

**WHO Donor Human Milk Banking Guidelines Development:
Convening of the Guidelines Development Group**

Virtual meeting (14:00 to 17:00 CET each day)
12-14 December 2022

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¹ Guidelines for declarations of interest (WHO experts). Geneva: World Health Organization. (<https://www.who.int/about/ethics/declarations-of-interest>), accessed 8 October 2019

GUIDELINE DEVELOPMENT GROUP BIOGRAPHIES

APARECIDA DA SILVA, DANIELLE:

In 1995, she graduated in Food Engineering from the Salgado de Oliveira University, master's degree in Agricultural Microbiology from the Federal University of Viçosa (2000) and Ph. of Adolescents, Fernandes Figueira/Oswaldo Cruz Foundation (2009). In 2002, she began his activities at the National Institute of Women, Children and Adolescents' Health, Fernandes Figueira/Fundação Oswaldo Cruz as a Technologist in Public Health at the Reference Center for Human Milk Banks, where she currently works as a manager and acting mainly in the following areas: topics: human milk, processing and quality control, human milk bank. Since 2005 she has been a technical consultant in the International Technical Cooperation program in Human Milk Banks between the Oswaldo Cruz Foundation, the Ministry of Health and the Ministry of International Relations.

GRAY, JIM:

Jim Gray has been a Consultant Microbiologist at Birmingham Children's and Women's Hospitals in England since 1995. Jim has held several research grants, and has authored well over one hundred papers on infection-related topics. Current research interests include point of care testing for group B streptococcus screening in labouring women, prevention and treatment of gynaecologic infections, and antibiotic stewardship in paediatrics. Nationally, Jim has worked on several programmes within the National Institute for Health and Care Excellence (NICE), including the Donor Breast Milk Banking Guideline. He is an Expert Advisor for the British National Formulary for Children (BNF-C) and has served on several national and international committees relating to paediatric infectious diseases and antibiotic treatment. He is an editor of four different medical journals, and was Editor-in-Chief of *The Journal of Hospital Infection* until September 2022.

GRØVSLIEN, ANNE:

Anne Grøvslien is the head of the nutrition unit in the NICU in Oslo University Hospital (OUH). She was involved in the process starting a milk bank in 1995 at OUH and Anne has run the milk bank and has been involved in writing the national guideline administrated by the Norwegian Directorate of Health (2002 and 2018).

Anne is a National qualified lactation consultant and she works with mothers at the NICU.

Since 2002, she has been the head of the Norwegian Milk Bank Network.

She is a founder member and the former secretary (2014-2022) to the European Milk Bank Association (EMBA).

Additionally she is working in projects in India, since 2012, on behalf of Department for Global Health, OUH, as a consultant for setting up milk banks and breastfeeding related issues. She was also involved in the writing of the National Guidelines on Lactation Management Centres in Public Health Facilities, in India (2017).

Anne is educated within, and work as, a multi-cultural counsellor in her hospital, both with staff and patients and issues related to cultural disagreements and questions.

The recertification of Mother- Baby friendly neonatal units has started in Norway and Anne is the head of this work in OUH.

HOSSEINI, MOHAMMADBAGHER

He was born in Tehran and is a Full Professor of Neonatology and Head of the Neonatology Department(From 2009 until now)at Tabriz University of Medical Science (TUOMS)in Tabriz, IRAN. He was also Head of the Pediatrics Department of TUOMSfrom2019 until 2021.He is the Founder and pioneer of the first Human Breast Milk Bank of Iran(2016) at Alzahra Teaching Hospital affiliated to TUOMS. He finalized the project of establishment of the next 10 Human

Milk Bank in Iran sponsored by the Ministry of Health of Iran in 2019. He passed a short training course on his Sabbatical leave on Neonatal Intensive Care and Developmental Care for High Risk Infants, Karolinska Institute, Stockholm, Sweden and he is a NIDCAP Professional too. His academic positions include: member of National Board of Directors of Education of Perinatal and Neonatal Subspecialty in Iran from 2014 up to now and Collaboration with American Journal of Perinatology as reviewer. He is author of more than 65 manuscripts (Original articles) in different subfields of Neonatology specially: Kangaroo Mother Care and Breast Feeding, NIDCAP and Developmental Care of High Risk Infants, and Breast Milk Banking.

KIMONDO, RUBY:

Preemie Love Foundation was started by Ruby Kimondo in 2015. Her motivation to start Preemie Love was driven by her own personal experiences with Prematurity. Ruby is 46 years old, married and with four children. She experienced Severe Preeclampsia in all four pregnancies leading to three of her babies being born at 28, 30 and 34 weeks. Her third pregnancy, even though still Preeclamptic, was managed well into week 38, thus giving her the only full term baby out of the four. At 26 years old and expecting her first child, Ruby had no idea of a pregnancy condition called Preeclampsia and knew very little about babies born prematurely. When she saw her baby for the first time, looking so tiny and fragile at 1300g, she broke down and cried. Thus began her long journey through Prematurity. Weeks of daily commutes to the Neonatal Intensive Care Units to see her babies, uncertainties as to the long term outcomes of these long stays in neonatal care and finally to the daunting task of caring for her preterm babies at home. It is against this background that she set out to start a support group for women who had given birth prematurely; to fill in some gaps that she felt existed in the care received in hospitals. These gaps include:

- Provision of adequate information to expectant parents pertaining to Preterm Birth. (Or what could go wrong in a pregnancy).
- Provision of mental health care to parents going through the Preterm Birth experience.
- Provision of adequate follow up and guidance to parents after discharge from hospital.
- Lack of sufficient Public Awareness on Preterm Birth leading to weak support systems for parents at the community level.

Preemie Love has attempted to fill some of these gaps through offering a platform where parents can receive and give compassionate support to one another and receive information and practical suggestions for caring for their babies. The group has used WhatsApp as its primary communication and information dissemination tool. In addition, there are frequent physical meetings by active members and outreach to mothers at Kenyatta National Hospital (KNH) Newborn Unit. Ruby coordinates the group's activities with assistance from volunteer mothers in the group. Through this work, she has been able to connect with over 1000 mothers and created four active WhatsApp groups. Majority of these mothers live in Nairobi but there are many others from Mombasa, Kiambu, Thika, Nakuru, Nyeri, Kericho, Kisumu, Bungoma and Kakamega. Ruby would like to sustain, expand and build on this work to adequately bridge those gaps she identified, and has worked collaboratively with other players in the Maternal and Newborn Health Care space in Kenya including Ministry of Health, UNICEF, KEMRI Wellcome Trust Research Programme and the local media. Her desire is to see families of babies born preterm receive adequate support to ensure the best possible health outcomes for their babies

NANGIA, SUSHMA:

Dr Sushma Nangia, is a Neonatal specialist heading Neonatology at one of the largest public health teaching Institution in New Delhi, India. Her seminal contribution in the area of neonatal nutrition with special emphasis on introducing the concept of 'Early Total Enteral Feeding' with no intravenous alimentation is gaining global acceptance and has benefitted many small and sick neonates by reducing feed intolerance, sepsis, NEC and pain associated with intravenous cannulation. A staunch believer of breastfeeding who promotes exclusive use of 'Mothers Own

Milk' (MOM) in the Neonatal intensive care unit for preemies. She has revolutionized the concept of family participatory care in India, especially at the Special Newborn Care Units, by following the policy of 'Zero Separation' and allowing the parents to hold equal responsibility as a caregiver for their small babies. She has been instrumental in establishing the first Comprehensive Lactational Management Centre at a public health facility in North India, the 'Vatsalya Maatri Amrit Kosh' with Indo-Norwegian Collaboration which has been successfully flourishing well since 2017. Her publications related to human milk banking have unraveled multiple facets related to challenges associated with the establishment and functioning of human milk banks in low-middle-income countries, including during the COVID 19 pandemic.

O'CONNOR, DEBORAH (DEBBIE):

Deborah (Debbie) O'Connor PhD RD is the Earle W. McHenry Professor and Chair of the Department of Nutritional Sciences at the University of Toronto, and a Tier 1 Canada Research Chair in Human Milk and Infant Nutrition. She also holds scientific appointments in the Translational Medicine Program at The Hospital for Sick Children, and the Department of Pediatrics at Sinai Health. At SickKids, she served as Director of Clinical Dietetics and Breastfeeding Support from 2000 to 2012 and then as Associate Chief of Academic and Professional Practice until 2013. She was the inaugural Chair of the Advisory Board for the Rogers Hixon Ontario Human Milk Bank until June 2022. Dr. O'Connor's research program focuses on early enteral feeding strategies for very low birth weight infants to support optimal nutrition, growth, and neurodevelopment. Dr. O'Connor was a recent member of several national and international committees and working groups, including the Society of Obstetricians and Gynecologists of Canada Nutrition Practice Guidelines, US-Canada Governments Joint Dietary Reference Intake Working Group on Chronic Disease Endpoints, US National Academy of Sciences, Engineering and Medicine Exploration of New Evidence for Nutrition during Pregnancy and Lactation, and NIH's Breastmilk Ecology: Genesis of Infant Nutrition (BEGIN) Project.

PAMBUDI, WIYARNI:

I am a paediatrician in Jakarta, Indonesia and have been involved in breastfeeding advocacy for more than ten years. Most recently I was on the drafting team for the minister of health regulations regarding donor human milk units in hospitals.

PERRIN, MARYANNE:

Dr. Maryanne Perrin is trained as a nutrition scientist, industrial engineer, and dietitian. She is an Associate Professor in the Department of Nutrition Science at the University of North Carolina Greensboro where her research focuses on providing evidence-based guidelines for the processing, storage, and use of donor human milk. She has led studies to characterize the nutritional composition of donor human milk within the Human Milk Banking Association of North America network, and currently serves as the Principal Investigator on a National Institute of Health funded project to study the composition of donor human milk globally among low-, middle-, and high-income countries. This study will use simulation to evaluate the impact of milk bank pooling practices and clinical fortification practices, with the ultimate goal of improving nutritional therapies for the preterm infant. Dr. Perrin served on the Board of Directors for the Human Milk Banking Association of North America from 2016 to 2020 and chaired the Analyzer Task Force and the Nutrition Standards Working Group.

PICAUD, JEAN-CHARLES:

Jean-Charles PICAUD is full Professor of Pediatrics at France Claude Bernard University, in Lyon, France. He is working in the department of Neonatal intensive care unit at Croix rousse university hospital in Lyon. He developed his clinical research in the field of neonatal and infant nutrition, and particularly optimization of parenteral and enteral nutrition for very preterm infants. He worked on the validation of dual-energy x-ray absorptiometry in neonates, evaluation of nutrient's utilization using nutrient's balances, on the evolution of gut flora in extremely preterm infants and the effect of probiotics supplementation. He published also studies about nutrition of full-term neonates and infants, notably the impact of low protein intake on further risk on infant obesity. He is the past-president of European milk bank association (EMBA) and current president of French human milk bank association (ADLF). He worked within ADLF to harmonize practices in the 36 French human milk banks and with the French ministry of health to create (2008) and update (2022) national guidelines for human milk banking. He developed research concerning human milk for preterm infants: measurement of its composition, optimization of the fortification, best way to pasteurize human milk to preserve its quality.

REIMERS, PENNY:

Penny Reimers is a registered nurse, midwife, and International Board-Certified Lactation Consultant. Her PhD evaluated the implementation of a Feeding Buddies programme to improve exclusive breastfeeding amongst HIV infected mothers. She has been involved in Human Milk Banking in South Africa since its inception, coordinated the iThemba Lethu Community based milk bank for 10 years, was a founding member of the Human Milk Banking Association of South Africa and served on the Department of Health advisory board for drafting national regulations around Human Milk Banking. As a post-doctoral fellow in the Department of Child Health and Paediatrics at the University of KwaZulu Natal, she was involved in development work on mobile human milk pasteurisation systems and has authored and co-authored papers on donor milk banking.

TRAN, HOANG THI:

Dr Hoang Thi Tran is a neonatologist at Da Nang Hospital for Women and Children, Viet Nam. She gained her paediatric Master and PhD degrees at the University of Melbourne, Australia, following her undergraduate medical doctor degree at the University of Medicine and Pharmacy in Ho Chi Minh City. Dr Tran has held a dual role as the Deputy Director of Da Nang Hospital for Women and Children as well as the Acting Head of Paediatrics at the School of Medicine and Pharmacy, University of Da Nang. She has been the Head of the first human milk bank in Viet Nam established since 2017. She has also been the deputy president of **Viet Nam perinatal and neonatal association** and a member of the Independent Review Group for WHO-Western Pacific region on monitoring implementation of the Action Plan for Healthy Newborns. Her passion is to improve maternal and child health based on low-cost and effective interventions such as breast feeding, human milk banking, early essential newborn care, and kangaroo mother care.

WAIYEGO, MARY:

Mary Waiyego is a neonatologist at Kenyatta National Hospital (KNH) -Kenya. She is an honorary lecturer at the department of Paediatrics and Child Health-University of Nairobi. In addition to her clinical work in the high-volume newborn unit and neonatal ICU at KNH, she conducts research and quality-improvement projects. She is a technical adviser to the national NEST-360 program and a consultant in the Evaluation of Technologies for Neonates in Africa platform. She headed the human milk bank development at Pumwani Maternity Hospital-Kenya and continues to serve in the national baby-friendly hospital initiative working group as a newborn specialist.

WEAVER, GILLIAN BSc (Hons):

Specialist in the field of human milk banking since 1989, committed to driving improvements in safety and sustainability, promoting and facilitating equity of access to donor human milk for all infants who will benefit.

Manager; world's longest continually operating HMB at Imperial College Healthcare NHS Trust, London, UK (27 years).

Co-founder; UK Association for Milk Banking and European Milk Bank Association

Contributed to the development of internationally recognized standards and guidelines (UK, EMBA, India, South East Asia)

Works with NGOs to develop tools and resources for the global milk banking community and has provided support and recommendations to aid the establishment of human milk banks in Australia, India, Kenya, Myanmar, New Zealand, South Africa, Uganda and Vietnam.

Co-founder; Human Milk Foundation, established to fund donor human milk provision where clinically indicated, including for community based infants, as well as education, training and research into the science of human milk.

Registered expert for EU H2020 funding programmes. member of ICCBBA Technical Advisory Group (ISBT128 coding system for human milk). In 2019, received a 'Points of Light' award from the UK Prime Minister Theresa May for her contributions to the support of breastfeeding and human milk banking.

WOOD, ERICA:

Professor Erica Wood has expertise in the donation, manufacturing, regulation and clinical use of medical products of human origin, particularly blood transfusion and haematopoietic stem cell transplantation. She is a haematologist at Monash Health and Head of the Transfusion Research Unit in the School of Public Health and Preventive Medicine at Monash University, in Melbourne, Australia.

Erica serves on the WHO Advisory Committee on Blood Regulation, Availability and Safety, and the WHO Anaemia Guidelines Development Group. She is a member of Australia's Therapeutic Goods Administration Committee on Biologicals, the Haemopoietic Progenitor Cell Sector Clinical Advisory Group, the national Haemovigilance Advisory Committee, and the Evaluation Subcommittee of the Medical Services Advisory Committee.

Erica is immediate past president of the International Society of Blood Transfusion, and former president of the International Haemovigilance Network and the Australian and NZ Society of Blood Transfusion. She has served as Chief Examiner (Haematology) for the Royal College of Pathologists of Australasia.

Erica is a founding member of the Victorian Blood Matters Advisory Committee, and chaired its Serious Transfusion Incident Reporting (STIR) expert group. She is an Australian National Health and Medical Research Council (NHMRC) Leadership Fellow, and leads the NHMRC-funded Blood Synergy research program.

YAMANI, MOHAMMED ISAM:

Mohammed Isam Yamani had his Ph.D. from Berlin Free University, Germany, and has been since 1985 professor of Food Microbiology and Hygiene and Quality Management Systems at the Department of Nutrition and Food Technology, Faculty of Agriculture, University of Jordan, Amman-Jordan. He was Dean of the Faculty of Agriculture, and Head of the Amman Municipality Food Control Laboratories. He has taught, proposed, and directed academic activities work in different fields of food science and technology. He published tens of papers and articles in international refereed research and professional scientific periodicals; and was the author of the book Hazard Analysis and Critical Control Point Generic Models for some Traditional Foods: A Manual for the Eastern Mediterranean Region published by World Health Organization; co-authored two books on Chemical Profiles and Food Traceability of Selected Jordanian Foods. He was a professional member of the Institute of Food Technologists, the American Dairy Association,

and the International Association for Food Protection. He had been a certified lead auditor to ISO 9001 (Quality Management System), ISO 22000 (Food Safety Management System), and HACCP System to ensure food safety.
