

Resilience as an international PhD student.

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As an aspiring cancer researcher from Argentina, my journey in pursuit of scientific excellence has taken me to different parts of the World (and of my mind). Working in Latin America often leads us to seek opportunities abroad, to carry on some “big experiments” with the illusion of having plenty of results to add to our PhD theses. The goal is to implement novel techniques that are at the forefront of scientific advancement but are not available in our home countries. If they are available, they will be so expensive that we would need the entire budget and duration of our grants. In my case, I was particularly focused on deciphering the main source of energy of metastatic prostate cancer cells growing in the bone microenvironment, at a single cell level, implementing the latest advances in flow cytometry. Of course, on this journey we can face numerous obstacles and setbacks. However, we gain a lot of self-awareness that leads to more self-confidence. Throughout this experience, I have come to appreciate the invaluable role that resilience plays in the field of cancer research during international training.

My first test of resilience on this matter came with my desire to work for a short time in the US. I applied twice for a prestigious scholarship to conduct a short-term stay in the US, only to be met with undesired results each time. Despite being so close to getting the grant, only a few others did and that was not my case. Of course, I first felt discouraged – of ten awardees from the whole country, I was in the twelfth position. I quickly shifted my mindset to be proactive. I became positive about what I learned throughout the application process, instead of letting those rejections hinder my progress, which helped me persevere and seek alternative opportunities to further my research. Thinking out of the box and looking for other institutions Worldwide, novel techniques to answer the same questions, establishing new collaborations to find good mentors, and seeking unknown funding sources were the key factors that maintained my motivation and positive expectations. Meanwhile, I lived an experience that definitely changed my vision – I was awarded a Global Scholar in Training Award from the AACR to attend the Annual Meeting. I had the chance to immerse myself in an outstanding community of early career researchers, many of whom had similar experiences to share, and to participate in all the Professional Advancement Sessions that were helpful to prepare my next international grant proposal.

After 3 months, I was fortunately granted a scholarship to embark on an internship at a highly esteemed institute in Europe, which presented a promising platform for my intended research. With the aim of applying a novel technique to my biological models, I entered this endeavor with the hope of advancing and finishing my PhD thesis. As we all know, science is not “I want it, I get it”. As time passed, I started to see that my research stay was not yielding the desired number of scientific results. Again, I was disappointed, as I began to question the potential of my thesis upon returning to Argentina. Well... while the experiments did not work as expected, many other things did.

It was during this challenging period that I discovered some remarkable insights and developed new tools to practice resilience and to stay positive while facing adversity. Despite the initial setbacks, I encountered an abundance of colleagues, friends, and mentors from my home and host countries, who were more than willing to assist me along my scientific journey. Meditation became a powerful habit that made me put it all in perspective, both the good things and the bad ones, and released the tensions after a long day of experiments. Exercise and a good diet

helped: my long after-lab runs along the Mediterranean Sea, listening to good music, and being in contact with nature made me feel a sensation of physical and mental well-being that fulfilled my energy to start over and try again. Moreover, I recognized the importance of finding joy and fulfillment amid adversity. By embracing the cultural exchange and the unique experiences that come with conducting science abroad, I realized that success should not be solely measured by favorable research outcomes. Rather, personal growth, learning, and connections forged along the way must also be celebrated.

Back in my country, with new perspectives and tools, and the invaluable support of my mentors, I redirected my focus towards writing my thesis. Being aware of who we are, of what we have, and of what we can do, is at the forefront of progress. I gathered my determination and submitted my work for evaluation, and one year after my experience in Europe, I got my PhD degree. With time, I realized that the heaviest burdens that sometimes we carry are not the difficulties themselves, but rather the negative mindset that threatens to impede our progress. In the balance, all I learned during this journey and the people I met during my stay, weigh much more than a nice dot plot.

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