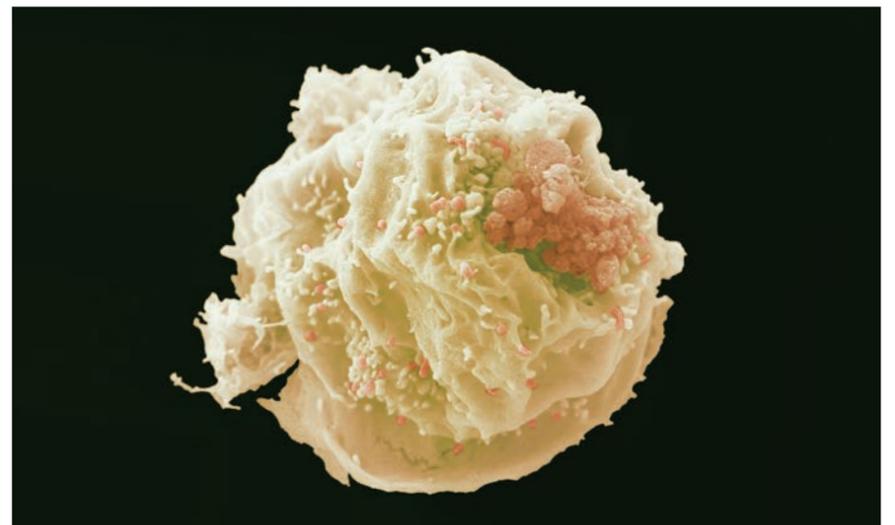
The series of short films form the backbone of the exhibition, and include:

- BBC journalist George Alagiah, who is living with bowel cancer, meets Vivian Li, Stem Cell and Cancer scientist, as she creates 'mini-organs' (organoids) in the quest to personalise cancer treatments.
- Renowned cell biologist Mariann Bienz, who had a lung removed as part of her own cancer treatment, meets Charlie Swanton, Cancer Research UK's Chief Clinician and Crick group leader to talk about the evolution of tumours.
- Lawyer and brain cancer patient Adam Blain, meets scientist Simon Boulton to talk about the role of DNA in cancer as well as his experience of having a tumour which was first diagnosed by his wife.
- Cancer Research UK's Chief Scientist Karen Vousden talks to Alix Fox (broadcaster and sex educator) to bust some cancer myths including: do elephants get cancer and is cancer 'contagious'?
- Crick scientist Erik Sahai meets Dr Georgette Oni, a trailblazing plastic reconstructive surgeon, as they discuss how cancer spreads
- Dominique Bonnet, an expert in Acute Myeloid Leukaemia at the Crick, gives journalist Tim Jonze, who is living with a rare blood disease, a behind-the-scenes tour of her labs.

The final two films reveal the work taking place at two pioneering biopharmaceutical companies, built on research at the Crick, as they develop revolutionary therapies tackling cancer:

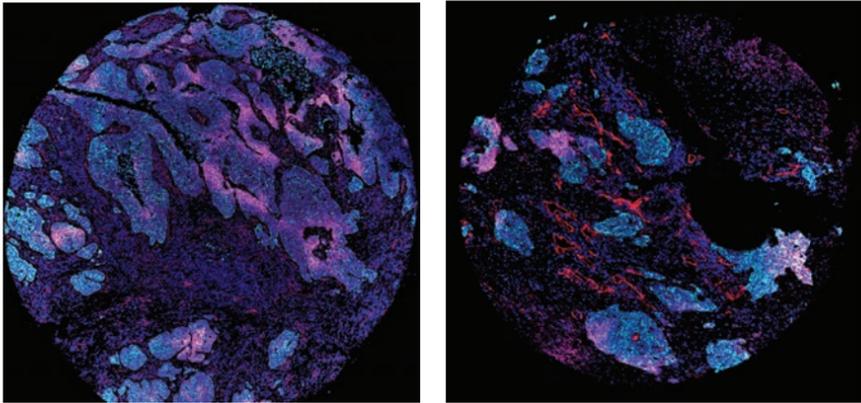
- Medical ethics expert, Deborah Bowman MBE interviews Iraj Ali of Achilles Therapeutics about personalised treatment using the patient's own immune system to fight their cancer.

- Professor Adrian Hayday and Dr Oliver Nussbaumer from GammaDelta Therapeutics discuss their pioneering work into new cell therapy which could become available in a similar way to donated blood from blood banks.



Breast cancer cells Credit: Electron Microscopy STP, Francis Crick Institute

The exhibition also features an audiovisual installation in a custom-built cinema. Produced by Studio Prelude and SDNA this immersive film, *Micro Cosmos*, weaves together stunning microscopy imagery from Crick researchers, as well as a newly commissioned soundscape from artist Mira Calix. Alongside the exhibition there will be a lively programme of events and



Lung Tumour; the tumour cells (cyan) express proteins (pink) to handle low oxygen environments. These images allow scientists to examine blood vessels (red) in the tumour microenvironment, which is important as blood vessels supply cancer cells with oxygen but can also be a highway for immune cells which can help to fight cancer. (Credit: Charlie Swanton lab, Francis Crick Institute)

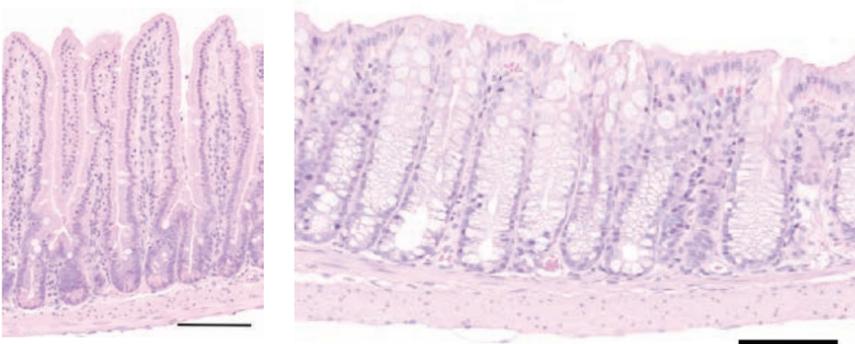
talks, as well as an in-depth digital experience with additional exhibition content.

Cancer remains one of the world's most widespread and deadly diseases, with 1 in 2 of us developing cancer in our lifetime. Through the immersive films and accompanying exquisite microscopy imagery, *Outwitting Cancer* addresses questions including "what is cancer?" and "why are so many people still dying from cancer?"

Paul Nurse, Director of the Francis Crick Institute, said: "Unravelling the mysteries of human biology and using this to develop new ways to tackle diseases like cancer is at the heart of what we do at the Crick. Over recent years we have seen discoveries about how cancers evolve and new approaches to treating cancer. This exhibition will bring to life the journey our researchers are on to understand how cancer starts, spreads and responds to therapy."

Yasmin Khan, curator said: "Outwitting Cancer is about the power and potential of cancer research. The exhibition will get into the minds of the brilliant scientists working at the forefront of biological research. It will seek to dispel confusion through an immersive digital exploration of the complexity of cancer, opening up new conversations around the disease and its future."

Outwitting Cancer: Making Sense of Nature's Enigma was developed in collaboration with a Patient Advisory Panel (PAP) brought together to develop the exhibition at the Francis Crick. All PAP members have some lived experience of cancer, whether it is personal or through a family member. The PAP have also co-created a zine - 'Onco'Zine - A Rough Guide to Cancer for visitors to take away.



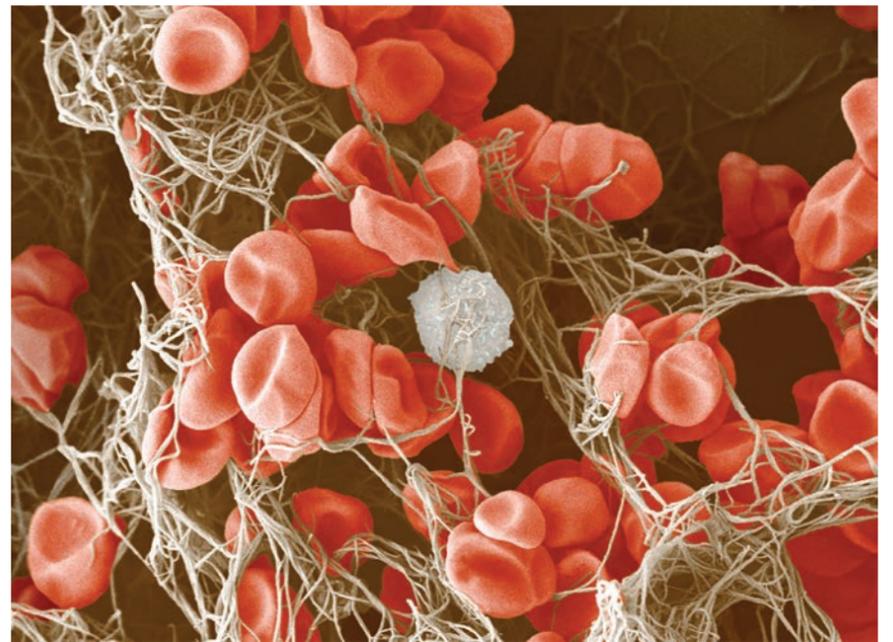
Intestinal cells (Credit: Vivian Li lab, Francis Crick Institute)

Opening details

Outwitting Cancer: Making Sense of Nature's Enigma - is a free exhibition running from Saturday 25th September 2021 until July 2022 at The Francis Crick Institute, 1 Midland Road, London, NW1 1AT.



Patient Advisory Panel Members shared valuable insights from their lived experience of cancer to help the Crick's team think more deeply about how scientific research affects us all. One result of their work is this co-created magazine, which will be available in the exhibition and online



Formation of a blood clot with many red cells and a single white blood cell becoming entangled in a fibrin mesh. Fibrin forms a mesh during the clotting of blood to disrupt the flow of blood and prevent additional blood loss from a wound. Crick scientist Dominique Bonnet is using her expert knowledge of how white blood cells are made in the bone marrow to decipher what goes wrong when this process goes out of control, giving rise to a type of blood cancer called acute myeloid leukaemia (AML). Dominique was the first to discover a surprising phenomenon; that a whole variety of cancerous white blood cells can originate from just one malfunctioning stem cell. Her lab is rapidly gathering further knowledge to unravel the mysterious mechanism that causes blood stem cells to malfunction, helping pinpoint ways to stop it and restore health (credit: Eelectron microscopy STP, Francis Crick Institute)

The gallery will be open Wednesdays 10am – 8pm and Thursdays, Fridays and Saturdays 10am – 4pm. The exhibition will follow all government guidance on managing the risk of COVID-19.

Alongside the exhibition there will be a lively programme of events and talks, as well as an in-depth digital experience with additional exhibition content.

More information online

Visit <http://crick.ac.uk/outwittingcancer> or @TheCrick for further details.

George Alagiah in conversation with scientist Vivian Li outside a laboratory at the Crick.

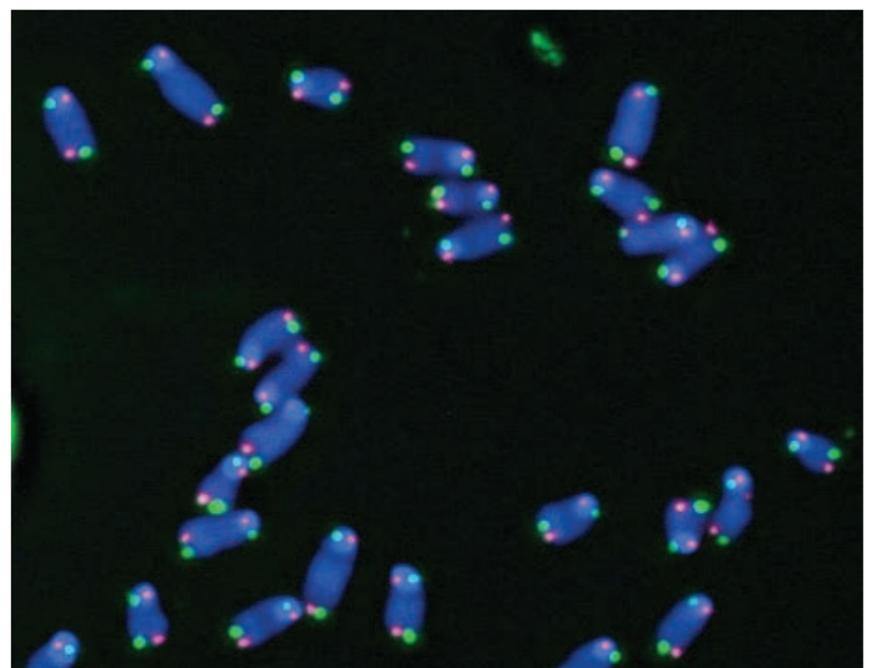
NOTES TO EDITORS

Outwitting Cancer: Making Sense of Nature's Enigma is the fifth exhibition at the Crick, which was delayed from 2020 due to the Coronavirus pandemic.

The exhibition includes an immersive video installation in a custom-built cinema designed by Studio Prelude and associates, projection mapping and film direction by SDNA, alongside a newly commissioned soundscape composed by Mira Calix.

The Crick is Europe's single largest biomedical research institute under one roof. By breaking down barriers between departments and disciplines, the Crick is accelerating the discovery of fundamental biological processes behind human health and disease. And with the help of its partners, it is bridging the gap between research and application to ensure its discoveries change lives for the better.

An independent organisation, whose founding partners are the Medical Research Council (MRC), Cancer Research UK, Wellcome, UCL (University College London), Imperial College London and King's College London.



Telomeres shown as pink and green dots at the ends of chromosomes stained blue. Cancer cells keep multiplying because they make enzymes to preserve their telomeres. Simon Boulton's lab is studying this phenomenon. Credit Paulina Marzec, Simon Boulton lab, Francis Crick Institute