



# national science week 2017

## Tristan Wells

### *Rock Doctor, Gold Digger!*

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My background is in the mechanical trades, prior to studying science I worked for seven years in the mining and manufacturing industries. I originally intended to study environmental science and geology in order to improve the tailings (waste) management processes in mining. However, during my study I discovered a passion for the problem solving and deep thought required for mineral exploration and ended up studying economic geology (the study of economic mineral deposits and their genesis and distribution). My current research in the Earth Sciences at CODES involves improving methods of mineral exploration. Specifically how trace element geochemistry of accessory (minor) mineral phases can be used to vector toward mineral deposits, with a focus on the porphyry Cu-Au deposits of the Lachlan Fold Belt (pretty much all of NSW west of Lithgow).



As science student, geologists get to have fun in the field. Bushwalking, drawing maps and diagrams, hitting rocks with hammers, wetting them (we occasionally lick things), seeing what minerals are in the rocks and what that can tell us about the earth at the time the rocks were made. In the lab we get to crush and smash rocks, pan them, cook them, and shoot lasers at them. All in the name of science. I was drawn to geology because I am happiest when I'm outside (mainly), and stuck with it because it changes the way you look at the world.

For further information: [www.utas.edu.au/earth-sciences](http://www.utas.edu.au/earth-sciences)