Dr. Diane Botelho

Written by Christopher Fetter, M.Sc. Trainee

Dr. Diane Botelho is the Chief Science Officer at the Research and Productivity Counsel of New Brunswick (RPC) and adjunct Chemistry faculty member at the University of New Brunswick. She was generous enough with her time to share what experiences she found helpful when entering industry and advice for current science students and recent graduates.

Diane did her undergraduate training at Mount St. Vincent university, with a double major in Math and Chemistry, also completing honors requirements. She took full advantage of the research opportunities at Mount St. Vincent and spent four summers as a Natural Sciences and Engineering Research Council (NSERC) Undergraduate Student Research Award (USRA) recipient. Her degree and USRA student research experience gave her a well-rounded base and substantial CV with which to enter graduate school.

At graduate school Diane's funding continued as she received a Canada Graduate Scholarship from NSERC which allowed her to place all her focus on producing quality results in her PhD. at Dalhousie University. She trained in analytical chemistry with an emphasis on mass spectrometry techniques. This training in modern analytical techniques was helpful in her later industrial career. Dr. Botelho also completed a post-doctoral fellowship before beginning a career centered in industrial science.

Initially, Diane aspired to become a forensic scientist working alongside law enforcement; some volunteer experiences in forensic labs during her undergraduate studies suggested she would prefer work at a faster pace, leading her to consider work in industry. She finds industry suits her better as clients require high quality results often in very short timeframes. An additional benefit is that the work is quite diverse, allowing exposure to a variety of fields which ensures there are always new and interesting projects to work on.

Her role at UNB involves introducing undergraduate and graduate students to the resources and pace of work at a professional industrial lab. In some cases, this means Diane provides students with the opportunity to use the variety of resources available for her work with RPC clients to advance their honor's research projects. Working in the RPC lab allows students to gain insight into how science is performed outside of an academic setting.

Although New Brunswick is a relatively small province, Diane confidently states that it is a great place to do innovative science. For instance, nearly forty percent of Canada's cannabis testing goes through RPC. Diane was recently awarded the BioNB Bioscience Achievement Award for her work with air quality testing at RPC, including work in the cannabis sector.

Diane has some advice for current science students and recent graduates looking to enter an industrial career. Expect to start at entry level and work your way up, delivering quality results within the required timelines. Consider what kind of position you are looking for, and ensure you have the education requirements. Obtaining positions at RPC (and other types of industrial labs) can be quite competitive given the changing market environment and the need for high quality standards. However, if you enjoy interesting work that always involves learning and quickly adapting to new things, industry can be a very rewarding career option.