**Hands-on Genetics Lab for Teacher Professional Development & BEANZ workshop**

**Te Herenga Waka – Victoria University of Wellington & BEANZ (Biology Educators of Aotearoa New Zealand)**

**Date & time: Wednesday 26th November 2025, 8:30am – 3pm**

**Location: Kelburn Campus, Te Herenga Waka - Victoria University of Wellington**. Morning tea and lunch will be provided. There are no fees associated with this Teacher Professional Development opportunity.

**Register at the following link:** <https://forms.cloud.microsoft/r/BqszBCAAgA>

**Hands-on genetic workshop with Dr Diane Ormsby, Te Herenga Waka – Victoria University of Wellington**

DNA can be used as a forensic tool as a direct result of the development of polymerase chain reaction (PCR) and the sequencing of the human genome. PCR allows for targeted amplification of DNA sequences within minute samples of DNA. The DNA of all humans is largely identical, thought there are regions on the human chromosomes that show a great deal of variability - polymorphisms. Polymorphisms occur predominantly within the non-coding regions of DNA and provide the basis for DNA fingerprinting. We will work with the D1S80 locus, a polymorphic sequence termed variable number of tandem repeats (VNTR) located on Chromosome 1. Eighty percent of the population is heterozygous at the D1S80 locus, and the frequency of each allele varies between populations, so this locus can be used to discriminate between individuals. Each teacher will work with their own blood to extract DNA, use restriction enzymes, PCR, and electrophoresis to amplify the D1S80 VNTR locus from their own genome and attempt to distinguish their own two alleles. Approval has been received from the Human Ethics Committee (Approval number 2024/HE000284) to conduct this workshop. If you have any questions about this consent/workshop please contact Diane Ormsby on diane.ormsby@vuw.ac.nz or human-ethics@vuw.ac.nz

**BEANZ workshop with Jan Szydlowski (TiC Biology, Onslow College, and BEANZ Wellington Representative)**

This workshop will focus on Level 3 Biology internals BIO 3.2 and BIO 3.6, with a specific emphasis on the teaching and assessment of genetic technologies. Attendees will receive practical, ready-to-use teaching resources to enhance their classroom delivery and will have the opportunity to share their own successful experiences and troubleshoot challenges related to teaching these standards. Additionally, the session will include a dedicated time to briefly discuss the recently announced changes to the Science NZ Curriculum and gather feedback to inform Biology Educators' Association of New Zealand.

**Contact for further information:**

**Event + Genetics lab:** Dr Diane Ormsby on [diane.ormsby@vuw.ac.nz](http://diane.ormsby@vuw.ac.nz/)

**BEANZ workshop:** Jan Szydlowski on jan.szydlowski@onslow.school.nz