From the **experts**

Professor Dr Suhaila Mohamed, Coordinator of Cancer Diagnostic and Therapeutic, Bioscience Institute, Universiti Putra Malaysia explains why animal research is crucial in science. Prof Suhaila is currently testing on Malaysian herbs to find cure for cancer.

Can you explain the different types of animal testing and what they are for?

In vivo testing is the term we use for observation of an animal's behaviour. Vivisection refers to the cutting up of live animals or dissections. There is also Biomedical testing which is more on cancer and genetic testing. This test is to determine if the genes change in anyway after an experiment. There is also Toxicology which detects how much of herbs or drugs can be used on the animals before it is considered toxic. The last one is called Breeding — to observe if its baby has inherited anything from the animal tested on.

Why are rodents a popular choice when it comes to animal testing?

Rodents are actually the least similar to humans. But, if we do experiments on cats, monkeys or dogs, people will be very upset because they are pets. On top of being a pest and the fact that they multiply easily, rodents are popular because they eat everything. For example, a rabbit only eats vegetables and a cat does not but rats do. Size does matter. If we want to use a monkey, it would be difficult for us to handle because of its size. So, rodents are the best choice when it comes to size too. Plus, they have a very short life span — up to two years.

Prof Dr Suhaila Mohamed

What does your job entail?

As a Coordinator of Cancer Diagnostics and Therapeutics, I do research on the diagnostics — detecting the problem in two ways — physically and chemically. Physically, using allergies, while chemically means looking for biomarkers: increase in enzymes. Therapeutics means the treatment for the problems.

Why is it important for you to do tests on animals?

First of all, it is wrong to do the test on humans. It is important to diagnose and test the effects of the herbs or drugs we want to use on humans, on other living things first. So, we give it to the animals before confirming that the treatment is safe to be used on humans.

What is your current project?

Being a research university, we carry out a lot of different kinds of research. Each of my students have their own research projects. They choose a certain type of cancer and carry out further research on it.

In your personal opinion, do you think animal testing has helped save human lives?

Personally, all my research is done on animals. To date, I have 14 patents. Both my students and I believe that what we are doing is helping to save the lives of many.

What is the biggest challenge you face while going through the process of research?

My biggest challenge is keeping up with the diseases.

What advice do you have for teenagers who would like to be researchers?

Well, there is a lot that you need to know if you would like to be a researcher. There are things like physiology, biochemistry, so on and so forth. Not only that, you need to understand the things you are researching. You need to be responsible and take care of the animals that you are testing on so it doesn't affect your research. To tell you the truth, my students are not allowed to handle the animals, not until they are at post graduate level.

Would you mind sharing with us your proudest moment?

I don't have a favourite moment as a researcher. I am happy at even the smallest result I get from any of my research. If we have results, I would be extremely happy.

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