

ACCESS

MANITOBA

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Children's Health Under the Microscope: Research Facility Explores Pediatric Treatment

by Sue Murray

Children with chronic or complex diseases are the focus of ongoing research underway at a world-class Winnipeg research facility which has attracted some of the brightest medical professionals to the area. The **Manitoba Institute of Child Health** was established earlier this year to conduct state-of-the-art research and development related to the medical care of children.

The Institute, the first of its kind in Western Canada, received a \$750,000 investment from the Government of Canada through Western Economic Diversification Canada (WD).

The funding, administered through the Children's Hospital Foundation of Manitoba, went towards the purchase of state-of-the-art medical technology to support research being carried out at the new facility, including mass spectroscopy upgrades to the high performance liquid chromatography and gas chromatography systems.

The high-tech equipment is part of the framework of the physical and academic structure for new pediatric

pharmacological studies, which are part of a national initiative focusing on pediatric pharmacology and therapeutics.

The Institute project reflects Manitoba's position as a leader in the field of pediatric research and in clinical studies for children, using top-notch analytical laboratory support and state-of-the-art data storage and management.

The Institute, which is a division of the Children's Hospital Foundation of Manitoba and housed in the John Buhler Research Centre, is part of an extensive network of medical professionals working in collaboration

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on the project.

As the largest pediatric research facility in Canada, the Manitoba Institute of Child Health is well placed to become the western Canadian centre of a national research focus group in pediatric pharmacology and therapeutics. ♦

Retired Coast Guard Ship Key



C.C.G.C. Namao docked in Gimli, Manitoba.

by Mark Gale

The **Lake Winnipeg Research Consortium (LWRC)** will soon be conducting research on Lake Winnipeg from the decks of the retired Canadian Coast Guard Ship *Namao*, thanks to funding from the **Canada/Manitoba Economic Development Partnership Agreement**.

The funding will be used to complete repairs and capital improvements, such as engine rebuilding, necessary for the ship to regain its seaworthiness certificate. The *Namao* presents a unique research platform opportunity, due to the design and capabilities of the vessel. It is capable of dealing with the needs of researchers, while also being large enough to operate safely during a range of weather conditions and to bring the crew safely to shore in severe conditions.

The LWRC's goals are to protect and sustain the Lake Winnipeg ecosystem, exchange information and encourage educational opportunities while facilitating multi-disciplinary scientific research. The work of the consortium will help to preserve existing economic activities and provide benefits for future economic development by monitoring the health of the lake itself. Lake Winnipeg's flush rate is three to five years, and

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to Research on Lake Winnipeg

research will look at the effects of the '97 flood that are still being manifested in the lake.

Lake Winnipeg, the 10th largest freshwater lake in the world, is considered a major resource to the economy of Manitoba. Commercial fish production is in the order of \$15 million annually, and over 23,000 permanent residents living in 30 communities along the shores of the lake depend upon its fishery as a food source. The lake also generates \$100 million annually in tourism revenues. And, it serves as the primary headwater and storage reservoir for Manitoba Hydro.

Despite its economic significance, research on this lake has been limited because, prior to now, there has never been a vessel available that is capable of conducting research safely and effectively. The outfitting of the *Namao* through this project provides



C.C.G.C. Namao docked in Gimli, Manitoba.

a unique way to do the necessary research.

Western Economic Diversification Canada believes strongly in initiatives such as this innovative project which contribute to community economic development and useful environmental research. ♣

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Prairie Malting Barley Producers and Local Micro Breweries to Benefit from New Technical Centre

by Mark Gale

The **Canadian Malting Barley Technical Centre (CMBTC)** officially opened its pilot malting and brewing facilities on October 11, 2001, marking an important step in their mission to provide technical research and market support to Canada's malting barley, malt and brewing industries.

An independent, non-profit organization, the CMBTC's major goal is to support the development, commercialization and marketing of Canadian malting barley and malt, both domestically and internationally.

The CMBTC's new 100 kilogram pilot malting plant and three hectolitre pilot brewery will be key tools in the centre's research and support efforts. These facilities will allow technical experts to work with new and existing barley varieties and determine if they meet the requirements of malting and brewing companies.

The CMBTC's malting and brewing equipment uses state-of-the-art technology commonly found in commercial facilities. Some of the design features of the malting plant are major innovations not available anywhere else in the world. The equipment's scaled-down size will enable CMBTC staff to work with smaller lots of barley and malt, a distinct advantage in being able to conduct commercially relevant research and testing in a time and cost-efficient manner.

Canada's growing beer industry produces \$4.1 billion worth of product each year for the domestic market and enjoys annual export sales of more than \$300 million. To make all of this beer, Canadian brewers use \$122 million worth of malting barley a year.



Kilns for drying and processing the malting barley.

The quality of Canadian malting barley and malt is recognized worldwide. Through the support work of the CMBTC, Canadian producers will continue to build on that advantage and ensure they are well positioned to respond to the needs of domestic and international customers well into the future.

Project support/funding assistance was provided by Agriculture and Agri-Food Canada; Canadian Adaptation and Rural Development Saskatchewan; the Manitoba Rural Adaptation Council; and by Western Economic Diversification Canada through the **Canada/Manitoba Economic Development Partnership Agreement.** ♣