

# Brain shrink link finding

ALANAH FROST

PARTS of the brain grow significantly in people battling both depression and anxiety, but shrink in people suffering depression alone.

A new study by the Australian National University (ANU) has found the amygdala — which is responsible for emotion — grows in volume in people with the double diagnosis.

But in those suffering depression only, it had the opposite effect and caused another area of the brain, the

## Depression may trigger Alzheimer's onset

hippocampus, to shrink. The findings are important as the hippocampus is responsible for learning and memory.

Smaller hippocampi have also been connected to the development of Alzheimer's disease later in life.

Daniela Espinoza Oyarce, a PhD candidate at ANU, led the study and said the results showed the true effects of depression on the brain had been underestimated.

"There are a lot of studies talking about the brain and depression, but what we noticed was the findings are a bit inconsistent," Ms Espinoza Oyarce said.

"People that have depression quite often experience anxiety — and one in six Australians currently experience depression, anxiety or both."

"What we noticed was anxiety was lowering the effects of depression on the brain by an

average of 3 per cent — hiding the true shrinking effects of depression on the brain."

Ms Espinoza Oyarce said this was particularly important as shrinkage could lead to the onset of Alzheimer's disease.

The study, published in The Journal of Psychiatry and Neuroscience on Wednesday, involved more than 10,000 people and compared changes in the brain in people with depression, depression and anxiety and no mental health issues.

Ms Espinoza Oyarce said the next step of the study was to look at the effects of anxiety alone on the brain and see if there were traits that could increase the likelihood of developing a mental health disease.

"It's very difficult to get to the root of why depression or anxiety happens," she said.

"What we think is happening is that anxiety is creating

more connections between other areas in the brain."

"I think if we can link to behaviour or personality, we can find some link between why someone develops these diseases."

She said mental health was an important global health issue.

"We tend to think about mental disorders as something that we need to deal with ourselves and that is not the case," she said.

"It's a huge issue. And it is something everyone will likely experience in their lives."

## CRAFTY WAY TO HELP WILDLIFE



THE Bushfire Wildlife Rescue Support fundraising craft stall is raising money by auctioning off its cute, cuddly craft creations online.

Its most recent auction raised \$250, with the proceeds supporting the work of Bushfire Wildlife Relief Support, which provides material aid and food to Australian wildlife.

To help support the fundraising efforts by buying creations or be part of the next auction, visit [facebook.com/BWRSCraftfundraising/](http://facebook.com/BWRSCraftfundraising/)

Maureen O'Keeffe with some of the crafted animal toys created for the bushfire wildlife relief fundraiser.

Picture: GLENN FERGUSON

## Jail for 'brazen' armed robber

### RUSTY WOODGER

A TEENAGER who put a knife to the neck of a Geelong shop owner during a brazen armed robbery has been jailed.

Christopher Parcell, 19, was sentenced on Tuesday to a prison term of three years and four months, with a minimum of one year and eight months.

On January 10 this year, Parcell produced a knife and terrorised two workers inside a menswear store on Pakington Street, Geelong West.

The incident was sparked when the store's owner tried to block Parcell from leaving with a handful of clothing items that had not been purchased.

Parcell, then 18, pulled out a knife and held it about 5cm from the woman's neck, telling her: "I have a knife and I'll use it." He swung the knife at her twice and warned: "I'm bloody taking them ... or you'll die."

After Parcell fled the store, a good Samaritan intervened and punched him — Parcell dropped the knife and ran away.

Judge Gerard Mullaly told the County Court of Victoria on Tuesday the incident had caused a major impact on the victims, with one deciding to quit her job.

"This armed robbery was brazen and a frightening example of the always serious crime of armed robbery," Judge Mullaly said.

"You took a deadly weapon and terrorised the shop owner and her employee, brandishing it close to the shop owner's neck and swinging it to get her out of the way."

"As is clear, the psychological effect on the victims has been very significant."

Judge Mullaly said the courts needed to stand firm in punishing those who "terrorise ordinary shop owners and staff".

Parcell will serve his sentence in an adult jail.

He has already spent 191 days in custody.

## Dingo a treasure to protect, says Yosef

A NEW book by Great Ocean Road Wildlife Park owner Yosef Lasarow looks at the dingo's important place in the ecosystem.

Dawn of a Dingo Day examines the role the dingo plays in the landscape, the effect the livestock industry has had on its habitat, and the consequences of removing the iconic animal from the ecosystem.

"For too long now we have failed to recognise the profundity of nature and have compromised her will for the sake of our economic gains,"

Mr Lasarow said. "Just like the wolf, the Australian dingo is another one of those contentious topics that has been festering for far too long and, until we put things into their proper perspective, we will continue to pay the price."

He says little effort has been made to emphasise the dingo's ecological importance.

"They are not dogs ... the dingo qualifies as a top-order trophic regulator, positioned at the uppermost point of the food chain, the rudder to the entire system, and the golden

key to ecological harmony," Mr Lasarow said.

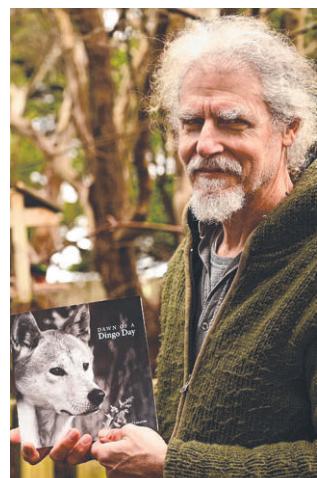
Dawn of a Dingo Day contains thought-provoking material and beautiful photography.

"It is with these concerns in mind that I have sketched a portrait of the dingo within the Australian landscape, demonstrating the dependence of the system on its presence, and highlighting, as a solution, that dingo protection is the golden key to the salvation of large sectors of the ecology," he said.

"This work also addresses the current livestock predation issues and argues that mandated dingo protection will not only lead towards ecological stabilisation but will also result in a lessening of livestock predation the more stable the system becomes."

"It strives to stimulate national awareness of yet another of Australia's national treasures, an iconic gem, and most important ecological player."

The book is available online from the Australian Dingo Foundation for \$10, with proceeds used for dingo awareness.



Yosef Lasarow and his new book, Dawn of a Dingo Day.