## Contents

### Part I  The Maternal Voice: A Link Between Fetal and Neonatal Period

1  Maternal Voice and Communicative Musicality:  
   Sharing the Meaning of Life from Before Birth  
   Colwyn Trevarthen  
   
2  Prenatal Experience with the Maternal Voice  
   Christine Moon  
   
3  The Maternal Voice as a Special Signal for Infants  
   Sandra E. Trehub  
   
4  The Development of Infant Participation in Communication  
   Maya Gratier and Emmanuel Devouche  
   
5  Brain Mechanisms in Emotional Voice Production  
   and Perception and Early Life Interactions  
   Didier Grandjean  

### Part II  The NICU Acoustic Environment and the Preterm Infant’s Auditory System Development

6  The Sound Environments and Auditory Perceptions  
   of the Fetus and Preterm Newborn  
   M. Kathleen Philbin  
   
7  The Auditory Sensitivity of Preterm Infants Toward  
   Their Atypical Auditory Environment in the NICU  
   and Their Attraction to Human Voices  
   Pierre Kuhn, André Dufour, and Claire Zores
Part III  The Early Vocal Contact in the NICU

8 Early Vocal Contact: Direct Talking and Singing to Preterm Infants in the NICU ........................................ 133
   Manuela Filippa

9 Maternal Voice and Its Influence on Stress and Sleep ....................... 151
   Fabrizio Ferrari, Giovanna Talucci, Luca Ori, Natascia Bertoncelli,
   Manuela Filippa, and Laura Lucaccioni

10 Support of Language and Communication Development as a Rationale for Early Maternal Vocal Contact with Preterm Infants ........................................ 165
    Manuela Filippa and Pierre Kuhn

11 Recorded Maternal Voice, Recorded Music, or Live Intervention: A Bioecological Perspective ..................... 183
    Joy V. Browne

Part IV  Family-Centered Music Therapy Experiences in the NICU

12 Empowering Parents in Singing to Hospitalized Infants: The Role of the Music Therapist .............................. 205
    Helen Shoemark

13 Sounding Together: Family-Centered Music Therapy as Facilitator for Parental Singing During Skin-to-Skin Contact ........................................ 217
    Friederike Haslbeck and Pernilla Hugoson

Part V  Early Family-Based Interventions in the NICU

14 Stress-Sensitive Parental Brain Systems Regulate Emotion Response and Motivate Sensitive Child Care .............. 241
    James E. Swain

15 Mother/Infant Emotional Communication Through the Lens of Visceral/Autonomic Learning ........................ 271
    Martha G. Welch and Robert J. Ludwig

16 Implications of Epigenetics in Developmental Care of Preterm Infants in the NICU: Preterm Behavioral Epigenetics ........ 295
    Rosario Montirosso and Livio Provenzi

17 Family-Based Interventions and Developmental Care Programmes: Rationale, Difficulties and Effectiveness .......... 311
    Jean-Michel Roué, Stéphane Rioualen, and Jacques Sizun

Index ........................................................................................................ 329
Early Vocal Contact and Preterm Infant Brain Development
Bridging the Gaps Between Research and Practice
Filippa, M.; Kuhn, P.; Westrup, B. (Eds.)
2017, XV, 343 p. 30 illus., 22 illus. in color., Hardcover
ISBN: 978-3-319-65075-3