

**RIGHT NOW,
RESEARCHERS,
FUNDRAISERS,
DOCTORS,
NURSES,
PATIENTS,
VOLUNTEERS,
CAMPAIGNERS,
SUPPORTERS
ARE BEATING
CANCER**

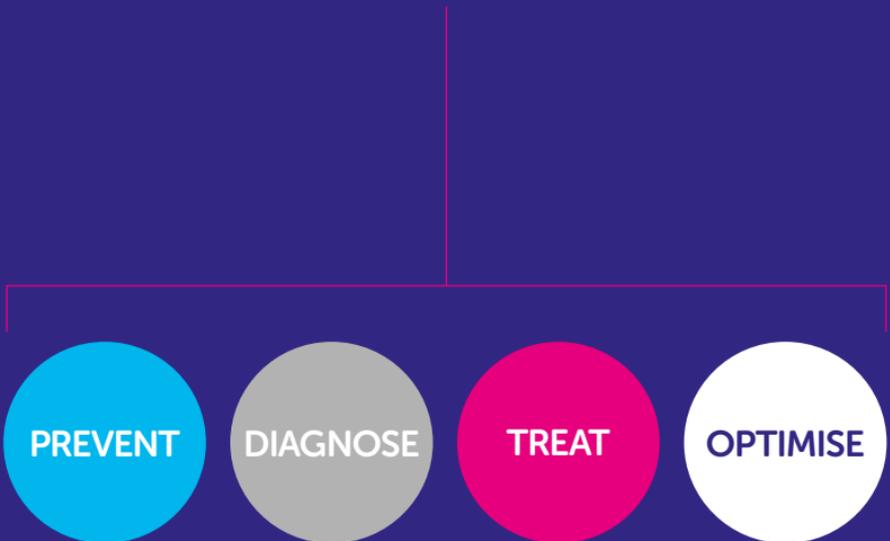
OUR
HIGHLIGHTS
2016/17



CANCER
RESEARCH
UK

Cancer Research UK's vision is to bring forward the day when all cancers are cured. Our ambition is to see 3 in 4 people surviving cancer for 10 years or more by 2034.

We're working to prevent cancer, diagnose it earlier, develop new treatments and optimise existing treatments to make them more effective.



ABOUT US

Cancer Research UK is the world's largest cancer charity dedicated to saving lives through research. Our vision is to bring forward the day when all cancers are cured, from the most common types to those that affect just a few people.

One in two people born in the UK after 1960 will be diagnosed with cancer at some point in their lives. Right now, half of the people diagnosed with cancer will survive their disease for at least 10 years.

Our ambition is to accelerate progress and see 3 in 4 people surviving cancer for 10 years or more by 2034.

Every day, scientists, doctors and nurses are working to save more lives. They're preventing more cancers, diagnosing the disease earlier, and developing new treatments. Our work to engage and inform patients, policy makers and the public is helping to ensure our research is making a real difference.

Thanks to you, we've helped double cancer survival in the UK in the last 40 years. But there's still so much to be done. While survival for some cancers has improved dramatically, others, like brain tumours and lung, pancreatic and oesophageal cancers, are still very hard to treat. We need to change that, so we continue to increase the amount we spend on these cancers as part of our research strategy.

Our research has shown that more than four in ten cancers in the UK are preventable, and we are working to ensure everything possible is being done to reduce the number of people who develop the disease.

None of our life-saving work would be possible without the strength of our fundraising and our outstanding people – our supporters, volunteers, patients and staff.

Thanks to you, we're making progress every day. Together we will beat cancer sooner.



Find out more about our research history at cruk.org/our-history

Read more of our highlights at cruk.org/our-year





**THANKS TO YOU
WE ARE BEATING
CANCER**



Tommy Brennan and his grandson Tommy appear on the front cover. Read their story, and others, online at cruk.org/our-year

SIR HARPAL KUMAR AND PROFESSOR SIR LESZEK BORYSIEWICZ THANKS TO YOU WE'RE BEATING CANCER

It's vital we work together to beat cancer. Everyone, from researchers to patients and supporters, can help us achieve our goal of seeing 3 in 4 people surviving cancer for 10 years or more by 2034.

Among the research we supported this year were the first Grand Challenge awards. We believe these four projects will revolutionise our understanding of cancer.

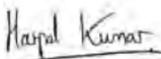
This year saw the opening of Europe's biggest biomedical research centre, the Francis Crick Institute, which we co-funded. We also announced our largest ever investment in our network of Centres, which bring together world-class expertise to help get treatments to patients faster.

Tackling obesity is an urgent priority as we estimate it will cause 670,000 new cases of cancer in the next 20 years. We're addressing this issue through research, campaigning and raising awareness.

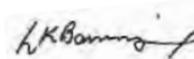
Smoking is still the biggest single preventable cause of cancer. This year saw the roll-out of plain packaging for tobacco, which we campaigned for. And we launched our 'Don't Quit on Us' campaign to protect vital Stop Smoking Services that are at risk from government budget cuts.

None of our work would be possible without our supporters. We strive to make sure your donations are spent in the best way. To help us do this, we involve people affected by cancer to help shape our work.

We want to thank all our amazing supporters. Every one of you is helping to beat cancer sooner.



Sir Harpal Kumar
Chief Executive



Professor Sir Leszek Borysiewicz
Chairman

24 May 2017

DR UDAI BANERJI

BRINGING BETTER DRUGS TO PATIENTS

I'm a Cancer Research UK clinician scientist at The Institute of Cancer Research, London. I work in the early stages of drug development, where new drugs are given to patients for the first time to see how they work in the body.

The patients volunteering for our trials often have advanced cancers and have already had several different treatments. It's a privilege to work with people who, at a difficult time in their lives, enrol in trials to help science, medicine and the next generation of cancer patients.

My lab focuses on making sure a cancer drug 'does what it says on the tin'. Funding from Cancer Research UK also allows me to conduct experiments to find new combinations of cancer drugs that are needed to fight the disease.

Cancer Research UK supports many different stages of cancer drug development, funding researchers, labs and equipment. They also train, fund and empower talented scientists, nurses, data managers, clinical trial

coordinators and medical staff, who are all critical to cancer drug development.

It's so important that different parts of the health system, including drug companies, the NHS and charities, work together to develop new treatments faster. So it's great that Cancer Research UK is working with partners like the Departments of Health to fund Experimental Cancer Medicine Centres. Initiatives like this will also help make sure research findings are developed into effective cancer drugs as soon as possible.

It's only because of Cancer Research UK's many generous supporters that researchers like me can do our work. Thank you to everyone who has donated time or money to this important cause. You are making these advances possible.



Dr Udai Banerji
Cancer Research UK clinician scientist

24 May 2017

GRAND CHALLENGE SPARKING A REVOLUTION IN CANCER RESEARCH

Cancer poses some extraordinarily complex questions. With our Grand Challenge awards, our most ambitious research grants ever, we want to help answer them – and in doing so, revolutionise the way we prevent, diagnose and treat cancer. Dr Rick Klausner, chair of the Grand Challenge Advisory Panel, introduces the first four winning projects.

“I’ve been reading and reviewing applications for research funding for almost 40 years. The ones we received for Grand Challenge were some of the most exciting I’ve ever seen.

Originally, the plan was to fund one team. But the quality of the shortlisted teams led to Cancer Research UK securing a partnership with the Dutch Cancer Society and an anonymous overseas donor to enable them to fund four. Together, the projects will receive more than £70 million over the next five years.

The panel chose these four projects because we believe they will dramatically improve our understanding of cancer.”



DEVELOPING A ‘GOOGLE EARTH’ FOR TUMOURS TO IMPROVE CANCER DIAGNOSIS AND TREATMENT

Using various new mass spectrometry imaging techniques, Dr Josephine Bunch and her team of chemists, physicists and biologists in the UK and US will develop a new way to map tumours in unprecedented detail – from the whole tumour to the individual molecules in cells. Their work could lead to new ways to diagnose and treat cancer.



USING COMPUTERISED 3D TUMOURS AND VIRTUAL REALITY TO BETTER UNDERSTAND CANCER

Combining established techniques with new technology, Professor Hannon and his team of scientists and virtual reality experts from

England, Canada, Switzerland and the US will build 3D breast cancer tumours showing every cell in them. These 3D tumours can be studied using virtual reality, a new way of studying breast cancer that could change how the disease is diagnosed and treated.

DISCOVERING THE CAUSES OF CANCER BY STUDYING DNA 'FINGERPRINTS'

In a project of epic scale spanning five continents, Professor Mike Stratton and his team from the UK, the US and the International Agency for Research on Cancer in France aim to build a deeper understanding of what causes DNA damage and how it leads to cancer. Their work could help prevent more cancers worldwide.

FINDING WAYS TO SPARE WOMEN UNNECESSARY TREATMENT

By studying tissue samples from women with DCIS (a condition which can sometimes develop into breast cancer), Dr Wesseling and his team of scientists from the UK, Netherlands and the US aim to determine how to distinguish between those who need treatment and those who don't. This could spare thousands of women unnecessary treatment.

Find out more about Grand Challenge at cruk.org/grand-challenge-series and how people with cancer were involved at cruk.org/patient-involvement

PROFESSOR ADRIAN HAYDAY MAKING VITAL DISCOVERIES AT THE FRANCIS CRICK INSTITUTE

Officially opened in November 2016, the Francis Crick Institute (the Crick) is the size of 17.5 football fields. Inside, scientists and medical professionals from different disciplines are collaborating to transform the way we do research. We co-funded the building of the Crick to house groundbreaking research into cancer and other diseases.

Professor Adrian Hayday is Senior Group Leader at the Crick focusing on immunology, the study of the immune system. In particular, he's researching 'gamma delta T cells'. These immune cells could be used as a type of 'early warning' system for cancers developing in the skin.

According to Adrian, it's not just the state-of-the-art equipment at the Crick that matters, but how it's used, and who's using it. "We've got these incredible support facilities at the Crick, both technical and intellectual," he says. "If you want to do something here, there will be the facility to do so



and it will be run by someone with outstanding expertise and hands-on experience.”

There are 1,500 staff and scientists at the Crick – from biologists to physicists, computer scientists to mathematicians, chemists to data analysts. “We have so many different perspectives and insights into a problem here,” says Adrian. “That’s what cancer research is going to benefit from.”

The Crick doesn’t just encourage collaborations between scientists. Its connections with local hospitals are helping to speed up research and make sure patients benefit from it as quickly as possible. “It would be an absolute crime if there wasn’t a connection between the amazing research, people and capabilities here and those at some of the UK’s best hospitals,” says Adrian.

Having the freedom and facilities to explore new ideas is a key part of what makes the Crick special.



“Fundamental research without boundaries is essential to understand more about cancer,” says Adrian. “We’re doing it here at the Crick, and that’s in large part thanks to Cancer Research UK and their supporters.

“We’re not even into the adolescence of the Crick yet,” says Adrian. “And yet, exciting science is already happening. I have no doubt that this place, and the work being done here, is going to be incredible.”



Find out more at [crick.ac.uk](https://www.crick.ac.uk)

““ Fundamental research without boundaries is essential to understand more about cancer. ””

MORE OF OUR 2016/17 HIGHLIGHTS



APRIL

For the first time our scientists in Cambridge scan a patient using a revolutionary imaging technique that could help tailor treatments faster.



MAY

Standardised cigarette packaging rolls out across the UK, a huge success for our campaign to reduce the number of people taking up smoking and help smokers quit.



JULY

We launch the second 'Walk All Over Cancer', which encourages people to get fit and raise money by walking 10,000 steps every day for a month.



NOVEMBER

Following campaigns highlighting the importance of government investment in science, we welcome the announcement of an additional £2 billion to be spent on research and development by 2020.



DECEMBER

The Food and Drug Administration in America approves the drug rucaparib, which our scientists helped develop, as a treatment for certain patients with advanced ovarian cancer. We hope a similar decision will be made in Europe soon.



JANUARY

Our researchers find a potential new way to harness the power of the immune system to fight cancer.



AUGUST

The Government announces plans to introduce a 'Soft Drinks Industry Levy' (known as the 'Sugar Tax'), a move we welcomed and supported.



SEPTEMBER

Our researchers develop a possible new way of detecting – and maybe preventing – some cases of oesophageal cancer using a specialised camera and a fluorescent dye.



OCTOBER

Our campaigning leads to the announcement of a £180 million investment by NHS England and Scotland in new radiotherapy machines.



FEBRUARY

Uniting against cancer, we raise £2 million on World Cancer Day by selling Unity Band® bracelets in our shops and online, and through collections across the UK.



MARCH

We invest £10 million in PRECISION-Panc, a study that aims to match pancreatic cancer patients to the best clinical trial for them.



OUR LIFE-SAVING WORK CONTINUES

DR FIONA WALTER AND PROFESSOR WILLIE HAMILTON CAN WE DIAGNOSE CANCER IN GP SURGERIES?

We're funding the CanTest Collaborative, revolutionary research looking at how GPs can use more tests to help them rule out cancer or speed up a diagnosis. The work is led by Dr Fiona Walter at the University of Cambridge and Professor Willie Hamilton at the University of Exeter. Fiona explains the project.



“The earlier we diagnose cancer, the more treatment options there are for patients and the more successful treatment is likely to be. That’s why we’re investigating whether some tests could be carried out in GP surgeries as accurately, effectively and safely as they can be in hospitals.

It could mean that GPs can diagnose cancer or quickly reassure patients if there’s nothing seriously wrong. And if they are unable to confirm a diagnosis in their surgeries, GPs may be able to refer patients to the most appropriate medical professional in the hospital faster.

Ultimately, it’s about helping more people survive.

It came about from my 30 years’ experience as a GP and the feeling that we can always improve the way we work with patients.

It’s a hugely exciting project. I’m delighted to be working on something that feels really worthwhile and could make a huge difference to patients in the future.”

SUE VIPOND HELPING TO MAKE SURE CANCER IS SPOTTED EARLY

Sue Vipond, 67, lives in Scotland with her husband John. She is passionate about improving early diagnosis, having recovered from ovarian cancer that was caught at an early stage.

“In spring 2009, I’d gone to see my GP as I’d been having abdominal pain. After blood tests and a scan, they discovered a cyst in my ovaries which looked suspicious.

When the consultant told me it was cancer, I was really upset, but then I thought ‘Right I’ve just got to deal with this’. Because my cancer was diagnosed early it was far easier to remain positive.

After surgery, I had six cycles of chemotherapy. There were days when I felt terrible, but it wasn’t as bad as I’d expected. I carried on as normal and still volunteered at my local Cancer Research UK charity shop, which I’ve been doing for almost 25 years now.

I feel passionately that we need to get the message out there about the importance of early diagnosis and the



signs and symptoms of cancer. That’s why I got involved in campaigning with Cancer Research UK to help people spot cancer early.

I think Cancer Research UK’s CanTest Collaborative project is a good idea. When someone goes to their GP because they suspect something is wrong, the less time they have to wait for a referral or test, the better.”

PETER BREADEN HELPING CHANGE THE WAY WE TREAT PANCREATIC CANCER

Retired lab manager Peter Breaden, 67, who lives in Southport, was diagnosed with pancreatic cancer in 2010. He took part in ESPAC-4, a Cancer Research UK-funded clinical trial that has led to a call for a new standard treatment for people with pancreatic cancer who've had surgery. Peter has been married to Alwena for 47 years. They have three children and seven grandchildren with two more on the way.

"My having cancer made us do things that we'd always wanted to do. It had a domino effect on my family too.

Alwena and I were celebrating our 40th wedding anniversary in Barcelona in 2010 when I suffered what I thought was bad indigestion. But a couple of weeks later I turned yellow with jaundice. I went straight to the GP. She took one look at the results of my blood tests and admitted me to hospital. After an ultrasound and CT scan of my pancreas they found a tumour.



The next morning they told me they could operate – that's when I first had hope that I'd survive. After a major nine-hour operation in May 2010, I was told there was a clinical trial testing whether a combination of two chemotherapy drugs – gemcitabine and capecitabine – would be better than just gemcitabine on its own. I was immediately sure I wanted to take part.



“Scientists had put a lot of work into finding the combination of drugs I took.”

My job as a lab manager meant I was indirectly involved in trials for a lot of my working life, gathering and processing data for research projects. I've always been aware of how important they are in developing new drugs and treatments.

When I heard how good the results of the trial had been, I was extremely pleased. Scientists had put a lot of work into finding the combination of drugs I took.

I really want to express my sincere gratitude to the researchers at the University of Liverpool, my surgeon, consultant nurse and all the team at the Royal Liverpool for looking after me. My wife nursed me when I got home – she was absolutely brilliant, and so were my family and friends.

There are still many types of cancer where new drugs and new treatments are needed. This trial proves that research into new treatments can provide very good results. After you've survived cancer, you do get a slightly different outlook. I feel very fortunate to be alive and am determined to enjoy life for as long as I can."

DR MARIAM JAMAL-HANJANI DISCOVERING A MISSING PIECE OF THE CANCER PUZZLE

The PEACE study is the UK's first national research study that's collecting blood and tissue samples from cancer patients who have died. Dr Mariam Jamal-Hanjani explains more.



"I'll never forget the first patient who joined the PEACE study. Despite being so ill, she wanted to be involved. It made me feel so humble.

Every PEACE study patient will have that in common. They are selfless people who want to help progress cancer research despite knowing they won't benefit from this progress themselves.

We're aiming to collect samples from 500 cancer patients who have died. It means we'll have information about cancer that we've never had before.

This will help us understand how and why some cancers progress and spread, which could help develop ways to prevent this from happening. We're also looking at why some patients don't respond or stop responding to certain cancer drugs. This will hopefully help us improve treatment.

I feel privileged to be part of this project. Together, patients, doctors and scientists are trying to improve the outcome for people with cancer in the future."

DAVE SIMS

REMEMBERING MY BROTHER MARK

Mark Sims was 15 when he was diagnosed with melanoma, a type of skin cancer, in 2003. It came back 12 years later and was incurable. A doctor from Bristol, Mark was a passionate ambassador for Cancer Research UK. In recognition of his contribution to the Charity, he received a Flame of Hope Award in 2016. Mark signed up to the PEACE study before he died in January 2017. His twin brother Dave, 29, shares Mark's story.

"Mark always thought about others more than himself. Even in his last days, he was worried about not being able to reply to people who'd messaged him on Facebook.

He realised that his experience of getting cancer so young, and the fact he was a doctor, would resonate with people. When he shared his story on social media, with a link to his fundraising page, he raised £5,000 in the first five hours.

When Mark's doctors asked him about taking part in the PEACE study, we knew he'd want to. It gave him another opportunity to help people.

Hopefully more people will get involved in the PEACE study as a result of his story.

It's really important to my family to raise awareness of melanoma. There are things you can do to lower your risk, like not going on sunbeds and covering up when you're in the sun.

We are all really proud of everything Mark did. He inspired us. It's never going to be easy without him, but the difference he's made to other people does make it a little bit easier."



ALFRED SAMUELS

“THANK YOU TO EVERYONE WHO SUPPORTS CANCER RESEARCH UK”

Alfred Samuels, 59, has advanced prostate cancer. He ran his own security business in the entertainment industry for 27 years, working with stars including Beyoncé. Alfred lives in Harrow with his partner Grace and has five children.



“Standing outside Parliament in a t-shirt in January, I felt cold – and proud. I was having a photo taken with other Cancer Campaigns Ambassadors after getting involved in campaigning about childhood obesity.

I like the fact that Cancer Research UK involves people like me, who have been affected by cancer, in their campaigns. We can influence government by telling our stories.

I got involved because I wanted to help raise awareness of what people can do to lower their risk of developing cancer. It has affected my family so much.

When the doctor told me I had cancer in January 2012, I was a strapping guy at the top of my game. Everything fell apart overnight. Telling Grace and my children was the most difficult part.

Two months later I joined the STAMPEDE trial, which is funded by Cancer Research UK. My doctor explained surgery wasn't an option for me because the cancer had

spread, but that the trial might be a good option. I decided to take part – I had nothing to lose.

As part of the trial, I started taking a drug called abiraterone and had hormone-reducing injections. I had side effects, like mood swings, which were difficult to handle. But Grace's support, hill walking and telling myself to not give up helped me get through it.

During the first six months of being on the trial, tests showed that the treatment was working. I'm still on STAMPEDE, which I find reassuring, and, fortunately, my cancer is being managed well.

I look at life differently now. I'm round my family much more. I'm a city boy, born and bred, but now I enjoy being in nature.

Right now, I'm also part of a group made up of people affected by cancer, who are advising Cancer Research UK on how they tell people about cutting-edge research – such as tailoring treatment to individual patients. They spend money wisely, on amazing research, which is why I think they deserve people's support.

It's been five years since my diagnosis and the future looks bright. A huge thank you to everyone who supports Cancer Research UK from me and my family."



“If it wasn't for abiraterone, and Cancer Research UK, whose scientists helped develop the drug, I don't think I'd be here today.”



Learn more about our Cancer Campaigns Ambassadors at cruk.org/our-ambassadors

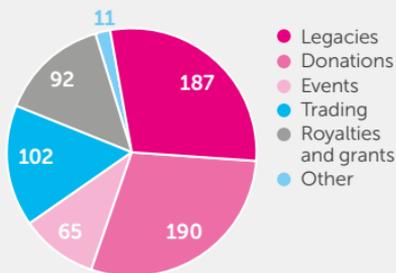
HOW WE RAISED AND SPENT OUR MONEY

Every single donation helps us beat cancer sooner. More than 9 out of 10 donations we receive are for less than £10, proving that small amounts make a big difference.

WHERE THE MONEY CAME FROM

Our total income in 2016/17 was £647 million. This was raised through:

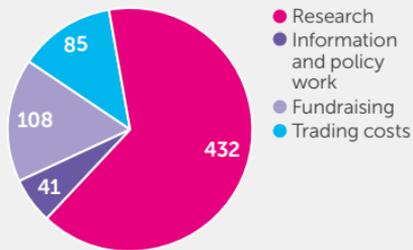
BREAKDOWN OF TOTAL UNDERLYING INCOME (£647m)



HOW THE MONEY WAS SPENT

Our total spend in 2016/17 was £666 million, made up of money raised during this financial year (see left), plus extra money gained through property and investments returns. It was spent on:

BREAKDOWN OF TOTAL EXPENDITURE (£666m)



OUR FUNDRAISING

We will become an opt-in charity as of 1 July 2017. Read more about our fundraising practices at cruk.org/our-promise and cruk.org/our-finances



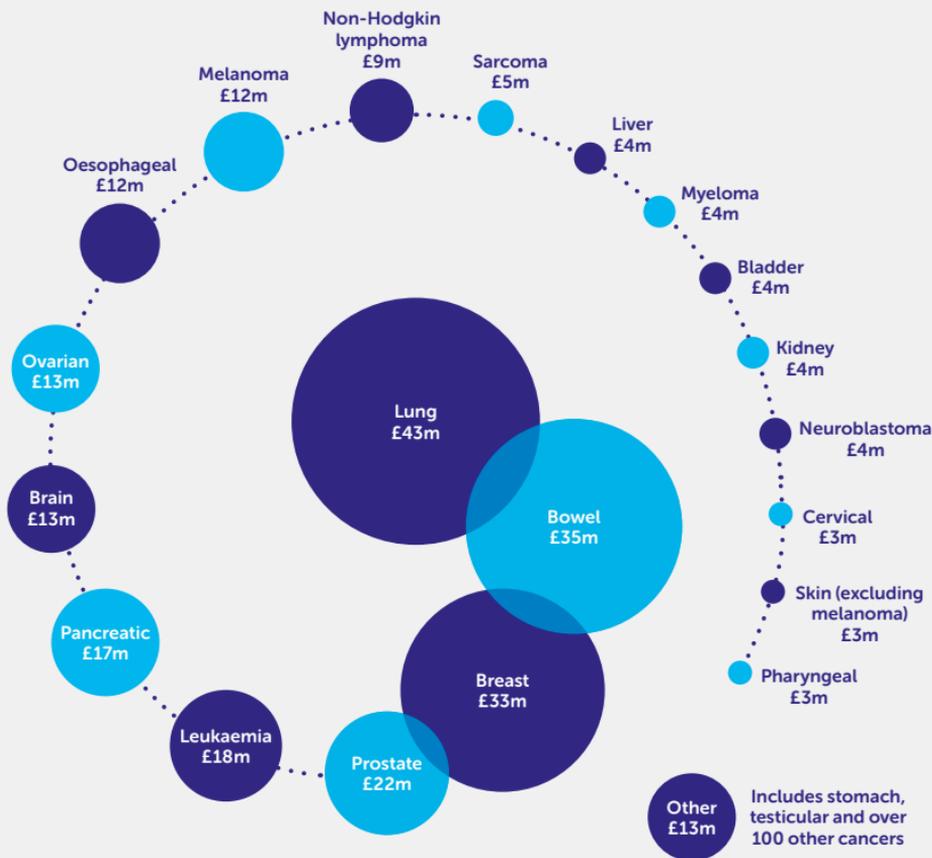
80p in every £1 is used to beat cancer. The remaining 20p goes towards raising funds for the future.



For more information, see our Annual Report and Accounts 2016/17 at cruk.org/our-finances

This year, we put £432 million towards research: £274 million on specific cancer types (see below), £112 million on research into the biology of cancer and £46 million was set aside for long-term projects.

WHAT WE SPENT ON RESEARCH INTO DIFFERENT CANCERS IN 2016/17



For more information on the research we fund, visit cruk.org/what-we-fund

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Find out more online at
cruk.org/our-year

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