



27 Old Gloucester Street
London WC1N 3AX

T: +44 (0)20 8054 9700
E: hello@animalfreeresearchuk.org
animalfreeresearchuk.org

The Rt Hon Elizabeth Truss MP
House of Commons
London
SW1A 0AA

4th August 2022

Dear Ms Truss,

We are writing to you as experts in the field of New Approach Methodologies (NAMs). These cutting-edge biomedical research techniques produce results that have much greater relevance to patients and include approaches such as artificial intelligence, organ-on-a-chip technology and the use of advanced cultures of human cells and tissues.

In your capacity as a candidate in the Conservative Party leadership contest, we are asking you to commit to supporting human relevant scientific research. We believe that this would generate significant health and economic benefits and would receive strong public support.

There is an urgent need for faster medical progress. Of the several thousand diseases that affect people, only around 500 of them have treatments available.ⁱ The current reliance on outdated, animal-based research methods is one of the factors that plays a significant role in this slow rate of progress. Greater than 92 per cent of drugs that show promise in animal tests and that proceed into human trials fail to get to clinic, mostly for reasons of poor efficacy and safety that were not predicted by animal testing.ⁱⁱ

Unlike traditional animal-based research, NAMs are not hampered by fundamental problems in translating results from one species to another. For example, researchers at Animal Free Research UK's Animal Replacement Centre of Excellence at the University of Exeter recently made a ground-breaking discovery in the treatment and prevention of diabetes. They used human cells to do this and the breakthrough could not have been achieved using animals due to genetic differences that complicate, rather than facilitate, our understanding of human diseases like diabetes. You will of course be aware of the economic impact of such major public health challenges. Diabetes UK estimates that the NHS spends at least £10 billion a year on diabetes, which is about 10% of its entire budget.ⁱⁱⁱ

Investment in NAMs offers a major opportunity for supporting the UK's economic growth. A report by the Centre for Economics and Business Research (Cebr), which was commissioned by Animal Free Research UK, found that NAMs are already making a significant contribution to the British economy. In 2019, it is estimated that the UK NAMs industry contributed £2.3 billion in turnover and £592 million in Gross Value Added (GVA) to the British economy. By 2026, the UK NAMs industry's contribution to UK GDP is predicted to reach a GVA of £2.5 billion.^{iv}

There is significant public support for supporting a transition to NAMs. For example, a YouGov poll commissioned in 2021 by Animal Free Research UK found that 68% of respondents would support a policy ending animal experiments in medical research in the UK and replacing them with non-animal alternatives (e.g. artificial intelligence and using human cells or tissue).^v

Animal Free Research UK recently published a policy document titled '[Eight Steps to Accelerate Human Relevant Innovation](#)'. This suggests key policies that could accelerate the transition to cutting-edge NAMs, such as providing funding and practical support for scientists and appointing a Minister for Human Relevant Science. We urge you to support these measures, given the benefits they offer for both public health and the economy.

We would be delighted to discuss these matters with you or arrange for you to visit the research facilities where we are using and developing these cutting-edge techniques. We look forward to hearing from you about whether you feel able to support British scientists in becoming world leaders in these innovative, future-focused technologies.

Signed by*

**Please note that the letter illustrates the view and opinion of the signatories but not necessarily of their associated organisations*

Carla Owen, CEO, Animal Free Research UK

Dr Martin Ashby, Consultant Palliative Medicine

Dr Jarrod Bailey, Science Director, Animal Free Research UK

Dr Adrian Biddle, Senior Lecturer, Queen Mary University of London

Dr Mridula Chopra, Nutritional Scientist, School of Pharmacy and Biomedical Sciences, University of Portsmouth

Dr Lilas Courtot, Science Manager, Animal Free Research UK

Professor Martin J. D. Clift, *In Vitro* Systems and Particle/Fibre Toxicology at Swansea University Medical School

Professor Matthew Dalby, Director of the lifETIME Centre for Doctoral Training in Engineered Tissues

Chris Denning, Professor of Stem Cell Biology, University of Nottingham

Professor Amanda Ellison, Professor of Neuroscience, Durham University

Dr Lorna Ewart, Chief Scientific Officer, Emulate

Dr Rosalind Hannen, Lecturer in Cutaneous Research, The Blizard Institute, Queen Mary University of London

Lorna Harries, Professor of Molecular Genetics, University of Exeter, and CSO SENISCA Ltd

Dr Paul Holloway, Principle investigator in stroke research, University of Oxford

Dr Shireen Kassam, Consultant Haematologist and Certified Lifestyle Medicine Physician

Dr Ali Kermanizadeh, Lecturer in Clinical Biochemistry/Toxicology, University of Derby

Professor Charles H Knowles, Professor of Surgery & Hon Cons. Colorectal Surgeon Barts Health NHS Trust, Barts and the London School of Medicine and Dentistry, Queen Mary University of London

Dr Deepali Pal, Senior Lecturer and Group Leader of 3RsLabPal Faculty of Health and Life Sciences, Department of Applied Sciences, Northumbria University

Mrs Kerri Palmer, Scientific Research Officer, Breast Cancer UK

Dr Nicholas, Peake, Senior Lecturer in Biomedical Sciences, Sheffield Hallam University

Mike Philpott, Professor of Cutaneous Biology, Blizard Institute, Barts and The London School of Medicine and Dentistry, Queen Mary University London

Professor Geoff Pilkington, Emeritus Professor of Neuro-oncology

Dr Paul Roach, Reader in Biomaterials and Interface Science, Loughborough University

Dr Susan Claire Scholes, Research Associate, Newcastle University

Toba Shahbaz, Summer Project Student, ImmuONE

Dr Jonathan Sheard, Research Consultant, Sheard BioTech

Dr Hannah Short, GP Specialist in Women's Health, Norwich

Sheree Smith, Early career research scientist, Leeds Beckett University

Dr Christian Tiede, BioScreening Technology Group Manager, The University of Leeds

Professor Gyanendra Tripathi, Professor of Human Physiology, University of Derby

Dr Margaret Wexler, Head of Science, Breast Cancer UK

ⁱ <https://ncats.nih.gov/files/NCATS-factsheet.pdf>

ⁱⁱ <https://pharmaintelligence.informa.com/resources/product-content/2021-clinical-development-success-rates>

ⁱⁱⁱ <https://www.diabetes.org.uk/professionals/position-statements-reports/statistics>

^{iv} https://www.animalfreeresearchuk.org/wp-content/uploads/2021/09/Animal-Free-Research-UK_Economic-Report-2.pdf

^v <https://www.animalfreeresearchuk.org/poll-clear-majority-of-britons-want-end-to-animal-testing-in-uk-labs/>