

Preface

The Sensory Environment of the NICU:  
Scientific and Design-Related Aspects



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*Guest Editor*

In the early stages of neonatal intensive care unit (NICU) design as life-and-death treatments were being refined, the impact of light, noise, movement, and other sensory stimuli was considered of minor importance. As long-term developmental status has replaced the survival rate as the focal point for evaluation of the quality of neonatal care, interest in the impact of the physical environment on the developing premature brain has accelerated.

Although extensive animal data on this topic are available, human studies have been hampered by small numbers of patients, and, even now, clinical research in this area is complicated by difficulties with blinding and exclusion of confounding factors. Despite these limitations, there are few areas of research where study data are applied as quickly as that describing the sensory environment of the NICU.

Given this setting, an issue of *Clinics in Perinatology* that summarized the scientific foundations and the NICU design implications of our understanding of the sensory environment of the NICU seemed highly relevant. Our goal is to establish a solid evidence base for the importance of considering this aspect of neonatal care and to provide useful suggestions for how to implement this knowledge.

Each of the authors in this issue is preeminent in their field, but special mention must be made of the author of our first article, Dr. Stanley Graven. A

pioneer in so many aspects of neonatology, Dr. Graven identified the environment as an important concern for neonatology well in advance of his colleagues. His teaching and active support of clinicians has been a key factor in the rapid growth of this field, and it is most appropriate that we dedicate this issue to him in thanks for the vision and constant encouragement he has shared with so many of us.

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