

ISEH Annual Scientific Meeting 2019 – Highlights from the New Investigators Committee

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ISEH Headquarters

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The ISEH 48th Annual Scientific Meeting was recently held in Brisbane, Australia. The meeting was excellent: the latest and greatest science in the field, catching up with old friends, meeting new ones, and all in a beautiful location.

For those of you that could not attend, here are some highlights of the meeting from the perspective of the students, postdocs and junior PIs of the ISEH New Investigators Committee.

Outstanding science

The program of speakers at this year's meeting was outstanding. Leaders from across the field freely shared their latest data and discussed new ideas. One highlight was David Scadden's (Harvard, USA) description of a gel scaffold that is injected under the skin to promote T cell progenitor growth, which improved immune responses in bone marrow transplant recipients. Another great moment was Adam Wilkinson (Stanford, USA) describing a remarkable expansion of haematopoietic stem cells in culture after the addition of children's craft glue!

A perfectly sized, friendly meeting for early career investigators

Events by new investigators, for new investigators

Meet the expert mixer

New investigators career session

New investigators technology session

Events for junior investigators

Junior PI grantwriting workshop

Junior PI session

By: Steve Loughran, Shannon McKinney-Freeman, Eric Pietras, Cedric Tremblay

Brilliant days of talks were followed by the legendary ISEH poster sessions. Attendees mingled amongst the busy posters, discussing the excellent data on display. It is always exciting to see the number of introductions happening during these sessions, and the high proportion of these that turn into extended, productive interactions. And of course, because we were in Queensland, there was plenty of excellent beer on hand to assist in-depth scientific discussions.

The high attendance, detailed discussions, and open interactions of the poster sessions are a great example of why the ISEH meeting is so beneficial to students, postdocs and junior PIs. The meeting was a perfect size: big enough to draw excellent speakers, but small enough that there are numerous opportunities for even the most junior of investigators to interact with the leaders of the field.

The meeting also included events designed to benefit those of us in the early stages of our careers. First of these was the new investigator pre-meeting workshop, where early career presenters were selected from the submitted abstracts to present to their peers, and receive

some valuable feedback. All these presentations were of an excellent standard, and three students and three postdocs were selected to present to the general meeting in a plenary session.

This year, a hot spot for connecting with experts from around the world was at the social event, which was held on the rooftop bar of The Fox Hotel – an unavoidable institution in Brisbane! Throughout the night, the Funk' N' Stuff band kept it pumping and managed to get everybody on the dance floor, allowing attendees to create a friendly bond that will last beyond the professional frame of the ISEH. As one of the highlights of this year's ISEH Annual Meeting, the social event assuredly allowed attendees to experience what's unique about ISEH: its inclusive sense of community.

There were also several events arranged by the ISEH New Investigators Committee, to benefit the students, postdocs and junior PIs in the society.

This event gave students, postdocs and junior PIs the chance to spend the evening enjoying food and drinks face-to-face with some of the leading haematology investigators from around the globe. The lively discussions carried on past the allotted time, with some continuing outside the convention center venue! Thanks to our experts, Drs David Scadden (Harvard, USA), David Traver (UCSD, USA), Marella de Bruijn (Oxford, GBR), Dan Tenen (Cancer Science Institute, SGP/ Harvard, USA) , Susie Nilsson (ARMI / CSIRO, AUS), Britta Will (Albert Einstein, USA) , Timm Schroeder (ETH Zurich, CHE), Toshio Suda (National University of Singapore, SGP), Hanna Mikkola (UCLA, USA), Andreas Trumpp (DKFZ, DEU) and Sean Morrison (UTSW, USA).

The Career Session gave ISEH's New Investigators an opportunity to have an informative, interactive discussion with four faculty panelists representing a diverse range of background and hematology expertise. Panelists included Drs. Katrin Ottersbach (Edinburgh, UK), Michael Milsom (HI-STEM, Germany), Eirini Trompouki (Max Planck, Germany) and Wilson Clements (St. Jude, USA). The focus topics of this year's session included managing stress, defining success and making decisions to pursue academic science versus other careers. Our panelists tackled these critical issues for the hour-long session with a mix of wisdom, frankness about their own career successes and mistakes, and humor.

This session focussed on the latest barcoding and transplant methods for tracking the contribution of individual clones to haematopoiesis. The students and postdocs that were at the coalface of developing these novel protocols provided tips and tricks to design and execute successful experiments using these methods. Dawn Lin (WEHI, AUS) described lentiviral barcoding, Joana Carrelha (Oxford, GBR) spoke about single cell transplants and Cre-ERT barcoding, and Alejo Rodriguez-Fraticelli (Harvard, USA) discussed Sleeping beauty transposon barcoding.

Another exciting feature of this year's ISEH meeting was the inaugural meeting of the Junior PI grant writing workshop. Organized by ISEH members' Katherine King (Baylor College of Medicine, USA) and Shannon McKinney-Freeman (St. Jude Children's Research Hospital, USA), this year's workshop included four participants and two mentors. Two participants hailed from US institutions and two from Australia. As such, the faculty mentors assigned to the workshop came from both the US and Australia: Drs. David Scadden (Harvard, USA) and Andrew Elefanty (MCRI, AUS). Participants represented a range of career levels, from preparing to transition to independence to established Assistant Professors. They came prepared to provide and receive feedback from both their fellow-participants and faculty mentors on their draft Specific Aims pages. The grants-in-progress being discussed ranged from previously submitted grants being honed for resubmission to grants in the early stages of preparation. The discussion was lively and engaging!

Drs. Scadden and Elefanty provided specific and detailed feedback to each participant in turn and also fielded questions from all participants regarding grant writing, study section organization, experimental approaches and other topics. The participants and mentors will reunite via teleconference in early November to review revisions to the Specific Aims pages and further optimize their proposals.

The organizers want to thank all participants, as well as Drs. Scadden and Elefanty, for making this inaugural workshop a success! Shannon McKinney-Freeman and Katherine King are already making plans for next year's workshop to be held prior to the ISEH meeting in New York and encourage anyone preparing their first major grant to apply!

A lunchtime session was set up to provide junior PIs with a "survival kit" of advice. Five expert PIs provided guidance they had learnt on the job – hard-earned knowledge that is not widely taught. This included navigating tenure, identifying and harnessing talent, identifying mentors and collaborators, publicising work, and traversing the "uncanny valley" between an investigator's first and second grants. Thanks to our expert PIs Drs. Patricia Ernst (U of Colorado, USA), Claudia Waskow (Leibniz Institute on Aging FLI, DEU), Steven Lane (QIMR Berghofer, AUS), Hitoshi Takizawa (IRCMS, JPN) and Keisuke Ito (Albert Einstein, USA)!

Overall the 2019 ISEH meeting was a fantastic experience, and we can't wait for the 2020 meeting in New York!