

# 'Shroom a magic cure

**EXCLUSIVE**  
**ROBYN RILEY**  
MEDICAL EDITOR

## Melbourne team makes anorexia breakthrough

IN a world first, Monash University researchers are investigating how a compound found in magic mushrooms could benefit people suffering from eating disorders, including anorexia nervosa.

Psilocybin is a psychedelic compound found naturally in the mushrooms that, when eaten, produce mind-altering effects including hallucinations and euphoria, but it also has therapeutic outcomes.

In the first study in an animal model of anorexia nervosa, the Melbourne team is hoping to show how psilocybin

acts in the brain to safely "break down" rigid and inflexible patterns of thought and behaviour that are characteristic of anorexia nervosa.

Claire Foldi leads a research team at Monash University's Biomedicine Discovery Institute that is using behavioural neuroscience technologies in animals. She has been awarded a four-year NHMRC Ideas Grant to do the work.

"Critically, the reason we don't have an effective treatment for anorexia nervosa is because we don't understand enough about why it develops," Dr Foldi said.

On Tuesday at the Metabolic Disease Conference in Marysville she will present evidence on the improvement in flexible learning in animals given psilocybin which she says could explain its efficacy in treating human psychiatric conditions.

"What we found was that the group given psilocybin could learn a complicated cognitive task much more quickly," Dr Foldi said.

"If it is true that psilocybin has fundamental effects on learning, on flexible thinking in a human patient, it has the potential to impact on a whole

range of psychological disorders."

She said psilocybin was already being investigated in human clinical trials worldwide for mental illnesses such as depression, substance use disorder and anorexia nervosa.

"But we still don't know enough about how it works, or why it works successfully in some patients, but not others," she said. "We also don't know how the results from clinical trials might be influenced by placebo effects."

Animal studies provided a way to investigate therapeutic effects while avoiding biases.

"Placebo control is the gold standard in clinical research, but the intense nature of the psychedelic experience makes it impossible to control for placebo effects," Dr Foldi said.

"Animal models are required to understand how responses to psychedelics might be driven by individual differences in brain function and behaviour, without concern for biases or placebo effects."

About one million Australians have eating disorders, which Dr Foldi says are among the most complex psychiatric disorders in clinical practice.

"Anorexia nervosa has the



Claire Foldi

highest mortality rate of any psychiatric illness, less than half of patients recover and there are no existing effective medical treatments," she said. Dr Foldi will be a panellist at a public lecture, The Obesity Crisis, at the NGV on Thursday. [robyn.riley@news.com.au](mailto:robyn.riley@news.com.au)

Steam train driver Jeremy Lavery gives Chloe, 3, the best seat on board; (below) former conductor 'Mr Penny Man' at Mont Albert station. Pictures: Tony Gough



### ALL ABOARD FOR HISTORY

RED rattler steam trains could be heard puffing through the eastern suburbs on Sunday. The historic trains had a final run from Hamilton St to commemorate the closure of Mont Albert station after 132 years due to level-crossing removal works.

Return shuttles ran all day from Mont Albert via Blackburn and Burnley, with five red rattler country carriages hauled by two K class steam locomotives on the tracks once more.

The event was run by the Surrey Hills and Mont Albert Progress Association, Bread Street Bakery and the Rotary Club.

"Next year the heritage building built in 1902 will be dismantled, stored and then reinstated into a new community plaza at the completion of the level crossing removal project," Progress Association secretary Yvonne Bowyer said.

"We look forward to a reinvigorated Mont Albert Village in 2023."

SUSIE O'BRIEN

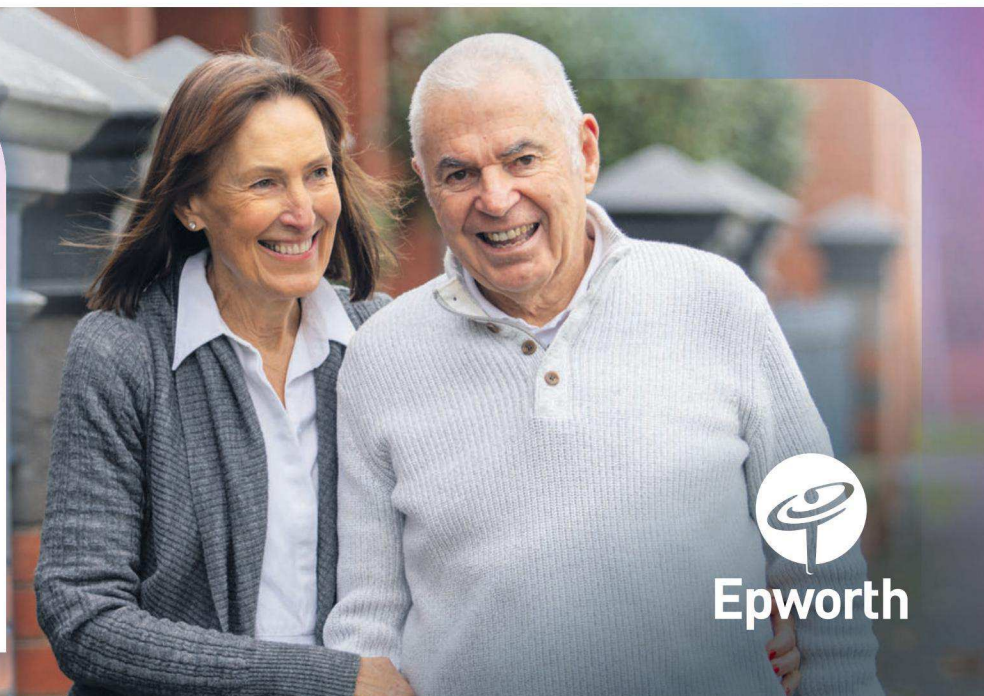
Your recovery is our goal.

Epworth for rehabilitation.

Epworth for life.

Ask your doctor for a referral to Epworth Rehabilitation in Melbourne or Geelong.

[epworth.org.au](http://epworth.org.au)



Epworth