



# Sleep researcher

Maths and sleep. What could they possibly have in common? **Marian McGuinness** finds out how maths brain **Katie Kandelaars** came to be a sleep researcher.

Katie Kandelaars, sleep researcher at the Centre for Sleep Research

**T**hink about times when you've been tired at school. You can't concentrate in class and your schoolwork takes twice as long to get through. All you want to do is put your head on the desk and snooze.

What if you were an airline pilot or a train driver? They can't afford to be dozy on the job. That's where Katie Kandelaars's research has come in handy. Originally, she wanted to be a teacher or a pilot, but her love of maths led her on an interesting path at university, through a Bachelor of Science degree and into **psychology**. That's when she found out about the Centre for Sleep Research at the University of South Australia.

Katie is doing her **PhD** using mathematics and computer software to predict tiredness in workers. She does cool things like putting **electrodes** on people's heads and measuring their brainwaves to see how deeply they're sleeping. Katie travels nationally and internationally collecting **data** and presenting her work at conferences.

'We have to be available at all hours of the day and night,' says Katie, 'but I'm happy that I've thought of something no-one else has thought of before and that's kind of cool!'

## COOL JOB TERMS WORTH KNOWING

**psychology:** the study of human nature

**PhD:** Philosophiae Doctor (Doctor of Philosophy)—the highest university degree

**electrodes:** disc-shaped sensors that receive electrical signals from the brain

**data:** facts and other pieces of information

For more cool jobs, see the Ace Day Jobs website at [www.abc.net.au/acedayjobs](http://www.abc.net.au/acedayjobs)

## WANT THE JOB?

Katie suggests talking to as many people as you can about the areas where maths can be used. Don't be afraid to get involved in a career some people think of as being a bit 'different'.

