

# THE MANITOBAN

Under the auspices of the Student Exchange St. Xavier's College, Kolkata and University of Manitoba, a great opportunity was bestowed upon us to see the outside world and travel across oceans to experience firsthand University campus life in a far away alien land. The campus selected for the 2011 batch was Winnipeg, the provincial capital of Manitoba, Canada. On the 26<sup>th</sup> of September, we, Pallabi Bhattacharya, Ria Saha, Saloni Sinha and Disha Sengupta from the Microbiology Department and Ritwika Banerjee from the Chemistry Department set out to embark on this remarkable international adventure.

Winnipeg, the City of Opportunity and its people welcomed us cordially. We enjoyed our stay at the homes of the locals, located close to the University. Most of our time was spent in the Buller Building which was home to the Departments of Microbiology and Botany. We attended several lectures, most of them centered on Biophysics and Genetics. The Cheese-Making Lab housed in the Dairy Science Building showed us how biotechnology has impacted as an industry. It taught us many secrets of cheese making—for example, use of which curdling agent produces the cheese fastest, produces the most cheese and the use of whey-o-meter for the purpose of quantification. Gradually, an awareness and the pro active adoption of alternative, multi-faceted approaches to learning developed among us.

In the Plant Breeding and Genetics Building, we had active interactive sessions with Dr. Anita Babel, Dr. Yvonne Lawley and Dr. Merv Pritchard. Wheat breeding and genetics expert Dr. Anita Babel delivered lectures on modeling crop development and yield, genetics of herbicide resistance and genetics of resistance to leaf spotting diseases. On visit to her lab, we learnt the development of Fusarium Head Blight resistance germplasm and development of wheat for fuel and fodder. Dr. Lawley took classes on agronomy and cropping systems with a special emphasis on cover crops and the management of plants and soils to address agricultural and environmental challenges.

We were privileged to gain admission to the National Microbiological Laboratory (NML), a member of the US Bioterrorism Response Network, currently Canada's only BSL-4 laboratory. It is the only facility to have high containment laboratories for human and animal health in one facility and is equipped with laboratories ranging from biosafety level 2 to 4 designed to accommodate the most basic to the most deadly infectious organisms. Activities of NML include reference microbiology, support to epidemiology programs, surveillance, emergency response, applied and discovery research and management of intellectual assets to improve public health in Canada and internationally.

We visited the research and teaching facilities of the Chemistry Department housed in the Parker Building which included the Manitoba Chemical Analysis Laboratory (MCAL), the

Mass Spectrometry Lab and the Nuclear Magnetic Resonance Lab. Our guide for the building, Dr. J. Sorensen directed our focus to the biologically active natural products produced by lichens native to Northern Manitoba—a polyketide (secondary metabolite) that has antibiotic and antifungal properties.



Visit to Fort Garry Brewery, Manitoba, set up in 1930, helped us get a demonstration of the finest raw ingredients used to brew quality ales and lagers. We witnessed the production of Fort Garry Dark Ale, Fort Garry Pale Ale, Fort Garry Premium Light, Fort Garry Rouge and Fort Garry Pilsener. We learnt that Craft beer making involved use of malty sweetness from Munich Malt to impart a wonderful sharp and clean bitterness. When samples were given to us to test its taste, they had a slightly spicy hop character balanced with a malty note.

We now understand the importance of student mobility in an individual's fully rounded academic education. On the personal front, there has been a noticeable change in our self-esteem and awareness leading to enhanced self confidence and a focused practical approach to our study. Our integration with other families and development of life-long friendships has fostered the appreciation of the value of home and family. The long term effect will be felt if and when we pursue tertiary studies in 'foreign' environments in terms of comfort and acquaintance. The participation in the exchange program has imparted a tremendous sense of enthusiasm, besides favorably gaining knowledge and experience of an overseas culture.

We thank our Principal Rev. Father Felix Raj, Vice-Principal, Rev. Father Jimmy Keepuram, Head of the Department of Microbiology, Dr. A.K.Mitra, Dr. Merv Pritchard and all our teachers and college staff who have helped us to go on this Exchange Program and we will cherish these memories for a lifetime.