Teaching next gen about biotech just in her DNA

## CAITLIN PAROCZAI

Perth teacher Pauline Charman is encouraging students to embrace biotech with her social enterprise that helps young scientists learn about DNA barcoding.

Ms Charman — who was a science teacher for 25 years — founded BioBarcode Australia in 2020 after realising there were not enough opportunities for young people to get involved in biotechnology.

"I had always known as a science teacher how important encouraging our next generation into STEM careers was. Australia's failed quite badly in terms of building a workforce that goes into tech," she said.

"There has always been a lot of robotics and engineering, but this area of biotech where kids get to experience life science and DNA tech is pretty rare."

BioBarcode's program involves identifying, mapping and monitoring living organisms using their DNA. Participants learn how to ethically collect samples from specimens, log the information digitally, and use equipment to extract DNA. Ms Charman, pictured, said the process could be used to identify particular species and plants.

Australia's biotech industry is estimated to be worth \$8.4 billion, according to IbisWorld, and its market size is expected to increase 3.6 per cent this year.

WA showed the greatest increase in the number of biotech organisations, going from 119 in 2017 to 179 in 2019, a report by AusBiotech found.

Ms Charman said it was important that schools start educating young people on biodiversity now, given the industry is expected to continue growing. "Biotech is such an important area because we know farming is going to look different in the next 20-30 years because of climate change," she said. Ms Charman said it was essential for the State Government to make biotech "more of a priority", considering WA's vast biodiversity.

BioBarcode is currently running its program in eight schools, including Willetton Senior High School, John Curtin and St Hilda's

