Advancing human relevant solutions in safety testing & biomedical research: The Lush Prize in 2020 and beyond

The Lush Prize is pleased to present its innovative science and policy award strategy at EUROTOX 2019 and invites delegates to find out how their research could be eligible for future funding. To support and sustain the activities of the very best in toxicology, R&D, policy and regulatory advancement, each Lush Prize year awards up to 400,000 EUR across five key categories: Science, Young Researchers, Training, Lobbying, and Public Awareness. There is also a special sixth category- the Black Box Prize, which may award a further major prize of 290,000 EUR for a breakthrough achievement in human-relevant toxicology.

The prize was established to address an urgently needed shift towards more 'fit for purpose' human-relevant toxicity testing methods; in order to meet the increasing demands of high throughput, chemical safety assessment and overcome the limitations of current preclinical regulatory requirements, which are of great concern with regard to their ability to predict human safety and disease pathogenesis, as well as being resource-intensive in terms of costs, time and animal use, resulting in multiple scientific and ethical issues.

Exciting advances in in vitro, in silico and in chemico technologies have achieved considerable success to date and provide irrefutable evidence for a future based on high quality, human relevant research, from genetic to population level. Since 2012, the Lush Prize has awarded 2.5 million EUR to a portfolio of outstanding achievements in research, training, lobbying and outreach, incorporating many of these technologies.

21st Century Tox & Research

21C Toxicology is a new approach to safety testing which is exciting regulators, toxicologists, campaigners and companies around the world. It has become possible because of advances in biology, genetics, computer science and robotics. Just a few examples of 21C projects that Lush Prize has been pleased to award include Multi Organ Chip (MOC) strategies, 3D Bioprinting, Adverse Outcome Pathways (AOPs), AI based platforms for toxicity testing and advanced approaches in cancer drug screening. These technologies provide new direction to a future based on high quality, human based safety testing and disease research, having established a wealth of evidence- as well as attracting regulatory interest - to date.

The Lush Prize continues to fund innovative new research worldwide and drives the next generation of cutting edge research, especially with the success of its Young Researcher Initiative across Europe, Asia and the Rest of the World, often providing bursaries to early career scientists who might otherwise face financial, political or social difficulties in continuing their work.

More than 100 winning research projects, organisations and individuals have been awarded Lush Prizes to date. Nominations are now open for the 2020 Lush Prize. Find out more, including how to submit a nomination at www.lushprize.org.