# young tassie scientists

The Scientists Get Involved YTS on the road

Teachers About YTS

## The Scientists

### Stan Mitew 🖻 download



### What interested you in science as a child?

My fascination with science, and the brain in particular began about 15 years ago when I was in first grade and our teacher showed us a 'magic' invisibility trick (actually utilizing the blind spot in the eye). It awakened in me a sense of curiosity about the great mysteries of the brain. It is not a very well understood organ and even today, there are constantly new discoveries about it being made. Growing up on a farm also helped a lot as I had free reign to conduct 'experiments' (sometimes annoying my grandparents) and was surrounded by animals and nature. I knew I wanted to be a scientist and solve future problems

### What did you like about studying in university?

When I started university at UTAS, the Medical Research degree was offered for the first time and I just knew it was made for me. It offered a broad selection of both medical and general science subjects that provided a good background for a career in research. My favourite subjects were invariably those that dealt with neuroscience, psychology and pathology as I felt I could combine all of these three areas of interest into my research goals. What I liked about the degree structure was that at the start, you are given a general selection of units in a particular field (eg. Science), which then get progressively more specialized, giving you the option to sample different areas of interest before you commit to one.

#### What are you doing now in your current research?

And why is it important? I am currently completing my Honours Degree in Medical Research at the Menzies Research Institute. My project aims to study the effects of Alzheimer's disease, a very serious condition that progressively kills cells in the brain, on different types of brain cells (neurons). There is a possibility that Alzheimer's disease is selective in which neurons it kills and that not all neurons are equally affected. By looking at which cells are less vulnerable, I hope to study the factors that mediate resistance to the disease. With the aging population that most developed nations are facing, the incidence of dementia and other age-related neurodegenerative disorders such as Alzheimer's disease is going to increase. Currently, there is no effective treatment for it, therefore research into new therapeutics is crucial.

#### What do you want to do in the future?

I hope to finish my Honours project at the end of this year and continue with a PhD next year. At some point, I hope to work in a major research laboratory, either in Australia or in the USA. Eventually, I would also like to get a postgraduate medical degree in Neurosurgery and use my experience as a medical researcher to help better understand the neurodegenerative disorders and how to treat them. I feel that as a scientific field, Neuroscience is still very young and there are plenty of discoveries to be made, making for a very challenging and dynamic area to study. But most of all, I think it's fun!