WHERE ARE THEY NOW?

SAMANTHA KENDRICK, MD

Samantha Kendrick, MD, is the Assistant Professor in the Department of Biochemistry and Molecular Biology at the Winthrop P. Rockefeller Cancer Institute at the University of Arkansas for Medical Sciences.

When did you become interested in lymphoma?

Towards the end of my doctoral studies, around 2009/2010. I was motivated both academically as well as personally to learn more about lymphoma. The oncogene I studied for most of my thesis work started to gain recognition as a poor prognostic factor for patients diagnosed with diffuse large B-cell lymphoma (DLBCL), thus it made sense to apply my research to this disease. At the same time, my husband was diagnosed with non-classical, nodular lymphocyte-predominant Hodgkin lymphoma (HL).

When did you receive funding from LRF?
What research project were you working on?
What kind of grant did you receive?

I received funding from a Postdoctoral Fellowship Grant from LRF in 2013. We were investigating the feasibility of simultaneously targeting gene expression of two key oncogenes in diffuse large B-cell lymphoma pathogenesis, cellular-myelocytomatosis (MYC) and B-cell lymphoma gene-2 (BCL2). We were studying unique structures that can form in the promoter regions of these genes, the areas of the gene that initiates expression, and serve as molecular switches by which we can modulate to turn expression “on” or “off” through small molecules.

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How has research regarding molecular targets changed the understanding of and treatment landscape for lymphoma/CLL and evolved since you first started conducting your research?

Over the last 10 years or so, advancements in methods to profile the gene expression patterns of tumors have broadened our understanding of the complex pathways that drive specific lymphoma types. Consequently, this comprehensive snapshot also generated a catalogue of putative molecular targets that provides additional targets for relapsed disease that otherwise would have limited treatment options. In addition, this data allows for the ability to identify particular subsets of patients who can benefit from such targeted therapies. We are excited about the ongoing and future development of personalized medicine for lymphoma and CLL patients.

Why was the funding you received from LRF vital to advancing your career in studying and treating lymphoma?

LRF's funding was critical at the postdoctoral stage of my career, as it not only helped establish a track record in funding specific to the study of lymphoma, but also provided the necessary financial support to conduct the work, which offered insight into how we can target two key oncogenes, BCL2 and MYC, for effective chemosensitization, and led to publications for advancing my career.

How has your relationship/involvement with LRF evolved since receiving this grant?

I continue to follow LRF events and initiatives, looking for opportunities to partner with the LRF. I was recently invited and participated in the LRF Adolescent/Young Adult Lymphoma Scientific Workshop.

Why is LRF's focus on research/research programs so important?

The LRF's research programs are instrumental for cultivating and supporting the next generation of scientists and discoveries to impact the treatment of lymphoma. The LRF also is ideally positioned for accomplishing these goals, as the foundation also provides a network of physician and research colleagues and patients that lends well to collaborative efforts to really drive the field forward.

What research are you currently working on that you'd like to share?

We are currently exploring how secondary structures that form within the promoter regions of signaling pathways important for the more aggressive forms of diffuse large B-cell lymphoma, including those associated with the B-cell Receptor, regulate expression of these lymphoma-enabling and chemo-resistant genes and leveraging these mechanisms to develop new, targeted therapies.

What are you most excited about in the field of lymphoma research? Why?

I am most excited about how the field is delving deeper into the molecular characterization of lymphomas, highlighting the idea that these lymphomas are not single diseases, but consist of multiple subsets that will require personalized medicine to achieve successful long-term disease-free survival for patients. This work is also foundational for understanding how these tumors develop and what pathways play a role in the aggressive phenotype.