REPLACEMENT NEWS

Autumn 2021- Issue 131

50 1970-2020 YEARS

ANIMAL FREE RESEARCH UK

Inside:

Diabetes Breakthrough

#TargetZero Parliament Debate

Economic Report

A gift for the future

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A moment of reflection

I had planned to use this page as usual – to introduce the latest edition of Rep News and all the great features within, from our Science Conference next month, to the great work on diabetes at the ARC 2.0 in Exeter, to our new Pioneer's Medal and the amazing fundraising events that are back - plus all the other items celebrating our and your work in between. They are all inside of course, waiting to inform and update you.

But I am sure you'll agree, it is only right to take a moment to reflect on the work of and pay tribute to a great a leader in animal protection, Sir David Amess, the

late Southend-on-Sea MP.

Sir David was a friend to many in our animal protection community and a vocal supporter of our collective desire to make the world - especially the UK - a fit and proper place for animals. He died close to the first anniversary of the inaugural AGM of the then new All-Party Parliamentary Group, which is tasked - via discussions with politicians, the human relevant life sciences sector, third sector groups including Animal Free Research UK, scientists and stakeholders - to accelerate the development and uptake of human relevant sciences in the UK.

Sir David was the vice chair, and over the past year and with his foot passionately pressed on the collective accelerator, the growing evidence of how pioneering human relevant medical research techniques can bring about better health and end the outdated use of animals is being heard loud and clear along the corridors of power.

Sir David will be greatly missed, and we shall pay homage to him and his signature doggedness by continuing the good fight for a kinder science and an end of animal use, emboldened as we are by his memory and by his legacy.

Sadness aside, I do hope you enjoy this last edition of Rep News for 2021. It's been another fascinating, landmark year for Animal Free Research UK - and it is all thanks to your generosity and loyal support.

With grateful thanks,

CARLA OWEN
Chief Executive

A TRIBUTE TO OUR FRIEND, SIR DAVID AMESS

The loss of Sir David Amess is felt widely inside and outside of British politics - especially among animal welfare and protection organisations beyond party politics. He was a great friend of Animal Free Research UK.

The MP for Southend-on-Sea was the Vice Chair of the All-Party Parliamentary Group on Human Relevant Science, and he was a strong supporter of the Alliance for Human Relevant Science.

In March 2020, he tabled an Early Day Motion on the need to accelerate human relevant science. This was signed by over 100 MPs, demonstrating powerful cross-party support for transforming medical research.

Sir David Amess supporting World Animal Free Research Day

Earlier this year Sir David tabled Parliamentary Questions about the use of animals in Covid-19 research, following our concerns about this subject - demonstrating once more his continued commitment to speaking out for animals, even at a time of national crisis.

And in May he threw his support for our first ever World Animal Free Research Day helping raise awareness of our annual flagship event.

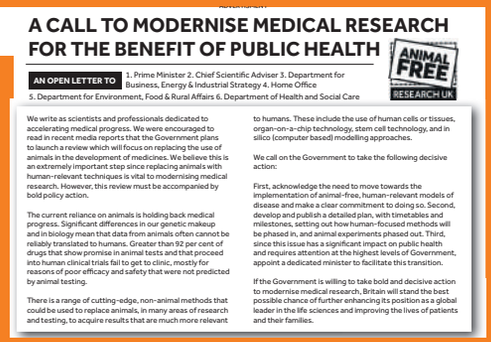
Animal Free Research UK Secretary, Sally Luther recalled his opening speech at the Alliance launch at the House of Commons a few years ago.

"He appeared to be an MP of the finest order: welcoming, putting us all at ease, passionate about the cause he was helping us to support and in every way a considered, well informed, kind and accessible person."

Animal Free Research UK Patron, Joanna Lumley spoke for us all, saying:

> "The death of Sir David is a tragedy for all including those involved in advancing animal protection, and we will remember him always for his dedication and determination to make medical research a kinder science. All our thoughts are with the family of this forward-thinking, compassionate, warm and thoughtful man who dedicated his life to the people he served and the animals he fought for."

A call to modernise medical research



A CALL TO MODERNISE MEDICAL RESEARCH FOR THE BENEFIT OF PUBLIC HEALTH

ANIMAL FREE RESEARCH UK

AN OPEN LETTER TO 1. Prime Minister 2. Chief Scientific Adviser 3. Department for Business, Energy & Industrial Strategy 4. Home Office 5. Department for Environment, Food & Rural Affairs 6. Department of Health and Social Care

We write as scientists and professionals dedicated to accelerating medical progress. We were encouraged to read in recent media reports that the Government plans to launch a review which will focus on replacing the use of animals in the development of medicines. We believe this is an extremely important step since replacing animals with human-relevant techniques is vital to modernising medical research. However, this review must be accompanied by bold policy action.

The current reliance on animals is holding back medical progress. Significant differences in our genetic makeup and in biology mean that data from animals often cannot be reliably translated to humans. Greater than 92 per cent of drugs that show promise in animal tests and that proceed into human clinical trials fail to get to clinic, mostly for reasons of poor efficacy and safety that were not predicted by animal testing.

There is a range of cutting-edge, non-animal methods that could be used to replace animals, in many areas of research and testing, to acquire results that are much more relevant to humans. These include the use of human cells or tissues, organ-on-a-chip technology, stem cell technology, and in silico (computer based) modelling approaches.

We call on the Government to take the following decisive action:

First, acknowledge the need to move towards the implementation of animal-free, human-relevant models of disease and make a clear commitment to doing so. Second, develop and publish a detailed plan, with timetables and milestones, setting out how human-focused methods will be phased in, and animal experiments phased out. Third, since this issue has a significant impact on public health and requires attention at the highest levels of Government, appoint a dedicated minister to facilitate this transition.

If the Government is willing to take bold and decisive action to modernise medical research, Britain will stand the best possible chance of further enhancing its position as a global leader in the life sciences and improving the lives of patients and their families.

In August we published an open letter in The Guardian where seventy-four scientists and academics joined forces with Animal Free Research UK to call on the Government to take bold and decisive action to modernise medical research for the benefit of public health.

Reports of a Government plan to launch a review focussing on replacing the use of animals in the development of medicines is an extremely important step - because replacing animals with human-relevant techniques is vital to modernising medical research. However, this review must be accompanied by bold policy action.

We are calling on the Government to make a clear commitment to implementing animal-free, human relevant research approaches, to develop a concrete plan to end the use of animals in research, and to appoint a dedicated minister to facilitate this transition to modernise medical research.

Animal Free Research UK's Science Conference

We are excited to announce our annual science conference this year themed Modernising Medical Research is to take place on December 14th and 15th 2021 in Birmingham.

The showcase will feature a slew of lectures, round table discussions and keynote speeches from leading research scientists from around the British Isles, Ireland and Europe.

Professor of Neuroscience at Durham University, Amanda Ellison will give the opening Keynote speech on 'A brighter future: where next for NAMs'.

A panel discussion on Science Engagement with decision makers will feature our Head of Public & Regulatory Affairs Isobel Hutchinson, Dr Martin Cliff and our University of Exeter ARC 2.0 prodigy Merlin Davies will join other young and upcoming animal free scientists for our Early Career Researchers Showcase.

A spotlight event will be the awarding of the first Animal Free Research UK Pioneers Medal. The specially commissioned medal will be awarded to the winner for their outstanding contribution in helping to make animal free the gold standard in UK laboratories. It promises to be an inspiring and exciting relaunch of our annual conference!

#TARGETZERO PETITION DEBATED IN PARLIAMENT

Significant events for animals in laboratories took place in October, with two high-profile petitions about animal experiments debated in Parliament.

One of these resulted from the #TargetZero campaign, which is a collaboration between Animal Free Research UK, Cruelty Free International and OneKind.

We were encouraged by strong calls during the debate for a kinder and more modern approach to research. We were also pleased to see work that we have championed reflected in the contributions, such as highlighting the economic potential of animal free techniques and calling for medical research to be modernised.

It was highly encouraging to see this critical issue represented in Parliament, since it has too often been absent from discussions in Westminster about animal welfare.

Earlier this year, the Government published its Action Plan for Animal Welfare, but animals in laboratories were given just one sentence, which committed to maintaining the status quo. For the millions of animals used in experiments, and the countless patients waiting for medical progress, the status quo is simply not good enough.

The debate was brought about by many thousands of compassionate people taking the time to speak out for animals. Over 83,000 people had signed the #TargetZero petition by that point, and we are hugely grateful to all of you who signed it. We believe that the petition has a very good chance of reaching 100,000 signatures by its closing date of 7th January, so please keep sharing with your network.

While the debate signalled important progress, it was marred by a great deal of sadness following the tragic death of Sir David Amess MP. Sir David was a dedicated and effective advocate for animals, who had served as the Vice-Chair of the All-Party Parliamentary Group on Human Relevant Science.

After compelling contributions from a wide range of MPs, it was followed by a response from the Minister for Science, Research and Innovation, George Freeman. This was comprehensive and contained some encouraging elements, but various points that were made deserve a response.

Firstly, the scientific problems with animal experiments cannot be over-emphasised. The Minister argued that animal tests are needed to ensure that humans are not exposed to harm, but research shows that fundamental differences between species mean that animal experiments are not (and can never be) a reliable predictor of whether substances will be safe for people. This can be illustrated by a simple example – chocolate is poisonous to dogs and paracetamol to cats, yet both these substances are generally safe for people.

While the Minister mentioned that animals in laboratories are covered by a specific law – the Animals (Scientific Procedures) Act 1986 abbreviated to ASPA, this does not mean that they are somehow offered a better standard of protection. Significant stress and distress are acknowledged as part and parcel of life in a laboratory for animals.

The Minister emphasised the legal requirement that animals can only be used when there is no non-animal method available. Sadly, we do not believe that this requirement is being taken seriously. The non-technical summaries of licences granted during the first half of 2020 show many examples of researchers failing to engage meaningfully with the question about their strategy in searching for non-animal alternatives, with a one-word answer provided in one case.

While the debate marked a key milestone, we are all too aware that we still have a very long way to go in achieving our vision of a world where human diseases are cured faster without animal suffering.

There's still time to sign the petition. We're keen to show that support for our case is growing and gaining a high number of signatures in your area will be especially helpful in enabling us to engage with your local MP.

www.animalfreeresearchuk.org/targetzero

In addition, we would ask you to take a moment to complete our new online action - urging your MP to speak out in favour of animal free research techniques, and highlighting the economic potential these offer.

www.animalfreeresearchuk.org/takeboldaction

We count on your continued support and look forward to working with you on this important issue. Together we can capture the momentum from the debate and use it to accelerate progress towards achieving a brighter future for animals and people.

Isobel Hutchinson
Head of Public & Regulatory Affairs

Animal Free Research Diabetes Breakthrough

Animal Free Research UK's Animal Replacement Centre of Excellence - ARC 2.0 - has made a major discovery in diabetes treatment and protection.

The University of Exeter team - backed by your generosity - have broken new ground into understanding the changes that can occur in insulin-producing cells.

Our scientists detected the gene responsible for changing the identity of beta cells in response to stress. Both type 1 and type 2 diabetes occur in part because of a loss of beta cells – this means the body does not produce enough insulin to regulate blood sugar.

It was already known the human body retains some beta cells that still function long after diagnosis. The new research brings the protection of these cells one significant step closer.

Professor Lorna Harries & Dr Nicola Jeffery

ARC 2.0 scientists found the gene responsible for changing the identity of beta cells in response to stress. This could lead to early intervention which would significantly boost the treatment or prevention of diabetes. Previous research had found that some loss of beta cells occurs because the cells change identity in response to the stresses that can arise from changes in fats or sugars in the blood. A proportion of these insulin-producing beta cells can become delta cells, which produce a different hormone, somatostatin. This can further reduce the body's ability to respond to insulin.

Although at an early stage, the new research utilises human cells instead of animal models, in a design which aims to ensure the findings are more likely to translate to finding new treatments.

Dr Nicola Jeffery - who led the research team which conducted the laboratory tests using entirely human cells and reagents - explained that by identifying which genes were differently activated in the cells which had changed. By inactivating these in turn, the animal free researchers discovered a gene called HNRNPD was found to be responsible for turning beta cells into delta cells in a similar proportion to

Dr Nicola Jeffery

what the team had previously observed in humans.

Added Nicola: "Finding the gene responsible for transforming beta cells into delta cells is really exciting. Diabetes is a major global health challenge, and we urgently need to find new treatments and prevention strategies.

"If we can intervene early enough, we may be able to protect surviving beta cells and find new routes to helping people continue to produce enough insulin to manage diabetes."

A report by Diabetes UK published last May also shows that over 4.9 million people are currently living with diabetes in the UK, with 90 per cent of those with type 2.

The report also detailed how:

- The number of people living with diabetes has hit an all-time high to reach over 4.9 million
- 13.6m people are now at increased risk of type 2 diabetes in the UK

Cases of diabetes diagnoses have doubled in the last 15 years so the need to find more effective treatment and protection has never been greater.

Professor Lorna Harries, who leads the University of Exeter's ARC 2.0, said: "These are of course early days, and we now need to understand exactly how HNRNPD brings about the changes in pancreatic cell identity we have seen.

"Once we are armed with that information, we may be able to step in and intervene to prevent these changes in cell identity."

Dr Jarrod Bailey, Science Director at Animal Free Research UK, said the "exciting and potentially very important discovery" illustrates the power of focusing on human biology from the off."

He added: "This could not have been done using animals, due to genetic differences that complicate rather than facilitate our understanding of human diseases like diabetes. And it could not have been done without the ongoing generosity of our loyal supporters."

We wish to acknowledge and express our heartfelt thanks to all supporters, with special mention to the Robert Luff Foundation for their generous contribution which enabled us to sustain our project with significant achievements.

Together we have the power to bring real change for humans and animals.

INVESTING IN INNOVATION - 'MINI HEARTS' PROJECT

Professor Chris Denning and his team at the University of Nottingham will be working to develop cutting edge human stem cell models, deepening our understanding of cardiac fibrosis - a prevailing cause of heart failure in the UK affecting 900,000 people annually.

Animal experiments in medical research have been poor predictors of cardiac fibrosis in humans – and despite huge scientific investment in animal-based research, there still is no effective treatment for the condition.

Their work will explore new research techniques (stem cell models) to speed up the discovery of treatments for this widespread problem, which touches the lives of so many.

According to the UK Stem Cell Foundation "stem cells offer the greatest potential in any area of medicine to treat some of humanity's most devastating and debilitating conditions".

A key cause of heart failure is cardiac fibrosis (thickening of the heart tissue). It is hard to treat, and the need to urgently tackle cardiac fibrosis is now well-recognised by clinicians, academics, industry, and biotech companies internationally. Patients with heart disease concurrent with cardiac fibrosis are 18 times more likely to be hospitalised and die, and currently there are no effective treatments.

This has fuelled a near-exponential rise in animal use in cardiac fibrosis research. In 1998, 4,800 animals were used, rising to 40,000 in 2018: a trajectory suggesting 70,000 animals per year will be used by 2030.

Cumulatively, cardiac fibrosis research over 32 years (1998-2030) will likely use 1.1 million animals.

"This over-reliance on animals has been poorly predictive of the human condition". Professor Chris Denning, University of Nottingham.

However, the way in which cardiac fibrosis occurs in animals differs substantially from the human disease in terms of mechanisms, severity, and timing. This inhibits the successful translation of findings from animals into understanding and treating the disease in humans. That's why there are no satisfactory drugs for cardiac fibrosis.

Instead, a more sophisticated 'all human' cell-based model is needed, wherein all key aspects can be regulated and refined to accurately mimic the disease. More human relevant techniques must be explored to have a chance of finding treatments.

Some cell-based models do exist for cardiac fibrosis. However, these have proved to be inadequate. So Chris and his multidisciplinary team at the University of Nottingham will use special cells (human induced stem-cells), which can be coaxed into forming the major cell types of the heart, called cardiomyocytes, cardiac fibroblasts, and endothelial cells. They will grow microtissues made of these three cell types to mimic patient heart function, including contraction, arrhythmia, failure, and death.

In the context of this 'tri-culture' model, they will ask:

1. Can cardiac fibroblast (largest cell population in the heart) behaviour be controlled? This is key, as they are responsible for maintaining the healthy structure and function of heart tissue.
2. How do cardiac fibroblasts affect cardiomyocyte function, (the cells responsible for generating contractile force in the intact heart) controlling the relaxation / contraction cycle of a normal heart?
3. How does heart function change when cells carry genetic mutations that affect heart function, such as mutations that cause hypertrophic cardiomyopathy (thickening of the heart muscle)?
4. Are there benefits from the commonly known antifibrotic drugs?

Success would be to provide a highly defined, human-relevant, reproducible, and controllable model – a model that will better serve cardiac research and would save the lives of hundreds of thousands of animals and people.

Chris and his team hope it will lead to drug development and testing. While developing this model, they will work closely with Dave Smith of AstraZeneca to understand appropriate routes to drug discovery.

Projects like these are the real hope to save humans and animals - and prove our scientists are true pioneers in animal free research. Their achievements are also those of committed supporters like you who are helping to prove that animal free research is the gold standard.

The Economic Case for Modernising Medical Research

A new economic report commissioned by Animal Free Research UK shows bold investment in new approach methodologies – aka NAMs – could see better treatments for patients, benefit the economy and make Britain a science superpower.

Medical research urgently needs to be modernised. Thousands of diseases affect humans but only around 500 have treatments available. As to why we have made only such modest wins in our long fight against human illness lies in the three million animals used in British laboratories each year. Patients remain waiting for progress in tackling devastating diseases such as Parkinson's and Alzheimer's because significant differences in our genetic makeup mean that data from animal experiments cannot be reliably translated to people.

To illustrate why using animals is a crude and outdated approach that is out of place in our increasingly high-tech society, let's consider two everyday items. First take chocolate – enjoyed by humans yet toxic to dogs. Second paracetamol – the go-to medicine to treat a range of symptoms for us humans, yet for cats these small miracle tablets can be deadly.

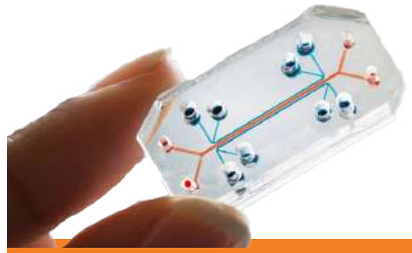
Consider also why over 92% of new drugs that look promising in animal tests fail to proceed to human trials.

Yet there is a solution that can lead the pursuit of medical researchers on our behalf towards a brighter future. At Animal Free Research UK, we fund researchers who use and develop cutting-edge techniques that will cure human diseases faster without animal suffering.

These New Approach Methodologies – or NAMs for short – include the use of human cells and tissues, artificial intelligence and organ-on-a-chip technology. The scientific and ethical argument for using such techniques has already been made clear, but we were keen to look at the economic impact to underscore the benefits of switching to NAMs.

So we commissioned the Centre for Economics and Business Research to assess the current size of the NAMs market and then forecast how it is likely to grow over the coming years. The results provide further compelling evidence of the need for government support in this area of public health.

The report estimates that in 2019, the UK NAMs industry contributed £2.3 billion in turnover and £592 million



Organ-on-a-chip technology

in Gross Value Added to the British economy.

It also suggests that NAMs are an area with high growth potential, forecasting continued growth over the coming years. In 2026, the UK NAMs industry's contribution to UK GDP is predicted to reach £2.5 billion. As well as their direct contribution to UK GDP, it is worth considering the potential of NAMs to benefit the economy more widely.

There is a key focus from Government on determining the UK's scientific strategy. Over the summer, the Prime Minister announced the creation of a National Science and Technology Council with a supporting office led by the Chief Scientific Adviser, Sir Patrick Vallance. The UK Innovation Strategy indicated that this new Council would determine a series of 'missions' which would be at the heart of the Government's scientific strategy and would address some of the key challenges facing the UK.

The release of this new economic evidence also coincides with another key event that will showcase Britain's approach to tackling major global challenges.

At the time of writing this article, the UK is hosting the UN Climate Change Conference. What is clear on how effectively the Government is tackling climate change, is that commitments have been made, targets have been set, and large-scale funding has been made available for this purpose. The UK government has a golden opportunity to be more progressive by recognizing the linkages between climate, health and animal welfare and spearhead modernising medical research accordingly.

Specifically, the Government should make large-scale grant funding available to support the further development of animal free techniques. Not only would this have major benefits for animals and public health, but it would place the UK at the forefront of a global industry with major economic potential.

While large-scale funding is of vital importance, it must be combined with bold policy action. Firstly, the Government must acknowledge the need to replace animals with cutting edge techniques and place this transition at the heart of its scientific strategy.

Secondly, it must develop a concrete plan for making this happen. And finally, it should create a new ministerial role to coordinate and oversee this vital transformation.

Modernising medical research to help boost the UK economy is within reach – but it depends on the Government being bold enough to wholeheartedly back the technologies of the future.

Isobel Hutchinson
Head of Public & Regulatory Affairs

SUMMER SCHOOL 2021

A glimpse into an animal free research future

All those who attended our Summer School's graduation event should feel optimistic and excited about the future – especially for animal free research.

I have genuinely never been so excited about the future within grasp for biomedical research – because each of those young Summer School students presented awe inspiring projects that left a veteran scientist like me astounded.

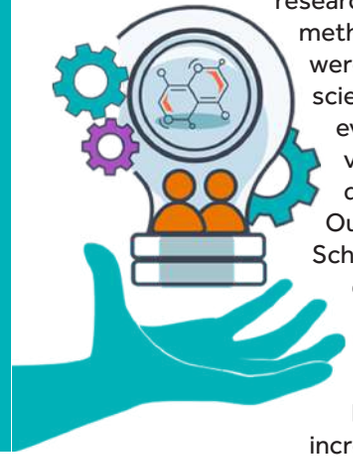
I was also inspired by the science we as a charity – thanks to our supporters – are funding.

The potential of the Summer School students' research will surely wow the stakeholders we are working with – the science community, academia, the private sector and politicians – to enact the change that needs to happen. The power of ground-breaking, humane science shone through from the gallery of early career scientists, who presented their projects with aplomb. Their passion, knowledge and clarity of thought and speech captivated their audience.

Reflecting on this most successful event, I am left firmly believing biomedical science is at an unprecedented point. As shown by our Summer School students, the research models and tools we now have at our disposal are so advanced, so capable, so brilliant, so ever improving, so human relevant that we now stand at a genuine inflection point. The change we seek is surely coming down the track.

Watching these amazing young researchers might have made me feel a tad old but I was exhilarated to be in the company of so many bright and keen young scientists.

As they walked us through their projects, I was reminded how the research tools and methods they use were a dream – science fiction, even – to us veterans three decades ago. Our Summer School students demonstrated just how far we've come. Progress has been utterly incredible.



What was clearly evident at the Summer School this year was just how effectively the new generation of medical researchers is deploying the new methods available to their science. It is young scientists like these who will reverse decades of failure and it is through their projects we got a good look at the future.

Modern human relevant research methods will tell us why people get certain diseases and conditions, how it happens and, crucially, what we can do about it by pointing the way towards new drugs that work and which are safe.

We will see personalised medicine, where an individual's genes, lifestyle and other factors are all taken into account to understand what's going on for them, and what solution to their conditions can be tailored to them.

It's clear that one day we will wonder why we ever experimented on animals.

We will ask why science persisted for so long in causing so much suffering to animals to only generate data that we struggled to apply to human conditions. And we will be left aghast as to why it took us so long to change medical research and to do better.

Our young scientists are accelerating that change. They demonstrated with clarity and confidence they have the power and knowledge to push the metamorphosis of biomedical research into the next stage – to not only help save the lives of 200 million animals used in scientific experiments around the world every year, but to also transform the lives of the almost eight billion people on our planet looking to science to understand the diseases we all fear, for ourselves, families and friends.

Their work is possible thanks to the passion and dedication of our loyal supporters who want to see better scientific research and an end to animal experiments that have little or no human relevance.

Let there be no doubt that our Summer School students are proof we do live in extraordinarily exciting times.

By Dr Jarrod Bailey
Science Director

FABULOUS FUNDRAISERS

Once again, from everyone here are Animal Free Research UK, we want to say a huge thank you to all of our supporters. We are overwhelmed by your incredible acts of generosity and kindness. You enable us to continue our fight towards a kinder science. You are the lifeblood of animal free research, and we simply wouldn't be here without you.

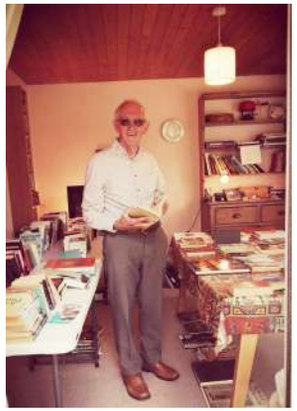
A Lucky Find!

Supporter Jenny Codlin was donated a gold necklace by Cathy, another group member, to help fundraise for Animal Free Research UK. Jenny could see the beautiful necklace was special and lost no time in whizzing to the local jewellers who confirmed it was indeed special. So special in fact that it sold for an amazing £336.22!

That really was a fabulous find. Thank you so much for your generous donation Cathy! And of course thank you to Jenny and Bude group for their continued support.

Garden book sale

Long time supporter, Michael Payne opened his garden as part of the Penarth Open Gardens event to fundraise in memory of his beloved wife, Rosemary.



A collection of Rosemary's fiction was on display, which attracted many locals but also visitors from Cardiff, Newport and the Welsh Valleys.

"It is a privilege for me to continue to support Animal Free Research UK in Rosemary's memory."

Thank you so much Michael. We are truly grateful and honoured that you choose to honour Rosemary's love for animals by supporting Animal Free Research UK.

Phoebe's art for animals

Our fabulous supporter Phoebe has been busy drawing to raise vital funds for Animal Free Research UK.

You can see regular updates and new pieces of art on Phoebe's JustGiving page. Such amazing work and talent!

Check out some of her fantastic creations and show your support for Phoebe!

www.justgiving.com/fundraising/Phoebe-Gasston

One delicious bake sale!

Here is Mary Owen, our very own CEO Carla's mum, who hosted a home made bake sale for Animal Free Research UK.

We can tell a lot of love and talent went into baking this huge selection of vegan cakes which went down a treat with the locals. So much so that Mary raised over £300!

Thank you so much Mary. Now I think we are all craving some cake!

CHALLENGE FOR CHANGE

Every minute of every day, 6 animals are used in research in the UK.

You can take action for animals by taking on our Challenge for Change!

Check out some of our amazing Challenge for Change fundraisers already making a difference.

Register to join at:

www.animalfreeresearchuk.org/challengeforchange

Lynne's swim for kinder science

Here is another one of our fantastic supporters, Lynne who completed the Swim Serpentine as part of Challenge for Change, swimming six miles in a fantastic time of 4 hours 33 minutes and 59 seconds.

"It was pretty exhausting but so glad I did it and raised the funds to help Animal Free Research UK. I really hope it goes someway to stopping the abuse of animals."

Well done Lynne – a fantastic accomplishment! And thank you so much for supporting Animal Free Research UK. Your support provides much needed funds to our ground-breaking work that will save animals from the laboratory and advance more human-relevant research.

Show your support for Lynne - www.justgiving.com/fundraising/Lynne-Wills-Super6

Isabel's Great North Run

Pictured is the wonderful Isabel who took on the challenge of the Great North Run for Animal Free Research UK. And what a great run Isabel had – she finished with a fantastic time of 1:54:23!

Well done Isabel. An amazing achievement! And thank you so much for choosing to fundraise for Animal Free Research UK. We cannot continue the work that we do without the support and dedication from people like you!

Show your support for Isabel - she is so close to her target! www.justgiving.com/fundraising/Isabel-Hill-GNR

And here's is our very own Isobel's marathon challenge

"I'm very excited to take on my Challenge for Change by running in the Brighton Marathon in April 2022, to raise funds for Animal Free Research UK!

I find running is a great way to enjoy some fresh air and green space and have been jogging at a leisurely pace for a few years. In 2020 I ran a half-marathon distance on my own, after the event I was going to run in was cancelled due to Covid-19.

I'm looking forward to experiencing the atmosphere of an in-person event and hope to raise plenty of funds to support Animal Free Research UK's brilliant work."

Show your support for Isobel - www.justgiving.com/fundraising/isobel-hutchinson

We cannot continue the work that we do without the grit, determination and generosity of our wonderful supporters - THANK YOU!

In memory

Honouring and remembering a loved one

Donating or fundraising in someone's memory is a very special and meaningful way to remember them – honouring their life and helping to end animal suffering.

We've been incredibly touched and grateful to receive support from Michael Payne in memory of his wife Rosemary.

She was a much admired priest and was among the early pioneers of those women who were finally able to be ordained to the priesthood and who were respected for their ministry before their gender.

She was a long-term vegetarian and animals were a significant part of her life especially dogs and horses.

Husband Michael said: "Rosemary had a highly responsible and caring approach towards animals, keeping horses, cats and dogs.

"She would carefully place spiders from the bath outside and would catch mice in her church in humane traps and then release them in a field half a mile away.

"She led an outdoor service where we gave thanks for animals, but was interrupted with gunfire from a local pheasant shoot".

"Her prayer changed so those killing animals for enjoyment would think again. This exemplary behaviour was noted by the many with whom she came into contact".

We are truly grateful and honoured that Rosemary's family chose to remember her with an in memory gift.

Her memory will live on in our work to end the use of animals in laboratories.

Rosemary Payne

Help us make Jamie's wish come true

It is when someone close passes away that we stop and reflect on our loss and wonder what medical treatment, cure or care might have avoided their departure. For us at Animal Free Research UK, our and your loss means a renewed commitment to find human relevant solutions without the killing of animals in laboratories.

We are celebrating Jamie's life, an unsung hero like many of you, generous and dedicated advocates, and volunteers for our cause. Jamie was a founding member of our Bude ambassadors' group. He was passionate about our cause and brought his energy and enthusiasm to many of the group's initiatives. Always kind, positive, warm, loving and calm he was an incredible role model to many of us who have been involved with ending the use of animals for medical research.

Jamie and the Bude group

Jamie

Jamie is very much missed, and his death has impacted us all greatly. His passing at too young an age after a short battle with cancer reminds us how we must forge ahead and accelerate changes in medical research, and to make breakthroughs that are truly the solution to our human diseases.

Our volunteer support group in Bude have raised an fantastic £1,082 to honour Jamie's memory and to make his wish that, one day, a cure for cancer in its many forms is made possible without animal suffering. This is the power of gifts made in memory of loved ones: their legacy continues alongside our shared journey to end animal experiments.

On behalf of Jamie, his Animal Free Research UK family in Bude and all of us – thank you! We are sure he is surrounded by the animals who have lost their lives in laboratories - and we know he already has his arms around them and they are taking very good care of each other.

A gift for the future

During our lifetime we each support charitable causes that are close to our hearts - those with which we share our values and beliefs. We see cruelty or injustice - and we are compelled to connect with likeminded people who also want a more compassionate future to become a reality.

The same is true after life: leaving a gift in your will is simply a continuation of those same values and experiences held so dear during life.

Because of this, and wanting to provide for family or friends, your will is one of the most important legal documents you will ever sign – and one of the most heartfelt demonstrations of support that an individual can make to a charity.

A lasting legacy

Alan and Kathie Stross, committed long-term supporters of ours, decided to leave us a gift in their will. We invested this in our Animal Replacement Centre of Excellence (ARC 1.0) at Queen Mary University of London's Blizard Institute. The Centre aims to further validate the most robust and applicable non-animal research methods for human cancer.

The kindness of Alan and Kathie has directly led to major scientific innovation at ARC 1.0 with the development of a 3D cancer model using human cancer cells. This was then used to build a "metastasis-on-a- chip" device which allows the migration of the cancerous cells, mimicking the process in a human body.

"Thankfully, the wheels are now turning towards humane methods of research and I want to be a part of that change, even after my life has ended, so leaving a legacy to Animal Free Research UK is the best way for me to achieve that."

Rosemary, a committed proud supporter and legacy pledger.

What will you leave behind?

We believe that we can bring an end to animals being used in medical research and every day we take a step closer as new discoveries are being unearthed - but we cannot do this without the generosity of our supporters.

After providing for your friends and family, we hope you'll consider including a gift in your will to Animal Free Research UK. Thank you.

For more information about Leaving a Legacy, please visit our website:
www.animalfreeresearchuk.org/leave-a-legacy

Should you wish to discuss this further or have any queries relating to leaving a gift in your will, please contact **legacies@animalfreeresearchuk.org**

Protect your family with an online will

Animal Free Research UK has partnered up with Beyond to offer a free will writing service to ensure your wishes are fulfilled.

Beyond are the UK's trusted companion for everything after life. Whether you're looking to sort out your will or you've recently lost someone, they are here to help. Every will made with Beyond is checked by their in-house team of legal experts.

To find out more visit **www.animalfreeresearchuk.org/beyond**

Email: legacies@animalfreeresearchuk.org **Telephone:** +44 (0)20 8054 9700
Registered charity in England and Wales (No. 1146896) and Scotland (No. SC045327)

WAYS YOU CAN HELP

There are many ways you can help raise funds for us – and many won't cost you a penny!

Shop for a Kinder Science

Welcome to the Animal Free Research UK shop!

We have a range of fabulous items for sale. Perfect as gifts for friends and family or as a treat for yourself.

And what's even better is that every purchase will support our vision for a kinder, compassionate science to build a brighter future for humans and for the animals.

SPECIAL OFFER: For every £60 you spend, you will get **£10 off!** Offer available online and valid between 22nd November - 5th December. Don't miss out!

Visit **shop.animalfreeresearchuk.org**

Make your birthday even more meaningful and set up a Facebook birthday fundraiser asking friends to donate as an alternative gift.

giftaid it

Add GiftAid to make your donations go even further! If you are a UK taxpayer, we will receive an extra 25p for every £1 donated!

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Select us as your charity of choice and then Amazon will donate every time you shop! Head over to smile.amazon.co.uk