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**Chief Scientist for Australia**

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**Gold Coast Science Fair**  
**Career Speech**

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- Good morning everyone and welcome to the Science Fair. I trust you're already having a lot of fun today. I know I certainly am, even as Chief Scientist it's not often I get to ride a hover board!
- Today I'm going to be talking about all the exciting possibilities that a career in science can offer. I've also got some assistants here today who are from the first ever group of Young Ambassadors for Science.
- Anna, Kate, Isabella, Aisha and Kristina are graduates of the National Youth Science Forum which means they are five of Australia's brightest science students. Later on they're going to talk to you about their experiences and the new science careers they've learnt about.
- Despite what you might see in movies or magazines or in TV ads, being a scientist is more than white lab coats, goggles and hair nets. It can be as diverse as trekking across Antarctica collecting ice core samples or treating wild animals in the outback.
- My career to date has certainly been exciting and taken me to places I never thought I'd go.
- In primary school I wanted to be a teacher. Only in high school, when it was possible to take classes in pure science, such as chemistry, did it occur to me for the first time

that being a scientist was something you could do for a career.

- But I'd never met a scientist and so had to imagine how I could combine science and work.
- The first connection I made was to medical technicians or researchers. I thought there must be someone who studies your blood after you gave a sample at the doctor's and it seemed amazing to me that you could tell something about the health of somebody just by looking at their blood.
- It also meant you would get to use a microscope, which seemed like a pretty good deal.
- Later in high school I became fascinated by Physics, inspired by a wonderful teacher.
- Physics involves everything from understanding how aeroplanes fly, to understanding why the stars and the planets appear to move across the sky in the way they do.
- It seemed to me that physics could really help me understand any question about the world that I wanted to ask. Even then though, I had no idea what a physicist did for a living, only that I wanted to know more about physics.

- So after school, I went on to study Physics and Mathematics, as well as teaching at university.
- Then, during my graduate studies and afterwards, I studied astronomy, trying to understand the nature of mysterious dark matter and discovering planets outside our own Solar System in the distant reaches of the Milky Way Galaxy. This took me to Holland in Europe where I lived for seven years.
- One of the highlights of my career was leading a project of 73 scientists from all around the world who worked together to identify the smallest known planet outside our Solar System. Our discovery meant that it was likely there were many more Earth-like planets that we might not know about. It also meant there was a slightly bigger chance there could be life outside of Earth. Working as part of that team, I travelled to South America, to Tasmania and to Africa.
- Between researching stints, I also worked as a science journalist, and later became Director of Mount Stromlo and Sliding Springs Observatories, working at the Australian National University in Canberra.
- Now as Chief Scientist, I have very little time for research. Instead, I contribute to science by

communicating with the public, helping to inform government policy and meeting students like some of you whenever I can.

- Now that you've heard a little about me, I'd like to invite our Young Ambassadors for Science to come on stage and share their experiences of science so far.
- Ok you have two minutes each... Go!
- Thankyou so much, lets give them all another round of applause. Please stay on stage girls because I thought we could all play a bit of an activity for the rest of our time together.
- What some of you might have noticed from my own career and from listening to our Youth Ambassadors for Science is that there is more to science than being a Physicist, or a Chemist or a Biologist.
- Some of the biggest challenges we face in Australia, things like climate change, food and water security and human and environmental health need complex solutions. Solutions that are outside the realm of one scientific discipline, but require piecing together knowledge from different fields.
- I have here a collection of different science and social science areas written on cards. I'm going

to ask each of you to draw one, and then I'll ask the audience what sort of careers you could have, what sort of problems you could solve, or activities you could do by combining the two areas of knowledge written on the cards.

- For example if you combine nutrition with zoology you could study the diets of different animals. Just recently a study was released that found Orang-utans were the most energy efficient animals which they found by studying calorie intake and energy expenditure.
- (play game)
- Excellent now to the final two draws, we have prizes for audience members that answer first.
- The first two disciplines are Taxonomy and Programming.
- The last two disciplines are Toxicology and Archaeology.