Lab Spotlight: Perie Lab

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How many members make up your lab? Students/postdocs?
7 people, 2 technicians, 1 PhD student, 2 postdocs and 1 clinician.

What is the major research theme of your lab?
Retrace the hematopoietic tree using lineage tracing techniques.

What is the most exciting project in your lab right now?
The most exciting project in the lab at the moment is trying to connect cellular barcoding information with other single cell multi-omics approaches.

What's the biggest accomplishment your lab has had recently?
We started very recently, so most projects are not yet completed but we have recently finished a project where we have followed simultaneously division and differentiation from individual stem cells in an in vitro system and we find that there is a strong clonal

dependence both in division and fate.

What is the key to running a successful lab?
It is early to really say if it works, but one of my mentors told me that the key is to have very good people and to provide them a nurturing environment. It is better not to recruit, than to recruit the wrong person. This can sometimes be complicated as you don't always have the ideal candidate at the right moment and you have to perform the work you promise in your grant.

What facilities or equipment does your lab absolutely depend on?
Except very simple basic equipment like PCR machine, we only use facilities (animal experiment, flow cytometry, sequencing), which are functioning quite well at the Curie Institute. We are now setting up with Celine Vallot a single cell facility that will allow researchers to use customized dropseq line.

What has been your greatest challenge in managing your lab?
Multitasking for other people is very hard. When I was a student and a postdoc, I used to multitask at my own pace most of the time. Now, several projects need attention at the same time and it is hard to accomplish.

What was the most exciting part about starting your new lab?
See your ideas becoming reality and even better being improved by your lab members.

Does your lab attend the ISEH annual meeting?
I try to promote the ISEH meeting to my lab members. We are located in a biophysics department so the ISEH is one of the best places to connect with the field of hematopoiesis. ISEH is really a great place to discuss recent developments in the field, and is just the right size for students to interact with other labs.

What is the most beneficial aspect of ISEH membership for your lab?
We like the webinar series and the access to the journal of Experimental Hematology.

How do members of your lab celebrate accomplishments?
I believe that one should celebrate every small accomplishment and try to promote that in the lab. Research is such an uncertain job, not only because we go towards the unknown, but also because of the job situation. It is really important to appreciate each step. For example if you have GFP+ cells in your barcoding experiment at the time of sorting, you should celebrate. When you get your sequencing results you should celebrate. When you find something in your result, you should celebrate. The same goes with papers. You should celebrate when the paper is submitted, in review and of course when it is accepted.

Does your lab have any fun traditions?
Not yet but I hope it will come.

Interview conducted by:
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Each month, **Simply Blood** spotlights a lab focused on the research of basic hematology, immunology, stem cell research, cell and gene therapy, and other related aspects. Get to know these different labs around the world! This month, we are featuring the Perié Lab at the Curie Institute in Paris (France).

Leïla Perié works as a principal investigator in the biophysics department of the Curie Institute in Paris (France). Her research combines advanced experimental cell tracking techniques and modeling to study hematopoiesis. She received an engineering degree in food science, as well as a PhD in experimental immunology, bringing new insight to immune cell geo-localization dynamics in the human spleen during HIV infection. Leïla then pursued postdoctoral training in experimental, computation and mathematical approaches to hematopoiesis funded by a European Marie Curie Fellowship. She was sharing her time between the Schumacher lab at NKI (Amsterdam) and the De Boer lab at Utrecht University. Leïla has received several prizes (Young investigator prize from the Bettencourt Schueller foundation, the Paoletti prize from CNRS) and several prestigious research grants (ATIP - Avenir, starting ERC). She is also involved in science and society activities (Atelier des Jours à venir), while maintaining her own blog.

How long have you had your lab?
Since 2015, so 3 years.