The Lush Prize
Young Researcher Asia Awards 2016

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Background - What is the Lush Prize?

- The '1R' Lush Prize
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What is the Lush Prize?

The Lush Prize is an annual fund of 45,000,000 JPY (£250,000) which rewards outstanding work in scientific research, education and campaigning to end the use of animals in product safety (toxicity) testing.
More alternatives to animals are urgently needed

Investment in research & development for non-animal test methods is urgently needed as animal testing is:

* Ethically wrong – animal suffering;

* Poor science - animals cannot reliably predict safety in humans
Animal testing is not accurate

Does animal testing work to confirm the safety for cosmetics?

YES 17%

NO 83%

Total Responses 8,624

2016 Opinion poll survey by Lush Cosmetics, Japan
Animal testing is not accurate

For example, 90% of new drugs fail human tests, having been considered successful in animals.

Animal tests are only 30-60% predictive of human responses, usually no better than tossing a coin.
The Lush Prize was developed to address an urgent need to;

- Fund the development of modern, more reliable methods of safety testing
- To replace outdated, unreliable and cruel animal tests
This resulted in a yearly fund being made available to co-ordinated scientific, training and lobbying initiatives around the world, all working to end the use of animals in laboratories.

There are **five prize categories** available each year;

- Science
- Young Researcher
- Training
- Lobbying
- Public Awareness
Prize categories (cont..)

1. **Science** - For individuals, research teams or institutions for work conducted on relevant toxicity pathways. Outstanding research producing an effective non-animal safety test based on an approach other than toxicity pathways, where none existed before, may also be considered.

2. **Young Researchers** - Open to scientists (up to 35 years of age at the time of application) with a desire to fund the next stage of a career in animal free toxicology. (The annual YR prize fund is usually divided between five winners, each awarded approx 1,400,000 JPY). The Young Researcher prizes are distinct from other categories as they awarded on the basis of *future* research proposals, intended to replace the use of animals.

The Science Prize and Young Researcher Prize are designed to advance direct research into non-animal technologies. **Lush Prize is pleased to launch the Young Researcher Asia Awards at the 2016 Asia Congress**
Prize categories (cont..)

3. Training - For individuals, teams or organisations involved in training others in non-animal methods. The need for training and communication is vital and remains an obstacle to change.

Many establishments or individuals may not have been trained in available, animal-free methods or might not even be aware of them, while future scientists and students need to be provided with education in alternatives to animals, in order to be able to pursue further research in this area.

This prize recognises the importance of relevant information and hands-on training among commercial scientists, researchers and students.

The Training Prize is designed to aid resource for projects training scientists or regulators in non-animal methods.
Prize categories (cont..)

4. **Lobbying** - The Lobbying prize rewards exceptional individuals, groups or organisations pushing for change, focusing on policy interventions promoting the replacement or end of animal tests. These may include science-based lobbying at national or international level, for example to recognise non-animal testing methods in national or international (e.g. OECD) programmes of test guidelines; removal of animal tests and achieving mandatory requirements for non-animal methods in legislation, regulatory policies and testing guidelines.

5. **Public Awareness** - Organisations and individuals working to raise awareness on both the ongoing suffering associated with animal testing and the scientific need for its replacement are recognised by the Public Awareness prize. Winners are awarded for their work in ensuring that these issues remain high on the public agenda.

The **Public Awareness** and **Lobbying** Prizes are designed to maintain pressure and influence, to ensure regulation is updated to reflect advances in 21st-Century toxicology.
The **Black Box Prize**

A special sixth category of prize is the **Black Box Prize**. It may offer a full **45,000,000 JPY (£250,000)** in any one year, for a key breakthrough in research into **pathways of human toxicity** in response to chemicals, replacing the use of animals.

The first Black Box prize was awarded in 2015, to several scientists for developing new test methods which establish the Adverse Outcome Pathway (AOP) using animal-free tests to detect skin allergy in response to chemicals.
The '1R' Lush Prize

Many funding schemes are devoted to 'the 3Rs';
  Reduction
  Refinement
  Replacement of the use of animals in experiments

But 'Reduction' and 'Refinement' methods still involve animals

The Lush Prize only supports projects working towards the '1R';
the complete replacement of animal tests and is the largest prize fund in the world devoted to this
The Lush Prize so far has funded.....

- 8 international **scientific** organisations for projects including human lung cancer tissue culture models, body-on-a chip systems, 'omics' technology-derived data from analysis of human *in-vitro* and *in-silico* models, QSARs (Quantitative Structure Activity Relationships) and work on toxicity pathways in heptotoxicity and developmental toxicity

- **32 young researchers** and early career scientists from across the world, with bursaries totalling more than 40,000,000 JPY.

- 8 outstanding **Training prize** winning organisations for projects including preparation and delivery of training workshops and webinars, outreach and communication in universities and educational establishments across the world and direct delivery of 'hands-on' training in non-animal methods in China
The Lush Prize so far has funded (cont......)

11 Public Awareness projects (total more than 45,000,000 JPY) for breakthrough investigational campaigns highlighting the suffering of non-human primates, cats and dogs; initiatives to end toxicity testing in the USA, Switzerland, China, Russia, Canada and Japan and finally, campaigns on banning animal tested cosmetics in Taiwan, Australia and New Zealand.

10 Policy makers, political figures and scientific organisations devoted to alternatives to animal testing from the USA, Sweden, Germany, New Zealand, Brazil and India have been awarded more than 45,000,000 JPY in Lobbying Prize funding to date.
Since its launch in 2012, the Lush Prize has awarded over **210,000,000 JPY (£1.5 million)** to bring forward the day when safety testing takes place using only human-based methods, without animals.

- Nominations from Japan, South Korea, China, Taiwan, Singapore and Malaysia
- Many future nominations are welcomed from across Asia
- 2016: Record number of nominations
- 55 projects/scientists from 21 countries, including Japan, South Korea, China and Singapore
In 2016, Lush Prize is excited to launch the **Young Researcher Asia** awards

- Young scientists of up to 35 years old from across the Asia region, each awarded **JPY 1,400,000 (£10,000)** for their research projects

- Research proposals using alternative, modern technologies, working towards ending the use of animals in safety testing
The need for alternative, non-animal tests is recognised

Since the **EU cosmetic testing bans** introduced 2009-2013, numerous non-animal tests have been developed, e.g. EpiSkin®, ('human skin in a test tube') saving the lives of thousands of rabbits, rats, mice and guinea pigs every year.

But there is still much more to do as millions of animals are still used in safety testing worldwide, each year.

*This is why the Lush Prize is so important*
The law must catch up with science

Research mustn't STOP but it must CHANGE
2016 Lush Prize winners - latest cutting edge research saving animals

- Building innovative 3D human skin models to test cosmetics

  Human tissue test methods to assess how chemicals cause liver damage (toxicity)

  Development of human 'in-vitro' (test tube) methods to test dental and medical devices

Lush Prize looks forward to receiving many more Young Researcher and other award nominations from across Asia and worldwide in 2017!
Nominate your work for a Lush Prize

Nominations for the 2017 Lush Prize open in April

Nominate your own work or that of another

If recommending another for nomination, the recommended individual(s) or organisation must submit a full nomination form by the July 2017 deadline
Thank You for listening

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