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Lola Manterola,
ICR honorary
degree recipient

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Editorial

We are delighted to have recently received the highest national honour in UK further and higher education, the Queen's Anniversary Prize, for our transformational breast cancer research.

Although we don't do what we do for accolades, we're very proud that our hard work has been recognised and it gives us all a motivational boost as we continue our mission.

Our scientists have played a part in some of the most pivotal developments in the history of breast cancer research. This prestigious award focuses on how these discoveries have improved the lives of people with, or at higher risk of, the disease. You can read more about this on page 4.

While celebrating our advances in breast cancer research, we're also committed to making similar progress against other types of cancer, including those that remain extremely difficult to treat. On page 6, you can find out more about our pioneering research into brain cancer, which we hope will ultimately lead to improved diagnosis and treatments for this disease – helping people to live longer, better lives.

On page 10, we share the story of Lola Manterola, who we recently awarded an honorary degree. In 2011, Lola co-founded the CRIS Cancer Foundation with her husband, Diego, after her diagnosis with multiple myeloma, a type of blood cancer. The charity has since donated over £2 million to support several of our research projects. Like our scientists, the organisation's goals are ambitious, and its continued support has enabled us to take on new challenges and make exciting advances.

I would also like to take this opportunity to thank all our supporters, whose ongoing generosity plays such a vital role in helping to ensure that our research has the maximum possible benefit for people with cancer. Together, we can continue making more discoveries and saving more lives.

Professor Kristian Helin
Chief Executive
The Institute of Cancer Research

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Childhood cancer appeal raises over £145,000

Thank you to everyone who has helped us raise over £145,000 for our Christmas fundraising appeal.

The appeal asks for support to help us cure more children with cancer, more kindly. It

features Tommy, who was diagnosed with leukaemia aged four but is now looking forward to a more normal life after successful treatment.

We are very grateful to those of you who have donated so

far – and there is still time to do so if you haven't already.

Support our appeal at ICR.ac.uk/Tommy

“I survived cancer as a child and now I'm working to defeat it”

Andrew Wicks was 12 years old when a chest x-ray revealed that an orange-sized tumour close to his lungs was the cause of his persistent cough. He was diagnosed with acute lymphoblastic leukaemia (ALL), a type of blood cancer. After years of treatment, he got the all-clear. Now, inspired by his experience, he is a scientist in our Breast Cancer Research Division.

“I still remember getting my diagnosis. I couldn't really digest the news at first – I was too numb, too shocked to be scared. But my parents were devastated.

“The treatment was tough. For many months, I only really left the house for medical appointments.

“As a patient, I constantly asked questions about



Andrew Wicks undergoing treatment, left, and, right, as an ICR scientist today

how different treatments worked. I took part in clinical trials and was fascinated by how research leads to new treatments.

“Three years after completing treatment, I started a biology degree, which I followed with a Master's degree focused on cancer drug resistance.

“Keen to learn from leaders in the field, I joined the ICR as a Scientific Officer. I'm now

in the fourth year of my PhD, studying how tumour cells become resistant to targeted cancer drugs called PARP inhibitors.

“I see here every day the strong connection between lab-based research and the resulting benefits for patients. Knowing my current research might help others facing a cancer diagnosis is extremely rewarding.”

Prestigious prize for transformational breast cancer research

We are honoured to have been awarded the Queen's Anniversary Prize, which was presented by Her Majesty The Queen during a ceremony held at Buckingham Palace on 22 February.

The award recognises our innovative work on breast cancer, which has not only improved outcomes for patients in the UK but also benefitted patients and healthcare systems around the world. It acknowledges our outstanding contributions towards advancing the understanding of the disease, pioneering new methods of diagnosis and treatment, and leading clinical trials that have resulted in changes to clinical practice.

Securing this honour for the second time in recent years is a testament to our 'bench to bedside' approach, which enables us to translate fundamental laboratory discoveries into effective treatments that change people's lives.



ICR Chief Executive Kristian Helin accepting the award from Her Majesty The Queen



Securing this honour for the second time is a testament to our 'bench to bedside' approach

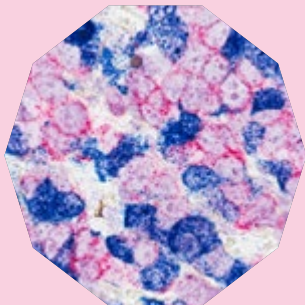
Fundraisers take steps to defeat cancer for 17th Climb of Life

More than 80 walkers completed a 10-mile trek in the Lake District in November, as part of the 17th Climb of Life, raising over £98,000 for our research.

The annual hike was started in 1984 by Graeme Chapman MBE, after he lost his father to cancer. To date, the event has raised over £1.3 million to support our mission to defeat the disease.



New targeted breast cancer drug approved



A new targeted drug has been approved by the US Food and Drug Administration (FDA) for treating advanced breast cancer, raising hopes that the medicine could soon receive approval in Europe and the UK.

We played a pivotal role in the development of capivasertib, from early science to drug discovery and clinical trials.

Breast cancer cells. Credit: Min Yu

Multi-million donation boosts groundbreaking drug discovery research

Our scientists are taking forward a pioneering drug discovery programme that could lead to new treatments for a wide range of cancer types – thanks to a generous multi-million pound gift from the Kidani Memorial Trust.

At our Centre for Cancer

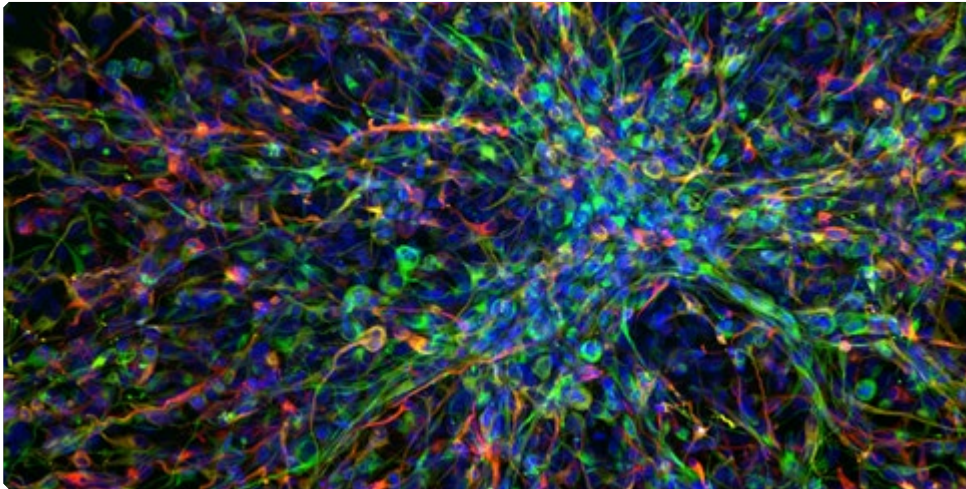
Drug Discovery, the four-year research programme aims to develop drugs targeted to a specific genetic fault that occurs in many different cancers.

We are immensely grateful for the Kidani Memorial Trust's long-term support of our

drug discovery work. It funds several of our projects in this area of research, one of which has recently led to a new drug entering clinical trials for ovarian cancer patients.

Overcoming challenges in brain cancer research

People with brain cancer urgently need new treatment options to help them survive their disease – but it's a tumour type that's particularly difficult to treat.



Glioblastoma cells. Credit: Valeria Molinari

The delivery of any drug to the tumour poses a major challenge because most drugs can't cross from the bloodstream into the brain due to a protective membrane called the blood-brain barrier.

Brain tumours are very often made up of subpopulations of cells that differ genetically and behaviourally, meaning that even if some cells respond to treatment, others may be resistant and keep growing. In addition, some

brain tumour types are so rare that researchers have little opportunity to study them.

Although thousands of people in the UK receive a diagnosis each year, brain tumours continue to be a cancer of unmet need. For advanced brain cancer, there is sometimes no effective treatment, let alone a cure. As a result, brain cancer remains the deadliest cancer among children and young adults.

Despite these challenges, we are making progress

In 2023, in recognition of our world-class research programme, we were awarded a grant to establish a Brain Tumour Research Centre of Excellence. This Centre acts as an international hub to facilitate transformative partnerships among experts and to help speed up progress towards more effective treatments. At the Centre, a team led by Professor Chris

(continue reading on page 8)



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We are making huge leaps forward in treatment for so many cancers – survival rates for breast cancer have doubled in the last 40 years. But for brain cancer, it's a completely different story

“Laura wanted to make a difference for other patients”

Laura Nuttall (pictured above, right, with her mother), was diagnosed with brain cancer when she was 18 years old and given 12 months to live. Thanks to innovative treatments, Laura survived four and a half years, but she sadly died in May 2023. Her mother, Nicola, is passionate about supporting research to find a cure.

“We are making huge leaps forward in treatment for so many cancers – survival rates for breast cancer have doubled in the last 40 years. But for brain cancer, it's a completely different story.

“There have been no new treatments in decades and only 5 per cent of those

diagnosed with glioblastoma, like my daughter Laura, will still be alive five years later. Without investment in research, nothing will change.

“Laura was passionate about making a difference for other patients – the only time she got upset was when she heard of another young person with the same horrific prognosis.

“It's too late for Laura but we will continue to support brain cancer research on her behalf for better, kinder treatments and, ultimately, a cure.”



It has been really exciting to see the journey from lab to clinic

Dr Gabriela Kramer-Marek

Jones is working on new treatments for high-grade glioma in children and young adults.

Elsewhere at the ICR, our scientists are making breakthrough discoveries in various types of brain cancer.

Improving treatment for glioblastoma

Researchers led by Dr Gabriela Kramer-Marek have developed an innovative light-activated therapy to help detect and treat glioblastoma, one of the most common and aggressive types of brain cancer. They combined a small lab-engineered protein with a fluorescent dye and used it to target and label glioblastoma cells left in pre-clinical models after surgery to remove the tumour. By shining near-infrared light on these compounds, the scientists were able to activate them to kill the cancerous cells. This approach could help surgeons remove hard-to-treat residual cells that might otherwise multiply and lead to a relapse.

Dr Kramer-Marek's team also successfully used a non-invasive imaging technique to assess levels of a protein marker in glioblastoma tumours in the lab. High levels of the protein in humans are associated with a better response to some immunotherapies, so this marker could help guide treatment decisions by identifying those most likely to benefit from certain

treatments. A clinical trial is currently underway in people with primary glioblastoma.

Understanding treatment resistance in DIPG

A study led by Professor Chris Jones that involved researchers from across five ICR divisions looked at new treatment approaches for diffuse intrinsic pontine glioma (DIPG), which primarily occurs in children and is always considered fatal due to the lack of effective treatments. The scientists identified for the first time how DIPG tumour cells develop resistance to single treatments, and they have proposed a new combination treatment that may prove more effective.

You can help us to help others

Our researchers' progress is reliant on the continued support of generous individuals and organisations. With your help, we can take on new challenges to make a real impact and drive forward smarter, kinder treatments for people with brain tumours.

To make a regular donation, please visit icr.ac.uk/Monthly

“I never thought I would be able to run a half marathon again”

In August 2022, Damien McDonald was diagnosed with lung cancer that had spread to his neck. Last year, he ran the Great North Run to support our research.

“Hearing I had advanced lung cancer was such a shock. My treatment was five rounds of chemotherapy, which I finished in January 2023, and I now take a targeted treatment called osimertinib. Scans show the disease is stable, with no sign of cancer in my neck.

“Before my diagnosis I was a keen runner who had finished 22 marathons, but by the end of chemo, even 200 metres was a struggle.

“By March 2023, I built up to running 5k and set myself the massive goal of running the Great North Run in September.

“I decided to raise funds for the ICR, since it was involved in the development of two of the chemotherapy drugs I was treated with, carboplatin and cisplatin.

“I was so emotional at the start; the enormity of the situation hit me – I never thought I would be able to run a half marathon again. I ended up raising more than £2,200 for the ICR.

“The drug keeping me alive has only been available since 2018. I'm hoping for more research advances for patients like me.

“Meanwhile I'll continue my treatment and my running, and living life as best I can.”

Get involved

We still have places available in this year's Great North Run on Sunday 8 September. If you would like to join #teamICR, e-mail sports@icr.ac.uk or visit icr.ac.uk/sports

Damien (centre) with his niece and brother-in-law after completing the Great North Run



“A clinical trial saved my life”

Lola Manterola was 37, with two young children and a successful banking career, when she was diagnosed with multiple myeloma, a type of blood cancer. It was advanced and incurable, and she was given just four months to live. Lola says the diagnosis brought her whole world crashing down:

“When I was told I had cancer, suddenly all the plans I had didn’t matter anymore. This disease was going to take it all

away from me. Chemotherapy didn’t work for me, and the thought of not being there for my daughter and son was unbearable.”

Then, her husband, Diego, found her a place on a clinical trial that saved her life. Her cancer has been in remission for the past nine years.

Lola’s experience led her and Diego to establish the CRIS Cancer Foundation in 2011, to give the same chance that

Lola had to the many other patients who do not respond to standard treatment.

CRIS Cancer Foundation has headquarters in the UK, Spain and France, and supports cutting-edge research projects in each location. The Foundation also encourages collaboration among researchers from these countries to accelerate the discoveries and apply them to patients as soon as possible.

In the UK, CRIS Cancer Foundation’s main partner is The Institute of Cancer Research.

“We are really proud to support projects at the ICR. So far, we have donated over £2 million to support research into multiple myeloma, childhood brain tumours and thoracic cancer, as well as establishing a new immunotherapy lab.

“Since we first established the CRIS Cancer Foundation, we have looked to the ICR as a benchmark of professionalism and excellence in cancer research,” Lola says.

“I was recently thrilled to be awarded an honorary degree by the ICR in recognition of our work. We share the same mission and commitment to defeat cancer and, together, we aim to make a real difference in people’s lives.”



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Since we first established the CRIS Cancer Foundation, we have looked to the ICR as a benchmark of professionalism and excellence in cancer research
Lola Manterola



Make your legacy life-changing

Legacy gifts have underpinned our discoveries in cancer research throughout our history – funding cutting-edge laboratory equipment, supporting PhD students and contributing to building our state-of-the-art Centre for Cancer Drug Discovery.

By pledging a gift to us in your Will, you'll become part of the journey to defeat cancer for years to come. You will be helping our scientists drive forward their life-changing work and tackle new challenges, safe in the knowledge of sustained funding.

Leaving a legacy means you are investing in the future of research – and a better future for people with cancer.

Find out more at icr.ac.uk/legacy

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