

REPLACEMENT NEWS

Winter 2022 - Issue 136



Inside:
Our year in review
Pilot Study Grants
Mini Hearts Project update
Home Office Report

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A lot can happen in a year...

It has been an incredible journey for Animal Free Research UK over the past few years, and 2022 was no different.

Through the hard work and dedication of our supporters, scientists and team, we have been able to achieve so much more than we ever thought possible.

You may remember reading about our Mini Hearts Project last year which is set to help combat cardiac fibrosis – a prevailing cause of heart failure in the UK. Read updates on this pioneering project from the University of Nottingham on page 10.

Thanks to your continued support and generosity, we're able to fund a host of ground-breaking, human relevant research projects. Dr Dania Movia is developing a model to detect drug resistance earlier in lung cancer which you can read about on page 14, while Professor Lorna Harries and Laura Bramwell are investigating the role of sex hormones in ageing to discover preventative treatments for the common, chronic diseases of ageing – find out more on page 15.

You'll also find out more about the Pilot Study grants you're supporting on page 18, which explore innovative ideas in animal replacement research to advance human health.

It is thanks to you that these trailblazing scientists are working hard on the

frontline of modern medical research to not only advance human health but crucially prove just how outdated the use of animals truly is.

Animal Free Research UK is delighted and proud to be involved with the lifETIME CDT - a partnership aiming to accelerate therapeutic discovery by training innovative young researchers in the use of advanced human relevant techniques. You can read about Lauren, one of the students we are currently supporting through this programme on page 17 who has already made strides in her research career. It is heartening to support students like Lauren and indeed the lifETIME CDT project, and to hear how passionate she and her peers are about their work.

All our work is as ever all thanks to your unwavering support and generosity. Without you, the research that will secure a kinder science would not be taking place, and the animals who need us would lose their voice.

So on behalf of the scientists you help fund and all the animals you are fighting for, I offer heartfelt thanks. With you by our side, the months ahead are full of promise, hope and success.

With grateful thanks,



CARLA OWEN
 Chief Executive



Latest News



Professor Geoff Pilkington appointed as Chair

Professor Geoff Pilkington has been appointed the next Chair of Animal Free Research UK. He will succeed Laura-Jane Sheridan who steps down in Spring 2023.

Geoff, a Trustee and former member of our Scientific Advisory Panel, brings a wealth of experience and expertise with a decorated scientific career spanning 50 years in brain tumour research.

“It is an honour to take on the role of Chair at Animal Free Research UK. As a scientist, I know that animals are poor representations of humans and I am a strong advocate for using human models to study human diseases. New animal free approaches are proving time and again that animal research is outdated and not translatable to human disease. It is now more urgent than ever that we recognise their potential to ensure a brighter future for patients and animals.”



Professor
Geoff Pilkington

We're all looking forward to working with Geoff to drive forward the change needed to realise a world where human diseases are cured faster without animal suffering. Geoff's impressive medical research background and clear vision for the uptake of human relevant science will be instrumental in helping achieve our goal.

“I am incredibly proud to have served as Trustee and Chair at Animal Free Research UK. I know Geoff will be a fantastic Chair to guide the charity through implementation of its next strategy and I wish him and all at Animal Free Research UK the best of luck in this important work.”



Laura-Jane
Sheridan

From everyone at Animal Free Research UK, a heartfelt thank you to Laura-Jane for the dedication with which she has served during her tenure.

The FDA Modernisation Act 2.0: What does it mean, and what will follow?

In 2021, the European Medicines Agency - responsible for the safety and monitoring of medicines in the EU - put in place measures to encourage and accelerate the development and adoption of non-animal methods in the testing and approval of new human drugs. For those of us who are working hard to achieve change in this field, it was a concrete sign that attitudes are, belatedly but encouragingly, changing.

A further, potentially highly significant sign came in the past few months, with the U.S. congress FDA Modernization Act 2.0 adoption, causing a stir globally by not requiring anymore animal testing for developing drugs. This is big step forward, considered as a triumph by animal free research campaigners, after years of negotiation, petitions, and proactive battles with the FDA to use scientifically satisfactory alternatives. It marks the beginning of the transition towards modern, animal free toxicity testing process.

What happens in the U.S. hopefully will inspire change in the UK regulations.

The EU and the U.S. are at the tipping point of a great revolution in biomedical research and drug development, approaching the end of an era for animal testing. The UK has a choice to be part of the revolution and to maintain its position as a world leader in scientific innovations and medicine, or to be left behind by other countries that have greater vision and are embracing the change. Government, scientists, investors, and drug companies now need to rebuild their arsenal with New Approach Methodologies that have the potential to lead the impending era of human relevant, patient-centric research and drug discovery.

The end of AmazonSmile

Amazon have announced that they will be winding down Amazon Smile in February. The impact on small charities, including ourselves, will be significant.

Over the years we have received over £192,000 in donations from AmazonSmile. All thanks to you, our wonderful supporters.

Although sad news, there are many other ways that you can support us through your purchases including with EasyFundraising. Scan the QR code or find out more on page 22 to register and see your favourite brands donate to Animal Free Research UK whenever you shop with them.



SCAN ME

2022 in review

As we reflect on the past year, it is with your support that we have achieved many great things in 2022.

We have continued to champion animal free research, from funding pioneering initiatives like our Mini-Hearts project, to supporting students at our Summer School to be motivated and committed to become the next generation of animal free scientists.

Despite challenging circumstances around the world, we have continued to work towards a kinder science – bringing us closer to a world where animal research is a thing of the past.

Here are just a few of Animal Free Research UK's 2022 highlights...

#TargetZero campaign handed in to Downing Street



Carla Owen (Animal Free Research UK), Carol Royle, Michelle Thew (Cruelty Free International) & Bob Elliot (OneKind)

Influencing decision makers to change policy is a key focus area in our work.

At Downing Street, in collaboration with Cruelty Free International and OneKind, our Patron Carol Royle joined us to hand in our Target Zero petition which calls on the government to pro-actively plan to end animal testing in the UK.

Over 101,000 people signed the petition proving there is strong public support for ending outdated medical research. Every one of those signatures helped to urge the UK Government to listen to the public and commit to a clear action plan.

Pioneering animal free research

After pausing during the pandemic, we were also able to visit some exciting Animal Free Research UK funded projects in laboratories this year.

It was fantastic to tour Professor Chris Denning's lab at the University of Nottingham, where he and his team are working to develop cutting edge human cell models to study heart failure.



Professor Chris Denning

We also visited the Institute of Child Health at Great Ormond Street Children's Hospital where Dr Claire Smith and her team are developing a new 3D model of the lung to study RSV bronchiolitis – a life-threatening lung infection affecting 34,000 children in the UK each year.



Dr Claire Smith

And we are funding many other projects just like these, advancing the development of human relevant research for diseases including cancer, heart disease and Covid-19.

Parliamentary Reception

Thanks to Labour MP Luke Pollard, we hosted a reception at the House of Commons where we launched our Eight Steps to Accelerate Human Relevant Innovation – a manifesto that sets out how the UK can become a world leader in animal free science.

We were joined by our fantastic Patrons Dame Joanna Lumley and Carol Royle who both gave keynote speeches endorsing the Eight Steps and calling on the government to launch a formal inquiry into how the UK conducts medical research.



Carol Royle



Anna Firth MP



Dame Joanna Lumley



Luke Pollard MP

Summer Student Programme

Our Summer Student Programme gave early career scientists valuable laboratory experience in animal free medical research. 16 students spent the summer developing animal free research techniques to study a wide range of illnesses.

The Programme ended with a 2-day Summer School jam-packed with inspirational workshops to provide our young scientists with additional skills to help them develop their future careers.



Our class of 2022

Our Science Conference returned for 2022



Dr Don Ingber

In June, we were delighted to return to hosting our annual Science Conference. Over two days in Birmingham, we discussed our collective desire to benefit human health by pioneering, perfecting and transitioning to modern animal free medical research.

Attendees had a ringside seat in history – the awarding of our first Animal Free Research UK Pioneer Award to Dr Don Ingber, the founding director of Harvard University's Wyss Institute for Biologically Inspired Engineering. In 2010, Don developed a lung-on-a-chip – the first of its kind – making him a worthy winner of our inaugural award.

The UK's first Helpathon

In October we teamed up with the Alliance for Human Relevant Science and Dutch partners from the Transition Programme for Innovation to launch Britain's first Helpathon.

Helpathons - a pioneering initiative from the Netherlands - provide a safe space for scientists who want to move away from animal research to seek advice on how to go about it. This year, we were delighted to help Professor Jesmond Dalli and Dr Duco Koenis identify animal free research methods to study inflammation.



Prof Jesmond Dalli

Supporting pioneering science

We're currently funding nine pilot studies covering research topics including stroke, liver disease and breast cancer. Short pilot studies allow researchers to tap into blue-sky thinking and identify concepts with the potential to replace animals.

These pilot studies are making a difference.



The Animal Free Labcast

We were so excited to launch our podcast, The Animal Free Labcast, in 2022.

If you haven't already, make sure you have a listen. All episodes are available on our website, on Apple podcasts or wherever you listen to your podcasts. And make sure to leave us a review!



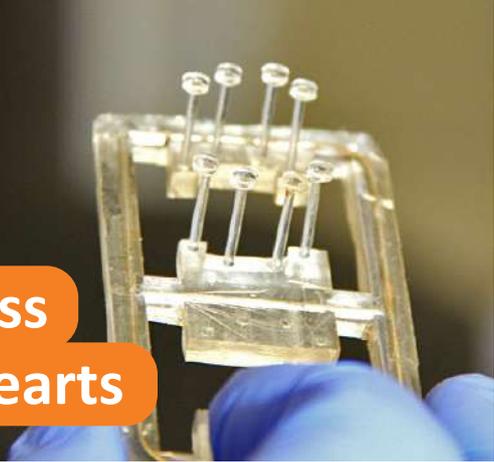
The launch of the Community of Practice

Partnering with the Alliance for Human Relevant Science, we also launched our Community of Practice aimed at stimulating collaboration between medical researchers, students, industry and others. We developed an online platform for this community to connect with each other, share ideas, and find creative solutions to problems. Collaboration is key to accelerating towards a kinder science – a science that benefits animals as well as humans.

As you can see a lot can happen in a year and we're sure the next will be no different. We are as ambitious as ever and excited by what 2023 will bring.

So just one last and important thing...from everyone at Animal Free Research UK we want to say a heartfelt thank you to you for your generosity and compassion for animals, without which we wouldn't have been able to achieve everything we have this year. Your support is deeply, deeply appreciated.

Pioneering progress to heal broken hearts



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

There are currently around 7.6 million people living with heart and circulatory diseases in the UK. Heart failure affects 900,000 people in the UK, with cardiac fibrosis being the leading cause. Animal research has been a poor predictor of cardiac fibrosis in humans – and despite huge scientific investment in animal-based research, there still is no effective treatment for the condition.

It is estimated that by 2030, over 1.1 million animals will have been used in the quest to find treatments for cardiac fibrosis.

Funded by Animal Free Research UK, the 'Mini Hearts' Research Project looks to deepen our understanding of cardiac fibrosis by using human stem cell models to support drug discovery, which could one day lead to ways to treat and help protect patients.

And we have some exciting progress to share with you.

Outcome 1: Finding the best way to grow cardiac fibroblasts from donated human stem cells.

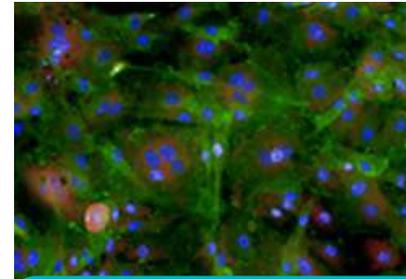
Cardiac fibrosis develops when cells called cardiac fibroblasts are damaged ultimately causing scar tissue to develop that interferes with the heart's ability to pump blood around the body.

Most ways for growing and maintaining cardiac fibroblasts using stem cells currently involve using animal-derived serum (obtained from the blood of calf foetuses) to help the cells grow.

The team in Nottingham have been working hard to optimise their approach to growing cardiac fibroblasts using animal free serum. They confirmed that they had grown the correct cell types by identifying two particular marker or flags that are found on cardiac fibroblast cells.

They used a technique called immunocytochemistry, which is where antibodies are attached to a fluorescent

dye. These antibodies are designed to hunt down the flags, after which they attach to them.



Immunocytochemistry image of cardiac fibroblasts grown in the lab using animal free serum

Special microscopes, which detect fluorescence, can then be used to spot the cardiac fibroblast cells. This work means the research team have now successfully developed a new fully human, animal free approach for growing high-purity cardiac fibroblasts in the lab.

Outcome 2: Controlling when cardiac fibroblasts change using animal free serum.

When cardiac fibroblasts become damaged (for example after a heart attack), they can sometimes change into cells known as myofibroblasts. These cells can create scar tissue and this can ultimately lead to heart failure.

Chris and his team have found that they can control the conversion of cardiac fibroblasts into myofibroblasts by blocking a molecule called TGF-beta (important in cell growth) which stops it from working.

The research team has now tested

the response of cardiac fibroblasts to TGF-beta using the animal free serum described in Outcome 1. When exposed to TGF-beta, over 80% of healthy cardiac fibroblasts transformed into myofibroblasts. But crucially, when blocking this protein, fewer than 20% of cardiac fibroblasts underwent this transformation. They also determined the optimal amount of blocker needed for this to happen.

Overview

Although only in year one of three, the project is already unearthing vital information which will better serve the future of heart research, potentially impacting the lives of hundreds of thousands of humans and animals.

What better outcome could there be if animal free research was to provide the key to understanding and treating these conditions? And thanks to your support and generosity, the progress of this life-saving project wouldn't have been possible.

"Through Animal Free Research UK and their committed supporters, we are delighted with the progress we have made so far in the Mini Hearts project. Once again, thank you for enabling us to carry out this important research."



Dr Kate Nguyen & Prof Chris Denning



Increasing pressure on Government to modernise medical research

One of the major challenges in securing progress for animals in laboratories is the secrecy that has typically surrounded the field of animal experiments. However, every so often, documents published by the Government offer a rare snapshot of information.

The latest document to be published was a series of annual reports from the Animals in Science Regulation Unit – the team within the Home Office that regulates animal experiments. In amongst dry corporate information is a disturbing record of incidents of ‘non-compliance’ – failings to comply with the law on animal experiments, or with the conditions attached to the licences given out for these.

NOTE: What follows are examples of incidents which we report in support of evidence and transparency, You may want to skip the next section of bullet points if you would rather not read these.

Examples of incidents include:

- Boxes of 112 live rats being moved in error to a compactor where they were crushed
- 4 dogs being given a substance that was not authorised.
- A monkey dying after becoming trapped behind a device in their enclosure and not noticed.
- 16 rats dying from suffocation after an isolator alarm and fan were switched off in error.
- 1,300 fish dying after a chlorine tablet was added to a reservoir tank in error.
- There were also numerous incidents of failing to provide animals with adequate food or water.

Shockingly, none of the breaches that were identified resulted in any form of prosecution and were mostly dealt with by measures such as ‘letters of reprimand’ or inspector advice, with licences being suspended or revoked in rare cases.

When the report was published, we did all we could to ensure that it was brought to the attention of the public. We worked with supportive MPs from across the political spectrum to raise these shocking failings in Parliament and press the Government for more ambitious action to replace animals with the human relevant techniques that you help to fund. This included preparing a detailed briefing document for parliamentarians, contacting the relevant Minister and setting up an online action to enable dedicated supporters like you to contact their MPs.

Over 1,500 of you kindly contacted your MPs to alert them to the shocking animal welfare failings in British laboratories

We did succeed in drawing attention to these disturbing revelations. An article about these was published by the Independent; 12 written questions were asked by MPs about it in Parliament; and 9 MPs agreed to contact the relevant ministers to raise their concerns.

While concrete changes always take time, these activities added significant weight to the growing pressure on the Government to take action in speeding up the transition to a kinder and more modern approach to medical research.

This is just one example of the work that you have made possible over the last few months to give animals used in experiments a voice in Parliament.

We have continued to meet with MPs to make the case for animal free research, including Kevan Jones and Minister for Social Care Helen Whately.

The Animals in Science Committee, which advises the Government on this area, invited us to submit evidence to its review of the Forced Swim Test – a shockingly outdated and unethical test that is still used in some mental health research. We submitted a detailed response explaining the scientific problems with this approach and the cutting-edge, animal free techniques that could be used instead.

We also submitted evidence to the new UK Committee on Research Integrity’s strategic plan, emphasising the need to ensure that human relevance sits at the heart of this.

While we are working hard to speed up the pace of change, we are encouraged to see growing parliamentary interest in this issue and more funding being made available for non-animal research.

In early December, the Government confirmed it had awarded £4.7 million to the development of new non-animal technologies.

While much greater funding is urgently needed, this represents a significant step forward and we are extremely grateful to you for working with us to generate the momentum that helps to bring about positive developments like this.

By Isobel Hutchinson
Public Affairs Director

Monitoring treatment response in lung cancer

Dr Dania Movia, at Trinity College Dublin, is developing a quicker, more cost-effective lab model to monitor and detect lung cancer drug resistance earlier, which could enable doctors to switch patients to more effective treatments quicker, vastly improving their outlook.

Lung cancer is one of the most common types of cancer, claiming the lives of almost 1.7 million people worldwide and almost 35,000 people in the UK. Treatment is sometimes too late as symptoms are often unnoticeable until the disease has spread through the lungs or into other parts of the body.

A more human relevant way of studying drug resistance is needed.

Dania is looking at how particles called 'extracellular vesicles' could lead to drug resistance in non-small-cell lung cancer, the most common type of lung cancer.

Extracellular vesicles are small, cargo-carrying particles that are released from cells. Their cargo can include genetic material (for example DNA), proteins, or chemicals important in cell communication. Some vesicles that tumours release can alter the composition of the environment that surrounds the cancer cells (known as the tumour microenvironment)

in such a way that it helps the cancer to thrive. This could be for example, by suppressing or killing immune cells, rendering them unable to effectively fight the cancer or by remodelling the tumour environment, making it easier for cancer cells to move and spread.

Dania is developing a quicker, more cost-effective lab model to monitor drug resistance. She's collecting lung fluid samples from lung cancer patients. The non-small-cell lung cancer cells, along with other cells, will then be grown within an environment that mimics human tumour tissue and enables the cancer cells to be tested with anti-cancer drugs.

This novel, fully humanised model of non-small-cell lung cancer (NSCLC) could pave the way to replace animals used in NSCLC drug testing, saving many animals' lives.

If drug resistance could be detected using this model earlier, doctors could switch to different, more effective treatments, vastly improving the prognosis for many lung cancer patients.

The role of sex hormones in ageing

Professor Lorna Harries and Laura Bramwell at the University of Exeter, are investigating the potential for synthetic sex hormones to target and reduce cell ageing enabling clinicians to influence the diseases at their roots, rather than merely attenuating their symptoms.

As we age, our risk of developing chronic diseases such as cancer, osteoporosis, cardiovascular disease and diabetes increases.

One of the 'hallmarks of ageing' is cell senescence. Most of our cells naturally divide, and this is how we grow, develop, and repair our tissues. Senescence is where our cells stop dividing and start to deteriorate, effectively marking the end of a cell's lifespan. Research shows that senescent cells can release chemicals which can also cause other cells to senesce, and it is the accumulation of these senescent cells that contributes to the adverse effects of ageing.

Women generally live longer than men largely because their health span is longer. After menopause, the risk of age-related diseases becomes more similar to men, which suggests female hormones may play a role in targeting and slowing down cell senescence and the development of disease.

Laura is investigating the potential for synthetic progesterones and

oestrogens (female sex hormones) to target and reduce cell senescence in the lab, effectively turning back the cells' ageing clock. She's treating ageing human cells grown in the lab, with plant hormones that are similar to human sex hormones to assess their influence on cell ageing.



Senescent skin cells

The team are also carrying out the first human trial of its kind to assess the potential of naturally occurring plant equivalents of human sex hormones as therapies for osteoarthritis and osteoporosis.

This research could identify targets to slow or halt cell ageing, providing a springboard for a future generation of preventative treatments for the common, chronic diseases of ageing.

F

irst-of-its-kind study validates organ-on-a-chip as a better approach to predict drug toxicity than animals

The conventional drug development system is lengthy, costly, and ineffective as it relies on animal research that fails to predict human reactions to new drugs. This is reflected by high failure rates – consistently over 92% of new drugs, which appeared safe and effective in animal tests, fail in human clinical trials. This is mostly for unforeseen issues with safety and efficacy.

Animal reliance in preclinical trials has caused the pharmaceutical industry to waste considerable time and resources developing many drugs that are destined to fail – but this can change.

Organ-on-a-chip technology involves growing human cells on small devices to mimic organs of the body, such as the liver. This technology could help predict and identify toxicities earlier, compared to conventional approaches including the use of animals.

The CEO of an organ-chip company called Emulate, Lorna Ewart, and colleagues have recently published a study in the prestigious journal Nature Communications Medicine. They analysed 870 individual human liver-chips to determine how well they predicted drug induced liver injury across a set of 27 known toxic and non-toxic drugs. The liver-chip system outperformed conventional models, with an 87% chance of predicting liver toxicity compared with 47% using 3D liver models and 0% using animals.

Experts also identified that liver-chips could generate over \$3 billion annually for the pharmaceutical industry. This money could go towards the development of safer, more effective drugs for patients.

These results suggest that widespread acceptance of organ-chips could replace animals, help minimize harm to patients, and generate billions in revenue for the pharmaceutical industry helping in the development of more effective drugs.

Animal Free Research UK celebrate this crucial step to overcoming huge failure rate in drug discovery and development, and towards the end of animal testing and research more generally.

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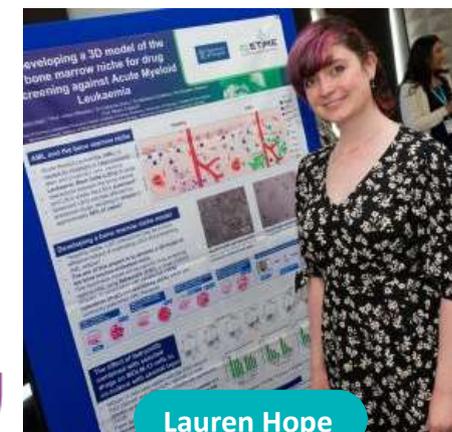
raining innovative young researchers in partnership with the LIFETIME CDT



Animal Free Research UK is delighted and proud to be involved with the lifETIME CDT - a partnership aiming to accelerate therapeutic discovery by training innovative young researchers in the use of advanced human relevant techniques. By replacing animal testing with these methods, this next generation of scientists will lead the way towards a more humane, more human relevant, more successful way of developing and testing new drugs.

One of the students we are currently supporting through this programme, Lauren Hope, recently wrote about how she took time out of her PhD research at Glasgow University (developing a 3D bone-marrow model to test new drugs against Acute Myeloid Leukaemia), for a 3-month placement with us.

“ Working with Animal Free Research UK was an excellent experience. Not only was this a great opportunity to learn more about animal free research, but it was interesting to learn about what happens behind the scenes at a charity organisation. Witnessing the interactions and collaborations between each department was excellent too – seeing how everyone works together to achieve one main goal. Additionally, my colleagues were kind and helpful, and it was such a privilege to work together. ”



Lauren Hope

Lauren is currently working with Professor Matt Dalby at the University of Glasgow on the Animal Free Research UK funded project to develop a 3D model of bone marrow to test drugs for blood cancer. You can read more about this project on our website: www.animalfreeresearchuk.org/active-projects

Pilot Studies



Animal Free Research UK award Pilot Study Grants to explore new ideas in animal replacement research that could advance human health.

The purpose of these grants is to allow researchers to tap into blue-sky thinking and identify concepts with replacement potential that merit further attention and development. It will also enable the collection and sharing of further data and findings which will lead to secure larger funding for the scientists.

Here are a few of our current Pilot Studies:

A human relevant approach to study brain damage caused by abnormal heart rhythm

Dr Adjanie Patabendige, Edge Hill University

Animals to be replaced:
dogs & horses

Irregular and often fast heartbeat, caused by a condition known as atrial fibrillation, can cause the flow of blood to the brain to change. This can lead to a breach in the blood brain barrier (a cell layer that prevents harmful substances from entering the brain) leading to brain damage and an increased chance of developing stroke or dementia.

Dr Adjanie Patabendige is building on an existing approach which uses human cells to recreate the blood brain barrier in the lab. She's modifying this system and using ECGs (heart rhythm recordings) from atrial fibrillation patients, to investigate what happens to the blood brain barrier when blood flow is altered. This will help her to understand how atrial fibrillation leads to brain damage.

A first of its kind for studying atrial fibrillation, this human relevant approach could have a profound impact on ending animal suffering. It could also advance our understanding of the effects of atrial fibrillation on the brain, guiding treatments and reducing the risk of brain damage and dementia.

Developing human mini-brain circuits to reveal new insights into stroke

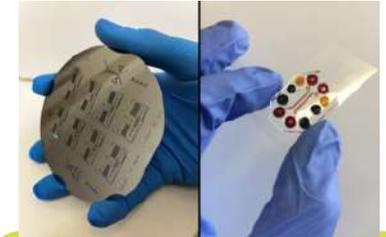
Dr Paul Holloway, Oxford University

Animals to be replaced:
mice, rats & fish

Strokes happen when the blood supply to part of the brain is cut off and is a leading cause of death and disability worldwide. Stroke research is one of the most failure-prone areas of research, with progress having stalled in the last 50 years.

New technologies are now enabling scientists to grow and study human neurons in the lab, but these tend to grow in a tangled arrangement rather than into ordered circuits like those found in the brain.

Dr Paul Holloway is developing a novel, human relevant approach to guide neurons into forming ordered, connected circuits. This will help uncover new insights into what happens during a stroke. He is using computer microchip technology to create a transparent, flexible chip with tiny channels that help guide neurons to make connections. These channels are filled with chemicals to mimic stroke.



Designs are etched onto Silicon wafers and then cast designs into a flexible transparent material to create cell culture devices with miniature channels

An improved lab model of stroke could have a drastic impact on ending the use of animals in stroke research and pave the way for the development of drugs that stop the injury spreading, limiting the severity of the stroke.

A novel nanomedicine for liver disease

Dr Ali Kermanizadeh, University of Derby

Animals to be replaced:
mice

Nanomedicine is a relatively new medical approach and involves using materials at the nano scale (one-billionth of a meter). Drugs can be packaged as 'cargo' and precisely targeted where needed, for example, the liver, meaning fewer side effects for people.

Dr Ali Kermanizadeh, at the University of Derby, has developed a novel nanomedicine, loaded with a strong anti-inflammatory cocktail, to treat liver disease. The nanomedicine is designed to deliver the drug 'cargo' slowly and continuously, meaning fewer invasive injections for people.

FABULOUS FUNDRAISERS

Another incredible end to the Bude group year of fundraising

A final craft fayre brought the Bude group 2022 fundraising total to £8,124.74.

And incredibly brings their overall fundraising total to over £48,000! What a fantastic achievement. We are overwhelmed by your dedication and incredible acts of kindness over the years.

If you haven't already, make sure you listen to our podcast, **The Animal Free Labcast**, where we were joined by the wonderful Steph Jones-Giles from the Bude group.

In the episode, Steph shares her passion for fundraising and explains why it is one of the best bits of her life. Learn about Steph's motivations for supporting us, her inspirational fundraising successes, and how she engages with her community in Bude, Cornwall, on animal free science.

Listen to Steph's episode of The Animal Free Labcast on Apple Podcast or wherever you listen to your podcasts.

Amy's double marathon for a kinder science



“ I will be running BOTH the Brighton Marathon and the Manchester Marathon in April - just 2 weeks apart!

I already know that it's going to hurt. A lot. But I have the freedom to choose to put myself through this pain and a voice to share my experience. The 3 million animals used for experiments in UK laboratories every year don't. They don't have a choice or a voice. But we do. ”

Good luck Amy! Your grit and determination is an inspiration to us all.

Show your support for Amy:

www.justgiving.com/fundraising/amy-stockley3



What will you leave behind?

What legacy would you like to leave to future generations?

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.

“ 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.

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



SCAN ME



You're everyday shopping can make a real difference



Sign up to easyfundraising and see your favourite brands donate to Animal Free Research UK whenever you shop with them.

EasyFundraising turn your daily shopping into every day magic!

They partner with over 7,000 brands who will donate part of what you spend and it won't cost you any extra.

And so far our amazing supporters have already raised nearly £8,500 for Animal Free Research UK!

Visit www.easyfundraising.org.uk to find out more and register!

FAQs

How much do brands donate when I shop with them?

Most brands pay a % of what you spend with them as a donation, and some retailers pay a flat amount.

How does Animal Free Research UK get paid the donations?

Once a quarter, EasyFundraising will send across all donations which have been paid out by the brands.

Does using easyfundraising make my online spend more expensive?

No. Using easyfundraising does not add any cost to your online shopping. The brand covers the cost of the donation meaning it's 100% free to use!

OTHER WAYS YOU CAN HELP



Your challenge, your way.

All you need to do is dream up a challenge to complete. Whether you decide to hula hoop for an hour a day, or you are already taking part in a challenge and want to fundraise for Animal Free Research UK – you choose your challenge.

There are no rules - the main thing is to get active, have fun and fundraise.

There is no fundraising target, we just ask that you raise as much as you can! However much, big or small, your donations will make a huge difference.

Email hello@animalfreeresearchuk.org for more info



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!



Welcome to the Animal Free Research UK shop!

shop.animalfreeresearchuk.org



SCAN ME



Animal Free Labcast

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