

Seventy Bronze CREST Awards earned

Last year, seventy students in Years 8 to 10 achieved the Bronze level award in CSIRO's Creativity in Science and Technology (CREST) program. The nationally accredited program encourages students to independently design and execute their own open-ended science projects. Projects within the program can focus on conducting a unique scientific investigation or developing a new technological solution to address a recognised need.

To achieve a Bronze award, students were required to spend a minimum of ten hours of dedicated work on their projects and demonstrate a thorough understanding of the scientific method of inquiry.

Meriden students explored a diverse array of topics including the fermentation of kimchi at various times and temperatures, how instant ice packs work, identifying the most effective substances to combat fruit flies, and the creation of a *SafeSeat Sensor* designed to alert parents to the presence of children in car seats.

Congratulations to the following girls for their efforts in achieving these awards.

Year 8

- **Cynthia Bui** - *The effect of bananas on avocado ripeness*
- **Nicole Cen** - *The effect of different substances on osmosis*
- **Julia Chen** - *Effects of grass on the amount of soil that erodes when it rains*
- **Gabriella Correia** - *Whether the type of environment affects how a betta fish sleeps*
- **Luna Duan** - *The effect of temperature and sugar on rehydration of dried roses*
- **Zena El Sadik** - *Baking Soda and/or vinegar - stain cleaning agents to the rescue?*
- **Katherine Fanning** - *The effect of different solutions on cut flowers*
- **Kitty Gai** - *The effect of the mass of paper on its dissolution time*
- **Nikita Garg** - *How does ocean acidification affect underwater matter?*
- **Eva Hu** - *The effect of salt to the boiling point of water*
- **Isabella Jiang** - *Investigating absorbency in paper towels through capillary action*
- **Charlotte Kang** - *How does the temperature of lemon juice affect its voltage?*
- **Olivia Kim** - *Kimchi fermentation at various times in different temperatures*
- **Yiru Li** - *Investigating the viscosity of honey at different temperatures*
- **Vivian Liao** - *Water turbidity*
- **Emily Ng** - *Does time in the fridge affect the Vitamin C in calamondins?*
- **Chloe Nguyen** - *Effect of water salinity on plant growth*
- **Chloe Papageorgiou** - *How does untreated greywater affect plant growth?*
- **Annalakshmi Satchithanathan** - *How does the incline of a slope affect how a ball travels down it?*
- **Cindy Shen** - *The effect of changing the temperature on the stickiness of tape*

- **Miriam Shin** - *Borax in carbon capture*
- **Ashley Shu** - *Fabric absorbency and repellence*
- **Chloe Tam** - *How does the distance of sound affect its noise level?*
- **Chanelle Tiranatvitayakul** - *Testing the insulating ability of various materials*
- **Anusha Viswanathan** - *Effect of increasing light reflected by a concave mirror on heat*
- **Amelia Von** - *How do instant ice packs work?*
- **Hannah Wong** - *Butter versus oil in cupcakes*
- **Veronica Xie** - *Harmonic habit havoc*
- **Jasmine Yang** - *If dissolving sugar or salt in water affects its boiling point*
- **Louisa Yenson** - *Effect of different pH solutions on the growth of plants*
- **Carol Zhang** - *Does the temperature of water affect the amount of time to freeze?*
- **Chloe Zhou** - *Effect of changing salt concentration on ability of wood to float*

Year 9

- **Elyssa Ghaly** - *Need a boost?*
- **Yasmin Jangir** - *Which skin moisturiser works best to keep skin moist?*
- **Dominique Kaleel** - *Is the strength of hair affected by chemical lightening?*
- **Amelia Kozman** - *Observing the effect of temperature on the activity of pepsin*
- **Sheiszen Ling** - *Safe Steps*
- **Zara Naidoo** - *Yeast with different substances experiment*
- **Jazara Navaratnam** - *Which substances are the most effective to kill fruit flies?*
- **Mia Pertsinidis** - *Bushfires and hypoxic blackwater*
- **Ananya Philip** - *The effect of pH on the length of time a glowstick glows*
- **Kiana Taylor** - *The drink which causes the most erosion in teeth?*
- **Chloe Weng** - *Does listening to music affect efficiency of how a student studies?*
- **Corrine Xu** - *Do seeds in lemon have an impact on Vitamin C content?*
- **Abby Xu** - *Effect of coconut oil in micellar water on make up*
- **Sophie Yang** - *Materialistic soot*
- **Sharon Jiaqi Zhao** - *How high plants grow when watered with three different liquids*

Year 10

- **Farnia Afjool** - *Baking powder and the rise of a cupcake*
- **Laura Baquero** - *Measuring the speed of light in gelatine*
- **Calleigh Chow** - *Effect of polarity on solubility*
- **Rudia Chung** - *Determining the porosity and permeability of different soil types*
- **Laura Croxon** - *The effect of light intensity on the voltage of solar panels*

- **Annabelle Desmond** - *Wearable hazardous gas detector*
- **Krithi Dhiwaharan** - *SafeSeat Sensor*
- **Kaiyan Dou** - *Brine shrimp*
- **Alyssa El-Hakim** - *What common fruits and vegetables contain the most acid?*
- **Sophie Gan** - *Wheelchair-friendly pet feeder*
- **Lucinda Harricks** - *The viscosity of different liquids*
- **Sara Hawley** - *Decomposition of compostable bags*
- **Natalie Kim** - *Electrolytes in sport drinks*
- **Sienna Li** - *The effect of different concentrations of vinegar on soil pH*
- **Olivia Lim** - *Electrolytes and sport drinks*
- **Maria Skiadopoulou** - *Woodchip versus straw mulch for marigold plant growth*
- **Claire Sun** - *The effect of varied salinities of water on brine shrimp hatching time*
- **Catherine Tran-Le** - *Production of bioplastics*
- **Mia Wills** - *Impact of electromagnetic radiation on radish seed germination*
- **Emily Yang** - *Hydroelectricity generator in household pipes*
- **Sally Zhang** - *Production of bioplastics*
- **Amanda Zhong** - *Production of bioplastic using banana peels*
- **Lena Zhu** - *Hydroelectricity generator in household pipes*

Mrs Claire Marsh

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