

HAEMATOLOGY SIG 2021

The Haematology SIG Seminar for 2021 was held virtually on November 13 and organised by myself, Lauren Eddington, Haematology SCL Dunedin. Over 120 attendees had signed up to attend by the day of the event, which was a packed seminar with talks from 9:00am-4:00pm. Sponsorship from Roche, Stago, and Abacus helped the event go ahead. We had a wide range of blood science topics covered over the course of the day including CBC analysis, flow cytometry, forensic blood science, and health care governance.

The seminar started off with Chris Greenwood and the wonderfully titled talk 'How do you solve a problem like Malaria.' He taught us all about a PCR method for identifying the presence of malaria in blood samples which he worked up in the Hawke's Bay laboratory. This benchtop method allowed core staff to be more confident in the malarial results they put out after hours, as opposed to making and interpreting thick films.

Two haematology medical laboratory science students presented talks about the research they worked on during their placements. Zoe Whitfield from Pathlab Bay of Plenty spoke about extending the acceptable sample age for running the monocyte distribution width up to seven hours. This is a parameter that can be used in identifying developing infections and sepsis. Ella Edwards spoke about comparing different methods for giving accurate platelet counts in situations of EDTA mediated platelet clumping. As a result of her research her placement laboratory in Dunedin will now be instituting a method using gentamicin to disperse platelet clumps.

Jason Huang from Roche presented three cases where full blood count analysers produced abnormal graph results 'masquerading' the true issue. In one case, malarial parasites were hiding under the guise of eosinophils. Jason's in-depth explanations of scatterplot graphs and interesting cases are always much appreciated!

Caity Dalley clearly presented three cases from flow cytometry highlighting the importance of running CD5 markers on cases that appear to be CLL. This marker can help identify patients who have biclonal CLL.

Associate Professor Rob Siebers presented a short talk on a very interesting point - 'The 70% claim'. It is often quoted in articles that around 70% of all clinical decisions are dependent on laboratory results. Tracing the references back, this claim is not at all substantiated and has just been falsely perpetuated. This is something that will require a study to show the actual direct impact of laboratory results, which would likely vary between hospital and GP practises.

Rosalyn Rough from ESR introduced us all to another side of blood science - blood spatter analysis! She gave an engaging informative talk and many attendees had questions to ask about the topic at the end.

Dr Peter Bradbeer from Starship Hospital gave a great talk on his specialty of paediatric haematology. His passion and knowledge were clear to everyone who attended, and it was very useful to go over some of the ways in which 'children are not little adults'.

Matt Eby from Leukemia and Blood Cancer New Zealand gave an informative talk about the ways that the organisation can support blood cancer patients. They have fantastic services available including personal patient and family support, financial assistance, running support groups, and funding research. It was great to highlight and learn about this help that is available.

Dr Gustavo Faulhaber from Pathlab Waikato presented about hyperferritinaemia, beginning with a presentation of hyperferritinemia-cataract syndrome. High ferritin does not mean iron overload, and if misdiagnosed this can lead to unnecessary venesections. Transferrin saturation should be tested and also raised before venesection programmes are considered. 90% of the patients would have another cause for the high ferritin, such as acute illness.

I gave a whirlwind talk giving a quick introduction to machine learning and neural networks. There are many ways that artificial intelligence can come into the laboratory and diagnostic space, including image identification and decision making based on laboratory parameters.

Terry Taylor presented a talk on health governance. As the President of the NZIMLS he is very involved in representing the medical laboratory science profession and improving the situations for laboratories and laboratory workers. It was helpful to have a talk about the big picture for the profession, especially as now is such a time of change in the healthcare sector.

Although the event was virtual it was fantastic to still see such a high level of engagement with attendees able to ask questions through the Q&A section on the event portal. The virtual event ran smoothly with Eddy van Til in charge of all the tech for the day. He ensured that all our presenters were comfortable in using the online portal beforehand and that the timetable worked well for everyone.

At the end of the day our two judges, Rob Siebers and Cat Ronayne, awarded the best speaker prize, sponsored by Stago, to Caity Dalley, and the runner up prize to Chris Greenwood. Thanks to the NZIMLS, our sponsors Roche, Stago and Abacus dx, and to all our presenters for making the seminar as great as it was!

Lauren Eddington
