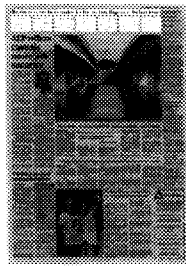


Media Alerts Since Brain Folds Media Release Issued (19 April 2004):

<p>12:00 News 2GO FM (Gosford) Compere: Troy Carey Station Ph: 02 4324 2400</p>	<p>19/04/2004 - 12:01 PM Summary: 200013703910 Duration: 0:08</p>	<p>Male 16+ 8800 Female 16+ 8900 All People 17700 ABs 3900 GBs 11200</p>
<p>Scientists from Melbourne University have discovered the differences in the way the surface of the human brain is folded could indicate a persons intelligence.</p>		
<p>South West Drive ABC Ballarat (Ballarat) Compere: Steve Martin Station Ph: 03 5320 1011</p>	<p>21/04/2004 - 04:45 PM Summary: 300013730352 Duration: 8:00</p>	<p>Male 16+ N/A Female 16+ N/A All People N/A ABs N/A GBs N/A</p>
<p>Melbourne University have conducted a study into the brain and folds in particular parts of the brain, that varies in some people, and may effect behaviour in some people. The research maybe useful in the study of mental problems.</p>		
<p>Interviewees: Murat Usel*, Melbourne University</p>		
<p>Mornings ABC Newcastle (Newcastle) Compere: Madeleine Randall Station Ph: 02 4922 1200</p>	<p>22/04/2004 - 10:07 AM Summary: 200013738398 Duration: 8:34</p>	<p>Male 16+ 4000 Female 16+ 4200 All People 8200 ABs 2000 GBs 4200</p>
<p>University of Melbourne senior research scientist Murat Yücel talks about the research into the association between the surface of the brain and its cognitive abilities; description of the folds on the surface and how the two hemispheres are joined with this varying between individuals; tests indicate a difference between the folds on the right or left hand side of the brain; can give clues to the differences between people and the potential for types of reasoning; folds are a representation of how the brain is connected; research is in its infancy as only recent advances in brain imaging technology have made the study possible on living people; research could impact on sufferers of mental illnesses such as schizophrenia and OCD; research into brain surfaces started from studies into schizophrenia; have received funding from the federal government.</p>		
<p>Interviewees: Dr. Murat Yücel, senior research scientist, University of Melbourne</p>		
<p><i>(This program or part thereof is syndicated to 1 station.)</i></p>		



Canberra Times Tuesday 20/4/2004
General News Page 5
Circulation: 38,313
Size: 141.54 sq.cms.

Brain researchers unlock clue to intelligence, behaviour

MELBOURNE: Differences in the way the surface of the human brain is folded could indicate a person's intelligence, Melbourne scientists have discovered.

People with asymmetrical brains score higher on tests of verbal and spatial skill, University of Melbourne psychology and neuropsychiatry PhD student Alex Fornito found.

"Although our study only focused on problem-solving and strategic thinking, the results indicate that similar variations in folding in other parts of the brain may be related to other intellectual abilities," Mr Fornito said.

The study focused on a specific part of the brain called the paracingulate, located within a fold unique to the

human brain.

Researchers tested the right-handed trial participants on tasks known to be performed by the left hemisphere, which houses verbal knowledge, and the right hemisphere, which is more spatially oriented.

They found the paracingulate fold was more developed in the right or left hemisphere for some, but equally developed on both sides for others.

Those with the left-hemisphere paracingulate fold performed much better than participants with symmetrical paracingulates on cognitive tests, regardless of whether the tasks were designed to be driven by the left or right hemisphere of the brain.

Researcher Stephen Wood said, "We already know that

there is variability in the folding of the brain, this research tells us that it is not just cosmetic but actually meaningful for behaviour."

The differences in the folds may also help to explain some psychiatric disorders, the researchers said.

They hope to use the findings, published in the journal *Cerebral Cortex*, to determine the significance of asymmetry and variations in the brain folds of psychiatric patients, and work out if it's an inherited characteristic. The team said it had been shown previously that people who suffered from schizophrenia had more symmetrical brains.



Advertiser (Adelaide) Tuesday 20/4/2004
General News Page 14
Circulation: 201,499
Size: 23.83 sq.cms.

Brain folds linked to intelligence

THE way in which the surface of a person's brain is folded could be an indication of how smart that person is, University of Melbourne researchers say.

PhD student Alex Fornito said yesterday people with asymmetrical brains scored higher on tests of verbal and spatial skill. The study focused on problem solving and strategic thinking but results indicated a link with other abilities.



Daily Telegraph Tuesday 20/4/2004
General News Page 17
Circulation: 404,980
Size: 124.80 sq.cms.

Scientists find enlightenment in grooves of the brain

Differences in brain surfaces may be more than just cosmetic — they may reveal our intelligence, reports KYLIE WALKER

UNTIL now, scientists haven't learned much from the dents and grooves in the surface of our brains.

But differences in the way the surface of the brain is folded could indicate intelligence quotient, according to a group of Melbourne scientists.

They may also help explain some aspects of psychiatric disorders and help scientists develop a better understanding of which disorders are inherited.

According to University of Melbourne psychology and neuropsychiatry PhD student Alex Fornito, people with asymmetrical brains score higher on tests of verbal and spatial skill.

"Although our study only focused on problem solving and strategic thinking, the results indicate that similar variations in folding in

other parts of the brain may be related to other abilities," he said.

The study focused on a specific part of the brain called the paracingulate (PC), located within a fold unique to the human brain.

The researchers tested right-handed trial participants on tasks known to be performed by the left hemisphere, which houses verbal knowledge, and the right hemisphere, which is more spatially oriented.

They found the PC fold was more developed in the right or left hemisphere for some, but equally on both sides for others.

Those with the left-hemisphere PC fold performed much better than participants with symmetrical PCs on cognitive tests, regardless of whether the tasks were designed to be driven by the left or right hemisphere.

"We already know that there is variability in the folding of the brain. This research tells us that it is not just cosmetic but actually meaningful for behaviour," researcher Dr Stephen Wood said.

The differences in the folds may also help to explain some psychiatric disorders, the team said.

They hope to use the findings, published in the journal *Cerebral Cortex*, to determine the significance of asymmetry and variations in the brain folds of psychiatric patients, and work out if it's inherited.

It has been shown schizophrenia sufferers have more symmetric brains, the team said.

They hope their new findings will provide some greater insight into understanding the disorder.



West Australian Tuesday 20/4/2004
General News Page 33
Circulation: 201,433
Size: 70.97 sq.cms.

Brain fold linked to cognitive skills

MELBOURNE

Differences in the way the surface of the human brain is folded could indicate a person's intelligence, Melbourne scientists have discovered.

People with asymmetrical brains score higher on tests of verbal and spatial skill, University of Melbourne psychology and neuropsychiatry PhD student Alex Fornito found.

"Although our study only focused on problem solving and strategic thinking, the results indicate that similar variations in folding in other parts of the brain may be related to other intellectual abilities," Mr Fornito said.

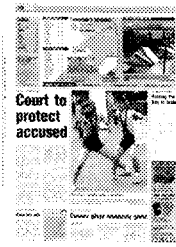
The study focused on a specific part of the brain called the paracingulate (PC) which is located within a fold unique to the human brain.

Researchers tested the right-handed trial participants on tasks known to be performed by the left hemisphere, which houses verbal knowledge, and the right hemisphere, which is spatially oriented.

They found the PC fold was more developed in the right or left hemisphere for some, but equally developed on both sides for others.

Those with the left-hemisphere PC fold performed much better than participants with symmetrical PCs on cognitive tests.

AUSTRALIAN ASSOCIATED PRESS



MX - Melbourne Monday 19/4/2004
General News Page 2
Circulation: 87,919
Size: 41.31 sq.cms.

● **SMART STUDY**

Folding the key to brain

Differences in the way the surface of the human brain is folded could indicate a person's intelligence, Melbourne scientists have discovered.

People with asymmetrical brains score higher on tests of verbal and spatial skill, University of Melbourne psychology and neuropsychiatry PhD student Alex Fornito found.

"Although our study only focused on problem solving and strategic thinking, the results indicate that similar variations in folding in other parts of the brain may be related to other intellectual abilities," he said.

The study focused on a specific part of the brain called the paracingulate, located within a fold unique to the human brain.

The differences in the folds might also help to explain some psychiatric disorders, the researchers said.



Geelong Advertiser Tuesday 20/4/2004
General News Page 6
Circulation: 29,625
Size: 69.88 sq.cms.

Brainy? It's all on the surface

DIFFERENCES in the way the surface of the human brain is folded could indicate a person's intelligence, Melbourne scientists have discovered.

People with asymmetrical brains score higher on tests of verbal and spatial skill, University of Melbourne psychology and neuropsychiatry PhD student Alex Fornito found.

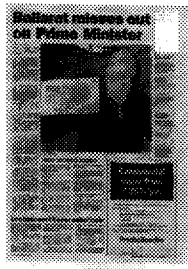
"Although our study only focused on problem solving and strategic thinking, the results indicate that similar variations in folding in other parts of the brain may be related to other intellectual abilities," Mr Fornito said.

The study focused on a specific part of the brain called the paracingulate, located within a fold unique to the human brain.

Researchers tested the right-handed trial participants on tasks known to be performed by the left hemisphere, which houses verbal knowledge, and the right hemisphere, which is more spatially oriented.

They found the fold was more developed in the right or left hemisphere for some, but equally developed on both sides for others.

Those with the left-hemisphere paracingulate fold performed much better than participants with symmetrical paracingulates on cognitive tests, regardless of whether the tasks were designed to be driven by the left or right hemisphere of the brain.



Ballarat Courier Tuesday 20/4/2004
General News Page 3
Circulation: 20,414
Size: 23.08 sq.cms.

Intelligence all in the folds

DIFFERENCES in the way the surface of the human brain is folded could indicate a person's intelligence, Melbourne scientists have discovered.

People with asymmetrical brains score higher on tests of verbal and spatial skill, University of Melbourne psychology and neuropsychiatry PhD student Alex Fornito found.



Australian Wednesday 21/4/2004
Higher Education Page 25
Circulation: 130,000
Size: 89.59 sq.cms.

A groovy kind of brain

Louise Perry

THE grooves and folds on the surface of the human brain could indicate how smart a person is, Melbourne-based scientists have discovered.

While it has long been known that no two brains have exactly the same groove patterns, until now scientists did not know if the grooves and folds meant anything or if they were purely cosmetic.

Carried out at the University of Melbourne in collaboration with the Mental Health Research Institute, the research found that people with asymmetrical brains scored higher on verbal and spatial skill tests.

The study focused on a specific part of the brain called the paracingulate, located within a fold in the middle of the human brain.

University of Melbourne psychology and neuropsychiatry PhD student Alex Fornito carried out the research by scanning the brains of 30 right-handed men and intends to continue the testing on women.

"This is significant in that it is the first research to show what this variation in folds actually means and that they are not just part of a cosmetic appearance," Mr Fornito said.

He said people who had more folds in the left hemisphere of the brain appeared to be better at problem-solving and strategic thinking, in contrast to a person with more grooves in the right hemisphere or a relatively similar amount on both hemispheres.

He said the difference in folds could also help to explain psychiatric disorders like schizophrenia.