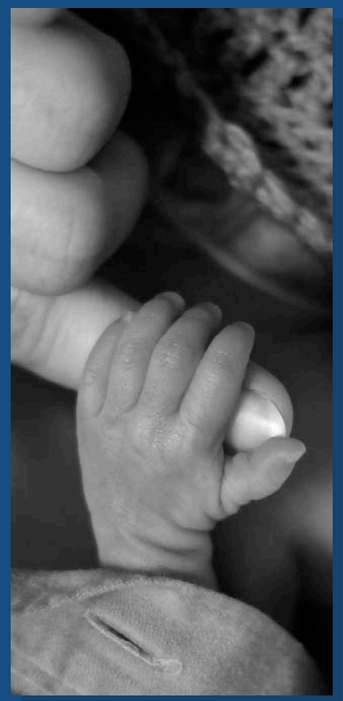
Mothers' Milk Bank
of the Western Great Lakes

Capital Campaign

Every week

59

premature babies are born in Wisconsin & Illinois weighing less than 3.3 pounds.



Introduction

Human milk is rapidly becoming the standard of care for very premature and ill infants. For these vulnerable patients, it is considered medicinal as well as nutritional.

A donor milk bank is a not-for-profit organization established for the purpose of collecting, screening, processing and distributing donated human milk primarily to these infants. The Mothers' Milk Bank of the Western Great Lakes is seeking the necessary funding to open a milk bank that will meet the increasing demand for pasteurized donor human milk in the region.

Mission & Vision

The Mothers' Milk Bank of the Western Great Lakes will provide hospital neonatal intensive care units with improved health outcomes of these fragile babies through the use of pasteurized donor human milk. Additionally, the milk bank will educate, promote, and support breastfeeding and human lactation in the community in the region.

What is human milk and why does it work?

Human milk is a biologically active living fluid, perfectly designed for an infant's nutritional needs and immature systems. Immune-fighting cells and bio molecules, including polyunsaturated fatty acids, growth factors and enzymes serve protective and nutritive functions. One important component of human milk that remains stable throughout the pasteurization process is human milk oligosaccharides. These sugars serve two critical functions:

- They are prebiotics or food for the healthy gut flora that need to flourish in order for a new baby to have a healthy intestine.
- They attach to harmful bacteria that are present in an infant's intestine, thereby preventing many infectious illnesses.

Necrotizing Enterocolitis

Premature babies may develop a dangerous digestive tract inflammation called Necrotizing Enterocolitis (NEC). It can lead to swelling, infection, and death of the intestines. Approximately 12% of babies born weighing less than 3.3 pounds will suffer from NEC. Often, these babies require abdominal surgery to remove damaged sections of the intestine. This is a high risk surgery for these premature babies and is often associated with a high risk of death, or a future life of intestinal problems due to chronic malabsorption. NEC accounts for 2% of all infant deaths in the United States.

Standardizing the use of human milk (mother's own milk plus donor milk, when needed) in hospital Neonatal Intensive Care Units (NICU), will reduce the incidence of NEC, thereby saving lives. Concomitantly, hospital health care costs would decrease because NEC accounts for 19% of all newborn healthcare costs.

> *"A 2009 meta-analysis concluded that infants fed formula were 2.5 times more likely to develop NEC than those fed donor human milk.*
>
> -Quigley

Additional Clinical Benefits

Donor human milk also reduces the incidence of sepsis, shortens the length of hospital stay, is associated with improved infant developmental outcomes, and decreased incidence of retinopathy of prematurity (ROP).

Nearly

50%

is the mortality rate of babies requiring surgery as a result of NEC

Approximately

300,000

is the cost to treat a baby that requires gastrointestinal surgery due to NEC

At any moment approximately

1200 babies

are in tiny hospital beds in Illnois & Wisconsin and may need access to donor milk

ADVENTIST HINSDALE HOSPITAL
ADVOCATE CHRIST MEDICAL CENTER
ADVOCATE GOOD SAMARITAN HOSPITAL ADVOCATE ILLINOIS MASONIC MEDICAL CENTER
ADVOCATE LUTHERAN GENERAL HOSPITAL ALL SAINTS - ST LUKE'S HOSPITAL ASPIRUS WAUSAU HOSPITAL
AURORA WEST ALLIS MEDICAL CENTER
AURORA BAYCARE MEDICAL CENTER
AURORA SINAI MEDICAL CENTER
CADENCE HEALTH CENTRAL DUPAGE HOSPITAL CARLE FOUNDATION HOSPITAL CHILDREN'S HOSPITAL OF WISCONSIN COLUMBIA ST. MARY'S HOSPITAL EDWARD HOSPITAL
EVANSTON HOSPITAL
GUNDERSON LUTHERAN HOSPITAL
JOHN H. STROGER, JR HOSPITAL OF COOK COUNTY LOYOLA UNIVERSITY MEDICAL CENTER LURIE CHILDREN'S HOSPITAL OF CHICAGO MAYO CLINIC HEALTH SYSTEM FRANCISCAN HEALTHCARE IN LA CROSSE MERITER HOSPITAL MT SINAI HOSPITAL MEDICAL CENTER NORTHWEST COMMUNITY HOSPITAL NORTHWESTERN MEMORIAL HOSPITAL OSF ST FRANCIS MEDICAL CENTER ROCKFORD MEMORIAL HOSPITAL RUSH-COPLEY MEDICAL CENTER RUSH UNIVERSITY MEDICAL CENTER ST ALEXIUS MEDICAL CENTER
ST ELIZABETH HOSPITAL ST JOHN'S HOSPITAL MINISTRY ST JOSEPH'S HOSPITAL ST MARY'S HOSPITAL ST VINCENT HOSPITAL UNIVERSITY OF CHICAGO MEDICAL CENTER
UNIVERSITY OF ILLINOIS HOSPITAL & HEALTH SCIENCES SYSTEM UWHEALTH AMERICAN FAMILY CHILDREN'S HOSPITAL WAUKESHA MEMORIAL HOSPITAL

Supplementing Mothers Own Milk

There are many reasons why some mothers of premature babies are unable to provide sufficient breastmilk for their babies. Many of these moms had high-risk pregnancies due to medical problems that impact lactation. Women with very early preterm babies have missed out on 3-4 months of pregnancy, which means their breasts did not finish optimal development to make a full milk supply. In addition, these moms are unable to put their babies to the breast during the first few days to weeks, making it difficult to establish a healthy milk supply.

Bereavement Support

The death of a child is one of the most traumatizing experiences for a family. Each mother needs support to work through her grief in her own way. One aspect of neonatal loss that is often overlooked is lactation management and options for mothers including milk donation. For some mothers, milk donation has brought comfort during one of the most difficult times in their lives.

The Milk Bank will offer comprehensive and compassionate support for mothers who wish to donate their stored breast milk after their baby's death. Our multidisciplinary Bereavement Donation Committee is comprised of local and national experts in the field. The committee's guidelines ensure that grieving mothers and families are supported throughout the entire donation process.

> *"It allowed Melinda to live on and give other babies a chance for life, which my daughter was not able to have.*
>
> -Lisa Koenen
>
> Illinois mother who donated more than 1,200 ounces of milk after her 7 month old daughter passed away.

How Much Milk is needed?

In 2011, United States milk banks dispensed 2,182,916 ounces of pasteurized donor human milk.

With thousands of premature babies born in the region each year, the Mothers' Milk Bank of the Western Great Lakes will need to dispense over 4,000 gallons of milk annually to satisfy the need.

Human Milk as the Standard of Care

Medical and health organizations from around the world endorse the practice of Pasteurized Donor Human Milk for premature babies. The 2011 U.S. Surgeon General's Call to Action to Support Breastfeeding specifically outlines the need to address obstacles to greater availability of safe banked donor milk for infants. Additionally, in 2012, organizations such as the American Academy of Pediatrics have reinforced the conclusion that breastfeeding and human milk are the standard for infant feeding and nutrition.

Setting a High Standard for Safety

Founded in 1985, the Human Milk Banking Association of North America (HMBANA) is the professional organization for all non-profit human milk banks on the continent. HMBANA sets standards and guidelines for human milk processing and storage in conjunction with the FDA and CDC in the United States.

HUMAN milk banking ASSOCIATION OF NORTH AMERICA

In the 100 years of milk banking in the United States, there has never been a documented case of disease transmission through the use of pasteurized donor human milk.

The Mothers' Milk Bank of the Western Great Lakes was selected as a HMBANA Mentoring Bank in early 2012. The Mothers' Milk Bank of Indiana was chosen to assist with all aspects of organizational development and guidance until the new milk bank is established.

Organizations who endorse the use of Pasteurized Donor Human Milk

American Academy of Pediatrics
DEDICATED TO THE HEALTH OF ALL CHILDREN™

U.S. PUBLIC HEALTH SERVICE 1798

AMERICAN ACADEMY OF FAMILY PHYSICIANS
STRONG MEDICINE FOR AMERICA

World Health Organization

eat right. American Dietetic Association

DEPARTMENT OF HEALTH & HUMAN SERVICES • USA
FDA

CDC
SAFER • HEALTHIER • PEOPLE™
Your Online Source for Credible Health Information

Academy of Breastfeeding Medicine

ACOG
THE AMERICAN CONGRESS OF OBSTETRICIANS AND GYNECOLOGISTS

The Joint Commission

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES
U.S. Public Health Service
Office of the Surgeon General

womenshealth.gov
The Federal Government Source for Women's Health Information

Follow the Milk

...from the donor to recipient

Donor Screening
Donor mothers undergo screening that begins with a telephone interview. Their health must meet similar medical requirements to those of blood donation.

Milk Donation
Donor mothers express milk over a period of weeks or months, or may choose to make a one-time donation.

Milk Depot
A depot is a facility that keeps a freezer for collecting milk from donors. The milk is then transported to the Milk Bank. Donors may also ship milk directly to the milk bank.

The Milk Bank

Donor Testing
The milk bank facilitates blood testing of all donors for HIV-1 and HIV-2, HTLV, Hepatitis B, Hepatitis C, and Syphilis.

Processing & Pasteurizing
Milk is carefully thawed, pooled and mixed by lab technicians, then pasteurized to eliminate bacteria while retaining the majority of the milk's beneficial components. Pasteurized milk is quick-cooled, labeled, and frozen.

Nutritional Analysis
Donor milk is analyzed by infrared spectroscopy to evaluate certain nutritional components such as fat and protein.

Bacterial Testing
Microbiological cultures are obtained to verify that heat-resistant pathogens are not present before pasteurizing, and there is zero growth of bacteria after the heating process. Any contaminated milk is discarded.

Transportation
After pasteurization, milk is shipped frozen overnight to hospitals and individual recipients.

Ordering Milk
Donor human milk is dispensed by physician or health care provider who can order or prescribe it. Doctors can request milk of varying calories per ounce. Milk is shipped overnight either to the hospital or patients home.

Tracking
Rigid protocols ensure careful handling at each stage of processing and distribution. The milk bank has a tracking system that allows the milk bank to know the recipient(s) of every bottle of milk.

How the Milk Bank Will Help

The Milk Bank is working to establish a human milk processing facility to serve hospitals and families in Wisconsin and Illinois. 80% of the NICU beds in these two states are located in the highly populated areas of Milwaukee and Madison, Wisconsin and Chicago, Illinois. As such, the milk bank will be located on the northern side of the Chicago metro area to provide easy access to these three cities.

Milk Depot Locations

- *Active Depots*
- 1 Park Ridge
- 2 Oak Park
- 3 Mt. Horeb
- 4 Cottage Grove
- 5 Oshkosh
- 6 Wausau

- *In Development*
- 7 Middleton
- 8 Genoa
- 9 LaCrosse
- 10 Elgin

A Proven Track Record

Before the milk bank became a bi-state organization, the Mothers' Milk Association of Wisconsin (MMAW) cultivated a successful depot system beginning in 2005. This dedicated group of professionals collected and shipped 10,000 oz. of milk per year to the Ohio Mothers' Milk Bank for processing. In 2011, MMAW joined with a group of Chicago based professionals to form the Mothers' Milk Bank of the Western Great Lakes with the goal of keeping more donated milk local, in order to save the lives of local babies. Today, the depot system has grown and several more are in development. Until the milk bank opens, collected milk is processed by the Indiana Mothers' Milk Bank.

Recipe for Success

The Milk Bank is currently campaigning to obtain startup capital funding. $850,000 is necessary to fund the milk bank until it is self-sufficient. At a cost of $4.50 per ounce of milk, the program fees charged are able to maintain the operations of the milk bank beyond the initial startup phase. Based on the financial analysis performed, the milk bank will become self-sufficient during its third year of operations.

Startup costs include construction of the 2000 square foot facility, pasteurization lab and purchase of processing equipment.

Some of the necessary items for the lab include:

- Sterifeed Pasteurizers
- Spectra Star Milk Analyzer
- Digital tracking system to track milk and interface with hospital charting software
- Commercial grade refrigerators, freezers & dishwasher

Financial Details

Capital Requirements

Startup Expenses	
Equipment	$200,000
Facilities Build-out	$200,000
Lease & Utilities	$20,000
Operational	$75,000
Supplies and Other	$25,000
Total	**$520,000**
Profit/Loss During Ramp Up	
Year 1	$182,249
Year 2	$113,260
Year 3, Q1	$31,407
Total	**$326,916**
Buffer	
Cash Flow Buffer	$100,000

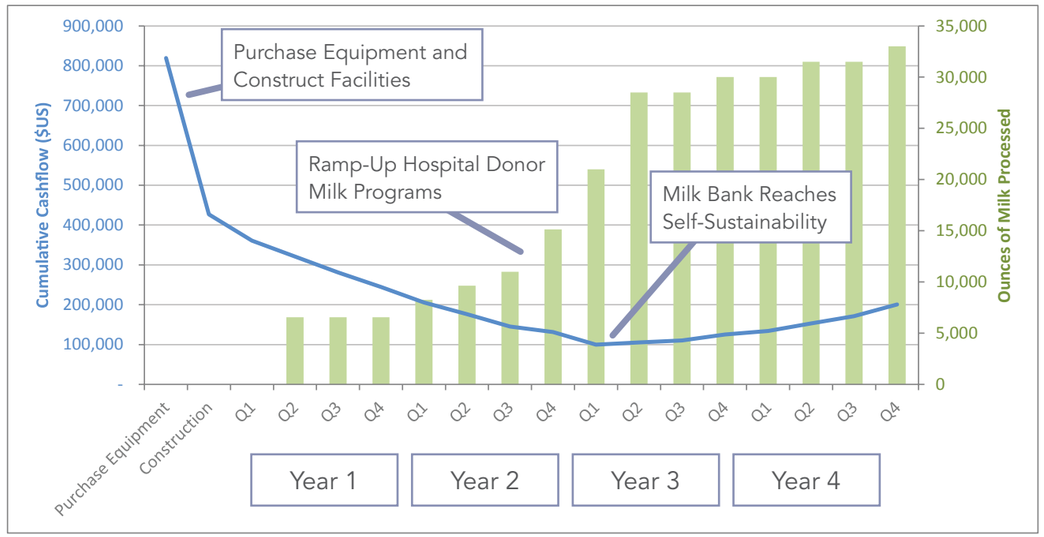
The financial model includes the initial capital investment as well as estimated operational costs until the milk bank reaches self-sufficiency. Based on growth expectations and expected market share, the milk bank will process enough milk to operate on the receipt of milk processing fees of $4.50 per ounce.

Historical experience of the 10 operating milk banks in the US demonstrates that the local availability of a Pasteurized Donor Human Milk supply rapidly accelerates adoption of this established standard of care.

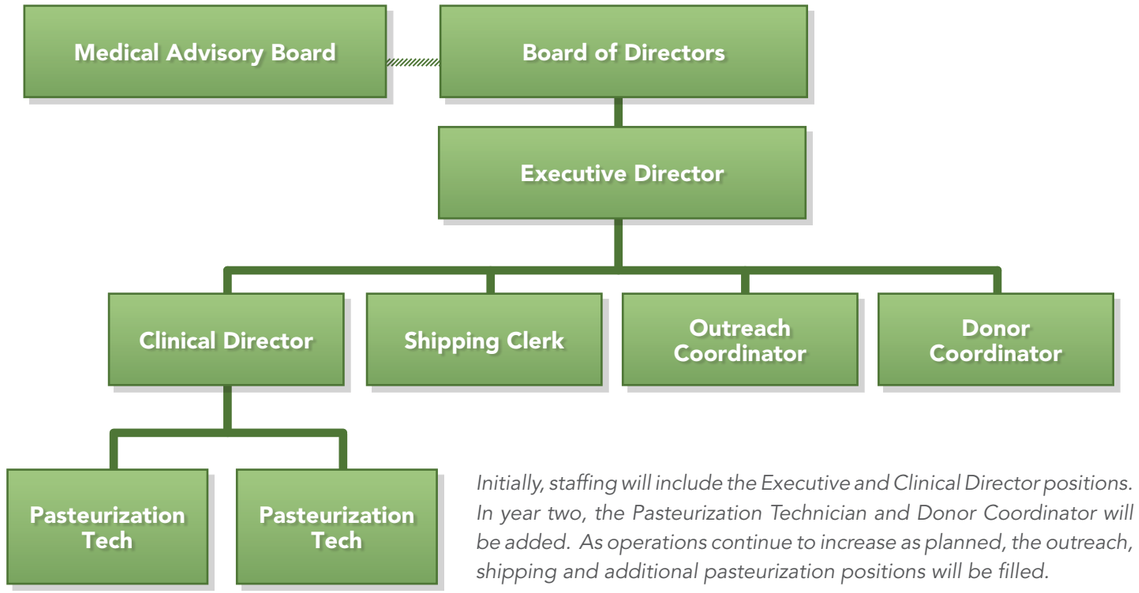
Total Capital Necessary to Begin Operations:

$850,000

4 Year Outlook - Cash Flow and Ounces of Milk Processed



The Organization



Initially, staffing will include the Executive and Clinical Director positions. In year two, the Pasteurization Technician and Donor Coordinator will be added. As operations continue to increase as planned, the outreach, shipping and additional pasteurization positions will be filled.

The **Board of Directors** is a group of dedicated members of the community committed to the mission of providing pasteurized donor human milk to local babies. This diverse group of professionals will establish broad policies and objectives with input from the Medical Advisory Board.

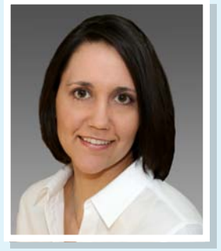
The **Medical Advisory Board** is made up of healthcare professionals from a variety of specialties impacted by the widespread use of pasteurized donor human milk. This board will review clinical policies annually as well as make recommendations to the Board of Directors, allowing for continued clinical innovation in keeping up to date with the latest research findings.

The **Executive Director** develops and collaborates with the Board of Directors to implement strategic plans for the organization. The director is also responsible for daily operations of the milk bank, financial management, marketing & public relations and fundraising.

The **Clinical Director** manages the pasteurization lab, milk processing and maintains adherence to HMBANA safety standards. The director ensures equipment is functioning appropriately and calibrated. The clinical director also works directly with hospital and other potential customers and clinical partners.

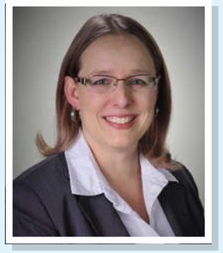
The **Leadership Team** is responsible for taking the milk bank from concept to operation. It includes members from the original Mothers' Milk Association of Wisconsin, medical professionals in family medicine, neonatology, nursing and lactation. The team also includes business professionals in nonprofit administration, project management, corporate finance, and pharmaceuticals.

The Leadership



Jennifer Anderson
IBCLC
Chair, Board of Directors

Anderson brings ten years of nonprofit administration experience both internationally and in the U.S. She currently runs a lactation consultation practice in Schaumburg IL and is pursuing a Master's Degree in Public Health from the University of Illinois at Chicago.

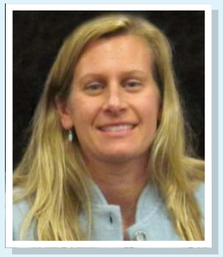


Marissa Grossenbach
Chair, Fundraising

Grossenbach delivered her son prematurely in a Chicago area hospital. During his NICU stay, she began to look for alternatives to formula. She found that donor milk was not available locally and set out to assemble a team to create a milk bank. She has 13 years of experience in project management.

Anne Eglash
MD, IBCLC, FABM
Co-Medical Director

Dr. Eglash is a co-founder of the Academy of Breastfeeding Medicine and the Mothers' Milk Association of Wisconsin. A board-certified family physician, she practices clinical medicine in Mount Horeb WI and teaches medical students and residents.



Jeannae Zeutzius
Chair, Grant Writing

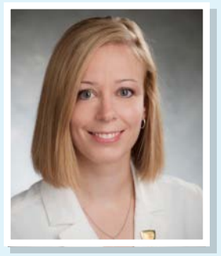
Zeutzius has seven years of experience working in pharmaceutical industry FDA-regulated facilities. She is familiar with aseptic technique used in the lab and in the clean room environment, and has extensive knowledge of microbial testing and microbiology lab operation start-up.

Kathleen Marinelli
MD, IBCLC, FABM, FAAP
Co-Medical Director

Dr. Marinelli is an Associate Professor of Pediatrics at the University of Connecticut School of Medicine, is a neonatologist and Director of Lactation Support Services at Connecticut Children's Medical Center and is chair-elect of the United States Breastfeeding Committee.

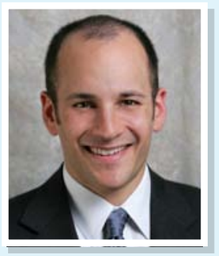
Maura MacDonald
Chair, Finance

MacDonald has a decade of corporate credit and lending experience in Recovery & Restructuring, Media & Telecom, and Securitization, and general Middle Market enterprises. She is familiar with the principles of GAAP accounting and business plan review.



Summer Cassidy
RN, BSN, IBCLC
Chair, Clinical Development

Cassidy was instrumental in initiating the first hospital program using pasteurized donor human milk in a Chicago-area Level III neonatal intensive care unit where she works as a nurse and lactation consultant. She is currently pursuing a Master of Science degree in Molecular Biology.



Jed Roher, JD
Legal

Roher is a lawyer in the Madison and Milwaukee offices of Godfrey & Kahn, S.C. Roher focuses his legal practice on tax and corporate planning for a broad variety of clients, including start-up enterprises, established public and private companies and non-profit health care entities.

Donor Human Milk

So precious we keep it in a bank