

## **Experimental Research – Intermediate**

### **Section Co-ordinators: Susan Tawia and Miranda McKellar**

Each year we wait with anticipation to see the entries in the Intermediate Experimental Research section of the Science Talent Search. Students who enter this section are in Years 9 and 10 and it was clear this year that many students thrived when given the opportunity to work on a project that inspired them.

There were forty-eight entries this year and many were of an excellent standard, which made the section very competitive. Six Major bursaries and twelve Minor bursaries were awarded. This year a new category was introduced: Distinction. This category enabled us to acknowledge the high-quality entries that just missed out on bursaries. Fifteen Distinction Certificates were awarded in 2017.

Pleasingly, girls and girls' schools were very well represented in this section this year, with many being awarded bursaries.

Some of the topics of investigation that were awarded bursaries included:

- The sound of silence
- Hot, warm or cold brewed Australian teas - are they antibacterial agents?
- Which fruits ruin your gelatin dessert?
- Can a natural additive be added to wool when rinsed to make it more comfortable?
- Font-tastic!
- Do liquid laundry detergents perform better than powdered?

Not only did these entries involve creativity to come up with an original idea to investigate, but also the discipline required to undertake a controlled experiment and document the process in detail. Undertaking research projects and then presenting them as a report parallels exactly what scientists do in the 'real world'. All of the students who managed to undertake this process and produce an entry for the Science Talent Search, which satisfied the requirements of both originality and scientific rigour deserve congratulations.

The Science Talent Search aims to stimulate an ongoing interest in the study of sciences by encouraging independent, self-motivated project work amongst students of Science.

An entry in the Intermediate Experimental research section of the Science Talent Search satisfies the requirement of the Science Inquiry Skills strand of the Australian Curriculum for Years 9 and 10. The Australian Curriculum: Science has three interrelated strands: Science Understanding; Science as a Human Endeavour; and Science Inquiry Skills. Together, the three strands of the science curriculum provide students with understanding, knowledge and skills through which they can develop a scientific view of the world. Providing students an opportunity to enter the Experimental Research (Intermediate) section of Science Talent Search gives them an opportunity to conduct authentic research, with unknown outcomes, rather than replicating an experiment from a science textbook.

It has been a pleasure coordinating the Intermediate Experimental Research section and having the opportunity to work with our valued judges to discover the many students with talent, creativity, and scientific inquiry skills. We would like to thank the judges for their work and commitment to the Science Talent Search. We also recognise and thank the teachers, school laboratory technicians and mentors who supported the students and, finally, the students who accepted the challenge. It instils confidence that Science in Australia has a positive future.