



Dr. William Pastor

I earned my Ph.D. at Harvard University, in the lab of Professor Anjana Rao. I was part of the team that discovered that Tet enzymes oxidize the epigenetic mark 5-methylcytosine to 5-hydroxymethylcytosine, and I subsequently invented a method to map 5-hydroxymethylcytosine in the genome. As a postdoctoral fellow in the lab of Dr. Steven Jacobsen at UCLA, I established a role for the GHKL ATPase Morc1 in directing DNA methylation of transposons in murine germ cell development, and I studied DNA methylation maintenance and gene regulation in naive and primed human pluripotent cells. I discovered a new role for the transcription factor TFAP2C in regulating human pluripotency. I started as an Assistant Professor in January, 2018, and my lab studies both epigenetics and placental development.

I joined the CRRD because of my interest in the placenta, the most exciting organ ever, and I want to connect with the larger placental biology community in Quebec.



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