

search

Issue 41 | Spring 2020



Inside this issue

10 | **In profile:**
Dr Astero Klampatsa –
harnessing the immune system

14 | **In focus:**
Keeping one step ahead
of cancer evolution

19 | **Inspired by:**
Tim Morgan – remembering
an inspirational fundraiser

Our mission is to make
the discoveries that
defeat cancer.

Contact us

The Institute of Cancer Research
123 Old Brompton Road, London SW7 3RP

T 020 7153 5387

E supportercare@icr.ac.uk

W icr.ac.uk

f [facebook.com/theinstituteofcancerresearch](https://www.facebook.com/theinstituteofcancerresearch)

t [@ICR_London](https://twitter.com/ICR_London)

Written and produced by The Institute of Cancer Research, London
© March 2020. The Institute of Cancer Research. All rights reserved.

The Institute of Cancer Research: Royal Cancer Hospital.
Registered Office: 123 Old Brompton Road, London SW7 3RP.
Not for profit. Company Limited by Guarantee.
Registered in England No. 534147. VAT Registration No. 849 0581 02.



Editorial

This summer our Centre for Cancer Drug Discovery will officially open. Within this new building, our researchers will be poised to outsmart cancer with the world's first 'Darwinian' drug discovery programme, which will focus on understanding, anticipating and overcoming cancer evolution, and preventing drug resistance.

This is an extremely exciting milestone for us, and we are so grateful for the dedicated support we have received from you, our community of donors. Our Christmas appeal was the most successful in our history, raising more than £175,000. Your incredible generosity will help us get the research programme in our new building off to the strongest possible start – and we look forward to keeping you updated on the progress we are making.

Our public campaign, "Let's finish it" continues to promote the new Centre. Last year we commissioned the Poet Laureate Simon Armitage to write a poem which was engraved onto a 20mm x 10mm cancer pill to celebrate the precision science which will take place in the Centre, and our ambition to defeat cancer. You can read the poem on page 18.

We have been talking a lot about immunotherapy over the past few years, as an area of great potential in cancer research. The ICR has been investing in new immunotherapy teams, and on page 10 we introduce Dr Astero Klampatsa, our new Team Leader in Cancer Immunotherapy, who is looking at how we can harness the body's immune system to treat mesothelioma and lung cancers.

With your support, we are helping more patients live well with cancer, and finish what they started. We couldn't do this without you. I do hope you will continue to follow and support our work.

Lara Jukes
Director of Development
The Institute of Cancer Research

- 04 Research news
- 06 Fundraising news
- 08 Climb of Life
- 09 Events calendar
- 10 In profile:
Dr Astero Klampatsa
- 12 In profile:
Meet our new recruits
- 14 In focus: Keeping one step
ahead of cancer evolution
- 16 Patient focus: Evolutionary
approaches to treatment
- 19 Inspired by:
Tim Morgan

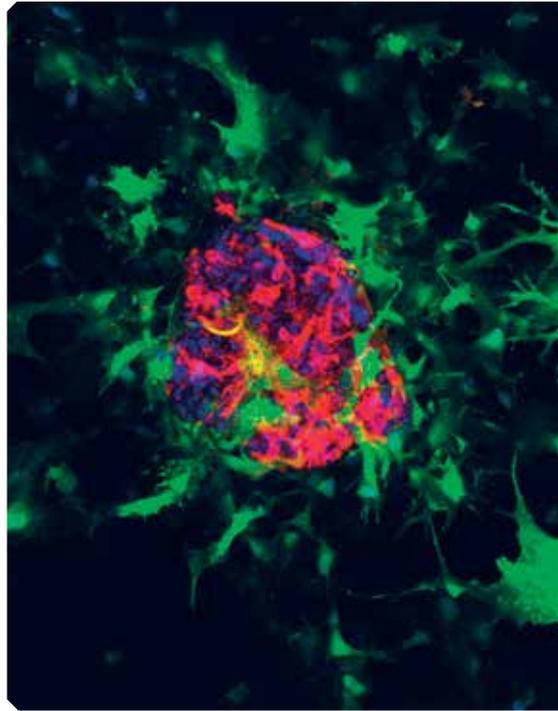
New evolution-busting drug overcomes resistance in aggressive breast cancers

We have discovered a new drug which blocks one of cancer's evolutionary escape routes from chemotherapy, and could be used to treat aggressive breast cancers.

The drug forces cancer cells to divide too quickly, leading to fatal errors in parcelling up DNA.

A new study led by the ICR's Professor Spiros Linardopoulos found that cancer cells in dishes treated with the drug went through cell division in just 11 minutes, compared with 52 minutes without the drug.

The first clinical trial of the new treatment is now under way in solid tumours, including aggressive triple-negative breast cancers – and it could also be effective against other fast-growing cancers such as ovarian cancer.



Did you know...?
Microscopic clusters of bubbles could enhance the delivery of chemotherapy drugs

World-first treatment with acoustic cluster therapy to improve chemotherapy delivery

The first patient has been treated with an innovative new technology pioneered by the ICR which uses microscopic clusters of bubbles and liquid droplets to enhance the delivery of chemotherapy drugs to tumours.

The technology was invented by the Norwegian company Phoenix Solutions, and then developed and evaluated at the ICR by Professor Jeffrey Bamber.

Microdroplets and microbubbles are injected along with the patient's chemotherapy and an ultrasound scan converts the clusters into an activated form within the tumour. The clusters then help to 'pump' the drug into the tumour, greatly increasing the dose which reaches the cancer cells.

The phase I/II clinical trial of acoustic cluster therapy will aim to provide early data on the effectiveness of the therapy, as well as establish its safety.

Olaparib becomes first gene-targeted medicine to show benefits in prostate cancer

A new clinical trial led by Professor Johann de Bono has shown that a pioneering precision medicine can slow or stop tumour growth in some men with advanced prostate cancer. The drug is already licensed for use in breast and ovarian cancer.

A phase II trial found that over 80 per cent of men with prostate cancer whose tumours had mutations in the BRCA genes responded well to treatment with the targeted drug olaparib.

Men in the study whose prostate cancers had DNA repair defects lived for more than 13 months on average – and nearly 18 months among those with BRCA mutations – raising hopes that the drug could become the first ever gene-targeted drug to be approved for prostate cancer.

80%

of men with prostate cancer whose tumours had mutations in the BRCA genes responded well to treatment with olaparib



Professor Kevin Harrington

Major trial backs immunotherapy as first-line treatment for head and neck cancer

A major trial led by Professor Kevin Harrington reports that immunotherapy is better than standard 'extreme' chemotherapy as first-line treatment for advanced head and neck cancer. It helped keep some patients alive for more than three years.

The immunotherapy drug pembrolizumab alone or in combination with chemotherapy extended patients' lives, compared with standard treatment. Some groups of patients treated with single-agent pembrolizumab responded for five times longer than with standard chemotherapy.

Pembrolizumab has recently been approved in Europe as a first-line treatment for patients diagnosed with advanced head and neck cancer, marking a key milestone in the use of immunotherapy as a standard part of cancer treatment.

Giles Abrey
with his parents
Richard and Dee



Farmer raises £39,000 flying solo to Cape Town

A farmer from Suffolk has completed a daring solo flight from the UK to Cape Town – in a plane he helped to build.

Giles Abrey flew 7,200 miles across 13 countries, raising £39,650 for three charities, including the ICR. His journey took him over sea, deserts and mountains, dodging thunderstorms and being battered by turbulence. He even found himself suspected of smuggling ancient artefacts during the epic solo flight.

Giles says, "This adventure has been 12 years in the planning – and although it was a solo adventure, I never felt like I was on my own due to the huge amount of support I received. I still can't quite believe I've done it!

"So many of my family and friends have been affected by cancer, and I wanted to do something to help. The ICR has an incredible track record in fighting cancer, and I'm really pleased to be able to do whatever I can to support their research."

If you would like to donate or read more about Giles' adventure, please visit adventures4charity.com

ICR chosen as UK Finance's Charity of the Year

We are delighted to have been chosen as the Charity of the Year by employees of UK Finance, the collective voice for the banking and finance industry which represents more than 250 firms in the sector.

Our partnership will give UK Finance employees the opportunity to hear more about the revolutionary research taking place in our new Centre for Cancer Drug Discovery. Representatives from the ICR will have the chance to participate in industry events such as the Digital Innovation Summit and the Festival of Finance. As well as staff fundraising, two UK Finance employees will also be running the London Marathon for the ICR.

Alastair Gilmartin Smith, Chief Operating Officer of UK Finance, said:

"The ICR was chosen by our colleagues as our 2020 corporate charity and the partnership means a great deal to us. Many of us at UK Finance have known the stress and strain of living with cancer and so embrace the opportunity to work with a charity which makes such a difference to the lives of so many."

Most successful ICR appeal ever raises more than £175,000

Our Christmas appeal has raised an incredible £175,000 to help us get the research in our new Centre for Cancer Drug Discovery off to the strongest possible start. The generous donations we received will also support our innovative research into immunotherapy and DNA replication.

We are hugely grateful to the thousands of donors who have helped make this the most successful appeal in our history.

In a world first, the Centre, which is due to open this summer, will bring drug discovery scientists together with experts in cancer evolution, to tackle cancer's lethal ability to evolve and become drug resistant. This pioneering drug discovery programme aims to put us one step ahead of cancer by anticipating how it changes and develops resistance, and by creating new anti-evolution treatments.

We look forward to keeping you informed of our progress and key developments ahead of the opening of the building. We continue to welcome donations to equip the building with the latest cutting-edge technology – please visit icr.ac.uk/letsfinishcancer for more information.

£175,000

£10,000

Heroic fundraiser raises over £10,000 in 30 days

Cancer patient Anne Vanstone, from Devon, has raised more than £10,000 for the ICR in just 30 days – after inspiring friends, family and her local community to host and take part in a huge variety of fundraising events.

In 2018, Anne was diagnosed with breast cancer, which had spread to other parts of her body. She is receiving the targeted treatment palbociclib, for which the ICR led UK trials – and at her last scan her tumour had regressed so far that in places it was no longer visible.

To celebrate feeling so well, Anne decided to embark on this intense fundraising challenge in November 2019. By the end of a 30-day marathon of quizzes, dinner parties, big breakfasts and much more, Anne had smashed her original target of £5,000, raising a fantastic £10,642.

Anne says, "I'm so grateful to still be here, and I'm grateful for other women in a similar position to me who now have this chance to live a normal life with cancer. That's why the ICR's work is so important."



Anne Vanstone with her daughter Fiona at their first fundraising event

Climb of Life expands to new heights

Our annual fundraising mountain trek, the Climb of Life, continued its tradition of beating the previous year's total to raise a record-breaking £104,315 in 2019.



The event, which took place in November in the Lake District, was launched by Graeme Chapman MBE in 1987 and is supported by companies from the stationery industry.

Every year more than 120 keen hikers in teams across multiple companies descend on Grasmere to take part in this unique event. And while the weather may not always be on their side, this doesn't stop their enthusiasm for helping us to defeat cancer.

We are delighted that this enthusiasm continues to grow, not only for the event itself but since 2018 for other events throughout the year, all under the Climb of Life banner.

Ride of Life

In September 2018 the first Ride of Life started and finished on our Sutton site. This cycle ride covered two distances, 100km and 60km, and it raised an amazing £15,000.

The Ride proved a great challenge again in 2019, raising an impressive £11,000 in its second year. Plans are already under way for the Ride of Life 2020, taking place in September.



Ride of Climbs

Climb of Life partner Hamelin Brands went the extra mile last August when its Managing Director Philip Beer took on a gruelling challenge, aptly named the Ride of Climbs. Over six days, Philip and his brother cycled over nine mountains in Southern France, achieving a total of 900km with more than 14,000m of climb.

Philip didn't stop there, completing the Swim of Life, a two-mile Serpentine swim, just a month later.

Philip and Team Hamelin raised a total of £5,000 in 2019 and are already training for several events in 2020, including the London Marathon.



Discovery Ball

There was a slight change of pace for a Climb of Life sister event, as the stationery industry put on their finery for the first Discovery Ball, a night of celebration held at Bedfordshire Blues Rugby Club. This glamorous evening included a sit-down dinner and auction, with a speech by the ICR's Dr Matthew Blackledge.



Jump of Life

Despite her fear of heights, Carol Houston jumped out of a plane at 15,000ft in July 2019 to support our work. Egged on by her keen skydiver husband Doug, Carol raised more than £2,600 for our research.

The ICR would like to say a huge thank you to every single person who organised and attended a Climb of Life event in 2019. We are delighted to say that this special network has now raised more than £1.1m for the ICR since 2007!

£1.1m



Events calendar

September

London to Paris cycle ride
9-13 September 2020

Connect two of the world's most chic capital cities and support the ICR by embarking on the challenge of a lifetime.

September

Ben Nevis trek
25-27 September 2020

A weekend of trekking the highest peak in Britain, with stunning views of the Highlands.

October

Virgin Money
London Marathon
Sunday 4 October 2020

If you're one of the lucky 45,000 to be told you have a place on the iconic London Marathon start line, consider joining #teamICR and using your place to help us finish cancer. Email sports@icr.ac.uk to join the team.

If you are interested in running, trekking or cycling for us, please visit icr.ac.uk/sports for a list of our upcoming charity events. Thinking about organising your own personal challenge? Contact sports@icr.ac.uk – we would love to hear your ideas.

Dr Astero Klampatsa

Dr Astero Klampatsa recently joined us as a Group Leader in Cancer Immunotherapy, having previously been at the Perelman School of Medicine at the University of Pennsylvania. Her team was set up thanks to a donation from dedicated ICR supporters, CRIS Cancer Foundation.

Joined the ICR 2019

Specialist subject

Malignant mesothelioma, thoracic immuno-oncology and immunotherapy.

Interests

Owner of a small olive grove in her homeland Greece, Astero often travels to work on her land, as well as on her family's pomegranate and tomato fields. She's a great cook and a keen urban cyclist.

“ ”

By studying how tumours interact with the immune system, especially with T-cells which in cancer do not function as they normally would, we aim to identify markers that can predict if and how a patient's tumour will respond to immunotherapy.

Dr Klampatsa's Thoracic Oncology Immunotherapy Group is helping to understand how immune cells interact with tumours, and ways we can harness the patient's immune system for treatment.

Her research focuses on mesothelioma, a highly lethal cancer that develops in the protective lining of the lungs, abdomen or heart, and which is mainly caused by exposure to asbestos.

Dr Klampatsa says: "In recent years, there have been great advances in enlisting the body's own immune system to attack cancer, marking a new era in cancer treatment. Our research is contributing to this exciting field by developing immunotherapies to help patients with malignant mesothelioma and lung cancer."

Dr Klampatsa and her team are developing treatments called CAR-T cell therapies – genetically engineered immune cells taken from patients, which attack proteins on the surface of tumour cells.

In mesothelioma, the immune system fails to react against the tumour cells, because T cells, the immune system's

'soldiers', do not function properly. Dr Klampatsa is working to understand the behaviour of various immune cells in mesothelioma tumours and why T cells malfunction.

Dr Klampatsa explains: "CAR-T therapy is a kind of 'living immunotherapy' where the patient's own immune cells are engineered in the lab to specifically target and kill cancer cells. Such targeted treatments have been very effective in blood-related cancers and we hope to develop them for the treatment of solid tumours as well."

Dr Klampatsa's team is supported by a £1.4 million donation from CRIS Cancer Foundation, which was set up by Lola Manterola and Diego Megia. Lola was diagnosed with incurable cancer and given just four months to live, but an experimental treatment helped save her life.

We are also grateful to the thousands of donors who have supported our work to develop new immunotherapies for patients who do not respond to standard treatments.



Meet our new recruits

We have been busy over the past year with recruitment of new research experts to strengthen and expand our work in key strategic areas.

We recruited 10 new research teams in 2018/19, and we are pleased to welcome a selection of our new Team Leaders here.



Professor Christina Yap
Professor of Clinical Trials
Biostatistics

Professor Christina Yap joins our Clinical Trials and Statistics Unit, bringing with her more than 15 years' experience in the design and analysis of clinical trials. She was previously working at the University of Birmingham.

She has a keen interest in innovative methodologies for running and analysing clinical trials so they can be used to their best potential to influence clinical practice.

““”

We know that intelligent trial design plays a vital role in reducing the time it takes for new treatments to reach patients, by helping to generate the required standard of evidence for drug approvals from regulatory bodies such as NICE more quickly.



Professor Nicholas James
Professor of Prostate and
Bladder Cancer Research

Professor Nicholas James joins us in the Division of Radiotherapy and Imaging, as a specialist in bladder and prostate cancer.

He brings a wealth of expertise in evaluating new treatment approaches via large, multi-centre trials. He is the Chief Investigator on the STAMPEDE trial, which has been recruiting men with advanced prostate cancer to a rolling programme of different clinical questions for 14 years.

““”

I look forward to collaborating with the huge range of world-class scientists and clinicians working both at the ICR and The Royal Marsden.



Dr Max Douglas
Team Leader in
Telomere Replication

Dr Max Douglas joins us from the Francis Crick Institute as a Team Leader in the Division of Cancer Biology.

His research focuses on telomeres – protective sections of DNA found at the end of our chromosomes. Every time a cell divides, its telomeres get shorter, eventually getting so short that the cell can no longer divide. Cancer cells are able to overcome this barrier to cell division by altering their telomeres.

At the ICR, Dr Douglas will research how cancer cells do this, and he hopes to identify possible new ways to target and treat cancer. Dr Douglas' research is a close fit with other work in the division, notably that of Dr Gideon Coster and Dr Sebastian Guettler, who readers may remember from previous fundraising appeals.



Professor Terence Rabbitts FRS
Professor of Chromosomal
Translocations and Intracellular
Antibody Therapeutics

Renowned molecular immunologist Professor Terence Rabbitts joins us from the University of Oxford's Weatherall Institute of Molecular Medicine.

His research focuses on the development of new technologies to target and knock out the function of cancer-causing proteins inside cells. Antibody molecules contain a sensor region that is responsible for identifying a particular target. Professor Rabbitts uses these 'antibody fragments' to identify and target more difficult to drug cancer proteins.

The goal is to use these fragments to study cancer development as well as potential new cancer therapies. Professor Rabbitts is also exploring novel ways of getting the antibody fragments inside cells using nanoparticles.

““”

The unique combination of basic science and clinical expertise at the ICR will provide some really exciting collaborative opportunities!

““”

I am looking forward to working in the ICR's Cancer Therapeutics Unit where drug discovery is the central theme.

Keeping one step ahead of cancer evolution

Cancer is able to evolve rapidly and adapt to changes in its environment – which is why drugs that show promise at first can often stop working, as cancer finds a way to evade the effects of treatment. Researchers in our new Centre for Cancer Drug Discovery will seek to put us one step ahead of cancer, by anticipating how it will develop resistance over time and creating new anti-evolution treatments that leave cancer with no escape routes.

Knowing how a cancer is likely to evolve over time and when it might return after treatment could transform the care that patients receive. Gaining knowledge like this about cancer would give doctors time to prepare for the next step in treatment, perhaps by switching the patient to an alternative drug or enrolling them in a clinical trial.

Until recently these kinds of predictive powers about cancer were in the realm of science fiction. But now our researchers are pioneering innovative new ways to understand and overcome cancer evolution and drug resistance, with the potential to give patients many more years of life.

Tracking tumour evolution over time

Professors Andrea Sottoriva and Nicola Valeri, two experts in cancer evolution, are looking at how blood tests could be used to predict when a cancer is likely to return, without the need for invasive biopsies.

They teamed up to develop a system that applies some of the same principles used in forecasting the weather to make accurate predictions of how individual bowel cancers will evolve and become resistant to cancer drugs.

Around half of patients with an aggressive form of bowel cancer will respond to a drug called cetuximab, but virtually all these patients will eventually see their cancer return as it becomes resistant to treatment.

““”

Forecasting how tumours will evolve in individual people with bowel cancer could open up the very exciting possibility of using liquid biopsies for personalised, adaptive treatment.

Professor Nicola Valeri

However, it turns out that tiny fragments of DNA shed by tumours into the bloodstream can provide clues about how their cancer is evolving and help scientists predict when it is likely to become resistant to treatment. In their study, Professors Sottoriva and Valeri used blood samples as a 'liquid biopsy' to gain important information about the tumour, and how it was changing.

The DNA the tumour sheds into the bloodstream allows our scientists to get a more detailed picture of the tumour, without needing to perform anything other than a simple blood test.

The researchers fed data into a computer modelling system, in order to anticipate how long it would take an individual cancer to stop responding to cetuximab.

Professor Valeri, Professor of Gastrointestinal Cancer Biology and Genomics, explains: "Our study showed that liquid biopsies are better than traditional tissue biopsies at picking out people with bowel cancer whose tumours are unlikely to respond to cetuximab.

"We also found that analysing tumour DNA from frequent blood samples, which are already taken throughout a person's treatment, can help predict cancer's next move.

"Forecasting how tumours will evolve in individual people with bowel cancer could open up the very exciting possibility of using liquid biopsies for personalised, adaptive treatment."

Finding cancer's weak spot

Another ICR research programme, led by Dr Marco Gerlinger, Team Leader in Translational Oncogenomics, has uncovered further information about how cancers are able to evade treatments, and provides an early glimpse of what adaptive treatment might look like.

His studies have found that aggressive, highly mutated cancers evolve escape routes in response to immune attacks in an 'evolutionary arms race' between cancer and the immune system.



Dr Marco Gerlinger

Cancers of the gullet and stomach with faults in their systems for repairing DNA build up huge numbers of genetic mutations which make them resistant to treatments such as chemotherapy. But their high number of mutations means they look 'foreign' to the immune system and this leaves them vulnerable to attack.

That could also mean they are more susceptible to new immunotherapies, which harness the power of the immune system to fight against tumours.

Understanding how the arms race between tumour and immune system progresses, and which processes give cancer its edge, could help optimise future approaches to treatment.

Dr Gerlinger explains: "Our new study has shown that in highly mutated tumours, cancer and the immune system are engaged in an evolutionary arms race in which they continually find new ways to outflank one another.

"Watching hyper-mutated tumours and immune cells co-evolve in such detail has shown that the immune system can keep up with changes in cancer, which can become resistant to current cancer therapies. It suggests that we could use immunotherapies to shift the balance of this arms race, extending patients' lives.

In focus

“Next, we plan to study the evolutionary link between hyper-mutant tumours and the immune system as part of a new clinical trial looking at the possible benefit of immunotherapy in bowel cancer.”

Another of Dr Gerlinger’s recent studies has found a potential weakness in bowel cancers that have developed resistance to cetuximab which could be exploited by follow-up treatment. His team showed that patients whose cancers develop resistance to cetuximab could be good candidates for treatment with immunotherapy.

The researchers discovered that in these cancers, cells from surrounding tissues move inside the tumour, nurturing the cancer cells and helping them grow. But these changes also attract immune cells to the site of the tumour, and that could make the cancer cells easier for the immune system to spot – raising the prospect that immunotherapy could be an effective treatment.

Dr Gerlinger says: “We have shone a light on the complex biology that lies behind the ability of bowel cancers to evade treatment with the targeted drug, cetuximab.

“Most bowel cancers are ‘immune deserts’ – so it’s enormously exciting to see that cetuximab attracts immune cells into these tumours. I’m eager to see if immunotherapy can unleash the immune cells and shrink these tumours.

“Our findings could also lead to better tests so that people with changes in their tumours that mean they’re unlikely to respond to cetuximab – or likely to stop responding – could be spared unnecessary treatment.”

“““

We plan to study the evolutionary link between hyper-mutant tumours and the immune system as part of a new clinical trial looking at the possible benefit of immunotherapy in bowel cancer.

Dr Marco Gerlinger



Professor Andrea Sottoriva (left)

New anti-evolution treatments

Dr Gerlinger and Professor Sottoriva are among the researchers who this year will be moving into the Centre for Cancer Drug Discovery, a new building which will house a cutting-edge drug discovery programme and provide a base for our world-class researchers to collaborate on addressing the challenges of cancer evolution.

Unravelling cancer’s complexity, adaptability and evolutionary processes will be at the heart of the research taking place in the new Centre. The new building will host the world’s first ‘Darwinian’ drug discovery programme designed to outsmart cancer by overcoming or preventing cancer evolution and drug resistance. Through this new research we will create smarter, kinder treatments, so patients with cancer can live longer, healthier lives, and get the chance to finish all the things they have started.

“Living well with cancer is my reality”



Karen O'Malley with her grandchild

“At this point, my oncologist told me I was no longer curable. She started talking about palliative chemotherapy, and said if this didn’t work, I would have six to nine months. But, even if it did, I was not expected to live beyond the year.

“The news broke me. I didn’t want to get out of bed, and I didn’t know what to do.

“But then I was put onto FOLFIRI and cetuximab, and within weeks it started working. I had the surgery I needed to remove the tumours three years ago, and I’ve been on continuous chemotherapy ever since.

“It’s been the start of a whole new life for me. Thanks to my treatment, I’ve been able to welcome my three grandchildren into the world, and as a trained midwife many years ago, I delivered one of them at home in the bath when he decided he couldn’t wait to go to hospital!

“I feel like I have a new lease of life. I spend most of my time now with my grandchildren and my new puppy, and I’ve started wild swimming as it makes me feel so alive.

“I’m not kidding myself that the cancer’s gone, but just because I’m not ‘curable’, it doesn’t mean I’m not treatable. The last few years have brought so much joy to my life, and I’m incredibly grateful for everything I’ve been here to experience. Living well with cancer is my reality, and the ICR’s pioneering anti-evolution drug discovery programme will make it a reality for so many more.”

The ICR’s researchers are now working to open up more treatment options for patients with bowel cancer whose tumours have stopped responding to cetuximab, as part of their strategy to understand and overcome cancer evolution – an approach which lies at the heart of the research programme at the Centre for Cancer Drug Discovery.

Our new Centre for Cancer Drug Discovery will explore evolutionary approaches to treatment, so even patients with advanced cancer can manage their disease long term or be cured.

We spoke to Karen O’Malley, who was diagnosed with bowel cancer in 2015 when she was 53. She is currently on her 82nd cycle of FOLFIRI chemotherapy and the targeted drug cetuximab.

“I’d gone to hospital for emergency surgery to remove what they thought was an abscess in my appendix, and then I woke up to be told a mass had been removed from my large intestine. It was an absolutely horrific shock.

“I started chemotherapy shortly after, but then it was discovered that the cancer had spread further into my peritoneum and into my liver.

‘Poem on a pill’ cuts cancer down to size



Poet Laureate Simon Armitage with the engraved pill

In 2019 the ICR commissioned Poet Laureate Simon Armitage to write a poem for us, to support our fundraising appeal for the Centre for Cancer Drug Discovery.

The poem was engraved onto a replica cancer pill by micro-engraver Graham Short, and it will go on display in the new building when it opens later this year.

Simon's poem, and the micro-engraving of it, conveys the incredible precision science that we carry out to understand cancer, and which will underpin the creation of a new generation of cancer treatments in the new Centre.

Watch Simon Armitage read his poem at icr.ac.uk/poem

Finishing it

I can't configure
a tablet
chiselled by God's finger

or forge
a scrawled prescription,
but here's an inscription, formed

on the small white dot
of its own
full stop,

the sugared pill
of a poem, one sentence
that speaks ill

of illness itself, bullet
with cancer's name
carved brazenly on it.

£10,000 raised in memory of inspirational fundraiser

We were incredibly sad to learn of the death of Tim Morgan in November last year. Tim was a brilliant fundraiser, raising more than £270,000 to support bowel cancer research at the ICR.

In 2015, Tim was diagnosed with stage 4 bowel cancer. In 2016, while he received experimental targeted therapy, he and 10 of his friends and family took on the Dartmoor Demon race, a gruelling 90km cycle ride with a 1,600-metre climb. This punishing cycling challenge was described as the 'hardest event in the Cycling Weekly Sportive Series'. The team's remarkable efforts were recognised when they made it to the final of the JustGiving Fundraising Team of the Year Award.

The money Tim raised has helped ICR scientist Dr Marco Gerlinger to understand drug resistance in advanced bowel cancer. Dr Gerlinger has developed a liquid biopsy test that can identify genetic changes in cancer from blood samples, and used it to track how bowel cancer cells become resistant to an antibody treatment called cetuximab.

Tim's friends and family have donated a very generous total of £10,000 to the ICR in Tim's memory. This kind support will be directed towards Dr Gerlinger's research into bowel cancer, to ensure that Tim's legacy helps to improve the outcome for others with this disease.



To donate in memory
of Tim, please visit
[justgiving.com/
tim-a-morgan](http://justgiving.com/tim-a-morgan)

Tim (left) with his children, Dr Marco Gerlinger and Professor Paul Workman, presenting the cheque from his incredible fundraising efforts.

