

2012 Workshop

Transfusion Science (Intermediate)

BUNDOORA CAMPUS WEST

Date

Monday 30 January 2012 to
Friday 3 February 2012

Time

9.30 am to 5 pm

Venue

Haematology Laboratory
Biosciences Building (Building 223),
Bundoora campus west
Plenty Road, RMIT University

Fee

\$1 700 (\$1 500 for each additional
participant from the same
laboratory) includes participant
manual, lunch, morning and
afternoon tea.

Registration

Registration can be made online
through RMIT Training at
www.shortcourses.rmit.edu.au
using code S160014

School of Medical Sciences

Workshop outline

The first three days of this five-day workshop provide an introduction to blood grouping, crossmatching and antibody investigation. Days four and five will focus on the investigation of adverse responses to blood transfusion and the investigation of Haemolytic Disease of the Foetus and the Newborn (HDFN).

Through a program of lectures and tutorials conducted each morning, participants will be introduced to the major blood group systems of clinical significance, the techniques and procedures used to provide compatible blood for transfusion, techniques employed in determining blood group antibody specificity and the investigation of transfusion reactions and HDFN.

The afternoon sessions of the course will consist of problem-based practical exercises that allow participants to gain practical skills in the techniques used to investigate blood group antigens and antibodies. Both tube and column agglutination techniques will be employed during the practical component of the workshop.

A workshop dinner supported by the sponsors will be held on the evening of Thursday 2 February 2012.

Participants

This workshop is designed primarily for medical scientists and technicians working in the blood bank as part of staff rotations, or as a refresher program for medical scientists wishing to return to practice.

Award

Participants who complete this workshop will receive an RMIT Statement of Completion as recognition of their participation.

Professional recognition

This workshop is accredited within the Australian Institute of Medical Scientists (AIMS) Australian Professional Acknowledgement Continuing Education (APACE) scheme. Participants in the five-day workshop are eligible for 50 APACE points.

Workshop structure

Day one

- » Immune response to blood group antigens
- » Overview of blood group antigen systems
- » ABO and Rh systems

Day two

- » Principle of haemagglutination and techniques for the detection of blood group antibodies
- » Red cell panels and antibody investigation

Day three

- » Clinical significance of blood group antibodies
- » Compatibility testing and crossmatching

Day four

- » Adverse effects of blood transfusion and their investigation

Day five

- » Pathophysiology of HDFN and its laboratory investigation

Workshop staff

The program leader is Associate Professor Ralph Green.

The demonstrators and support staff for the workshop will include Elaine Batchelder from RMIT University, Jenny Condon from the Australian Red Cross Blood Service, Claire Grattidge and Matthew Wilson from CSL Biotherapies and representatives from Grifols Australia.

Accommodation

Information on accommodation conveniently located to the Bundoora campus of RMIT can be found on the Continuing Professional Development website (please refer to back page).

Workshop content

Theory

- » Blood group antigen systems and their clinical significance
- » Principles of haemagglutination and techniques used to detect blood group antigens and antibodies
- » Principles of compatibility testing
- » Basic principles of blood group antibody investigation
- » Causes and investigation of transfusion reactions
- » Haemolytic Disease of the Foetus and the Newborn

Practical

- » Blood grouping: saline and antiglobulin procedures using tube and column agglutination techniques
- » Compatibility testing: grouping, crossmatching and releasing blood for transfusion
- » Antibody detection and use of red cell panels to determine antibody specificity
- » Elution techniques used in the investigation of transfusion reactions and HDFN
- » Investigation of FMH

Workshop outcomes

On successful completion of this workshop, participants will be able to:

- » discuss in general terms the major blood group systems and explain their clinical significance;
- » discuss the purpose and the limitations of current compatibility testing procedures;
- » outline the processes involved in the detection and determination of the specificity of blood group antibodies;
- » perform manual tube and column agglutination techniques for the detection of blood group antigens and their corresponding antibodies;
- » apply the above techniques to grouping, crossmatching and the determination of blood group antibody specificity/ies;
- » discuss the pathophysiology of transfusion reactions and HDFN and their serological investigation;
- » perform elution techniques to detect red cell bound antibody; and
- » interpret Kleihauer and flow cytometry techniques for the detection of FMH.

Workshop sponsors

CSL Biotherapies

GRIFOLS

Enrolment and program enquiries

Contact: School of Medical Sciences
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Further information

Laboratory Medicine Continuing Professional Development (CPD)
www.rmit.edu.au/medicalsciences/labmedcpd