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Older Australian Twins Study (OATS)

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OATS Study Coordinator 2017 – 2020
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Why twins?



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Why twins?

The Older Australian Twins Study (OATS) aims to determine what influences memory and thinking as we age.



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Older Australian Twins Study (OATS)

- 740 twin participants
- 342 twin pairs, 56% identical twins
- Aged 65 – 90 years at first assessment
- Assessed up to 6 times between 2006 and 2023
- 3 recruitment phases:
 - OATS (2006 – 2012)
 - OATS PET (2016 – 2017)
 - OATS Online (2020 – 2021)



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OATS and OATS PET



Participant questionnaires/assessments

Study partner questionnaires

Blood sample for chemistry and genetics



MRI and/or PET scan for brain features

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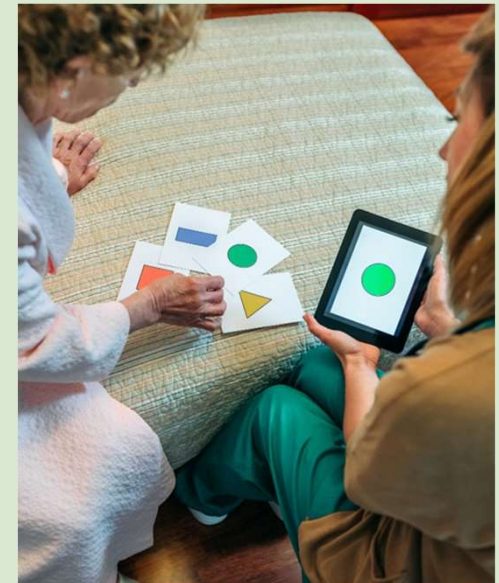
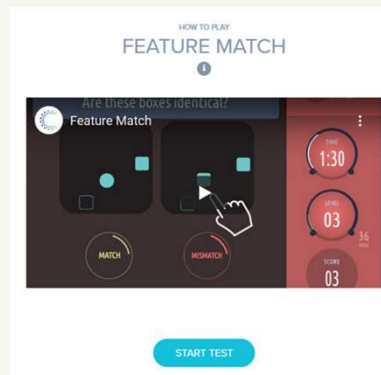


OATS Online

Online participant questionnaires

Online study partner questionnaires

Online cognitive assessments



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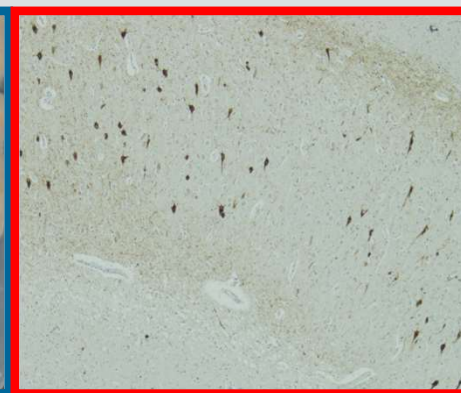
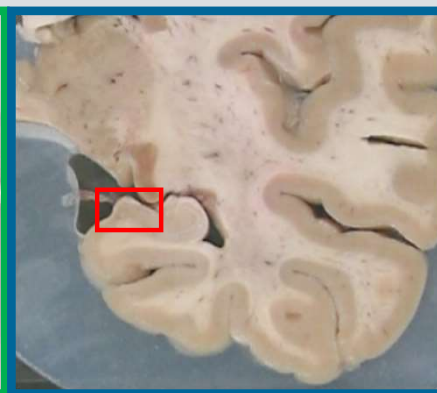
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Brain donations

Study	Consented	Deceased	Donated
MAS	114	73	53
SCS	18	15	12
OATS	55	10	7
Total	187	98	72



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Always in our hearts ...



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What have we learned?

- OATS provides a unique breadth and depth of data in a large sample of twins.
- OATS data have been used in >120 projects.
- Findings have been described in ~100 papers.



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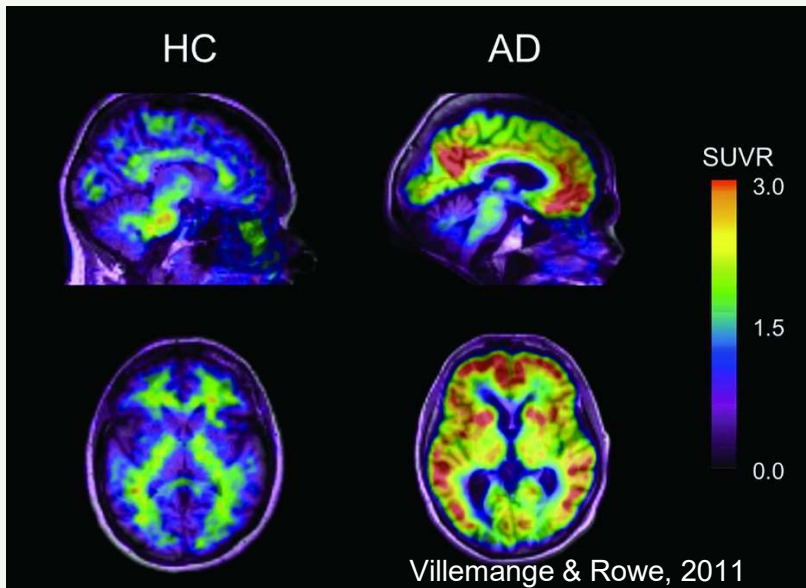


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What have we learned?

PET brain scans can quantify beta-amyloid, a protein that accumulates in the brain very early on in the development of Alzheimer's Disease.



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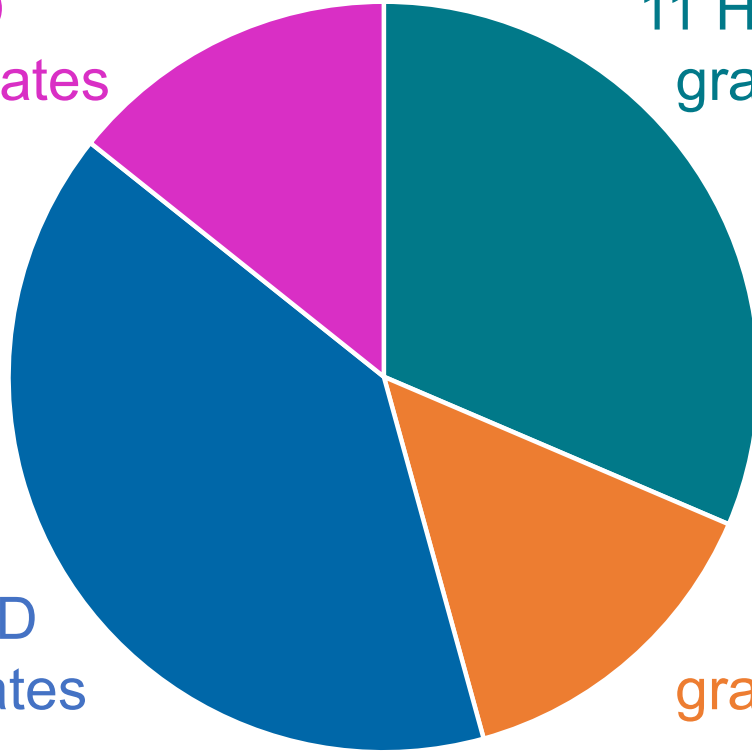
Research students

5 PhD
candidates

11 Honours
graduates

16 PhD
graduates

5 MSc
graduates



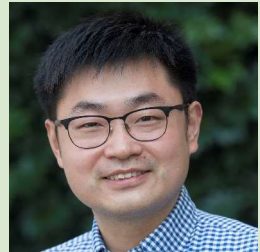
Dr Lee



Dr Batouli



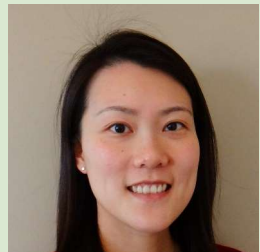
Ms Kanchibhotla



Dr Jiang



Dr Tsang



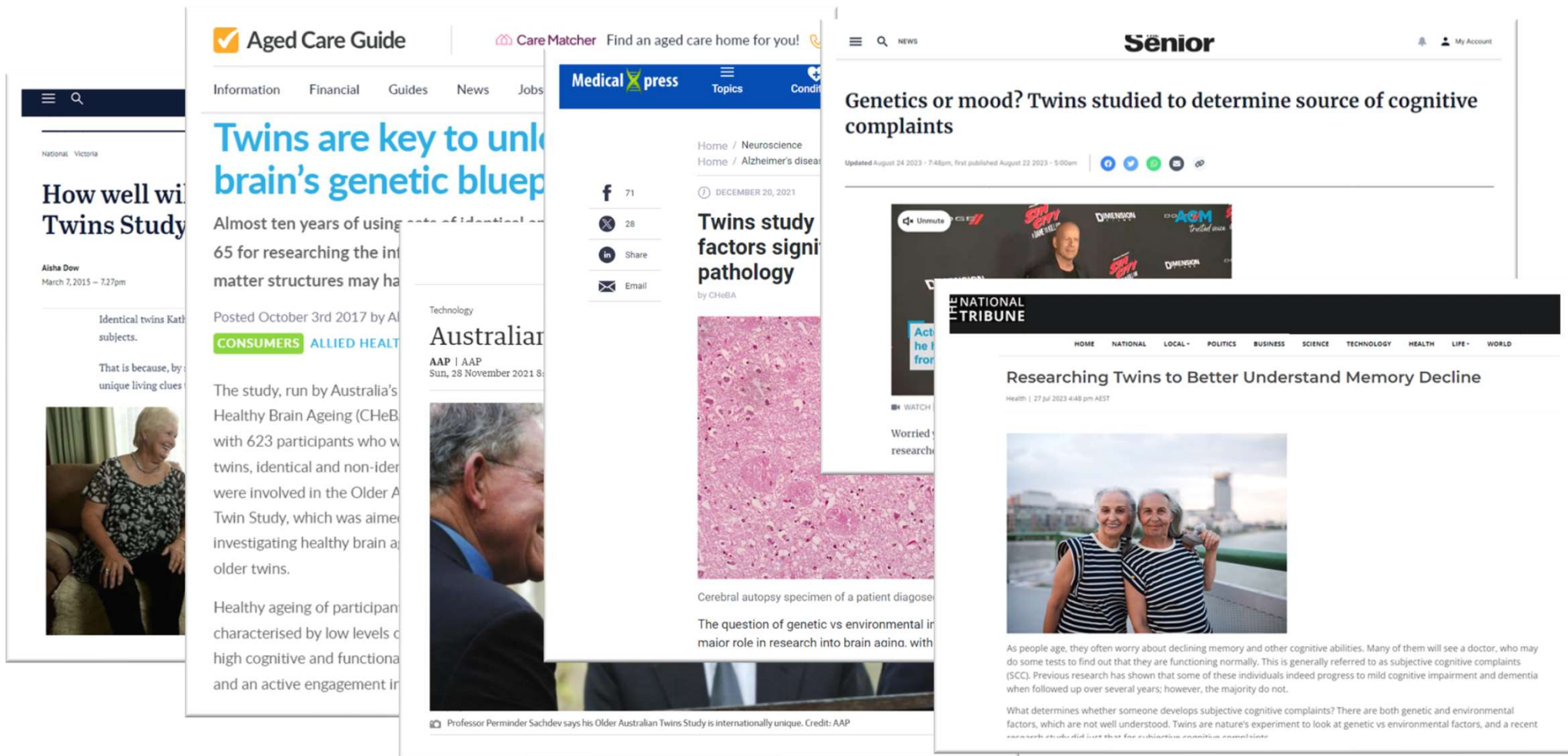
Dr Wu

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Thank you for your time: 21,000 hrs!



87 laps



5,118 episodes



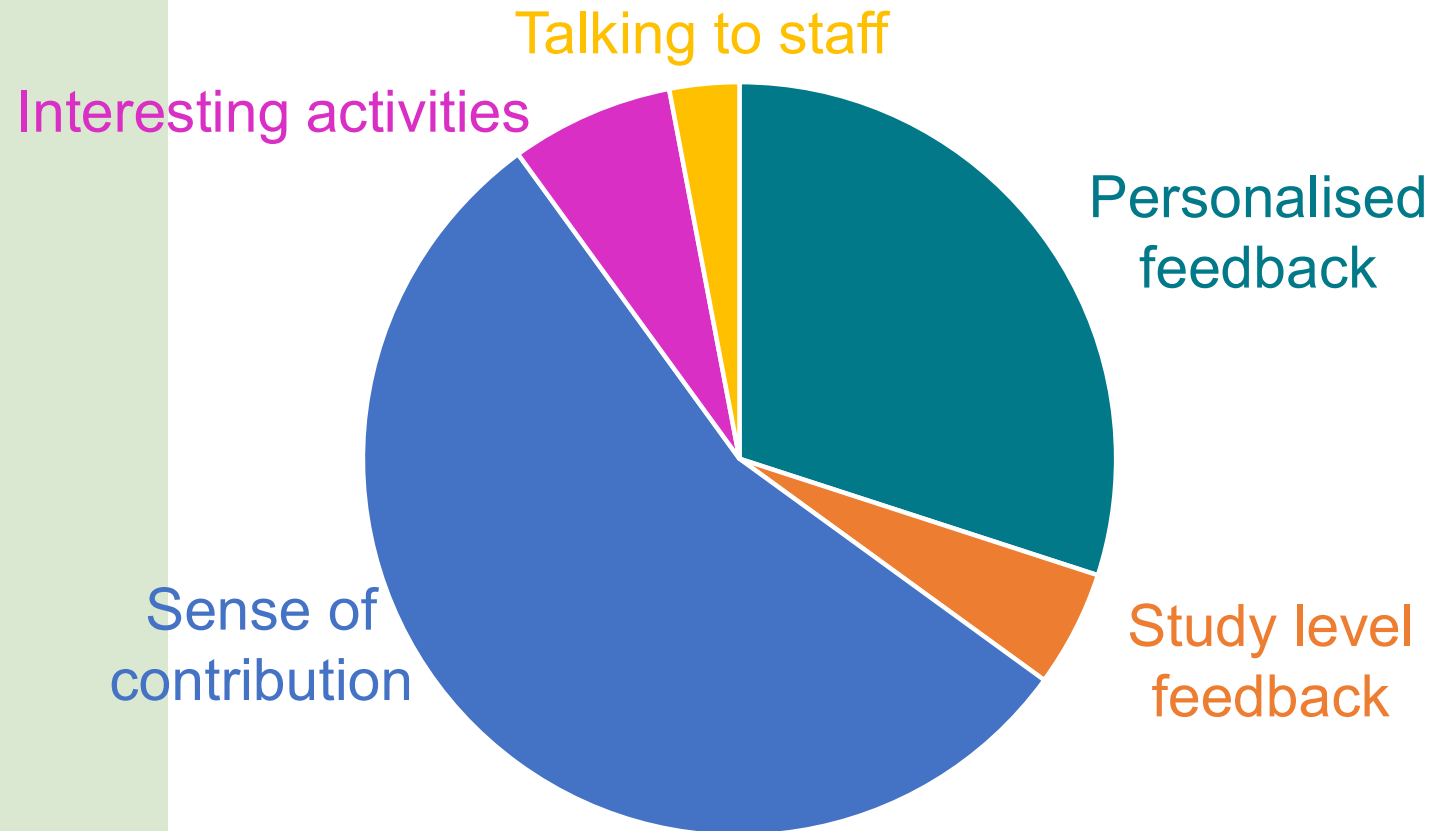
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Why did you do it?



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Thank you



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