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Celebrating 10 YEARS of Science to Impact

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Celebrating a decade of dedication: The Family Larsson-Rosenquist Foundation



Michael Larsson Honorary President, Founding President 2013–2017



Göran Larsson Vice President, President 2017–2021

A decade has swiftly passed since we inaugurated the Family Larsson-Rosenquist Foundation, and it's with immense joy and gratitude that we reflect on this journey.

Our story of integrating research into the development of our products begins nearly three decades ago, in 1996, within our family enterprise, Medela. We were contemplating the evolution of Medela's breast pumps, an endeavor that had hitherto been primarily shaped by the engineering brilliance of my father and the pioneering research by Einar Egnell in 1955.

Through my own research, I discovered the different sucking patterns of babies, especially the differences between nutritive and non-nutritive sucking. Inspired by this work, I convinced my family and our management team to base our next-generation products on solid scientific research. My search for a recognized researcher led me to Professor Peter E. Hartmann at The University of Western Australia. This is how our Symphony breast pump was born, a software-driven marvel that seamlessly translates the latest research into state-of-the-art technology.

Our collaboration with Professor Peter E. Hartmann thrived on transparency; Peter insisted on publishing all results, whether

positive or negative. This transparency, a testament to his integrity, also served as a compass that protected us from potential pitfalls and gave us a competitive edge.

Our initial collaboration led me to naively assume that a bit more research would unlock all secrets of breastfeeding, only to find out that each answer unveiled a wealth of intriguing questions, leading to groundbreaking knowledge, from refining our understanding of breast anatomy to discovering stem cells in milk. Although we lost Professor Peter E. Hartmann a few years ago, his work is carried on under the capable leadership of Professor Donna Geddes.

Despite these advances, it has astonished me for many years how a field as fundamental as human lactation has a scant pool of about 600 researchers. Perhaps this is because the subject of breastfeeding can really only be approached in a multidisciplinary way. Recognizing this dearth, and driven by my passion for breastfeeding research, our family decided around 15 years ago to allocate assets towards a long-lasting charitable cause. Thus, in 2013, the Family Larsson-Rosenquist Foundation was conceived with the vision of a world in which every child is granted an optimum start in life through the benefits of breastmilk.

A heartfelt acknowledgment goes to the countless scientists, experts, and collaborators who have advanced the field of human milk. The Foundation has grown, fortified by international alliances and mutual learning. We express our gratitude to every-one across academia, health, policy, philanthropy and government sectors for embracing our ambitious vision.

Under the skillful leadership of our Foundation Board and Managing Director, we're leveraging our insights for global and local impacts. We're forging novel partnerships, all targeting enhanced health for future generations.

The United Nations likens the path to sustainable development to a "great collective journey". It's an honor for our family legacy to join this voyage, both internationally and domestically. There's still much ground to cover to elevate breastfeeding rates sustainably, but together, our potential is boundless.

From humble family aspirations, we've blossomed into a global foundation. The Family Larsson-Rosenquist Foundation remains unparalleled as the sole global philanthropic organization exclusively devoted to promoting breastfeeding and its lasting impacts.

Our commemorative book underscores our proudest milestones and celebrates our invaluable partners. Dive in and join us in marking the Foundation's momentous first decade.

> In the name of the founding Larsson-Rosenquist family, Michael Larsson

"It's with immense joy and gratitude that we reflect on this journey."

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Reflections of gratitude: Hans Schmidtner

Hans Schmidtner Former President of the Foundation Board 2021–2023

Dear Friends

The 10th anniversary of the Family Larsson-Rosenquist Foundation is the perfect opportunity to reflect on our achievements and express our immense gratitude to our partners for joining us on this journey from science to impact.

As former President of the Foundation Board, I thank you sincerely for your outstanding support and collaboration over the past decade. Your dedication to our founding family's vision – a world where every child has an optimum start in life through the benefits of breastmilk – is creating positive change for new generations here at the Foundation's home in Switzerland and around the world.

As a longtime friend of Olle Larsson, I know that he would be grateful for your dedication to his family's vision and work to advance breastfeeding, as are his sons, Göran and Michael Larsson. In 10 short years, we have achieved much to be proud of.

With our partners, we endowed five independent research centers at renowned universities, including two at the University of Zurich. Today, these centers are leading innovative investigations in breastfeeding and breastmilk. They have since gone a step further, forming the Global Human Milk Research Consortium to collaborate on interdisciplinary research projects capable of bridging traditional divides between disciplines. We funded nearly 30 discrete research and tool development projects. Some were "anchor projects", now evolving into training resources or tools with scope for global scale-up. We launched the LactaHub online knowledge platform, growing daily, with by now over 5,600 subscribers and counting.

All these activities exposed the need for clear, strategic action plans to turn breastfeeding policies into reality. This need is universal – independent of location, and despite progressive breastfeeding policies. Thus, with our partners in Ghana, we are co-creating and co-testing an operationalization process that can be scaled up for sustainable, improved breastfeeding outcomes in different countries. Details about this innovative collaboration are on pages 25–27, by Managing Director Dr. Katharina Lichtner, and on page 32, in an interview with project co-creator Dr. Ernest Konadu Asiedu. Our work in the last decade has also exposed another gap: that between academic knowledge and its practical, widespread use. Researchers are uncovering critical findings with enormous potential for public health. Unfortunately, too often, their findings only end up in academic journals and are not used further.

With our partners, we are striving to open and expand access to valuable knowledge, making it more equitable and easier to use. With The Global Health Network, we are focused on knowledge management (page 29). With The Aga Khan University, we are pursuing knowledge translation (page 33). With partners in multiple locations, we are translating scientific knowledge into practical, efficient tools that can be scaled globally for meaningful health and development impact.

The work is ongoing. Nevertheless, after 10 years, we wanted to pause and reflect on what we and our partners have accomplished together. Now is also an excellent opportunity to say "thank you" as we share our learnings from these years with partners and new breastfeeding alliances at home in Switzerland.

Since 2020, we have amplified our local focus. We opened a public breastfeeding room in Frauenfeld in 2021. We are building a Swiss-wide breastfeeding alliance, bringing together organizations engaged for breastfeeding, government, academia, healthcare professionals, opinion leaders and influencers to give breastfeeding a higher standing in Swiss society and politics and to improve the health and well-being of local children, mothers and families. This is just the beginning. Neither the Foundation's collaborative achievements nor its plans would be possible without the strategic and operational leadership of Dr. Katharina Lichtner. I want to thank her profoundly for developing the Foundation's long-term strategy and for her day-to-day work to implement it. I also wish to thank the Team for their work to carry out this strategy and the Foundation's Scientific Advisory Board for their wise counsel. Finally, I wish to thank my colleagues on the Foundation Board. They are committed, passionate, and their experience is invaluable in steering the Foundation forward for long-term, sustainable impact.

When the United Nations set forth the Sustainable Development Goals in 2015, the Foundation was in its infancy. Today, it is an honor to support the goals linked to maternal and child health, carrying my friend Olle Larsson and his family's vision forward in Switzerland and abroad.

The Foundation, together with partners both dear and new, is embarking on its second decade. The vision remains unchanged: a world where every child has an optimum start in life through the benefits of breastmilk.

Please join us.

Hans Schmidtner, Former President, Foundation Board

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Welcome and introduction: Dr. Katharina Lichtner

Dr. Katharina Lichtner Managing Director

My journey with the Foundation started not from its beginning but shortly after in October 2015.

It was in early 2015 as I was leaving my position as CEO of a sports technology start-up that I received a call from a headhunter I knew well. He introduced the opportunity to build up a foundation focused on breastfeeding that had been established by the Swiss-based Larsson-Rosenquist family just two years prior.

As a mother who had been fortunate and privileged to easily breastfeed each of my two sons for over six months while continuing my career, it never occurred to me that breastfeeding could be a problem. Or a topic so vast that it could warrant the exclusive focus of an entire foundation.

How wrong I was! During the first meetings of the interview process, I realized that the breadth and complexity of breastfeeding are second to none. I was fascinated to find breastfeeding encompasses aspects from science to religion and everything in between.

In addition, the prospect of building another – and very different – organization after having been involved in building up companies for nearly 20 years was very appealing. What won me over was the Foundation's unique situation of financial independence and its candid entrepreneurial spirit. The founding family and the Foundation Board were united in the aim for an innovative approach to making breastmilk the norm of infant feeding again. Since then, the experience could not have been better.

The Foundation's culture of openness afforded me the freedom to systematically identify key break points in the challenge to increase breastfeeding rates. Together with the Board, we developed a multi-year strategy to address critical issues and build an excellent team able to execute such a strategy.

The result? We are completely rethinking the journey from science to impact.

Breastfeeding is the single most effective intervention to improve a baby's health and chance for a better life, particularly in the Global South. Yet despite decades of investment, breastfeeding rates are still frustratingly low: Millions of women and families worldwide don't have the support they need to provide breastmilk to their children. We believe it's time for new ideas to accelerate progress. Together with our partners we set out to revitalize the journey from science to impact, so countries can break through entrenched challenges and sustain ambitious breastfeeding goals. Details about one of our central projects – the operationalization of a country's breastfeeding policy – are on pages 25–27 and 32.

In the Foundation's initial years, we focused on learning from the international community. We gathered knowledge about past and present endeavors to improve breastfeeding environments, sharpening our understanding of what works and where we can best contribute to progress. This informed the development of innovative tools and resources that help decision-makers map out strategies that work for their communities.

It is generally accepted that breastfeeding immediately saves lives in the Global South, protecting infants from deadly communicable diseases. However, breastfeeding's significant contribution to the long-term health of mothers and infants here in Switzerland is often overlooked.

In the last World Breastfeeding Trend Initiative (WbTi) survey of 100 countries, Switzerland ranked 71st, scoring only 48 of 100 on progress in implementing a global standard for infant and young child feeding. This is not surprising, considering how few resources and little attention are dedicated to the topic.

Hence, the Foundation is extending its strategy, bringing learnings and achievements from the last 10 years home to improve the breastfeeding environment in Switzerland. Our contributions will focus on convening key stakeholders to collectively work towards a national breastfeeding strategy. Details outlining how the breastfeeding environment can be evolved to make it easier for women to breastfeed successfully are on page 36. Two of the five independent research centers the Foundation has endowed are in Switzerland, and we are exploring together with the research teams how their research can contribute to improving the breastfeeding environment for families in the country (pages 15 and 20).

Together with Professor Nikola Biller-Andorno, who leads the Institute of Biomedical Ethics and History of Medicine at the University in Zurich, we developed a framework to assess ethical questions around breastfeeding research and interventions (page 31). We look forward to the findings benefiting mothers in both Switzerland and abroad.

The public breastfeeding room we opened in our office in Frauenfeld in 2021 enables us to collect valuable, firsthand experience about operating such a space. We will direct the knowledge we gain towards improving workplace breastfeeding situations in Switzerland.

Likewise, we are translating many of the tools created in English over the last 10 years into German, French and eventually Italian so that practitioners in Switzerland can easily use them.

We are excited to enter our next decade and continue this journey, contributing original, innovative approaches to improve the breastfeeding environment for families worldwide. We believe that committing to this work and to funding breastfeeding are investments in our shared future.

Dr. Katharina Lichtner, Managing Director

A decade of partnerships and successes

In 10 short years, the Foundation has taken great strides to reestablish breastfeeding as the norm in modern society. At the heart of this story are the people who have become our partners along the way. Here we are delighted to introduce a few of the many we have been so fortunate to collaborate with. We hope you enjoy the highlights they have shared, in their own words, joining us in revitalizing the journey from science to impact. Please visit our website to learn about all the partners whose contributions we are grateful for but were unable to feature in this book.

The Foundation took its first steps towards bringing the founding family's vision to life: "A world where every child has an optimum start in life through the benefits of breastmilk". These early days were devoted to connecting with experts, attending global conferences, learning the landscape and building relationships. In short, planting the strategic seeds for long-term, sustainable solutions in child and maternal health As a pioneer in the field of supporting breastfeeding mothers, Michael Larsson had a keen sense of the knowledge gaps – he was also adamant that sound science be the basis for filling them. So it is not surprising that the first projects focused on endowing two research centers, LRF CIBF in Perth and LRF NGN in Zurich, to address critical questions and lay the groundwork for the Foundation's contribution to generating essential, evidencebased knowledge in the field. Moving on, the Foundation wanted to address two other critically important issues. One was disseminating international growth and feeding standards for infants born preterm by funding INTERPRACTICE-21st at the University of Oxford. The other was inspiring and supporting early scientists to advance in the field of breastmilk research and develop their professional skills through the TEP scholarship program, together with ISRHML.

2016

Expanding our understanding on the complexities of the field, we continued to close research gaps and moved towards supporting the implementation of results. Partnering with UCSD and Lars Bode, we endowed a third center, LRF MOMI CORE, focused on innovations in breastmilk research. In addition, the BBF tool created by Rafael Pérez-Escamilla at Yale was launched, allowing countries to assess their readiness to scale up breastfeeding.

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2018 saw the culmination of the Foundation's aim to address key knowledge gaps via endowments, with two further centers targeting two further important topics: the behavioral economics of breastfeeding at LRF CEB, which is building a better understanding of the decision processes and the socioeconomic outcomes of breastfeeding, and the endocrinology of breastfeeding at LRF OCEHL, which strives to help mothers with physiological breastfeeding issues.

2018

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This year brought the launch of LactaMap, a lactation support tool that was inspired by Peter E. Hartmann. Peter, passing away too early in 2021, provided invaluable guidance and mentorship to the Foundation, which we would like to honor here. 2019 also marked the beginning of what was to become a major strategic drive for the Foundation in revitalizing the journey from science to impact – the operationalization of breastfeeding policy.

While generating the operational concept to close the gap between policy and sustainable implementation at scale, we launched a pillar of our long-term strategy – LactaHub, the online knowledge platform for evidence-based breastfeeding knowledge, with The Global Health Network pioneered by the University of Oxford. PROVIDE, a video-based training tool promoting mothers' own milk in neonatal intensive care, developed by Paula Meier at Rush University Medical Center, also launched, contributing new resources to the field.

Ethical considerations are crucial in work with breastfeeding mothers and infants. Keenly aware of this, the Foundation partnered early on with Nikola Biller-Andorno at the University of Zurich to embed thorough ethical reviews into all its activities. This activity inspired EFBRI, Launched in 2021, EFBRI brought a sound ethics framework to the public. We also built a public breastfeeding room at our office, giving back to the community and providing us with firsthand experience on a topic we wish to expand.

Having developed a robust concept for the operationalization of breastfeeding policy, we partnered with the Ministry of Health and the Ubora Institute in Ghana to test the concept and create an implementation platform for the government. Seeing the vital need to translate evidence into easily accessible information for practitioners, politicians, journalists and the public, we crystallized this insight in a partnership with Zulfiqar Ahmed Bhutta at The Aga Khan University, launching a comprehensive knowledge translation project.

2023 has developed as a year of intense learning. As results from the different operationalization and knowledge translation projects emerge, critical gaps and promising ways forward are becoming apparent, providing the basis for the acceleration of the Foundation's effectiveness for years to come. We are excited to meet what will come next on this journey from science to impact.

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Establishing roots for the long term

As a pioneer in the field of supporting breastfeeding mothers, Michael Larsson had a keen sense of the knowledge gaps – he was also adamant that sound science be the basis for filling them. So it is not surprising that the first projects focused on endowing two research centers, LRF CIBF in Perth and LRF NGN in Zurich, to address critical questions and lay the groundwork for the Foundation's contribution to generating essential, evidence-based knowledge in the field.

Professor Valerie Verhasselt

Director, Larsson-Rosenquist Foundation Centre for Immunology and Breastfeeding (LRF CIBF), The University of Western Australia



You are investigating breastfeeding and breastmilk as preventive interventions against allergies, infections and metabolic diseases. What is your holy grail?

My holy grail is ambitious, it is having happy children, with happy mothers, happy dads, in a happy society. I focus on topics where there is scarce knowledge about breastfeeding and protection from disease, such as colostrum and its importance in long-term health. We also focus on diseases

where there is no established protection at a population level, such as for allergy or malaria.

Breastmilk contains compounds that are certainly protective for those diseases. We aim to provide recommendations for breastfeeding mothers to have their milk enriched in these compounds. For instance, our pioneering research has shown that by eating eggs, which can result in egg allergen in the breastmilk, mothers can contribute to decreasing the risk of egg allergy for their child.

You focus on health outcomes relevant to children in low-resource settings. Have your learnings led to new investigations?

I go where building knowledge is highly needed, such as for malaria and worm infections. These are killing or severely debilitating dis– eases and are endemic in low- and middle-income countries. However, there are very few studies investigating whether breastfeeding can help fight these diseases.

The research of the LRF CIBF explores a potential game changer in the field of vaccination – research providing evidence that breastfeeding may be a natural, and very efficient, way to vaccinate children and protect them from malaria. We also aim to promote colostrum feeding. Our research is investigating whether it could be key for preventing worm infections, which is important given that colostrum feeding is suboptimal among 50% of newborns on the planet.

What is it like being part of the Global Human Milk Research Consortium with the other LRF Research Centers?

It is exciting to be part of a consortium building knowledge through a multidisciplinary approach, and I am grateful for the generosity of the Foundation, the trust in me and my team, and for promoting human milk research that is in need of support!

Professor Giancarlo Natalucci

Director, Larsson-Rosenquist Foundation Center for Neurodevelopment, Growth and Nutrition of the Newborn (LRF NGN), University of Zurich



You study how breastfeeding, breastmilk, overall nutrition, family context and the environment affect children's neurocognitive development. How can these help children reach their full potential?

The aim of our clinical and molecular research is to improve our understanding of the complex interplay of all these factors. This will ultimately allow us to provide more complete guidance to professionals and parents regard-

ing the influence of breastfeeding, as well as support for the breastfeeding mother from the father, the family and society, on a child's neurocognitive development. The research will improve our understanding of the physiological and behavioral dimensions of breastfeeding, allowing us to propose more effective supportive measures.

How do your findings translate to everyday clinical practice?

We are expected to provide evidence-based conclusions that can convince physicians and medical staff of the need for change. We're also trying to reach a wide range of target audiences, which means our findings must be accessible and understandable to everyone! We need to explore different ways of communicating when we offer guidance to families, when we present another perspective on breastfeeding and early childhood nutrition at events and workshops, and when we communicate with the health system, where forward-looking health initiatives are developed.

Additional projects and activities in 2015

- Breastfeeding Country Index > Becoming Breastfeeding
 Friendly (2016) > Becoming Breastfeeding Friendly and
 Breastfeeding for Life Integration (2020)
- > Breastfeeding and Breast Milk from Biochemistry to Impact. A Multidisciplinary Introduction (English, published 2018) > Stillen und Muttermilch – Von den biochemischen Grundlagen bis zur gesellschaftlichen Bedeutung (German, published 2021)

Neurological development as it relates to breastfeeding and human milk has been underfunded and understudied in the past. What has been the impact of working with the Foundation?

The aspects we're trying to illuminate are very important, but remarkably complex. For example, ethical considerations prevent us from grouping children according to whether they are breastfed or not. We rely on cohort studies, which require substantial resources. The Foundation's support enables us to undertake ambitious research projects that invariably require significant interdisciplinary collaboration. I can then draw the attention of other institutions.

How does the absence of time constraints factor into it, especially as enabled by the financial structure of the Foundation's endowed professorship?

The ability to conduct this type of research over several years is of immeasurable value. Equally important is finding sustainable ways to transfer and operationalize this knowledge in the long term. Close collaboration with the Foundation and the other four research centers is essential in that regard.

Addressing critical issues

Moving on, the Foundation wanted to address two other critically important issues. One was disseminating international growth and feeding standards for infants born preterm by funding INTERPRACTICE-21st at the University of Oxford. The other was inspiring and supporting early scientists to advance in the field of breastmilk research and develop their professional skills through the TEP scholarship program, together with ISRHML.

Professor José Villar and Professor Stephen Kennedy University of Oxford, Principal Investigators, INTERPRACTICE-21st



To date, the INTERGROWTH-21st Preterm Postnatal Growth Standards and Feeding Protocols have been implemented in thousands of medical facilities, in 195 countries and regions. What is INTERPRACTICE-21st and what needs does it serve?

Professor Villar: A paradigm shift is required to ensure that babies born preterm grow healthily and are not overfed, which increases the risk of obesity in later life. The shift required is to stop thinking they should grow like fetuses or term babies; instead, preterm-specific charts should be used to measure their growth, and they should be fed human milk. The rationale is based on our research in the INTERGROWTH-21st Project showing that preterm babies will, when given human milk, grow healthily at their own pace and reach a similar size to their term counterparts by six months of age.

INTERPRACTICE-21st, which is about implementing the use of human milk and monitoring the growth of preterm babies appropriately with the INTERGROWTH-21st Preterm Postnatal Growth Standards, is helping to achieve that paradigm shift amongst pediatricians and parents and is already changing daily practice around the world.

Do the INTERGROWTH-21st standards address region-specific challenges?

Professor Villar: The INTERGROWTH-21st standards describe how all preterm babies should grow in the first six months of life. They are applicable whatever the reason for the preterm birth (which can be region-specific) because they promote a universal principle: When conditions are adequate and preterm babies are fed human milk, their growth and development will be optimal.

How does the partnership with the Foundation facilitate translating your research into tools for global use?

Professor Kennedy: The Foundation is unique amongst global funders because of its focus on human milk science, experience of operationalizing novel concepts and willingness to take a long-term view. The Foundation is therefore the perfect partner for the University's broader aim, which is ensuring that every small vulnerable newborn in the world is identified using clinical tools developed by the INTERGROWTH-21st Project because these babies benefit hugely from human milk. Our work together, therefore, which is truly collaborative, will be transformational.

Dr. Sara Moukarzel

Education Studies Researcher and Program Manager, University of California San Diego, on the Trainee Expansion Program (TEP)



ISRHML – The International Society for Research in Human Milk and Lactation – and the Foundation are working to introduce TEP in low-resource settings. Do you think this can help achieve far-reaching impact?

I strongly believe that TEP can achieve impact not just for low-resource settings, but also for the world. Connecting low-resource settings to high-resource settings also benefits high-resource settings, because with diversity comes

enrichment – and it's the enrichment of ideas that can lead to new ways to tackle problems.

When you were involved with launching TEP, you were a student in breastfeeding and breastmilk research yourself. What gave you the idea?

That was more than seven years ago, and there was no such thing as a breastfeeding research support program. To continue training, we had to apply for opportunities under biology, physiology, nutrition to an organization that would fund, let's say, preterm nutrition and health. It made it much harder to make the case against other important research questions that investments needed to be made in breastfeeding and breastmilk research.

With ISRHML starting to attract trainees and with more interest around human milk research, Lars Bode and I thought: "Who can better do that than ISRHML and the Foundation together?"

If we learn skills across different research groups, we can cut down on costs that result from centralizing a specific skill or resource in one area in the world. By having trainees travel to new places, they can start networking and building relationships – these relationships can

Additional projects and activities in 2016

- AMNESIA-Zug Pilot Project (Handbook published 2021)
- > Antibiotics Prophylaxis in Breastfed HIV-Exposed Uninfected (HEU) Infants
- > LactaMap An Online Lactation Care Support System

turn into funding opportunities, into research collaborations. How great would it be if one of the outcomes of the TEP program would be to expedite the process between conducting research and that research making it to clinical care and educational settings?

TEP is now in its second season (TEP 2.0). How has its evolution matched your expectations?

Being able to administer the program and award more than 40 grants, even during the COVID pandemic, is really a testament to the commitment of ISRHML and the Foundation.

I do see some redundancy in the research groups that are leveraging TEP. I encourage more and different research groups to try to attract trainees. I look forward to more milestones and success stories, to seeing how the awardees develop their careers and what kind of impact they are making on the field.

Closing research gaps and supporting implementation

Expanding our understanding on the complexities of the field, we continued to close research gaps and moved towards supporting the implementation of results. Partnering with UCSD and Lars Bode, we endowed a third center, LRF MOMI CORE, focused on innovations in breastmilk research. In addition, the BBF tool created by Rafael Pérez-Escamilla at Yale was launched, allowing countries to assess their readiness to scale up breastfeeding.

Professor Rafael Pérez-Escamilla

Yale School of Public Health, Principal Investigator, Becoming Breastfeeding Friendly (BBF): A Guide to Global Scale Up



How does integrating BBF in the operationalization approach being tested in Ghana extend its potential?

BBF started as a bird's-eye view of policy gaps in the enabling environments that families and women need to implement their right to breastfeed. Breastmilk for Life (BFL), this innovative initiative that strongly complements BBF, seeks to pick up where BBF ends. Once countries have done their breastfeeding trends, policies, and programs landscape

analysis, and identified systems-level policy recommendations to advance breastfeeding outcomes, the key question is: How do we translate policy recommendations into specific programs, interventions?

BFL will allow implementors to choose the best evidence-based programs and interventions for their context. I am excited to continue working with the Foundation on this enterprise.

Breastfeeding rates are not rising rapidly enough to meet related UN Sustainable Development Goals. What keeps you optimistic?

It takes a whole-of-society approach to make breastfeeding work for families and moms who choose to do so. As a scientist with over three decades of experience co-designing, implementing and evaluating infant feeding programs on a large scale, I am optimistic that we have the knowledge to make breastfeeding work for all. The great majority of women are choosing to breastfeed; yet very few meet their breastfeeding goals. The evidence unequivocally says that this is because of major structural barriers. I want to say very clearly that I respect 100% the right that women have to choose how to feed their babies. What is important is to make that decision based on sound evidence and not on misinformation. A woman should be supported in the infant feeding choice she makes, no matter what.

How does collaborating with the Foundation enable you to bring scientific knowledge to practical application?

In many ways BBF reflected the goal of the Foundation to move the science into knowledge translation. My team has benefited a lot from its constructive feedback, always allowing my team at Yale to make final decisions.

We are thrilled to be working with the Foundation on merging BBF with BFL into a unique, dynamic platform to find out how we can empower countries to control their own breastfeeding destinies.

Professor Lars Bode

Director, Larsson-Rosenquist Foundation Mother-Milk-Infant Center of Research Excellence (LRF MOMI CORE), University of California San Diego



LRF MOMI CORE takes an interdisciplinary approach to treat and prevent deadly diseases. Why is this important?

The whole idea is to engage other scientists, clinicians, educators and ask: "How could you contribute?" The moment people take their own approach and include a human milk or a breastfeeding lens, they create this magic data, and then they apply for funding elsewhere and it really starts multiplying. Stimulating funding is in large part the vision of

the Foundation. Over the last five years we invested about \$1,000,000 in 21 seed grants. The first 10 have been able to secure \$4,000,000 in funding, a \$4,000,000 return on investment.

The way the LRF Research Centers are set up will be a game changer for this field. Kudos to the Foundation to allow researchers the time horizon to develop something in perpetuity. Having funds available every year – and for these to grow – allows us to fail. And failure is critical for innovation. We call it the engine of discovery.

What are some of your major achievements?

We also have funding for fellows, for generating the next generation of scientists, researchers, clinicians, educators. Sara Moukarzel, PhD, was one. She teamed up with Professor Alan Daly (Social Sciences, Department of Education Studies) to look at information dissemination around breastfeeding and human lactation on social media, Twitter. That project alone generated 12 publications. Another example that speaks to the interdisciplinarity of the center is an early seed grant that went to Drew Hall, Associate Professor of Electrical and Computer Engineering, who developed screening technology to measure oligosaccharides at point of care. These are two of my favorite projects

Additional projects and activities in 2017

- > LactaMedia A Clinical Image Collection on LactaHub
- > Milk as Materia Medica
- > Probing the Effective and Toxic Principles of Four Herbal Galactagogues
- Strengthening Human Milk Banking: A Resource Toolkit for Establishing and Integrating Human Milk Banks > International Expert Consultation to Develop a Workplan Towards WHO Guidelines in Human Milk Banking (2019)
- The Foundation commits 75–100 million Swiss Francs to breastfeeding

because they're bringing people together from different disciplines to think about things differently and then activating them.

The Foundation provided emergency research funding during the COVID-19 pandemic. What did this mean to you?

There were parents, healthcare providers struggling, not knowing whether breastfeeding was safe. We teamed up with a group at UCLA to find out if there was active virus in human milk and if it was safe to breastfeed. We were able to answer this very quickly. It speaks to the very special relationship with the Foundation, where they understand it's urgent and make funding available literally overnight.

We want to be better prepared to address crises faster, so we're building a rapid response team here as part of the Human Milk Institute to screen for potential new threats. I see MOMI CORE continuing to be this engine of discovery that promotes innovation in this space.

Endowing two new research centers

2018 saw the culmination of the Foundation's aim to address key knowledge gaps via endowments with two further centers targeting two further important topics: the behavioral economics of breastfeeding at LRF CEB, which is building a better understanding of the decision processes and the socioeconomic outcomes of breastfeeding, and the endocrinology of breastfeeding at LRF OCEHL, which strives to help mothers with physiological breastfeeding issues.

Professor Ernst Fehr Larsson-Rosenquist Foundation Center for Economics of Breastfeeding (LRF CEB), University of Zurich



You study the behavioral factors and economic implications of breastfeeding. How might these influence the way health programs are designed?

Breastfeeding mothers face many obstacles. While we know of several potentially helpful approaches to overcoming them, there is little solid, empirical understanding of which are ultimately effective. In principle, each approach has its merits. But when issues are complex and highly dependent

on specific circumstances in individual countries, we need more empirical evidence to determine which interventions really work.

You consider fighting poverty and promoting a sustainable economy to be part of the mission. How can the LRF CEB contribute?

Our research fights poverty by significantly improving the human capital (i.e., education and skills) and health capital of individuals. Once we understand how breastfeeding causally affects children's cognitive abilities and immunity, for example, we can design better public health policies to support nursing mothers.

The Foundation jointly established the LRF CEB with the Department of Economics as the first research center of its kind. Has it influenced the department as a whole?

It's hard to overstate the importance of an endowment like this, because it makes the research possible in the first place! We're the first to apply behavioral economics to breastfeeding. The reason we did so is because everything is ultimately implemented through behavior change, so it is imperative that we better understand behavior as it relates to breastfeeding.

Once research of this kind is initiated, it ripples out to other professors and departments, creating a catalyzing effect. To this end, we intend to leverage synergies with the Larsson-Rosenquist Foundation Center for Neurodevelopment, Growth and Nutrition of the Newborn (LRF NGN) and integrate its findings into policy design. We should never implement policies that are not based on solid evidence from research. That would be absurd.

Professor Fadil Hannan

Director, Larsson-Rosenquist Foundation Oxford Centre for the Endocrinology of Human Lactation (LRF OCEHL), University of Oxford



Why is it important to build a holistic understanding of how hormones regulate human milk production?

We know a lot about the biology of the human body, but very little about how the human mammary gland actually functions to make milk. Our center is working to address this gap. We are characterizing factors leading to delayed onset of lactation, a major cause of early breastfeeding cessation. We recruit women intending to breastfeed, who

have healthy term pregnancies, and collect blood, colostrum and milk samples during the first few days after childbirth. We look at how their hormones and components of their milk or blood change to develop a holistic picture of the biological and hormonal drivers of the onset of lactation.

I hope this research will lead to a biomarker blood test to measure lactation hormones or another blood component, which may reliably confirm whether lactation has been switched on successfully after childbirth.

Improved understanding of lactation hormones may also lead to tailored interventions for improving lactation. For example, prolactin levels are important for triggering milk production, and exercise has been shown to promote prolactin production. So, in some breastfeeding women it's possible that non-pharmacological approaches such as moderate exercise could improve the yield of breastmilk. Investigative diagnostic tools and therapeutic strategies based on a sound understanding of lactation biology could really make an impact in a range of geographical settings.

Additional projects and activities in 2018

- > 1st Foundation Symposium
- > Breastfeeding and Allergy Prevention
- > Breastfeeding in Conflict Settings: Evidence Synthesis and Case Study Analysis
- > Impact of Colostrum on Early Postnatal and Adult Metabolic and Immune Homeostasis
- > LactaPedia A Glossary of Lactation for Science and Medicine
- > Mild Induced Labor Prior to Planned Caesarean Sections to Improve Neonatal and Maternal Outcomes
- > Quantitative Nutrient Intake with Breastfeeding and its Impact on Child Metabolism and Health Outcomes
- > Role of Breastfeeding in Bacterial Colonization

How can an independent research center catalyze this relatively new topic and enable your clinical and research aims?

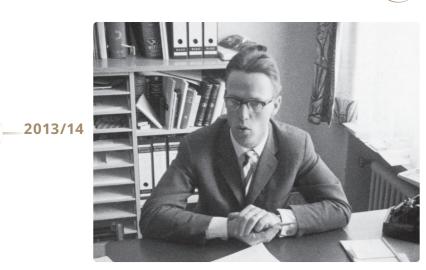
Our center is embedded within the hospital maternity unit. This allows us to directly recruit pregnant women and new mothers into our clinical studies. Our center, which is dedicated to characterizing the endocrinology of human lactation, is the first of its kind in the UK. It has acted as a beacon to bring together breastfeeding women and professionals with a mix of skills and abilities: medical doctors, basic scientists, a midwife, and experts at maternity and breastfeeding support, which directly benefits the participants.

How is the entrepreneurial approach of the Foundation linked to building for long-term impact?

With endowment-based funding, we have a chance to pursue more creative and higher-risk research that could pay out in substantial long-term gains in advancing knowledge about human lactation. The expertise provided by the Foundation about how to maximize return from the investment, scientific return, has been really helpful.

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Olle Larsson

2015



Göran and Michael Larsson as children



Founding of the Larsson-Rosenquist Foundation Center for Neurodevelopment, Growth and Nutrition of the Newborn at the University of Zurich. Left to right: Professor Michael Hengartner, former University President, and Michael Larsson. Photographer Frank Brüderli.



Founding of the world's first chair in Human Lactology at The University of Western Australia, now the Larsson-Rosenquist Foundation Centre for Immunology and Breastfeeding. Left to right: Professor Paul Johnson, former University Vice-Chancellor, Michael Larsson, Professor Peter E. Hartmann.

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Founding of the Larsson-Rosenquist Foundation Mother-Milk-Infant Center of Research Excellence at the University of California San Diego.

Left to right: Dr. Katharina Lichtner, Michael Larsson, Professor Lars Bode, Dr. David Brenner, former Vice Chancellor of Health Sciences, University Chancellor Pradeep K. Khosla. Photo by Melissa Jacobs.



Dr. Katharina Lichtner



Founding of the Larsson-Rosenquist Foundation Oxford Centre for the Endocrinology of Human Lactation at the University of Oxford. Left to right: Professor Stephen Kennedy, Janet Prince, Michael Larsson, Dame Louise Richardson, former University Vice-Chancellor, Dr. Katharina Lichtner, Reto Larsson, Professor José

Villar. Photo by John Cairns.

2018



Launch of INTERPRACTICE-21st at the University of Oxford.

Left to right: Professor José Villar, Janet Prince, Reto Larsson, Dame Louise Richardson, former University Vice-Chancellor, Michael Larsson, Dr. Katharina Lichtner, Professor Stephen Kennedy.



2016

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Launch of the Trainee Expansion Program with the International Society for Research in Human Milk and Lactation. Left to right: Michael Larsson, Professor Donna Geddes, Dr. Katharina Lichtner, Dr. Sara Moukarzel, Janet Prince, Professor Lars Bode.

Founding of the Larsson-Rosenquist Foundation Center for Economics of Breastfeeding at the University of Zurich. Left to right: Professor Ernst Fehr, Professor Michael Hengartner, former University President, Dr. Katharina Lichtner, Göran Larsson.

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2019

Honoring a mentor and embarking on a major strategic drive

This year brought the launch of LactaMap, a lactation support tool that was inspired by Peter E. Hartmann. Peter, passing away too early in 2021, provided invaluable guidance and mentorship to the Foundation, which we would like to honor here. 2019 also marked the beginning of what was to become a major strategic drive for the Foundation in revitalizing the journey from science to impact – the operationalization of breastfeeding policy.

> The field of human milk and lactation research we know today has been inspired in large part by someone we are honored to call a dear friend and a mentor: the late Professor Peter E. Hartmann.

> In the early 1970s, Peter was one of the few researchers investigating the protective properties of human milk and the metabolic functions of the mammary gland. Thanks to his vision, he built the basis for a new scientific appreciation of breastmilk and breastfeeding. His discoveries were like siren songs, calling others to join the emerging field.

> Peter continued investigating and making discoveries for over 50 years, until his passing in 2021. Today, every researcher in the field is a beneficiary of his extraordinary, lifelong work.

Peter's legacy extends beyond the papers he published, the prizes he earned, the esteemed positions he held or the associations he led. As a colleague, mentor and friend, he gave gifts that will resonate for generations. He advised countless students and graduated over 60 PhD candidates. He launched the Hartmann Human Lactation Research Group, today the Geddes Hartmann Human Lactation Research Group, directed by former mentee Professor Donna Geddes at The University of Western Australia.



Peter was a long-standing friend of Michael Larsson and a mentor to the Family Larsson-Rosenquist Foundation. He encouraged the Foundation and its unique vision from the very beginning. He served as an inaugural member of its Scientific Advisory Board, sharing his expert counsel until his passing in 2021.

His projects with the Foundation became resources that today serve health professionals, researchers, policymakers and others the world over. For instance, together with his daughter Dr. Melinda Boss and his son Dr. Ben Hartmann, they very generously contributed foundational chapters to the reference book *Breastfeeding and Breast Milk – From Biochemistry to Impact. A Multidisciplinary Introduction*, published by the Foundation in 2018.

Peter's work is an everlasting gift to mothers, children and families who are living healthier lives thanks to his brave research in human milk and lactation. The Foundation is forever grateful.

Dr. Katharina Lichtner Managing Director, Family Larsson-Rosenquist Foundation



The operationalization of a country's breastfeeding policy is one of the Foundation's key projects. What does this mean?

This is the transformation of a country's breastfeeding goals from political aspirations into a nationwide, comprehensive, multi-year actionable plan to sustainably improve the breastfeeding environment. The operationalization method integrates ongoing activities, describes different

demographic target groups of women, uses a human-centered design approach to identify key issues they face, identifies appropriate interventions, and includes expected overall costs based on a concise implementation road map. It is systematic, incorporates current relevant evidence, and is tailored to a country's existing systems, like the health and education systems.

How did this become a central focus of the Foundation?

You could say we grew into it. While developing the Foundation's strategy, we noticed the close connection between academia and politics working towards well-articulated health policies. At the same time there are breastfeeding-promoting projects from different organizations happening in parallel in communities, often without any coordination. However, discussions around translating a breastfeeding policy into an actionable plan were missing.

We find there is a robust understanding about why breastfeeding should be promoted and what needs to be done. However, how to effect the needed change is less well understood. This "know-do" gap poses a great obstacle to sustainably improve a country's breastfeeding environment. We saw this as an opportunity to develop innovative ideas to help close this "operationalization gap" and globally improve mother and child health.

Additional projects and activities in 2019

- Strengthening Human Milk Banking: A Resource Toolkit for Establishing and Integrating Human Milk Banks (2017) > International Expert Consultation to Develop a Workplan Towards WHO Guidelines in Human Milk Banking
- > Social Value of Breastfeeding and Breastmilk at the Workplace
- Breastfeeding and Breast Milk from Biochemistry to Impact.
 A Multidisciplinary Introduction (English, published 2018) >
 Stillen und Muttermilch Von den biochemischen Grundlagen bis zur gesellschaftlichen Bedeutung (German, published 2021)
 The Foundation moves to Frauenfeld

What is innovative about this method?

There are three highlights. At the highest level, we are advocating a paradigm shift away from individual solutions towards a process-based approach. Why women may find it hard to breastfeed always reflects a complex mix of issues that can't be solved by any individual intervention. Second, we wanted to find a practical way to integrate the necessary scale-up from the beginning. This led to the creation of an innovative target group stratification or "persona" concept. And finally, we wanted to facilitate easy integration of scientific findings into operational planning, which led to the development of a taxonomy to connect the dots between barriers to breastfeeding and tried interventions.

You are testing the method in Ghana. How do you go about it?

We approach this as a co-creation project with the Ministry of Health and Ubora Institute. Together, we're turning a theoretical method into a process that works in practice. We are very pleased to say the method is working, and we are now completing a five-year fully costed plan, outlining how Ghana can sustainably improve its breastfeeding environment. It has been demanding but extremely rewarding collegiate work over the last two and a half years. We expect to finalize the plan in mid-2024 and by the end of the year, we expect to make the method, templates and tools freely available.

The operationalization gap

Scientific findings are necessary but not sufficient to positively impact public health. To drive this change, original findings must be aggregated, translated into practice, and disseminated, with a plethora of stakeholders coming together to make it happen. This is conceptualized in the knowledge value chain graphic shown here which we developed as a core element of our strategy, illustrating the transformation process that guides much of our work.

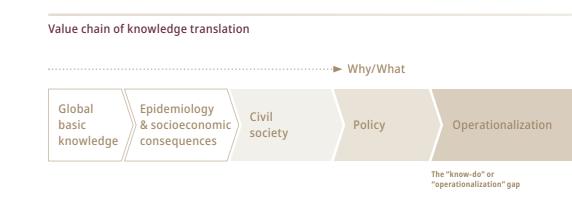
Whilst the translation of scientific findings into policy is well established, it is a different story post policy. Activities are highly fragmented, often uncoordinated, wrongly sequenced and executed by multiple parties, sometimes with conflicting agendas. The result? Efforts to increase breastfeeding rates are not as effective, capital-efficient or sustainable as they could be.

The operationalization method

However, by moving to a comprehensive, multi-year plan, positive, lasting impact is more likely. To achieve this, the operationalization method includes five distinct steps:

1. A **transparency phase** outlining past and existing improvement efforts, and identifying key influencers and stakeholders, country-specific scientific literature and current breastfeeding policy elements.

2. Developing "personas" – i.e., demographically stratifying all women of childbearing age into target groups, or personas – for the subsequent analysis phase – and as a basis for implementation at scale. 3. An **analysis phase** using semi-structured interviews to identify major breastfeeding barriers and prioritize them. In Ghana, approximately 400 interviews with mothers and key influencers were completed.



4. A **strategy development and planning phase**, where appropriate solutions, organizational requirements and an implementation roadmap are defined.

5. A **costing phase**, where a comprehensive, adaptable financial plan is developed, including a funding strategy if countries are not able to assume the costs with existing budgets.

The operationalization advantages

A comprehensive, multi-year plan offers distinct advantages. It enables governments to "own" and better coordinate post-policy implementation processes. Activities can be aligned with health, education or other systems, drawing on existing resources. They can be properly sequenced, and synergies can be realized. Furthermore, capacity building and retention will improve because expertise is built within the country. Overall, funding-to-impact ratios and sustainability should improve considerably.



www.larsson-rosenquist.org



How ····

The method also improves countrywide implementation at scale. At the heart is an innovative approach of defining personas, groups of women with similar socioeconomic realities, based on demographic data. This serves three main purposes: to identify major barriers to successful breastfeeding for each persona, to provide information about how to best reach them for intervention delivery, and lastly, to provide information about numbers and locations – all critical to developing robust scale-up approaches and determining the associated implementation costs. We believe using personas from the beginning safeguards against focusing on solutions that work in small pilots but fail to scale up due to cost or technical impediments.

In the early phases of developing the operationalization method, it became clear that governments would need support either due to a lack of sufficient staff and/or a lack of relevant skill sets. Hence, the Foundation is concomitantly funding and building a social enterprise in Ghana to serve as an operationalization competence center. It has found the perfect home at its partner Ubora Institute, a social enterprise itself. The new competence center unit will support Ghana and other countries in West Africa. We plan to use this business model as a blueprint for setting up other social enterprises in the Global South.

The "Breastmilk for Life" project

Since the start of 2022, we have been co-creating and testing the operationalization method in Ghana with the Ministry of Health and Ubora Institute. We have successfully completed the first four steps and expect to successfully complete the fifth step soon. We were excited to confirm that each step, thanks to its systematic but flexible design, worked as planned with minor modifications. We identified the best practical approach for each step, including an AI application that was expressly programmed to greatly shorten the interview analysis needed to identify breastfeeding barriers. We are currently preparing the method and learnings for publication and will compile everything into a freely available, comprehensive handbook to enable other countries to implement Breastmilk for Life.

We hope that the operationalization method will be a catalyst to improve breastfeeding rates around the world. Ultimately, we hope it will also be adopted for wider public health and nutrition initiatives, to improve infant and mother health globally and thus contribute to reaching the UN Sustainable Development Goals.

Launching a new resource and a strategic Foundation pillar

While generating the operational concept to close the gap between policy and sustainable implementation at scale, we launched a pillar of our long-term strategy – LactaHub, the online knowledge platform for evidence-based breastfeeding knowledge, with The Global Health Network pioneered by the University of Oxford. PROVIDE, a video-based training tool promoting mothers' own milk in neonatal intensive care developed by Paula Meier at Rush University Medical Center, also launched, contributing new resources to the field.

Professor Paula P. Meier Rush University Medical Center, Creator of PROVIDE – A Training Compendium on Providing Mothers' Own Milk in NICU Settings



How has the translation of academic knowledge to digital training tools promoted practitioner training, and what feedback are you receiving?

Neonatal Intensive Care Unit (NICU) families get so frustrated getting different information from different people. One focus point was to standardize the training tools so everybody uses the same information sheets, the same videos. I have heard it's absolutely invaluable in terms of stan-

dardizing messaging.

A handful of institutions have used the materials for quality improvement initiatives. An example is the education sheets and videos that enable nurses to help mothers initiate and maintain lactation in the NICU. The staff think it's an incredibly valuable resource, the quality of the videos especially.

What makes PROVIDE applicable across neonatal intensive care settings, regardless of geography?

The original focus was for low- and middle-income countries (LMICs). For example, in India, it is certainly being used in NICUs; skin-to-skin care has a record number of viewings from LMICs. It's being incorporated into a project that PATH is doing on human milk for the small and sick newborn, which I think will have an even bigger impact. The interest in high-income countries has also been incredible. A certain amount of the impact has been word-of-mouth. I've presented PROVIDE to the World Health Organization, the Pediatric Societies of Brazil, Argentina, Paraguay – that is a huge audience.

The global variability in NICU facilities and practices is smaller than many would think. Also, PROVIDE was filmed with a diverse population at Rush with families of many ethnicities. I built a career engaging families in the science of milk. One thing that makes PROVIDE attractive is that it's really complex science that's new to many practitioners, but explained so that it's understood easily and it resonates. I think that makes it generalizable across so many settings.

How did the partnership with the Foundation facilitate this trans-lation?

I'm so grateful for the trust the Foundation put in me to bring this to fruition. All researchers hope their work will impact practice. The grant gave us the ability to create incredibly well-done instructional videos and to fairly reciprocate the families who altruistically shared their experiences so other families would benefit.

Professor Trudie Lang

Global Health Research and Head of The Global Health Network, University of Oxford, on the launch of LactaHub



You interact with many communities of practice. What are their primary needs and why is LactaHub, the first knowledge hub focused on breastfeeding and lactation, a good fit?

The Global Health Network exists to support health research in low-middle-income countries, everywhere evidence is missing. Breastfeeding research is a really neglected area. This is why it works to have LactaHub on the network (now

over 65 knowledge hubs) because it's a very niche, specialized subject that is underserved, yet much better off connected up with other communities of practice. It works as that perfect synergistic relationship.

What would you like to see in the next evolution of LactaHub?

The Global Health Network aims to bring equity in access to who undertakes health research, who coordinates it, who leads it, and, of course, who benefits from the evidence. This couldn't be truer in the context of maternal health outcomes and neonatal development. So lots of the processes we're enacting are around bringing equity to who undertakes that research. We've got an exciting program coming up, trying to support 1,000 nurse- and midwife-led studies.

It would be amazing to have breastfeeding research experts taking part in some research-enabling activities or running training programs. We've talked a lot about the first 1,000 days of life and how this should link up with other initiatives around wider nutrition, or supporting mothers, and I think this work fits in beautifully. The opportunities for having that vast bank of knowledge available on the platform, and really enacting it by connecting up in person in the regions, would be an exciting next step.

Additional projects and activities in 2020

- > 2nd Foundation Symposium (virtual)
- > Begin work with McKinsey on operationalization of breastfeeding policy
- > COVID and Breastfeeding Study: Emergency funding to LRF MOMI CORE
- > Trainee Expansion Program (2016) > Trainee Expansion
 Program 2.0

What makes The Global Health Network such a beautiful innovation in knowledge management, and how has collaboration with the Foundation benefited your work?

It's definitely unique. The magic factor is having this facility that is completely disease agnostic and all-around research-enabling simply acting as that convener to move knowledge around. That is where we and the Foundation share the exact same outlook. The Global Health Network serves very deliberately to be entirely cross-cutting to support all types of research across the globe. With LactaHub having that precise focus on breastfeeding research, it's perfect.

The support for LactaHub is wonderful, and we've learned so much from the Foundation as well. It's been excellent to work alongside the Foundation for all these years, having that constant partnership where the Foundation is invested in the LactaHub facility, which we've enabled to grow.

Building a community breastfeeding room and an ethics framework

ly aware of this, the Foundation partnered early on with Nikola Biller-Andorno at the University of Zurich to embed thorough ethical reviews into all its activities. This activity inspired EFBRI. Launched in 2021, EFBRI brought a sound ethics framework to the public. We also built a public breastfeeding room at our office, giving back to the community and providing us with first-hand experience on a topic we wish to expand.

Ethical considerations are crucial in work with breastfeeding mothers and infants. Keen-

Dr. med. Sarah Dörig Physician, Mother and Visitor at the Family Larsson-Rosenquist Foundation

Breastfeeding Room



What does it mean to a mother to have a public place to breastfeed, like the one the Foundation created in Frauenfeld?

It's very valuable! It allows for a flexible response to a baby's sudden hunger. Public spaces can be very distracting for babies. A centrally located, practical, stylishly furnished lactation room is like a peaceful oasis where both mother and baby can experience a sense of security and comfort.

It's nice that you can lock it and that there are toys for older siblings to play with.

What's the general attitude towards public breastfeeding in Switzerland?

Breastfeeding in Switzerland tends to take place behind closed doors. While there are times when nursing in public is unavoidable, I still sense a kind of taboo around it. As a woman, it would be better to confidently say, "Breastfeeding is natural!" But I also had my moments of insecurity, of being sensitive to disapproving looks, of searching for a discreet spot and ensuring everything was covered.

Why is support for breastfeeding important?

As a physician, I am acutely aware of the fine line between practice and overload. Ideas about breastfeeding change after childbirth. Compassionate guidance can support a mother on her personal breastfeeding journey and builds maternal confidence. I also think it's important that mothers be allowed to rely more on their own intuition again.

How can private institutions like the Foundation support nursing mothers?

They can advise businesses and organizations, such as pharmacies, restaurants, counseling centers and government agencies, on setting up lactation rooms or areas. They can stress that it's important, that lactation spaces need to be part of the local landscape! They can sensitize employers to creating a supportive culture for nursing mothers returning to work. They can also help increase dialogue between mothers and contribute to the way mothers access breastfeeding information.

Professor Nikola Biller-Andorno

University of Zurich, Principal Investigator, EFBRI – An Evolving Ethical Framework Informing Breastfeeding Research and Interventions



How do you develop EFBRI modules for researchers, policymakers and clinical professionals who work directly with mothers and infants?

One dimension of EFBRI is clinical breastfeeding research involving various vulnerable groups such as pregnant women, mothers and infants. While established international guidelines like the Declaration of Helsinki do exist, they are scattered across a range of documents. We compiled and

consolidated them across the Foundation's portfolio of activities and made them accessible as EFBRI 1.0.

However, the Foundation also emphasizes the importance of implementation! There are few standardized guidelines, when it comes to balancing a breastfeeding mother's autonomy with the public health imperative that as many children as possible are breastfed. Identifying ethical considerations in implementation involved a careful look at a range of interventions gathered through an extensive literature review. We organized activities we found into a framework and tagged them with ethical red flags for discussion with practitioners. That led to EFBRI 2.0.

You solicit feedback and suggestions from EFBRI users to tailor future versions to their needs?

As with EFBRI 1.0, we are engaging in interdisciplinary discussions with practitioners about our framework and treating it as a learning document. The partnership with the Foundation and its wide network of implementation partners has been tremendously helpful in this regard! With the Foundation's support, we are currently involved in an intense feedback-gathering dialogue with colleagues in Ghana.

Additional projects and activities in 2021

- Best Practice Interventions Framework and Intervention Database
- > COVID, Breastfeeding and Vaccination Study: Emergency funding to LRF MOMI CORE
- > INTERPRACTICE-21st (2016) > Growth and Development of Preterm Infants Across the World

Ethics as a whole and ethical considerations in breastfeeding and lactation research are constantly evolving. What aspects should researchers and practitioners be particularly mindful of?

Our aim is to establish ethical guidelines for a list of various types of interventions for which the Foundation has already developed a robust classification system. We highlight important, sensitive ethical issues in breastfeeding interventions for a wide array of user groups, including governments, policymakers, clinics and those affected. While this kind of learning system will never allow us to cover 100% of them, the Foundation has taught me the importance of putting things into practice quickly, and that sometimes less than 100% can serve as a good basis for doing so.

Can you name some important aspects of your collaboration with the Foundation in terms of streamlining ethical considerations for researchers and non-experts in ethics?

The Foundation's commitment to a long-term, sustainable perspective is very valuable. Moreover, the Foundation is operationally active and constantly confronting its own set of new challenges. We can discuss and think deeply about the output that the Foundation requires of us, not to mention processes, results and feedback. It gives our work a strong connection to reality.

Testing operationalization in Ghana and translating knowledge globally

Dr. Ernest Konadu Asiedu

Public Health Physician Specialist (Healthcare Improvement Advisor/Field Epidemiologist), National Centre for Coordination of Early Warning and Response Mechanism, Ministry of Health, Ghana, Co-Creator of the Breastmilk for Life – Ghana project



Why do you believe this project is important for Ghana?

This is going to help us achieve Universal Health Coverage by leaving no one behind – UN Sustainable Development Goal 3 – and ultimately improve our various indicators as far as maternal and child health are concerned. One of our challenges is having an exclusive breastfeeding rate of less than 50%. This project is going to create more awareness and help to understand the reasons, barriers and promoters

of breastfeeding. The way we are bringing together various stakeholders, I am hopeful, especially with leadership involvement at that top level, that there is an opportunity for sustainability in terms of the implementation.

How might this project be beneficial for other countries in West Africa or beyond, and how might Ghana support other countries in that journey?

If you take Ghana as a model, most of the issues in West Africa and Africa may be similar. Since every country wants to increase its breastfeeding rate, anything that is positive in that direction, other countries will embrace it. We just have to be mindful of the context in which we work and focus on specific contextual issues pertaining to each country.

Having developed a robust concept for the operationalization of breastfeeding policy, we partnered with the Ministry of Health and the Ubora Institute in Ghana to test the concept and create an implementation platform for the government. Seeing the vital need to translate evidence into easily accessible information for practitioners, politicians, journalists and the public, we crystallized this insight in a partnership with Zulfiqar Ahmed Bhutta at The Aga Khan University, launching a comprehensive knowledge translation project.

If you look at ECOWAS (Economic Community of West African States), there is that cooperation between the leaders. If the breastfeeding rate is going down in Ghana, this is a good opportunity to let our neighbors or other member countries know and ask: "Is it the same in your country?" and then to share best practices. That opens that door to do a lot of learning and sharing.

What are your thoughts about the project, and how has this experience been unique from those with other international organizations?

Ghana was really improving in terms of its breastfeeding rate, and then suddenly in the last two years it hasn't been as expected. So it's timely to have a fair conversation around how we can improve breastfeeding rates. I think the good thing about the way we have taken this project is the way we had to co-design it together. I like the way we started the project, and how we planned and designed everything together. That is quite good.

Is there anything else you wish to share?

Being part of something that is very important for Ghana, to improve breastfeeding rates, I'm very hopeful it will lead to positive outcomes. If there's an opportunity to scale this up, we're going to see this happening across West Africa and Africa. Thank you.

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Professor Zulfiqar Ahmed Bhutta

Aga Khan University, Principal Investigator, Translation of Research-Based Breastfeeding Knowledge: Making the Latest Science Accessible



This project aims to do more than bring peer-reviewed publications from behind paywalls – what is the intent?

It has very ambitious objectives: to translate a lot of evidence-informed, high-quality scientific information into easy-to-digest, understand and share syntheses. Some of the best impact of any research is its translation into simple, layperson's language. That's one of the attractions, because there isn't anything comparable.

How are you translating scientific information for impact in practice? Where are the challenges?

In partnership with the Foundation, we came up with a conceptual framework to organize stakeholder groups. It's very challenging to be everything for everybody, so we have to make choices. Which messages should be selected, and for which stakeholders? We built an additional framework to organize this knowledge into categories. What is the best scientific information that we can provide on breastfeeding practice, breastmilk content, objective data on outcomes?

The Foundation has indicated it would bring on board communication experts to translate disparate information into clear knowledge sound bites that people would remember. That is a really exciting next phase. We are looking to cover the entire journey from science to impact and provide materials to aid the scale-up of breastfeeding in various contexts. In peaceful circumstances and also in circumstances that currently engulf about 40–45% of the world, where people are dealing with climate change, conflict, the cost of living and the risks of pandemic.

Additional projects and activities in 2022

- Infant and Young Child Feeding Advocacy Project, South Africa
- > Global Human Milk Research Consortium and Foundation Fellowship Program

What is it like collaborating with the Foundation to bring the project to life?

I've been very grateful for their respectfulness and the fact that they are cognizant of the challenges of working in low and low-middle income settings (LMICs). Slowly, steadily we've built a team that has now built momentum.

One big thing to move towards is applying the framework and end results to real-life settings in LMICs. The Foundation has contacts in Ghana and elsewhere where we may have an opportunity to beta test it as well. Breastfeeding and breastmilk availability in many LMICs are closely tied to poverty and development; exclusive breastfeeding is challenging at times because women have to work. What we can do as part of this work is to highlight that those challenges exist and identify solutions.

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Moving to the Foundation's new location in Frauenfeld, Canton Thurgau.



Filming the PROVIDE Training Compendium videos in the neonatal intensive care unit at Rush University. Courtesy of Rush Mothers' Milk Club, photography by Ron Levinson Productions.









Publishing the AMNESIA-Zug pilot project handbook, a blueprint to help other institutions and cantons implement low-threshold contact and counseling centers for those caring for people with dementia. Funded by the Foundation, the pilot launched in 2016 in Canton Zug. It was integrated as a permanent service into the psychiatric institution Triaplus AG in Zug in 2021, and the 11 municipalities of Canton Zug took on joint responsibility for future funding. Shown here: Dr. med. Hansruedi Kühn, Co-founder AMNESIA-Zuq.



Launching Project LEARN (long-term effects of early nutrition on child development) at the Larsson-Rosenquist Foundation Center for Neurodevelopment, Growth and Nutrition of the Newborn (LRF NGN) at the University of Zurich.

Shown here: Principal Investigator Professor Giancarlo Natalucci, Director of the LRF NGN.



Holding a practical workshop at the Amref International University 1st Primary Healthcare Congress in Nairobi, co-hosted by LactaHub and the Kenya Association for Breastfeeding (KAB).

Left to right: Kay Kutschkau of LactaHub and Josephine W. Munene, Mili Wanjiru Karina and Esther Nyokabi Kimani of KAB.





Global Human Milk Research Consortium meeting in Oxford.



Publishing the reference book. Breastfeeding and Breast Milk – from Biochemistry to Impact (English, 2018) Stillen und Muttermilch – Von den biochemischen Grundlagen bis zur gesellschaftlichen Bedeutung (German, 2021)





The Foundation opens a public breastfeeding room at its office on Rheinstrasse 1 in Frauenfeld.



		2017	2018	2019	2020	2021	2022	2023
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Branching out and deepening our roots

2023 has developed as a year of intense learning. As results from the different operationalization and knowledge translation projects emerge, critical gaps and promising ways forward are becoming apparent, providing the basis for the acceleration of the Foundation's effectiveness for years to come. We are excited to meet what will come next on this journey from science to impact.

Andrea Weber and Sula Anderegg

Swiss Federation of Midwives, Executive Director, and Swiss breastfeeding alliance Board Member and Representative, respectively



How is breastfeeding currently regarded in Switzerland? Have breastfeeding rates and political and social acceptance changed over the last two decades?

The benefits of human milk and breastfeeding are more widely recognized today than they were 20 years ago. We've noticed that in our consultations. Surveys show a slight increase in the duration of breastfeeding, and yet it continues to be a controversial topic, both in politics and in society at large. But the ongoing discussions around gender and diversity also provide an ideal opportunity to promote breastfeeding! Caregiving responsibilities are no longer attributed exclusively to mothers, but are now seen in a broader context, with increasing recognition of the essential role of fathers. This open and inclusive mindset envisions a future in which all mothers experience a high level of acceptance and access to support and information, also those that choose to breastfeed less or opt for alternative feeding methods.

Where do you see the biggest challenges for the promotion of breastfeeding in Switzerland?

A positive breastfeeding experience with the first child significantly influences attitudes towards breastfeeding the next. It is clear that breastfeeding and nutrition counseling must begin during pregnancy and also reach parents in new types of families, which is why we need to make a number of changes at the policy level. We've teamed up with partners such as Breastfeeding Promotion Switzerland, männer.ch and regenbogenfamilien.ch to propose a change in the law that would extend the period during which mothers receive breastfeeding support. We can also use new forms of communication to improve the general understanding of breastfeeding. And to gain more social and political support, we need more and better data on breastfeeding practices in Switzerland.

In addition to helping bring together key Swiss organizations, what role should the Foundation play in promoting breastfeeding in Switzerland?

The network aspect of the breastfeeding alliance under the auspices of the Foundation is important. The Foundation can and should play a leading role in shaping a national breastfeeding strategy. Effective lobbying requires considerable input from large players, such as the Foundation, with greater resources than smaller organizations. Working together, we can produce more impactful campaigns. The Foundation's profile, extensive expertise and history of advocating for breastfeeding and the value of human milk are also powerful assets.

Projects in Development

- > Artificial Intelligence to Increase Interview Analysis Efficiency for the Operationalization of Breastfeeding Policy in Ghana
- > Ethics of Breastfeeding Interventions Framework (EFBRI, 2021) > Case Study: Using EFBRI to Evaluate the Operationalization of Breastfeeding Policy in Ghana
- > Lactation and Micronutrient Needs Assessment



O U T L O O K

Looking ahead to the next decade and beyond



Dr. med. Marco Steiner President of the Foundation Board

Since joining the Foundation Board in 2018, I have been delighted by the great progress we are making, executing our strategy towards a world in which every child is granted an optimum start in life through the benefits of breastmilk. This progress has been attained thanks to our project partners, sage advisors and the tireless commitment of the Foundation Board and Team.

So let me pause to wholeheartedly thank all who have contributed to the first 10 years of the Family Larsson-Rosenquist Foundation. Everything achieved thus far would have been impossible without your dedication of time, heart and intellect to our cause.

In mid-2023, I became President of the Foundation Board. As a practicing gynecologist and obstetrician, I am honored to lead the Foundation into its next chapter.

We will continue to work on several persistent challenges: broadening the range of available funding approaches, exploring how to build robust funding coalitions that are tailored to different implementational needs, and learning more about decision processes and the mechanics of behavior change around breastfeeding. We will further evolve the method behind the operationalization of breastfeeding policies, and we will continue to seek answers to crucial, practical questions such as, "How do we bring knowledge into practice, and how can we make it easily accessible to the practitioners and families that really need it?" While we do this, we will apply the findings already gained to accelerate improvements in breastfeeding environments for families here in Switzerland and in the Global South.

Whatever question or challenge we target, a few fundamentals will not change. The Foundation will continue to branch into new, innovative endeavors, deepening our roots at home and abroad. We will continue to bring stakeholders together, breaking down boundaries between individual areas of expertise to find original solutions. And we will continue our quest to make breastmilk the norm for infant feeding again.

Uniting behind this purpose reflects our belief that, together, we have the greatest agency. When we collaborate to ensure breastmilk is truly valued and families are supported, opportunity expands: children and mothers lead healthier lives, human capital improves and poverty declines. This is our chosen path to contributing to the UN Sustainable Development Goals.

As I lead the Foundation into its next decade, I invite everyone who is genuinely interested in improving lives through breastfeeding to join us. It is truly exciting when brilliant minds come together to improve mother and child health globally, and I am very proud to be a part of this journey.

With sincere thanks to the Foundation Board, Scientific Advisory Board and Team





Dr. med. Marco Steiner President



Vice President



Fabian Hürzeler

Member

Maximilian Schwarzenberger Secretary



Former Board members

Michael Larsson Founding & Honorary President



Stephan Hürlimann Former Member



Hans Schmidtner

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Dr. Ulrike Wolff Former Member



Dr. med. Iris Irene

Bachmann Holzinger Member

Andreas Bär Former Member



Former Secretary





Markus Kern Former Secretary

In 2013 we, Michael and Göran, together with our father Olle Larsson and in honor of our mother Doris, who passed away in 2000, founded the Family Larsson-Rosenquist Foundation with the simple but bold vision: "A world where every child has the best start in life through breastmilk". Ten years later, we are delighted to see how this vision is taking shape with the support of many dedicated people from all over the world. On the occasion of the Foundation's milestone birthday, we would like to take this opportunity to thank them from the bottom of our hearts.

To the Foundation Board members: We applaud your generous contributions of time and expert thought-leadership. With your wise guidance, the Foundation's strategic course is strong and flexible, set for achieving innovations and sustainable impact in the field of breastmilk and breastfeeding.

To the Scientific Advisory Board members: We are grateful for your specialized perspectives and your generosity in sharing your knowledge. You helped the Foundation identify crucial information gaps and understand ways evidence-backed science can underpin advances in child and maternal health.

To the Foundation Team members: We recognize that your hard work, every day, is what enables the Foundation to progress towards its strategic goals. Many of you came fresh into this field, and your ongoing enthusiasm and dedication to true teamwork are behind every accomplishment.

To everyone else who has given the Foundation their gifts of time and engagement: Our sincerest thanks. Partners, advisors, global health specialists, health practitioners, regional and country leaders, and colleagues from around the word – thank you wholeheartedly for your fantastic support. We could not have done it without you, and we are looking forward to celebrating the Foundation's next milestones together with all of you.



Michael S. Kramer MD, Chair

Lars Bode

PhD, Member



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Uwe Ewald MD, PhD, Prof. em., Member



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Dr. Katharina Lichtner Managing Director

Foundation Team (as of end of 2023)





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Senior Associate Research

Martin Elbel Lead Swiss Strategy



Iman Kramer Head Finance & Operations



Management & LactaHub



Thomas Nauer Head Relationship Management & Marketing

Cassandra Petrakis Zwahlen Lead English Communications



Dana Prosser Executive Assistant



Dr. Michaela Turan Head Research



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We look forward to another 10 YEARS of successful collaborat 2 0 2 8