

## **Ferdaoussi Mourad (Ph.D)**

### **Biology Researcher. Expert in Diabetes and Metabolism**

My principal career objective was to enrich my scientific knowledge, and gain a solid background on the field of metabolic diseases. Therefore, I have had the opportunity to build my scientific career by visiting different prestigious European and Canadian universities recognized world-wide for the study of human genetics, and the molecular biology of pancreatic beta cells. Indeed, during my MSc in Lille University (France), I gained a strong expertise in the human genetics of type 2 diabetes. Then, to expand my knowledge, I completed my PhD training at the University of Lausanne (Switzerland) where I received outstanding training covering critical aspects of beta cell biology, as well as incretin and pro-inflammatory cytokine signalling. My thesis was awarded with the Gabriel Baud prize from the Faculty of Biology and Medicine of the University of Lausanne as the best study of metabolic diseases. To broaden my skills and get a deeper knowledge of the pathophysiology of diabetes, I decided to pursue postdoctoral training. The first experience was at the Montreal Diabetes Research Centre at the University of Montreal (Canada) where I benefited from the leading-edge research and expanded the breadth of my expertise into new aspects of beta cell biology, such as fatty acids signalling, cellular metabolism and knockout (KO) mouse models.

During my postdoctoral training in Montreal, I have had the opportunity to visit the UofA and collaborate with Dr. Patrick MacDonald. Soon after this fruitful collaboration, I wanted to join Dr. MacDonald's research group for a second postdoctoral training, and take advantage of the outstanding scientific environment offered in his lab. During this postdoctoral training, I have benefitted from the state-of-the-art of pancreatic beta cell electrophysiology, and *in vivo* metabolic studies in tissue specific- and inducible-KO mouse models. Furthermore, the laboratory of Dr. MacDonald is a worldwide pioneer in isolating human islets for research purpose from diabetic and non-diabetic cadaveric donors. I am very delightful to benefit from this unique opportunity to extend my scientific knowledge on exploring the mechanisms involved in human pancreatic beta cell dysfunction and death during the progression of diabetes.