

48th Annual Scientific Meeting of the International Society for Experimental Hematology (ISEH) 2019

A report by Lena Dorsheimer

Thanks to a travel grant from the German Stem Cell Society, I had the great opportunity to join the annual meeting of the International Society for Experimental Hematology in Brisbane, Australia.

The ISEH meeting is known for its outstanding schedule of events which bring educational sessions on basic, translational and clinical hematology together. Beside the high qualitative talks of scientists who are leading in the field of hematology, networking opportunities for scientist at every career level are an important aspect of this conference. Since the annual ISEH meeting is a quite familial conference, it is always easy to get in highly appreciated contact with other scientists, that are working in the same research field or even persons who are experts in these fields. This is a very important part of the meeting for a PhD student like me. To get easily in contact with scientists like Liran Shlush, Grant Challen, Michael Milsom, Tony Green and Connie Eaves is an exceptional chance.

The meeting started with a very impressive talk by David Scadden from the Harvard Stem Cell Institute, who received the Donald Metcalfe Lecture Award this year. His talk was about his work on sensing and communication mechanisms regulating the bone marrow microenvironment in stress and disease states.

Another very impressive lecture was given by Ulrich Steidl from the Albert Einstein College of Medicine, New York, about understanding the stem cell origins of malignancies by sequencing patient material. Targeted deep sequencing in combination with single-cell sequencing of pre-MDS stem cells, MDS stem cells, pre-AML stem cells and AML stem cells suggested a parallel evolution of stem cells during the progression of MDS to secondary AML and that the MDS bulk and AML bulk was formed by different clones.

A few presentations, e.g. by Adam Wilkinson, focused on methods to maintain hematopoietic stem cells in culture. Another main topic during the meeting was the characterization and remodeling of lineage determination in hematopoietic hierarchies. To do so more and more groups are using single cell methods like single cell RNA sequencing.

To the ISEH it is also relevant to support scientists that are at the beginning of their career. Postdoctoral and PhD students had the opportunity to present their work as a poster or even as a talk in several sessions. I had the great chance to present my own work as a poster with the title "The association of clonal hematopoiesis of indeterminate potential with chronic ischemic heart failure". During my own poster presentation, I had the opportunity to discuss with leading scientists in the field of Clonal Hematopoiesis of Indeterminate Potential, which was a huge advantage and left me with a lot of new ideas and thoughts. The work of other PhD students was also very impressive. A poster was about the work on a specific microRNA as a tool to expand HSCs ex vivo and another poster identified new surface marker to better phenotypically identify human HSCs.

Beside all the great scientific input, I had a lot of fun with colleagues and friends. It was nice to meet people I met also during the last years in previous annual ISEH-meetings. It is great to be a part of this community and I want to say thank you to the GSCN for the travel grant and with this to give me the chance to join the ISEH-meeting in Brisbane.

Lena Dorsheimer

Research Group of Prof. Dr. Michael A. Rieger (PhD)
Basic Mechanisms in Stem Cell Biology

LOEWE Center for Cell and Gene Therapy Frankfurt (CGT)

Department of Hematology/Oncology

Goethe University Hospital Frankfurt

Building 25, 1st floor, room 101

Theodor-Stern-Kai 7

60590 Frankfurt (Main)

Tel: [+49 / \(0\) 69 / 6301-84231](tel:+49+49+69+6301+84231)

Fax: [+49 / \(0\) 69 / 6301-7934](tel:+49+49+69+6301+7934)

Email: Lena.Dorsheimer@kgu.de

Website: www.rieger-lab.uni-frankfurt.de