REPLACEMENT NEWS

Winter 2022 - Issue 132

50 1970-2020 YEARS

ANIMAL FREE RESEARCH UK

Inside:

Healing broken hearts

#TargetZero petition hand in

Covid-19 project update

Women & Girls in Science

Contents

CEO'S MESSAGE 3
LATEST NEWS 4
MINI HEARTS PROJECT 8
PROF CHRIS DENNING 10
COVID-19 PROJECT UPDATE 12
STRESS AWARENESS 14
CAROL ROYLE 16
WOMEN & GIRLS IN SCIENCE 18
FABULOUS FUNDRAISERS 20
CHALLENGE FOR CHANGE 21
A GIFT FOR THE FUTURE 22
WAYS YOU CAN HELP 23
CRUELTY FREE BEAUTY 24

BOARD OF TRUSTEES

CHAIR: Ms Laura-Jane Sheridan
VICE CHAIR: Mr Daniel Cameron
TREASURER: Mr Daniel Cameron
Dr Christopher (Kit) Byatt
Ms Julia Jones
Ms Michelle Chan
Ms Sandra Honess
Dr Martin Ashby

COMPANY SECRETARY: Ms Sally Luther

SCIENTIFIC ADVISORY PANEL

Professor Mike Philpott (Chair)
Dr Martin Clift
Dr Stephen Dunne
Professor Lorna Harries
Dr Dania Movia
Dr Malcolm Wilkinson

Animal Free Research UK
Formerly Dr Hadwen Trust
27 Old Gloucester Street
London WC1N 3AX

Tel: 020 8054 9700
hello@animalfreeresearchuk.org
www.animalfreeresearchuk.org

©Animal Free Research UK 2021

A registered charity in England and Wales (No. 1146896) and Scotland (No. SC045327)
A company limited by guarantee (No. 08015625) in England and Wales

A lot can happen in a year...

As we reflect on the past year, it is with your encouragement that we have, against the odds, achieved many great things in 2021.

We have continued to champion animal free research, from funding pioneering initiatives like our Diabetes Research project, to supporting students at our Summer School so that they remained motivated and committed to become the next generation of animal free scientists.

A lot can happen in a year and the next will be no different. We are as ambitious as ever and excited by what 2022 will bring.

February is of course the month for love and we highlight the project you are helping to fund at Nottingham University, where Professor Chris Denning and one of our funded students are - literally - working to heal broken hearts. They are developing animal free, cutting edge human stem cell models to deepen our understanding of cardiac fibrosis - a prevailing cause of heart failure in the UK affecting 900,000 people annually.

Thanks to you, our charity has been in the thick of the battle for victory. As you'll note on page 12, you helped fund scientists Professor Lorna Harries and Summer School protégé Merlin Davies at our Animal Replacement Centre of Excellence (ARC 2.0) at the University of Exeter. They optimised a test that not only detects the Covid-19 virus in humans, but which can also identify if someone is still infectious with the disease. This is a game changer in the testing system we need to help us return to normal.

Our Patron, actress Carol Royle led our delegation with our partners Cruelty Free International and OneKind up Downing Street to hand into Number 10 the 100,000 plus signatures which backed our #TargetZero petition demanding an end to outdated science. Carol has written about how she became involved with animal protection and our charity on p16.

We also have a focus on some of our female students and staff to highlight International Day of Women and Girls in Science which falls in February. And we have news about our Parliamentary reception during British Science Week in March, and more besides.

We also look ahead to April which is poignantly Stress Awareness Month for we humans. But what about for animals in laboratories? We try to answer that important question on p14.

I hope you'll agree that this is the perfect read to put a spring in our collective step as we march on together towards a kinder, better science.

With grateful thanks,

CARLA OWEN
Chief Executive

Latest News

Parliamentary reception at British Science Week

Animal Free Research UK will be hosting a parliamentary reception in the House of Commons during British Science Week in March.

Animal free research supporter and Conservative MP for Crawley, Henry Smith, will greet guests at the March 16 event along side our Science Director, Dr Jarrod Bailey, with both helping to explain and build support for our Modernising Medical Research Campaign.

Our Public Affairs Director, Isobel Hutchinson, says "We will use the event to help build a cross party consensus. This important week is a golden opportunity to further engage the Minister for Science, Research and Innovation and show how Britain is capable of leading the world towards a kinder science."

Ask your MP to Modernise Medical Research

Since it launched in May 2021, your support has helped our Modernising Medical Research campaign gain momentum.

Now, Martyn Day MP has tabled **Early Day Motion 674** calling on the Government to embrace the potential of New Approach Methodologies. It also highlights our call for a new role within Government to accelerate the replacement of animals with human relevant techniques. Establishing a new ministerial position would bring focus to this vital transformation.

Stand with us and use our quick and easy tool to ask your MP to sign Early Day Motion 674 supporting animal free research.

If you haven't already, please visit **www.animalfreeresearchuk.org/EDM674**

Our flagship Summer Student Programme is back for 2022!

This summer we're once again funding up to 15 early career scientists to work on pioneering projects to find treatments for human diseases using cutting-edge, humane research.

Now in its tenth year, our Summer Student Programme gives each student valuable laboratory and desk-based research experience where they can develop animal free research techniques and learn how human-relevant, non-animal science is vital in the fight against human diseases.

With your support we are kick starting careers with compassion and giving opportunities to a new generation of aspiring young scientists.

We'll be sharing more details about the chosen students and their pioneering projects in the summer so keep your eyes peeled.

Summer School protégé showcases 3D breast cancer model

Animal Free Research UK funded PhD student, Kerri Palmer, presented her work at the Pathological Society of GB & Ireland conference in January.

Kerri, who is currently part of a three-year study into the prevention of breast cancer at the University of Aberdeen, showcased her work on developing an animal free 3D model of breast tissue. She delivered an excellent talk and was one of four runner ups receiving a prize.

Fantastic work - congratulations Kerri!

#TargetZero petition handed in to Downing Street

Carla Owen - Animal Free Research UK, Carol Royle, Michelle - Cruelty Free International and Bob Elliot - OneKind

Animal Free Research UK, Cruelty Free International and OneKind have handed over our #TargetZero petition – which calls on the government to pro-actively plan an end to animal testing in the UK – to the Prime Minister's Office at 10 Downing Street.

We were joined by supporters and Carol Royle, actor and Patron of Animal Free Research UK.

Thanks to you, our committed loyal supporters, the petition gain over 101,000 signatures. It was originally launched following the release of the most recent annual Home Office statistics which highlighted stubbornly high number of animal experiments in Great Britain.

Despite the overwhelming public support for ending animal tests, around three million animals are used in experiments each year in the UK. On this current trajectory, and without Government intervention, it is estimated that animal tests will continue in the UK for at least another 90 years.

In 2020, Home Office statistics revealed that the number of experiments on dogs, cats and horses had risen, underlining that there is still no concerted effort to stop these experiments.

Research carried out by YouGov on behalf of Cruelty Free International shows the public wants to see action taken to end animal tests, with 7 in 10 (70%) finding it unacceptable for animal tests to continue to take place for the next 90 years and 65% wanting to see a plan to phase out animal experiments in the UK.

Additionally, polling we carried out in March 2021 found that over two-thirds (68%) of respondents would support ending animal experiments in medical research in the UK and replacing them with non-animal alternatives.

Together we hope that the #TargetZero petition will demonstrate the public's strong opposition towards animal testing and press the Government to end its reliance on outdated science. Instead, we urge Ministers to embrace effective and safe non-animal methods to discover treatments and cures for disease, illnesses and to ensure cruelty free product safety.

Our CEO, Carla, says: "There is a united front among the public and organisations to end outdated medical research and it's growing stronger and larger by the day. Britain is well placed to lead the world towards a kinder science – but it must end archaic practices which not only cause immense suffering but hinder research into human diseases.

Reform is urgently required if we are to secure our international reputation as a science superpower and a nation that cares for people and animals."

Cruelty Free INTERNATIONAL

Michelle Thew, Chief Executive Officer of Cruelty Free International, says: "We joined forces with Animal Free Research UK and OneKind and with the British public to show decision-makers how strongly people feel about ending animal testing once and for all.

We urge the Government to work across its departments and with stakeholders to come up with an ambitious and concerted plan that will finally bring an end to the suffering and death of millions of animals in this country every year."

OneKind
Ending cruelty to Scotland's animals

Bob Elliot, Director of OneKind, says: "The #TargetZero petition has shown the strong support amongst the public for a phase out of animal experimentation in the UK. We urge the UK Government to listen to the public and commit to a clear action plan to make this happen.

We also encourage the Scottish Government to take action. While the power to ban animal testing is reserved to the UK Government, with its world leading universities, pharmaceutical companies and life sciences sector, Scotland has a key role to play in accelerating the transition to humane science."

How to heal a broken heart...

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 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.

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

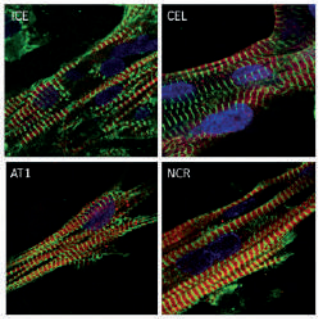
Instead, a more sophisticated 'all human' cell-based model is needed, wherein all key aspects can be regulated and refined to accurately mimic the disease. More human relevant techniques must be explored to have a chance of finding treatments.

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

This project will explore pioneering human relevant research techniques to speed up the discovery of treatments for this widespread problem, which touches the lives of so many.

At the Biodiscovery Institute, the team combine several remarkable technologies to understand why the heart goes wrong, how genetics and drugs interplay, and what we can do to fix these problems.

The first technology is called 'human induced pluripotent stem cells' or hiPSCs for short. This is where a small piece of skin, about the size of the head of a matchstick, is donated by a patient with heart disease. These cells can then be reprogrammed and coaxed into becoming heart cells with the same mutations the patient has.



Mini-heart immunofluorescence image

The second technology is called gene editing, which allows them to change the DNA sequence with precision. They can remove or introduce damaging mutations in the hiPSCs, then turn them into heart cells and ask what impact this has on heart function. For example, how do healthy versus diseased heart cells behave to different drugs? Does this influence who might be able to take the drugs?

By combining these two technologies in the current Animal Free Research UK funded project, Chris is researching drug interactions with these cells and how heart disease alters the way different heart cells respond to each other. This is particularly important for cardiac fibrosis, which significantly increases the likelihood of heart failure.

The project will deliver 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.

Technologies have evolved over the decades, and with pioneering projects like these using human stem cell models, we hope to be able to answer the most difficult of questions - how to heal a broken heart.

"On behalf of myself and the rest of the team at the University of Nottingham, I'd like to say a huge thank you to all of Animal Free Research UK's supporters. It's with your continued commitment that we are able to continue our pioneering research into treatments and cures for human diseases, without harming animals."

Professor Chris Denning

Professor Chris Denning

What is your role at the University of Nottingham?

I have two main roles. One as Director of the Biodiscovery Institute (BDI), which is the largest research facility at the University of Nottingham. The second is as Professor of Stem Cell Biology. The beauty of working in the BDI is not only the state-of-the-art facilities, but also the incredible breadth of interdisciplinary working – ranging from tackling climate change, through to understanding conditions such as cancer or lung, liver and (my own area) heart disease so we can pioneer new therapies.

How are modern medical research methods such as stem cell culture rendering animal-based experiments redundant?

Just because different animals share a broad category, such as being a 'mammal', does not mean the genetics and physiology are the same.

For example, the heart of a mouse works at 500 beats per minute relative to 60-80 beats per minute for humans. This means the mechanisms to regulate electrical activity and contraction are very different between these species. Testing whether drugs can mend a broken mouse heart is therefore a flawed approach and not a single drug shown to rescue heart failure in mice has translated into clinical use.

Also, rats are often more tolerant to cancer drugs and so animal tests might signal a drug to be safe, yet in humans it may cause unexpected side effects.

Just two of many examples of why we need human systems to understand human disease. This is why there is so much interest in human stem cell research.

What's been your most significant area of research?

I am proud of our work to investigate the heart disease called "hypertrophic cardiomyopathy". This is one of the causes of sudden cardiac death, which has led to the deaths of numerous football players during matches.

We combined stem cells and gene editing technologies to model this disease and are now testing whether we have discovered new ways to diagnose and treat this condition.

What's your assessment of the current state of animal free medical research - what are the big challenges?

Progress is being made but much more is needed.

Big areas that need attention are the differences in attitude towards animal research. For example, the USA and China have much more relaxed views. Also, different countries require different standards of care for animals. An impact of this is that expectations of the amount of validation via animal experiments differs by funder, publisher and reviewers.

Convincing all parts of society from the regulators, government, industry, clinical research organisations and so forth is slow and challenging.

Why is animal free research important?

Viewpoints differ dramatically based on who you speak to. First, many people in the UK will think humans have a moral and ethical duty to achieve animal free research, although this view is not shared by all nations. Second, others will be swayed by economics. For example, in 2015, there were over 6,000 medicines in the preclinical development stage, requiring millions of animals at a total cost of $11.3 billion. Of these medicines, less than one per cent made it to market. This is enormously wasteful in terms of animals and money, hence calls for more accurate, human relevant research.

What we do know is that human relevant research is vital in the fight against human diseases.

What advice would you give to young research scientist at the start of their careers?

Firstly, be inspiring and empower yourself to make things happen. In the Biodiscovery Institute at the University of Nottingham, we have started over 30 initiatives simply because early career researchers had an idea they wanted to develop – from Project Period (free sanitary products), through to 'Home Science Packs' to excite primary school kids about science.

Secondly, learn how to bounce back. Grant or paper rejections are always disappointing. But the winners are those who pick themselves up and try again.

Finally, value people. Achieving any goal will always be easier with a team on board. I have tried in my career to transition from telling and asking to instead, inspiring and empowering them. So, look after the people around you and your life will be richer for it.

Results could be a game changer in the fight against Covid-19

Animal Free Research UK funded scientists Professor Lorna Harries and Summer School protégé Merlin Davies from our Animal Replacement Centre of Excellence (ARC 2.0) at the University of Exeter have optimised a test that not only detects the Covid-19 virus in humans but can also identify if someone is still infectious with the disease.

During the drastic measures introduced in early 2020 to curb the Covid-19 pandemic, the team identified high levels of infection despite the public's careful adherence to the isolation rules and guidelines.

"Merlin and I are extremely grateful to Animal Free Research UK – and especially to you, our supporters for funding this important research."

Professor Lorna Harries

They knew back then the conventional PCR and lateral flow tests we have all become so familiar with, could show a positive result long after an individual had stopped being infectious – so they wanted a better way to identify who is still infectious from who is not.

Thanks to you, our generous supporters, Animal Free Research UK funded Lorna and her team to adapt the standard PCR test to see how long people infected with Covid-19 remain infectious.

What they found shocked many.

Whilst most people become clear of the virus within 10 days, the team's PCR test detected about 1 in 10 still have levels of active Covid-19 virus that could potentially lead to an infection in an exposed person.

After a 7-day isolation period it was 1 in 5, and after only 5 days it was 1 in 3 people. Furthermore, they couldn't tell who these people were from their clinical characteristics.

All of this research was carried out on the original strain of Covid-19 which first established a foothold in the UK. The current strains – Delta and Omicron – are more infectious, so the amount of virus needed to infect someone else could well be lower, and those numbers of infectious people could be higher.

We may all agree that it is necessary to balance the need to stop onward transmission and to keep the country running, so there has been pressure to cut the isolation period to a minimum.

Government guidance initially ordered those who tested positive to isolate for 10 days, and more recently this was reduced to 7 days and now a further reduction to 5 days.

The ARC 2.0 findings suggest that, especially with the reduced isolation time, it is very important for people to have two negative lateral flow tests 24hrs apart before re-entering society.

Crucially, the results also show where the consequences of onward transmission would be a real issue.

"In some settings, such as people returning to care homes after illness, people continuing to be infectious after ten days could pose a serious public health risk. We may need to ensure people in those setting have a negative active virus test to ensure they are no longer infectious. We now want to conduct larger trials to investigate this further."

Merlin Davies

Animal free research techniques are successfully being used in the fight against Covid-19, paving the way for the new approach to testing and research that we all want – a kinder science.

We could not have done this without your ongoing support.

In these exceptional, uncertain times, what is assured is that every one of us can make a difference – either by undertaking a kinder and more human relevant science, or by funding it.

April is Stress Awareness Month for humans, but what about animals in laboratories?

Few deny life in the 21st Century is stressful for humans so Stress Awareness Month, which falls every April, is a welcome diary date to reconnect with ourselves and regain certainty and control – but what about animals in laboratories?

Stress has been forced upon them for at least two millennia by humans (Hippocrates is among the first) practicing animal research - but yet where is the date in the diary to highlight and address their suffering?

It does not take much for the imagination to understand the plight of the millions of animals suffering in laboratories across the world.

Life for them is one where all control has been denied - and that's before experiments begin; the laboratory environment deprives them of the very basics required for physical and mental well-being.

Their distress has been documented and investigated, and it is accepted without question that they suffer from depression, anxiety, their physiological responses severely altered to the point of harming the individual.

Published earlier this year, a review of 200 scientific studies using rats and mice made the headlines in Canada's The Globe and Mail, which records six million readers weekly, and widely circulated on social media in scientific circles.

Led by scientists at the University of Guelph in Canada, researchers concluded that "conventional housing" of rats and mice in labs—consisting of small, barren cages or Perspex boxes—"appears sufficiently distressing to compromise their health."

They also stated that their findings added to previous work showing that "mice and rats used in research are typically exposed to CRAMPED", an acronym for cold, rotund, abnormal, male-biased, poorly surviving, enclosed and distressed.

This, concluded the researchers, raised "serious questions about the validity and generalisability of the data they generate."

The psychological and physiological damage is a serious welfare issue and that alone should result in an immediate end to animal-based experiments.

This had been known for decades. Yet here once again, in black and white, the report concluded beyond doubt that the stress put upon animals so affects their immune function, inflammatory responses, metabolism, diseases susceptibility and progression, and more besides, renders the reliability of any experimental results obtained null and void.

Add this to known biological differences between our species and the applicability of animal-based experiments to human health is nothing short of dangerous.

Yet for some among our science community, their only response seems to be to do more experiments on animals in laboratories to find out their stress levels.

It begs the question: just how large does the already huge amount of evidence generated need to be for everyone to look at the facts and agree to stop animal experiments - how much research do we need on this?

What is clear is current regulations governing such studies into the stress of animals in laboratories clearly do not ask enough or the right questions, like do we need to know what this research will find out? Do we know it already? Is it relevant to humans? Is it even relevant to the same types of animals who aren't in laboratories?

These questions need to be asked.

Of course, what should be taking place in the 21st Century with modern medical research methods readily available, is for scientists to stick to human-relevant research that benefits all – humans and animals.

Thankfully, attitudes and policy are shifting among our parliamentary law makers here in the UK and elsewhere. We and our partners lobby hard every day on behalf of our supporters to bring Britain and the world not only to their animal welfare senses, but also to understand how the new age of modern medical research has rendered animal-based research redundant.

During April's Stress Awareness Month, we should be minded to highlight the affect stress has on animals in laboratories as well as on us. By drawing parallels between human and animals during April, we have an opportunity to raise further the public consciousness and incite action.

Together we will once and for all end this unnecessary stress.

Britain must practice a kinder science

Carol Royle
Animal Free Research UK Patron

"The moment I decided to devote my life to standing up for animals I remember well.

I had been rehearsing late at The Central School of Speech and Drama and when I finally arrived home, my father, the late actor Derek Royle, was sitting in his chair watching the credits of the iconic TV series 'I Claudius'.

This was the must-watch TV drama of the time and had gripped the nation, and I sat down expecting to hear my father's thoughts on the production.

But instead, what captivated my attention was the high drama unfolding in the following TV programme - the late-night news. Scenes of butter and meat mountains filled the screen. Western Europe was suffering a glut of staples because of EU intervention to stabilise food prices.
I looked at my father and stated: "I am never going to eat meat again."

That was in 1973. I stopped eating fish not long after and eight years ago I swapped to a vegan diet and have not looked back.

That chance watching of the news 50 years ago opened a pandora's box of horrors of which I had been hitherto unaware. Those harrowing scenes of animal abuse and waste spurred me to learn all I could about intense factory farming, the brutal fur trade and animal experimentation.

Holding such beliefs and vocalising your anti-meat eating, anti-fur wearing and anti-animal experimentation beliefs during those times risked making you a social pariah. When I discussed my stance, I found some people to be overly defensive, tossing extraordinary and illogical arguments my way. Some verbally attacked me.

Reading became your armour so you could step onto the animal rights and cultural battlefield with confidence and knowledge. I learned how testing cosmetics and drugs on animals in laboratories is either inconclusive or downright dangerous for humans as well as the animals.

And I understood why because of our different genetic make-up many things – food, chemicals, plants, drugs – which may benefit us are toxic for animals and vice versa, often lethally so.

Appalled, I began writing letters to companies, magazines and newspapers about the immorality and unscientific exploitation of animals used as mere sacrificial testing apparatus for humans.

To my delight, some were printed - though it was more common for an editor to reply thanking me for my thoughts though politely refusing to publish.

One editor replied to my protest over an article about car safety, replete with a wretched photograph of a blindfolded brown bear strapped into the driver's seat of a car; this magnificent but confused animal was about to be catapulted into a brick wall to test the car for its passenger safety.

"Thank you for your letter..." began the editor's reply "but we are sure the powers that be know what they are doing."

Thank goodness we've come a long way from those unenlightened and patronising days, and I am thankful I have lived long enough to see this zeitgeist movement for animal welfare become a mainstay of any manifesto, be it political or corporate.

But we still have a long way to go. According to the 2020 Home Office records, nearly three million animals are used in experiments in Great Britain annually .

Yet in laboratories across the UK and the world, there are scientists – many funded by Animal Free Research UK - using cutting edge technologies such as 3D organ on-a-chip, human cell and stem-cell culture and Artificial Intelligence to research a slew of diseases and illness from cancer to dementia. These new methods give far more accurate conclusions compatible with humans. What's more, they deliver results and data faster and cheaper than outdated animal-based experiments.

So, half a century since I first started to stand up for animals, I recently found myself walking up Downing Street to hand into Number 10 a petition signed by over 100,000 people (see news story on page 6).
They all signed the #TargetZero

petition, which was launched by Animal Free Research UK, in collaboration with Cruelty Free International and OneKind, and which calls on the Government to take concrete action to phase out animal experiments once and for all.

I hope you can join me in spirit and in action by writing to your MPs, urging them to enable Britain to lead the way towards a kinder science for people and animals."

International Day of Women & Girls in Science

11 February 2022

In 2021, out of more than 600 Nobel medals awarded in scientific disciplines, only 23 went to women. According to UNESCO, today, only 33 per cent of researchers in the world are women. This clearly highlights a lack of diversity in science.

Women have led ground-breaking research into public health, vaccines, treatments and innovative technology, and have been on the front lines of the Covid-19 response as scientists, health care workers and more.

The world needs science, and science needs women and girls. So join us in celebrating those who are leading innovation and inspiration in the scientific world.

Here are just a few of the brilliant women scientists who are leading pioneering animal free research. All are working towards our collective goal – a world where human diseases are cured faster without animal suffering.

Niamh Haslett - Science Project Coordinator

I feel immense pride to be a woman in science. However, under representation is a huge problem we face daily. In my experience, I have never been in an academic/professional scientific situation where there have been more women than men.

Often playing an integral role in major advancements, women have historically been pushed into the shadows when it comes to credit. We still have a long way to go before women, especially women of colour, have appropriate representation in science. More acknowledgement of the issues women face in the whole field is needed for effective change.

I've always had a fascination with the sciences. I remember reading about the likes of Rosalind Franklin, Gertrude Elion, and Marie Curie and feeling so inspired. As I begin my career with Animal Free Research UK, I am comforted by the presence of strong female colleagues, as well as male colleagues who understand the need to make space for us and support us in our work. It is so affirming to see recognition and support becoming more commonplace, I hope it continues to grow.

Dr Lilas Courtot - Science Manager at Animal Free Research UK

I started my PhD in academic cancer research in 2016. I was a passionate, determined, and confident young woman, convinced that nothing could stop me from becoming a researcher. After completing my PhD, I was faced with these two realizations: the research world is far from what I expected and even though my PhD was a great scientific experience, it was not entirely positive on a personal level.

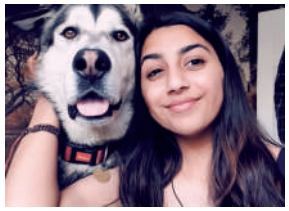
The question I keep asking myself is: would the experience have been the same if I had been a man? My answer is yes and no. Like many other female doctoral friends, we have been victims of sexual harassment. I have also witnessed and experienced bullying, which can be gender neutral.

I realize that this is not limited to academia, but if there is anything I know, it is that this field is far from being an example of gender equality and human rights more broadly.

That being said, there are reasons to be optimistic. In the UK, the number of women accepted onto undergraduate courses in higher education has increased by 50% between 2011 and 2020. There is also more and more support from research stakeholders with for example the #MeTooSTEM movement.

As a science manager at Animal Free Research UK, I finally see myself in the right place, not only because the cause I am advocating is just, but also because I am convinced that human-relevant science using animal-free approaches have a huge potential on impacting animal wellbeing but also, and very importantly, could bring incredibly relevant opportunities to young biomedical scientists. This would be my greatest achievement as a 'woman in science'.

Riddhi Sharma - Pharmacology student at the University of Bath



I'm a third-year pharmacology student currently completing my placement at UK Health Security Agency. My experience researching neurodegenerative disorders such as Parkinson's disease, has so far been interesting and incredible.

I have aspired to work in the pharmaceutical sector since I was a young girl. Being both female and an ethnic minority, I didn't really have the representation of seeing someone like me working in fields of science and technology, so I am so pleased to be part of the new wave of females in male-dominant fields, and hopefully being that representation for another young girl.

FABULOUS FUNDRAISERS

Another brilliant year for Bude...

2021 was quite a year. As usual the Bude group were making, baking and if it wasn't nailed down it was sold! We raised a phenomenal £9,482.96 which takes us to a grand total of £40,490.44.

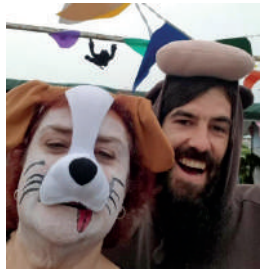
We had a sponsored walk, an online Panto and events at All the P's Tea Gardens.

All the P's Tea Gardens are now unfortunately closed. A huge thank you to Kim and Allan Gouldson. We are so grateful for everything they did for us in 2021 and wish them a wonderful retirement.

One member raised money with her extraordinary cakes, another sold unwanted CDs/DVDs, and donations poured in for the Recycling for Good Causes scheme.

Morrisons in Bude were proud to support the first World Animal Free Research Day – they hosted a weeklong awareness event with staff wearing charity t-shirts and collecting donations. The response from the local community was fantastic with several other businesses taking part in the day as well. We are looking forward to continuing the event in 2022.

A thank you to Trev's Taxi who had the great idea of using charity t-shirts as seat covers to raised awareness.



Sadly, last year we lost one of our own. Jamie was a founding member of our group with amazing energy and enthusiasm. A fundraiser in his memory raised a fantastic amount - he would be so pleased to see the amazing reaction from Animal Free Research UK supporters and the money raised.

So, what do we have planned for 2022? We will continue the online activities but also return to face to face events. Times are still a little uncertain, but we do have dates in the diary which feels positive.

In 2020 Penny Baxter planned to run, walk, crawl her way from Bude to ARC 2.0 in Exeter but this was unfortunately postponed due to covid. However she has now laced up her trainers and is ready to hit the road this September.

We have such fun in Bude and the whole community is so supportive.

Onwards and definitely upwards to the next target!

Steph Jones-Giles - Bude Community Ambassador

JOIN OUR TEAM

29 MAY 2022

The world's greatest festival of cycling returns on Sunday 29 May 2022. RideLondon-Essex 100 is a unique opportunity to ride 100 miles on traffic-free roads through the heart of London and neighbouring Essex.

The Start Line will be on Victoria Embankment, with 60 miles of rolling roads through some of Essex's most beautiful countryside and villages in between, before returning to London and the finish at Tower Bridge.

Secure your place today - **www.animalfreeresearchuk.org/ride-london-2022**

CHALLENGE FOR CHANGE

YOUR CHALLENGE, YOUR WAY

Fancy something different? Do a challenge of your choice...whatever it may be, you choose your challenge.

Whatever your age or ability, you can take part. 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!

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

Register today - www.animalfreeresearchuk.org/challengeforchange

Without gift in wills...

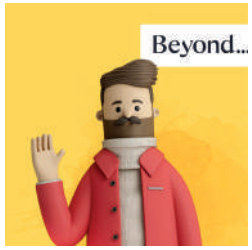
...millions of animals will continue to suffer in British laboratories every year

Animal Free Research UK is a charity on a mission to create a world where human diseases are cured faster without animal suffering.

Many of our pioneering research projects are funded through legacies. Some years over 50% of our income comes from gifts in wills – it really is fundamental to us achieving an end to animal experiments and advancing human relevant medical research.

However, statistics show that 65% of people in the UK don't have a will at all - and this jumps to 76% for those under 55.

Protect your family with an online will



We have partnered up with Beyond Life to offer a free will writing service to ensure your wishes are fulfilled.

Beyond Life 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 Life is checked by their in-house team of legal experts.

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

Your gift is a beacon of hope for animals.

There are many other 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 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.

Visit our shop - **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!

amazon smile

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

Celebrate cruelty free beauty with The Vegan Kind Beauty Box

The UK's Most Popular Vegan Subscription Boxes

You don't need to compromise your beauty routine anymore! With The Vegan Kind, access to skin-friendly and cruelty-free products has never been easier.

Each subscription plan also comes with a FREE TVK+ Membership, giving you access to exclusive discounts on thousands of vegan products at The Vegan Kind Supermarket.

And what's more, every month The Vegan Kind makes a donation to Animal Free Research UK, helping us to continue in our fight for a kinder science and to save millions of animals from laboratories.

How it works

1. Choose your box

2. Plan your schedule

3. Eagerly await the postman

There is zero animal testing, and all of the products in their boxes are as eco-friendly as possible. You can even get **£5 off your first order!**

Visit **thevegankind.com/subscriptions/beauty-box**

THE VEGAN KIND™ BEAUTY BOX