



## Dr. Alexandra Merkx-Jacques

Written by Julie Dayrit,  
M.Sc. Trainee



### **Bio:**

Dr. Alexandra Merkx-Jacques is the Director of Exploratory Research at IMV Inc. in Dartmouth, Nova Scotia. Her work focuses on immunotherapy for cancer treatments and have been actively involved in the development of IMV's novel DPX-COVID-19 vaccine. Moreover, Dr. Merkx- Jacques oversees a team of expert scientists to facilitate progress and bridge success for commercialization of innovative therapies. She earned a M.Sc. and a Ph.D. in Microbiology and Immunology at the University of Western Ontario in London, Ontario. Her M.Sc. studies was on the translational regulation of Escherichia coli RNA polymerase whereas her Ph.D. work focused on the role of protein glycosylation in the virulence of gastro-intestinal bacteria. She completed a Canadian Government Laboratory Visiting Fellowship at Agriculture and Agri-Food Canada in environmental microbiology studying the impact of agricultural practices on the distribution of virulence genes and antibiotic resistance in E. coli. Using a Caenorhabditis elegans infection model, Dr. Merkx-Jacques investigated whether these traits correlated with increased pathogenic potential. Her research shifted once again when first as a NSERC R&D Industrial postdoc and then as a Senior Research Scientist at Mara Renewables Corporation in Nova Scotia, she assessed the use of agricultural waste and micro-algae for the production of biofuels. Now at IMV, the focus of her scientific questions includes investigating how to improve cancer treatments. In her spare time, Dr. Merkx-Jacques is a self-taught painter who has displayed and sold her artwork at several art galleries in Nova Scotia. She enjoys showing the general public that being a scientist does not mean that one can't have a wide range of other interests.



**From the conversation:**

Alexandra is all about growth. She is passionate about sciences, its process and application. Alexandra advises young professionals to be flexible and be ready for the next chapter of your life.

From talking with her, I learned that it is normal not to know what you want to do in the next few years of your life. She highlights that growth and learning is an ongoing process and that feeling happy and joy in what you do is just as important as setting goals. During challenging times, including this current period, she encourages students and young professionals to find an area where you can express your creativity outside work to prevent work burn-out. Go forward. Make a conscious decision on which the path(s) you are willing to be on, consider what feels right for you at the time when you are feeling good. Reflect on where you are, where you want to be, and whether that vision feels right for you. She also emphasizes the importance of networking and building professional relationships that are in alignment with your on-going goals. Stay curious—you never know what opportunities may arise.