

# Manitoba

*Look out upon our rolling prairies, carpeted with wild flowers and clotted over with poplar groves, where wild birds sing and chatter, and it does not seem too ideal or visionary that these broad sunlight spaces may be the homes of countless thousands of happy and contented people.*

*Nellie McClung, Author and Social Activist (1873-1951)  
Excerpt from In Times Like These*



## ***The Staff of Life*** **Margaret Newton (1887-1971)**

When we picture Manitoba, most of us think of endless fields of wheat. However, those wheat fields might not be there today were it not for the work of Dr. Margaret Newton.

In 1916, a terrible blight hit Canadian farms. The mysterious plant disease called “wheat rust” devastated wheat crops and nearly destroyed the grain industry overnight. Farmers were desperate and demanded that the Canadian government find a solution.

Fortunately, an undergraduate student at Montreal's McGill University found a way to keep the killer blight at bay. In 1917, Margaret Newton developed different varieties of wheat that were resistant to the rust. Not only did this send Canadian farming off on a new track, but it also set Margaret off on a career that would see her eventually become a world expert in plant pathology. Much of her research was carried out at the newly created Dominion Rust Research Centre in Winnipeg.

Margaret Newton was a determined young woman for her time. She continued with higher education despite her father's disapproval, eventually becoming, in 1922, the first Canadian woman to earn a Ph.D. in Agricultural Science. Unfortunately, Margaret's intensive work with rust spores damaged her lungs beyond repair, forcing her to retire in 1945. Today, she is fondly remembered as an important contributor to the development of Canada's large wheat industry. In 1992, twenty-one years after her death, Margaret was inducted into the newly created Science Hall of Fame in Ottawa.

*The first wheat grown in the west was planted in 1754 by Louis La Corne on the south shore of the North Saskatchewan River.*

## ***Lotion for Beauty and Health*** **Lorraine Mignault**



Cosmetics make us look good, but soon they may make us feel better too!

Inventor Lorraine Mignault of Winnipeg has spent twelve years researching and developing a formula for a personal-care therapeutic lotion. It can be used to both improve skin qualities, and treat health conditions such as headaches, insomnia, back pain, sports-related injuries, arthritis, and itching from various causes.

Made from all-natural ingredients, the lotion is called a “cosmeceutical” because it overlaps two areas – cosmetics and pharmaceuticals. In clinical trials, users reported that many health conditions were relieved and repaired. The lotion is not yet on the market, but should be in the near future, as an ingredient and as an end product via licensing of the worldwide patent pending technology. In 1999, Lorraine was a finalist in the Manitoba Woman Entrepreneur of the Year Awards, Innovation category. She was also published in the respected *Cosmetics & Toiletries® International Magazine* in April 2001.

## ***Searching for Bugs*** **Diane Malley**

Bugs and bacteria...watch out! A new super sleuth is making it possible to instantly locate and identify dangerous pollutants in soil and water. In 1991, Dr. Diane Malley of Winnipeg took an existing technology called Spectroscopy and began applying it to environmental analysis. Spectroscopy, which uses infrared light, had never before been used for this purpose. With it, soil and water samples are analysed in a minute or less. This is a huge improvement over other kinds of soil and water tests that can take weeks or months to complete. The speed and accuracy of the test allows quick action to be taken to avoid further damage to the environment, and to prevent illness in people and animals. This service is available through her company, PDK Projects Inc.

Diane has closely observed the serious problems faced by communities around the world when soil or water supplies are contaminated by hazards such as E. coli bacteria. As a result, Diane is committed to working towards making the world a better place.

*Cosmetics have been worn throughout history by both women and men. For example, Cleopatra wore eyeliner and Louis XIV dusted his face with powder.*



*“Perseverance and a belief in one’s abilities are important. Believing in yourself makes your work more credible.”*  
**Lorraine Mignault**

*“It is absolutely necessary to have worthy goals. Try to live your life so you can maximize a win-win situation. Consider learning a life-long process, and enjoy one’s self.”*  
**Diane Malley**