

## Organizations related to IMiC.

Could we combine the red colour from the Gates foundation + the blue or purple colour from MILC?

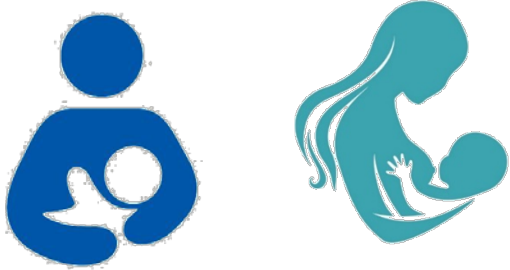


BILL & MELINDA  
GATES *foundation*

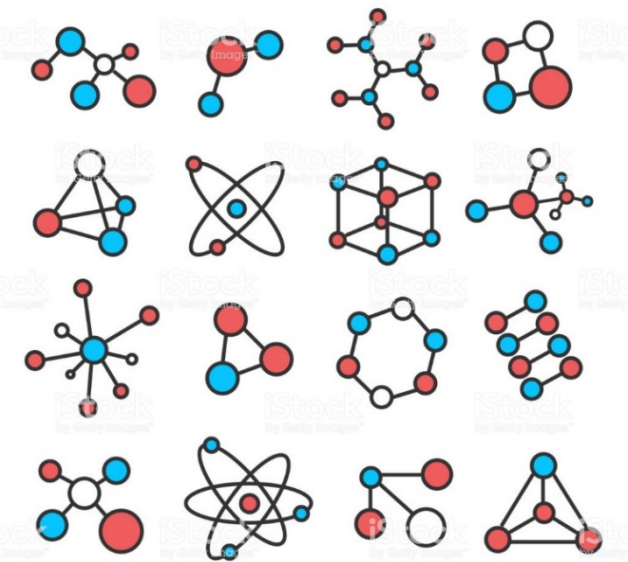


Inspiration images/concepts

International / global comparison of breast milk – these are the participating countries but we should NOT focus on the specific countries because we might add to them later.



Breastfeeding mother/baby



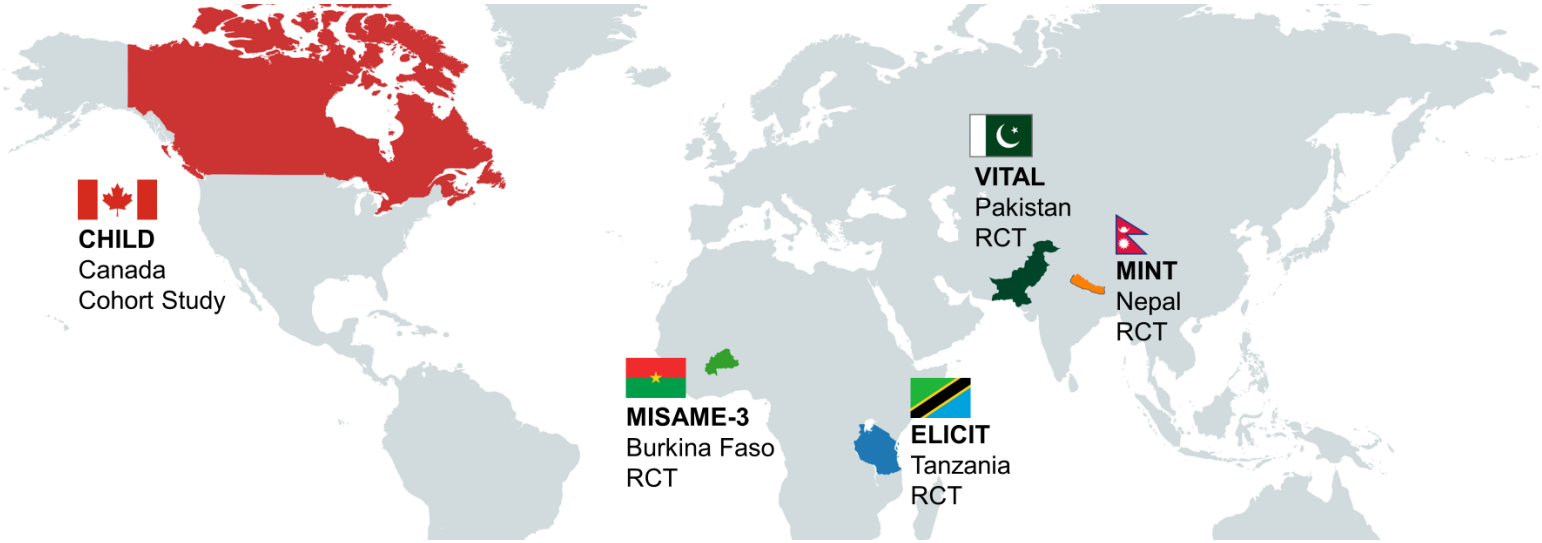
Molecules  
(components of milk)



Drop of milk



Big data



Science

Data

International

We want to be DIFFERENT from these logos  
(but could also draw inspiration):

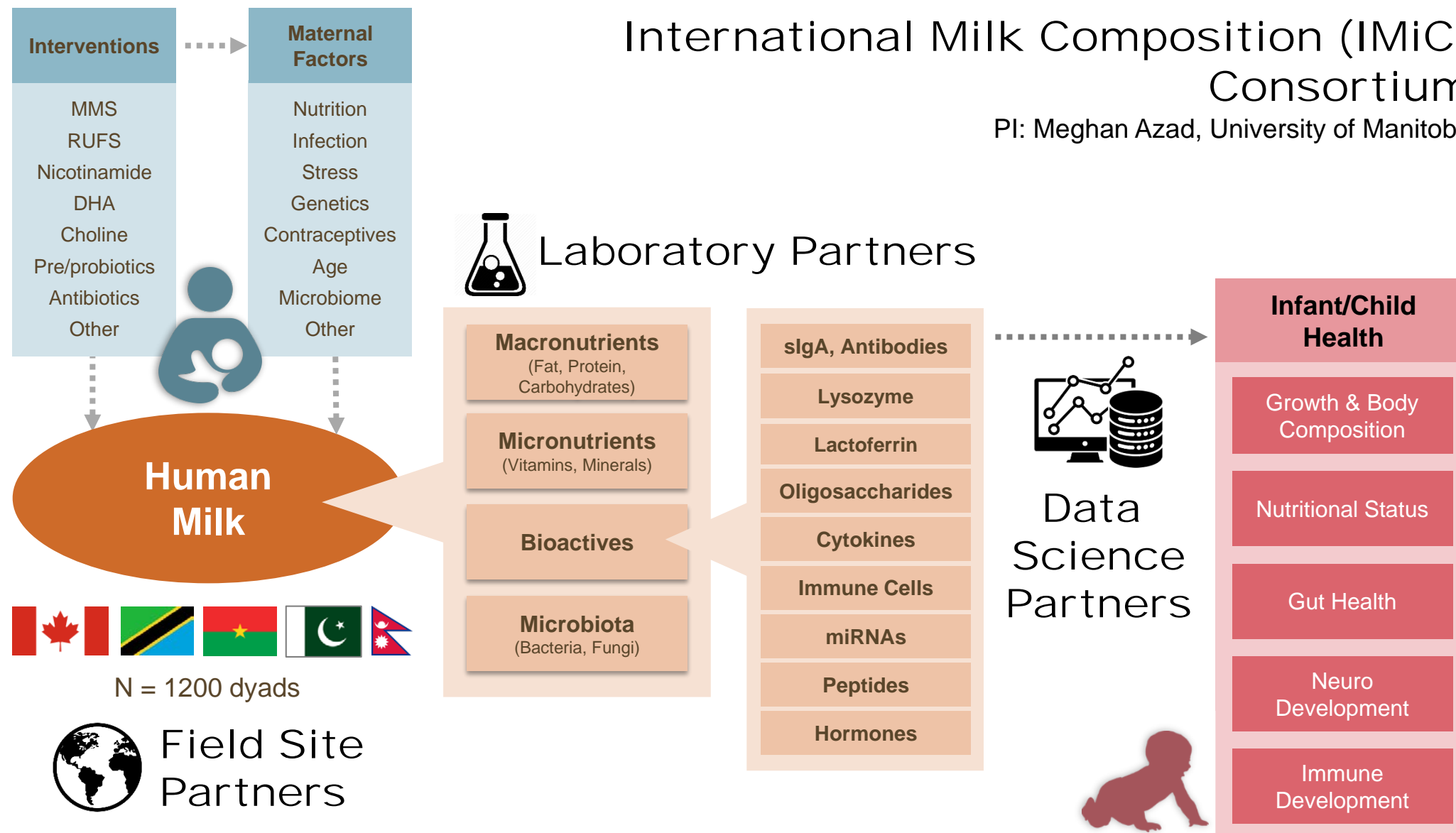


*Mobilizing the Healing Power of Donor Milk*

This is the overview of the IMiC project

# International Milk Composition (IMiC) Consortium

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### International Milk Composition (IMiC) Consortium

Breastfeeding provides optimal nutrition and immune protection to infants. Human milk contains a plethora of bioactive compounds that support infant growth and development. Many of these nutritional and non-nutritional components are highly variable between and within mothers, but little is known about the source and impact of this variation – yet, this information is critical to 1) understanding why some breastfed infants still develop infections or fail to achieve optimal growth trajectories, and 2) optimizing nutrition for infants who cannot be breastfed. The IMiC Consortium will support a comprehensive harmonized analysis of human breast milk from about 1200 mother-infant dyads living in diverse settings.

Our overarching **objective** is to identify, comprehensively, human milk components linked to infant growth and resilience to inform maternal, newborn and infant nutrition recommendations and interventions. We will establish a Consortium of maternal-child health and human milk researchers and methodologic experts who will co-develop a harmonized approach to breast milk analysis.

The Consortium will comprise **5 Field Site Partners** already conducting studies that involve breast milk collection and infant growth monitoring in Tanzania, Pakistan, Nepal, Burkina Faso and Canada. Aliquots of breast milk samples will be sent and stored centrally at the Manitoba Interdisciplinary Lactation Centre ([MILC](#)) Biorepository and distributed to **Laboratory Partners (TBD)** with expertise in measuring the human milk components of interest. Data generated from the breast milk analyses will be stored in a central database created and managed by the **Data Science Partners (TBD)**. These partners will be responsible for building the database, integrating and managing all data generated and assembled for the project, managing data access and sharing, designing the analysis plan, and undertaking the statistical analyses to address research questions such as:

- *What are the ranges and distributions of analytes in human milk?*
- *What is the variability in breast milk composition by geographic settings?*
- *How are various components in human milk correlated?*
- *How is breast milk composition influenced by maternal, environmental and sociodemographic factors?*

An additional goal of IMiC is to support pooling of data across sites to answer important questions related to the impact of maternal health and nutrition interventions on breast milk composition and its relation to infant health, growth and development. Each site will own its own data and will also independently address these same questions, as originally intended in their own studies.