CURSO
CIÊNCIA LÁ FORA

Modelo de *personal statement*

Asking questions and investigating the natural world are strong traits of my personality. I come from a Brazilian family of restaurant owners that always aimed to provide high-quality education for their children. As a result, I, Thiago, and my sister, Ana, became scientists. Ana is ten years older than me, and she has always influenced my path through academia. We both hold bachelor's degrees in Biology. However, I became more fascinated with human nature and physiology, even after extensive training in fish ecology – a training she provided during her Ph.D.

Although I have a diverse background – ranging from psychobiology to genetics –, human health is the topic that most makes me most enthusiastic. I am a hypochondriac. This subject is relevant to me because my goal is to provide insights and help patients find better options for cancer treatment. During the last six years, I have been extensively interested in understanding how cancer cells interact with the host's immune response. By investigating the architecture of the tumor microenvironment of prostate cancer through bioinformatics tools, my group and I were able to identify that critical regulators of cell proliferation may also affect the anti-tumor immune response. These analyses were conducted at the University of São Paulo (Brazil) in collaboration with Queen's University (Canada) and the Johns Hopkins Medical Institute (USA).

My interest in the immune response started in my undergraduate period when I became fascinated with the complexity of immune cells' roles and their regulators. Currently, my research goal is to manipulate the genome of prostate cancer cells to create artificial changes in the secreted molecules, which may alter the anti-tumor immune response. I hypothesize that chromosomal translocations and losses are linked to a less inflammatory microenvironment of the prostate – especially after needle-core sampling. In addition to this dry-lab interest, I am also keen on investigating these cells' proteomics after CRISPR deletion of chromosomes using computational pipelines. These analyses would shed light on how tumors evolve before and after hormonal therapy.

By conducting this research, I expect to develop bioinformatics abilities to work in pharmaceutical industries as a scientist and developer of analysis pipelines. The data analysis program would prepare me with high-quality training that is essential to my ultimate career goals.

Therefore, I am applying to this post-doctoral position at Harvard to gain insights into cancer research and develop my background as a professional bioinformatician.