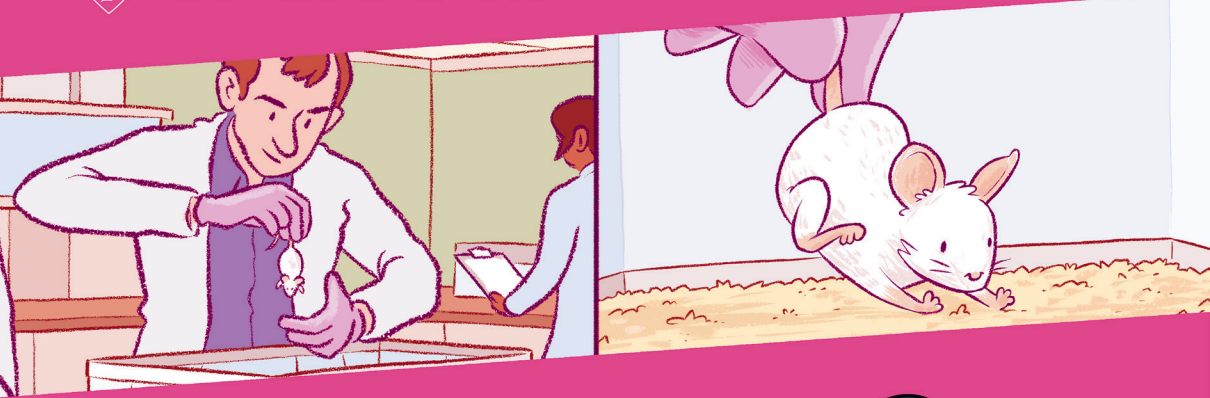




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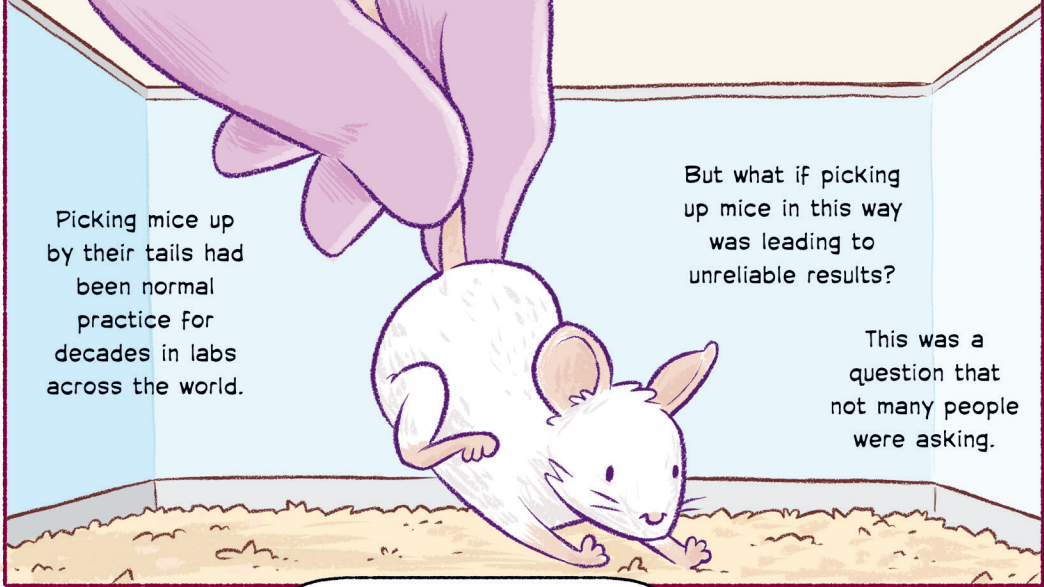


MAKING AN IMPACT

WITH THE DEPARTMENT OF EVOLUTION,
ECOLOGY AND BEHAVIOUR



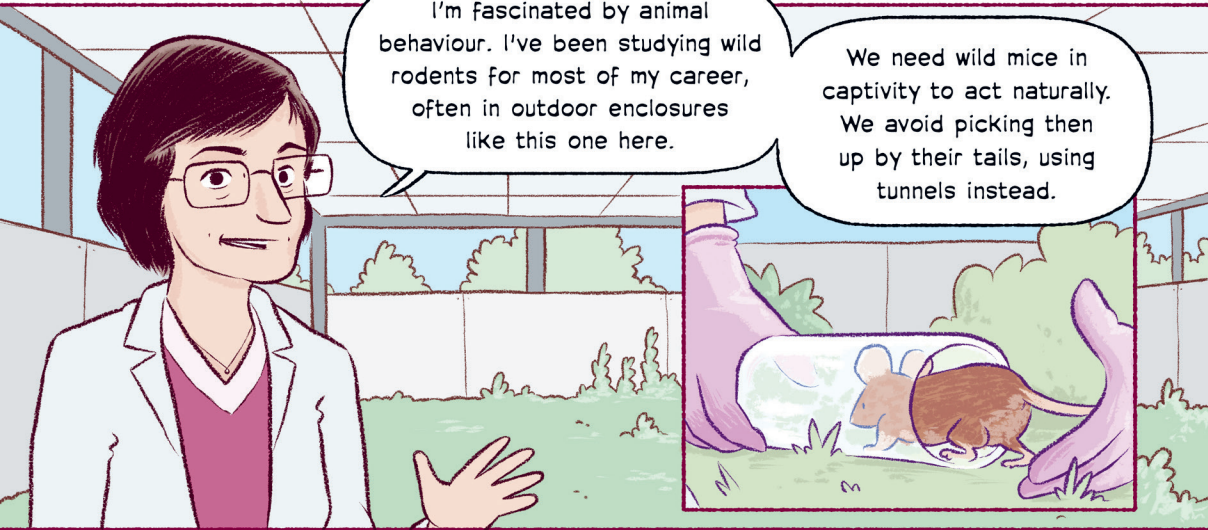
IMPROVING LAB ANIMAL WELFARE
AND ANIMAL RESEARCH



Picking mice up by their tails had been normal practice for decades in labs across the world.

But what if picking up mice in this way was leading to unreliable results?

This was a question that not many people were asking.



I'm fascinated by animal behaviour. I've been studying wild rodents for most of my career, often in outdoor enclosures like this one here.

We need wild mice in captivity to act naturally. We avoid picking them up by their tails, using tunnels instead.

Our mice were calm and curious, and they usually acted predictably.



The difference with the lab mice was stark. Their anxiety stopped them from showing normal responses.



We knew that if other scientists used tunnels for the mice to run into, the benefit would be huge.

But how do you go about changing a scientific practice that's accepted across the world? We'd need to offer definitive proof that there was a better way.



What followed was a decade-long effort involving multiple labs, facilities, different tests and breeds of mice.

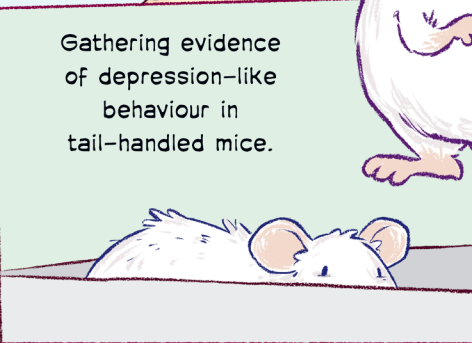
Proving that tail-handling led to mental and physical stress.



Showing that these mice became afraid of being handled.



Gathering evidence of depression-like behaviour in tail-handled mice.

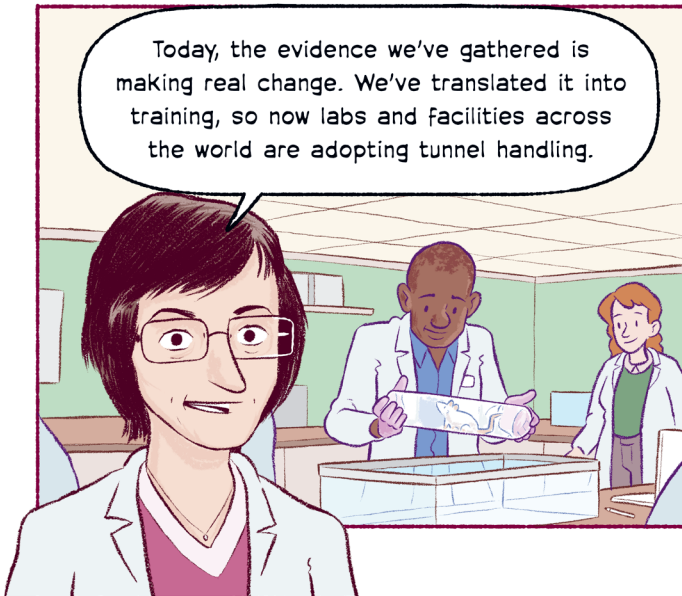


And proving that mice picked up by tunnels quickly lost anxiety and happily interacted with handlers.



Through all these years of experiments, there was a single, consistent conclusion. Picking up mice in a handling-tunnel was far superior to tail-handling.

Today, the evidence we've gathered is making real change. We've translated it into training, so now labs and facilities across the world are adopting tunnel handling.



It's better for the science, better for the handlers, and better for the animals.



The Department of Evolution, Ecology and Behaviour is **making an impact.**

We study the biology of animals, plants and microbes to understand the processes driving the natural world.

Discover our decade-long project to improve the welfare of laboratory mice and so improve scientific research.

To find out more about this project, and other work in the Department, visit:

liverpool.ac.uk/evolution

Written by Dr James Hall and Edward Ross. Illustrated and designed by Edward Ross. Thanks to Professor Jane Hurst.