

December 2022

Cancer Research – A New Paradigm

On 27th October we were incredibly lucky, as part of the [Alliance for Human Relevant Science](#), to be able to host an exceptionally inspiring talk by [Dr Azra Raza](#), Professor of Medicine at Columbia University in New York, international authority on leukaemia and acclaimed author of '[The First Cell: And the Human Costs of Pursuing Cancer to the Last](#)' (Amazon's 'best science book of the year 2019') at the Royal Society of Medicine in London.

[Professor Geoff Pilkington](#), Emeritus Professor of Neuro-oncology at the University of Portsmouth and former Head of the Brain Tumour Research Centre, went on to elaborate many of Dr Raza's themes, providing insights from his illustrious career and setting out his hopes for the success of the new [Childhood Cancer Charity](#), for which he is a founding Trustee.

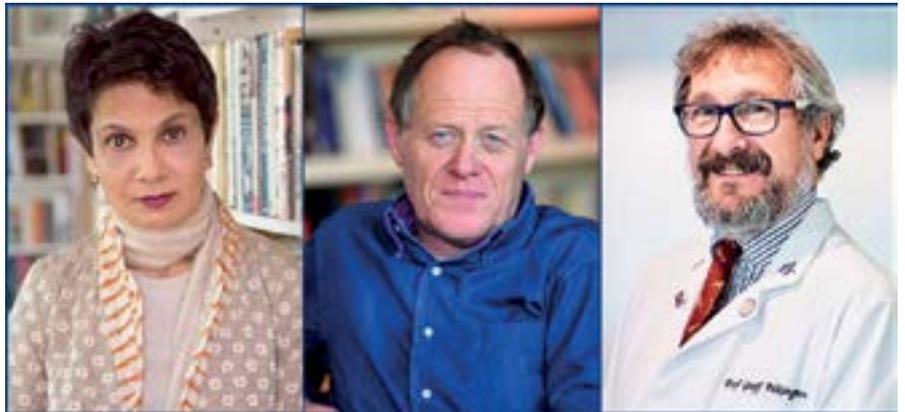
An expert audience then participated in a Q&A chaired by [Dr James Le Fanu](#), well-known columnist and historian of science and medicine, acclaimed author of 'The Rise and Fall of Modern Medicine', Fellow of the Royal Society of Medicine and Patron of Safer Medicines Trust.

Dr Raza explained why the global cancer research effort should change direction to:

1) focus on prevention and early detection, with the aim of finding the first malignant cell instead of attacking late-stage disease, to which end she has established [The Oncology Think Tank](#) and the [First Cell Coalition for Cancer Survivors](#); and

2) focus research exclusively on humans and their tissues, rather than on mice, rats and other animal models because, as she said, "they are not relevant. The data that you see cannot be translated to the human bedside". For this purpose, she has founded the [First Cell Center](#), to study her tissue repository of more than 60,000 samples collected from her patients over the past 38 years.

Dr Raza spoke movingly about the patients she was closest to and her anguish at being unable to offer them more modern or humane treatments than those



with which she began her career 40 years ago. She unflinchingly examined some of the fundamental mistakes we are making: "Today in America 90% of resources are invested in trying to understand and treat advanced metastatic cancers – mostly in mice – and this is the biggest problem."

However, she explained that together with [Professor Patrizia Paterlini-Bréchet](#), who spoke during the Q&A, she has revealed that [giant cancer cells](#) are universally present in tumours and in blood and can be detected and isolated from blood by size, using a molecular 'sieve'. This highly exciting discovery may hold the key to detecting and targeting cancer before it becomes established. The implications for revolutionising cancer treatment (and the potential for cure) could not be more electrifying!

We are so grateful to all the speakers for such an inspirational discussion. The whole event can be viewed on our website.

Dr Raza also gave a short talk to the All-Party Parliamentary Group on Human Relevant Science in October. Minutes of the meeting are on the Alliance website at HumanRelevantScience.org. Dr Raza emphasised how a paradigm shift could be achieved if serious funding (from pharmaceutical companies) was used to incentivise such game-changing research.

The website azraraza.com contains a treasure trove of articles and videos of many talks and interviews. I urge everyone to watch Azra's TED talk:

youtu.be/07rgtBzN4Qo and most recent interview: youtu.be/LqjShSpMZXY (English after 30 seconds!) and read her reply to: "What scientific idea is ready for retirement?": www.edge.org/response-detail/25429, plus: nypost.com/2019/10/26/heres-why-were-losing-the-war-on-cancer-according-to-this-doctor.

Community of Practice for medical researchers

A new online community aimed at improving communication among biomedical scientists has been launched by the Alliance for Human Relevant Science and Animal Free Research UK. The Animal Free Research Community of Practice is an interactive network for members to share their work, ideas, challenges and passion among likeminded peers. With free membership for academic and early career scientists, students,



industry and others involved in biomedical research, members can interact online 24/7 as well as attend planned events, including open houses, roundtables and Helpathons.

A user-friendly website features up to date news, resources, tools, networking and project collaboration opportunities, latest research papers, job vacancies and academic openings. The community is curated by members and hosted by Animal Free Research UK coordinators. Members are invited to create and add content to the online forum, share events and resources, and to collaborate on projects such as writing reviews, articles and much more. The Animal Free Research Community of Practice will raise awareness, deepen knowledge, drive creativity and spark passion for science that benefits animals as well as humans.

We urge all who want to practice modern medical research – that which truly delivers benefits for human health – to sign up and become part of this important, exciting community. Please ask any researchers you know to join, via AnimalFreeResearchCommunity.com.

Our grateful thanks to Dr Jan Turner

It was a delight for Safer Medicines Trust to be led by Jan for 3+ years, during which our achievements were phenomenal. Sadly, all good things must come to an end and our loss is Axol Bioscience's gain. We are so lucky that Jan remains on our Science Advisory panel and has secured Axol's partnership in the Alliance for Human Relevant Science.

Before she left, Jan was interviewed for a [15-minute podcast](#) about organs on chips, which is on our website, and co-authored a paper on "[A History of Regulatory Animal Testing: What Can We Learn?](#)", which is also on our website.

We are deeply indebted to Jan and wish her every success with her continuing work towards making human-relevant science the default choice in advancing life-science research.



Big data and in silico New Approach Methodologies

A new paper by Safer Medicines Trust scientific consultant Rebecca Ram, Dr. Domenico Gadaleta of the Mario Negri Institute, Italy and Dr. Tim Allen of the MRC Toxicology Unit, Cambridge, discusses the progress of in-silico methods and the increasing relevance of 'big data' and artificial intelligence approaches in safety testing and biomedical research.

The paper also discusses the scientific and legislative drivers necessary for change, along with the steps needed to achieve regulatory acceptance and so shift the paradigm and advance human health.

The full paper can be accessed via our website: [The role of 'big data' and 'in silico' New Approach Methodologies \(NAMs\) in ending animal use – A commentary on progress – ScienceDirect](#)

Calling all publishers!

Our research consultant, Dr Pandora Pound has been busy writing a book on the scientific limitations of animal research, the inspiring new approaches available to replace it, and the obstacles to progress. We are really excited about this project, which is almost complete. The book is aimed at the general public and we think it will radically change hearts and minds – if it reaches them! Please contact us if you happen to be or know a publisher who may be interested.



First UK Helpathon

Helpathons have been pioneered in the Netherlands to encourage researchers who might otherwise conduct animal experiments to make the shift towards human-relevant methods. TPI Helpathon have organised 6 successful Helpathon events so far.

To help the UK to join the Netherlands as an international leader in transitioning towards human-relevant methods, the Alliance for Human Relevant Science and Animal Free Research UK teamed up with the Dutch Helpathon team in October at an event in London. We are so grateful to them for making the first ever UK Helpathon such an inspiring and enlightening experience. This UK Helpathon represents the first step towards establishing a network of international Helpathons under one umbrella.

Professor Jesmond Dalli and Dr Duco Koenis from Barts, the London School of Medicine and Dentistry and Queen Mary University, asked the Helpathon volunteers to help them work out how to replace their animal models of rheumatoid arthritis with improved, human-relevant research methods. The Helpathon itself, a highly creative two-day brainstorming event, is just the start of an ongoing

project which will involve feedback from the researchers on the ideas they were given.

More information and highlights from the event can be viewed on the Alliance website at HumanRelevantScience.org.



International scientific engagement

We have responded to government consultations, including one by the UK Animals in Science Committee on the Forced Swim Test and one by the US National Academies of Science, Engineering and Medicine on Non-human primate Model Systems: state of the Science and Future Needs. We have reviewed several grant applications to European funding agencies on projects relating to animal models and NAMs. We have also offered our scientific expertise in numerous peer reviews of papers on animal models submitted to scientific journals.

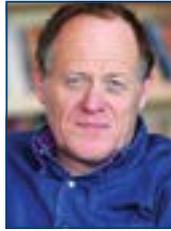
Our Patrons



Mat Fraser



Caroline Lucas MP



Dr James Le Fanu



Carol Royle



Grahame Morris MP

We are extremely grateful to all our supporters for helping to spread the word and for your generous donations: we couldn't do what we do without you!

Please help us to continue this vital work.

ACTION

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Petition

Sign our petition calling for the use of more reliable safety tests. You can sign on our website [OR on paper: print sheets](#) or order by email, phone or post.



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You can donate on our website or by post or phone – please see below.

We rely completely on your generosity. We receive no corporate or government funding and have no expensive overheads: all of our office space is donated without charge.

If you want to see real progress towards a future where medical research is based on studying humans rather than animals, please support our work today.

DVDs

Watch Safer Medicines (2007) on our website or order FREE copies.



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