

Our discoveries Your impact 2024







# Welcome from our Chief Executive



I feel honoured to have overseen the past year at The Institute of Cancer Research, London, which really has been exceptional. The passion and dedication of our amazing scientists and professional services staff has led to many achievements in research, teaching and fundraising. But none of this could have been achieved without your support. We are exceedingly grateful to all of you – our wonderful donors, supporters and partners.

Thanks to your generosity, we have made many scientific advances, identifying new genetic mutations linked to cancer, discovering a way to reverse drug resistance in prostate cancer and developing a new treatment approach for an aggressive type of blood cancer, among other achievements.

Our significant contributions to research have led to success in the past year too. The drug capivasertib – which we played an important role in discovering and developing – was approved in the UK for the treatment of advanced breast cancer. This followed our award of a prestigious Queen's Anniversary Prize in recognition of our transformational breast cancer research programme.

We also had an excellent year for fundraising. The patient stories and research highlights we shared during our Spring Appeal, which focused on hard-to-treat cancers, inspired donations of more than £100,000, and we received more than £4 million left as gifts in Wills. There were also many other highlights, including Dave Day, which saw thousands join a motorcycle ride in memory of Hairy Biker Dave Myers, and the London Marathon, where we were represented by 53 runners who raised more than £164,000.

Thank you again for all your support over recent months. Your generosity allows us to keep working tirelessly to make the discoveries that will improve and save the lives of people with cancer. We hope you will continue to join us in our mission – together, we can defeat cancer.

Kristian Heli

Professor Kristian Helin Chief Executive Officer

# Financial highlights in 2024

We are truly committed to our mission of defeating cancer, which means we – with your incredible support – need to raise as much money as possible to propel our research. Scientific advancement will always be our priority, and this is reflected in our income and expenditure.



We celebrated an excellent year for fundraising, thanks to the generosity of our supporters, donors and partners. Through donations, legacies and philanthropic giving from individuals, trusts, and foundations, we raised £1 million more than in the previous year.



A total of 96 per cent of our expenditure went towards research and research support costs – that's 96p of every pound donated. When you support us, you can rest assured that your contributions really are going to make a difference to people living with cancer.



Our 2023 Christmas Appeal focused on childhood cancer, while our 2024 Spring Appeal drew attention to hard-to-treat cancers. Together, the two campaigns generated more than a quarter of a million pounds to fund our life-saving research.



More than 350 supporters challenged themselves to run marathons, climb mountains, jump out of planes and much more - raising a fantastic £455,000 for our research.



We received over £4 million from gifts left to us in Wills. This is a substantial part

This is a substantial part of our overall fundraising income, and we are hugely grateful to those who chose to make their legacy life changing.



Regular gifts helped our scientists tackle new challenges with confidence, safe in the knowledge of sustained funding. The commitment of £168,000 from 1,263 regular donors in the past year, is helping to drive forward our research into the future.

## Our discoveries 2024

#### With your support, we have been able to make remarkable advances towards our goal of defeating cancer.

Your donations have helped us complete many exciting projects, some of which we have highlighted here.



#### New imaging technique aids drug discovery scientists

Our researchers developed a new imaging workflow that provides higher-resolution images of biological molecules in a shorter timeframe. This methodology could support the design of next-generation treatments.



#### Enzyme could prevent breast cancer recurrence

We found that hormone therapy can result in genetic modifications that cause certain types of breast cancer cells to 'hibernate,' allowing them to survive treatment and promote disease recurrence. We demonstrated the feasibility of blocking these changes by inhibiting an enzyme called G9a.



#### Potential new drug target discovered for aggressive blood cancer

Our scientists identified an alternative version of a protein complex called the NURF complex. As this previously unreported complex promotes the survival of acute myeloid leukaemia, targeting it might be a way to control or eliminate the disease.



#### Scientists identify 74 new cancer-promoting genes

Using data from nearly 10,500 patients spanning 35 cancer types, our scientists revealed 330 unique genes likely to play a part in driving cancer, including 74 previously unidentified genes. These findings have the potential to improve precision oncology.



## Al nearly twice as accurate as a biopsy in grading sarcomas

In an ICR-led study involving 90 people with retroperitoneal sarcoma, a new Al algorithm accurately determined the likely aggressiveness of 82 per cent of the tumours analysed. In comparison, only 44 per cent were correctly graded using routine biopsy.



#### New biomarker predicts treatment response to PARP inhibitors

Our scientists found that thousands more cancer patients may benefit from PARP inhibitors, a type of targeted cancer drug. They showed that these drugs were effective against cancers involving changes in a gene called SF3B1, which is commonly mutated in many cancer types, including lung cancer, pancreatic cancer and some forms of leukaemia.



#### Immune system 'trained' to destroy breast cancer cells

In a preclinical study, we used PROTAC, an innovative new technology, to destroy a protein called RIPK1, which breast cancer cells need to survive. This process makes the immune system alert to cancer, effectively training it to recognise and kill any remaining cancer cells. This could significantly reduce the risk of recurrence.



#### New treatment approach prevents leukaemia from starting or progressing

Our scientists have found a new treatment approach for acute myeloid leukaemia (AML), a cancer of unmet need. They developed a drug called IOX5, which prevents AML from progressing by inhibiting the enzymes crucial to its growth. Combining IOX5 with an existing drug called venetoclax further increased its efficacy.



#### Experimental drug reverses drug resistance in prostate cancer

We successfully used an experimental drug called AZD5069 to reverse drug resistance and slow tumour progression in prostate cancer. AZD5069 targets myeloid white blood cells, which tumours can 'hijack' to help fuel their own growth.



### Trial findings may change standard of care in prostate cancer

We worked closely with our partner hospital, The Royal Marsden, on the phase III trial RADICALS-HD, which showed that postoperative hormone therapy provides no significant benefit for people with low-risk prostate cancer. This finding may lead to many patients being spared from unnecessary side effects.

#### Other highlights

Capivasertib, a targeted breast cancer drug that our scientists helped discover and develop, was approved for use by some patients in the UK following a successful trial that we led with The Royal Marsden.

We were honoured to be one of the two charities chosen to benefit from the 'Dave Day' motorbike ride in memory of Hairy Biker Dave Myers. This contributed to an excellent year for our fundraising, in which we raised £1 million more than in the previous year.

We began co-leading the biggest prostate cancer screening trial for 20 years. The trial aims to find the best way to screen men for prostate cancer, with the ultimate goal of saving many thousands of lives worldwide each year.

#### Thank you

We want to thank each and every one of you for supporting us this year. Whether you made a donation, set up a regular monthly gift, took part in a fundraising event or left us a gift in your Will, you are helping us in our mission to defeat cancer.

Your support translates directly to better outcomes for patients with cancer and a vision of the future where none of us will lose loved ones to this disease. We are extremely grateful to all of you and hope you will continue to support us going forwards.



be here today. The Institute of Cancer Research"



It only takes a moment to give a gift, but the impact of your donation can last a lifetime.

she is still taking olaparib - and it has given her a quality of life she could only have

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dreamed about.