



## **Pacific Pathology Training Centre**

### **Blood Transfusion Science**

**19 October – 13 November 2020**

This training course will be delivered over four weeks at the Pacific Pathology Training Centre, based at the Wellington Hospital campus in Wellington, New Zealand to medical laboratory personnel working in hospital laboratories (or similar) in the South Pacific region. The PPTC engages specialist's scientists as external lecturers to teach this course.

#### **Aim:**

A comprehensive theoretical component and a series of practical workshops are provided to students in the medical laboratory field of Blood Transfusion science. The purpose of the training is equip the students with sufficient knowledge to be able to work confidently in their home laboratories and be able to provide quality diagnostic test results to clinicians using the medical laboratory services for patient management and better health outcomes.

#### **Course Content and Objectives:**

This course delivers the following subjects to the students:

- Transfusion transmitted diseases (including HIV, Syphilis, Hepatitis B and C)
- Donor selection criteria and collection
- Blood processing, blood transfusion practise, ABO, Rh and other blood group systems,
- Blood group genetics and basic immunology
- Preparation of Coombs control cells, technical methods
- Antibody screen and identification
- Compatibility testing
- Haemolytic diseases of the newborn
- Transfusion reaction investigations and Haemovigilance
- Blood bank quality management processes
- Equipment maintenance
- Organisation of a blood bank including emergency planning, major trauma cases, backup planning
- Appropriate use of blood components in transfusion medicine
- Referral laboratory network
- Practical sessions are provided, focusing on correct technique and fundamental basic procedure
- Tours of NZBS cross-match laboratory and the blood donor centre

Content of this course ensures that the practical needs of all students attending are met and the practical sessions will focus on repeated basic methodology, so as techniques are mastered to levels of excellence