2020 Interview Spotlight Series: Part II

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ISEH Headquarters July 16, 2020



This week on Simply Blood we are continuing our 2020 Interview Spotlight Series. In Part II we are featuring the ISEH 2020 New Investigator's Invitee: Elisa Laurenti, MBS; PhD. Dr. Laurenti answers questions about her work, trends in hematology, mentorship, and more. Have additional questions for Dr. Laurenti? Don't miss her session at this year's Virtual Scientific Meeting.

1. How would you describe your science?

Ultimately, I want to contribute to the understanding of how such a complex cellular system as blood production is set up and maintained. Currently my laboratory is particularly interested in how haematopoiesis changes throughout a human life, starting from the embryo all the way to the old age. From my PhD, I have been fascinated by cellular guiescence, and why its molecular regulation is such an important feature to maintain healthy blood production. Now my laboratory looks at how understanding quiescence networks can contribute to gene therapy and ex vivo expansion protocols. We hope that having fundamental insights into the cellular structures and molecular regulation of blood stem and progenitor cells in healthy humans will pave the way for improved understanding of disease, new treatments but also new prevention strategies.

2. Which scientists have inspired you?

There were many, at all stages of a science career, women and men, and from all walks of life. People are a big part of makes science so rewarding for me. A number of individuals have made a big impact on the scientific decisions I have made and on how I run my lab. I feel lucky to have had tremendous supervisors, senior colleagues who organically became mentors and "scientific siblings", who all keep giving me support and perspective. I have always been constantly inspired by the people I have worked closely with, lab neighbours, collaborators, my own lab members, but also scientists I know less well whose careers have progressed in parallel to mine.



3. What advice would you give to new investigators entering the field?

First, equip yourself with analysis tools. There is no great experiment without a good analysis. Second, work closely with someone (either within your group or neighbouring lab), you will learn so much, will be more productive and it is a great training if you consider becoming a PI later on. And you may even make friends for life along the way. Third, network, communicate, ask questions, share your passion for science. You will be surprised at how much of a difference this can make in the long run.

4. What do you think will be the next big trend in the field of haematology in the coming years?

Certainly, we will see new technological advances that will shed a new light on some fundamental questions, such as how the cell fate decisions of stem and progenitors are made. The lines we believed exist between health, stress and disease are becoming more blurred, when looking at humans. It will be exciting to see quantitative biology become the norm, using as input data from donors and patients, humanised models and animal models, ultimately leading to a deeper understanding of the multifactorial transitions from health to disease.

5. What do you enjoy doing, outside of science?

I love to go out and enjoy the beauty that is out there, whether it is in a museum or in a park, in the streets nearby my house, or anywhere I get the chance to travel to. I also love to cook. Good food is important to me, and now that I am not in the lab anymore, there is something very rewarding about following and improving on a protocol for the joy of family and friends!

Dr Elisa Laurenti

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Interviewed by Stephen Loughran of the ISEH New Investigators Committee