

Dr Hadwen Trust receives largest intake of humane research grant applications in 40-year history



Scientists are showing an increasing interest in using and developing new techniques without the use of animals to advance medical research, says the Dr Hadwen Trust for Humane Research (DHT). The charity has received a record number of applications from scientists seeking funding to develop non-animal techniques in medical research but says that more funding is needed to harness the full potential of these technologies.

The Dr Hadwen Trust is the UK's leading medical research charity funding exclusively non-animal techniques, with a portfolio of projects at universities, hospitals and research institutes across Britain. The charity currently awards up to £700,000 in grants annually in a wide range of medical fields such as cancer, neurological diseases and cardiovascular conditions, to name a few.

Grant applications to the Dr Hadwen Trust that meet the charity's strict scientific and ethical criteria are short-listed for peer review by a panel of external experts specialised in the particular field of interest.

This year the charity received 120 research applications for funding, a record 500% increase on the previous year. This is the highest number of applications ever received in the DHT's forty year history; a 114% increase compared to the highest intake in 2003. The DHT says that such an increasing interest from scientists from all fields to advance medical research and replace animal experiments is a very positive and significant step forward.

An impressive range of cutting-edge research approaches, including advanced 3D cell culture techniques, computer modeling and non-invasive brain scanning are being proposed by scientists dedicated to improving medical progress by replacing often inadequate or poorly performing animal models with more human-relevant techniques.

"The limitations of using animals are becoming increasingly acknowledged within the scientific community. This is reflected by the increase in the number of grant applications where applicants are motivated by a desire to improve the quality of their research and replace animals with more human-relevant advanced methods and technologies." says Dr Sebastien Farnaud, Science Director of the DHT. "The ethical responsibility to tackle animal suffering is also a key factor, with many of the proposals having the potential to replace the use of thousands of animals each year."

The DHT has a forty-year history of funding innovative research that advances medical progress and saves human and animal lives. Past DHT successes include funding early stage research which led to a non-animal method to replace the Draize rabbit test for severe eye

irritancy; ground-breaking research in the early 1990s that pioneered the development of the non-invasive MEG brain scanner (magnetoencephalography) to study the human brain and replace invasive experiments on cats and monkeys, and in 2009 the first three-dimensional multi-cellular model of a form of human breast cancer.

The charity's current research portfolio includes development of further three-dimensional human tissue structures with targeted gene disruptions that replace genetically modified mice; use of fibroblasts as a new disease model for Huntington's disease; and an advanced brain research tool called dual-site transcranial magnetic stimulation (TMS), instead of invasive experiments on primates, to study brain function in humans.

However, even as the UK's largest charity funder of non-animal replacement research, the Dr Hadwen Trust will not be able to fund each and every highly relevant application as more funding is needed to develop the full potential and make use of such advanced research.

Says Kailah Eglington, Chief Executive of the Dr Hadwen Trust:

"Non-animal replacement techniques represent some of the most exciting and advanced technological approaches that medical science has to offer, so it is encouraging to see an increased interest from more scientists across all fields. At the same time, it's disheartening to see that so many of these replacement solutions might never be explored because of insufficient funding. We call upon the public to help raise more vital funds to pursue better and more ethical medical research."