

# Gravens By Design: The 37<sup>th</sup> Gravens Conference on the Environment of Care in the NICU convened in Clearwater Beach, FL, on March 6-9, 2024

Robert White, MD, Vincent Smith, MD, Joy Browne, Mitchell Goldstein, MD, MBA, CML

*“This year, Dr. Mia Malcolm, NICU mom and family advocate, addressed ‘The Power of Effective Communication in the NICU.’ She helped us understand how families react to hearing that their baby had ‘failed’ a treatment or procedure – extubation, for example, or to hear that their baby was ‘misbehaving.’ She addressed how judgmental NICU staff can become towards parents if they are less – or more - involved than we consider appropriate.”*

Day 1 at Gravens focuses on Science and Application but always begins with a parent’s perspective. This year, Dr. Mia Malcolm, NICU mom and family advocate, addressed “The Power of Effective Communication in the NICU.” She helped us understand how families react to hearing that their baby had “failed” a treatment or procedure – extubation, for example, or to hear that their baby was “misbehaving.” She addressed how judgmental NICU staff can become towards parents if they are less – or more - involved than we consider appropriate. She asked that we become more thoughtful about how our comments to them or about them or their baby might be interpreted, especially with recognition of the stress that they are under. In the final presentation of the day, Dr. Paige Church touched on the same topic, pointing out that our typical focus on IQ scores or physical abilities as criteria for successful treatment of a high-risk newborn devalues other characteristics that might be equally or more important to the quality of life for the child and their parents. Among those presentations was one by Dr. Scott Berns who described his experience as the father of a child with progeria whose life was full of joy and meaning.

A second point of emphasis on Day 1 was the complexity of brain development in the second and third trimesters and how this is impacted by preterm delivery and our subsequent care practices. Dr. Petra Huppi noted that early activity in a newborn is beneficial to subsequent neuronal maturation and reviewed extensive research on how music and voice can be used most effectively in the NICU. This is a vital role for parents in the NICU, but if they cannot be there much of the time, caregivers must recognize

and embrace this aspect of NICU care that is so often overlooked or considered optional. She was followed by Dr. Nathalie Maitre, who outlined the superiority of infant-directed speech in promoting neurological development and detailed the challenges of achieving that in a typical NICU and strategies to overcome those challenges.

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Dr. Jeff Alberts described the sense of touch as multidimensional, interactive, and an essential means of communication, especially in the newborn period when other forms of communication are not extensively developed. Dr. Elizabeth Rogers outlined the “All Care is Brain Care” project at VON that helps teams provide more interactive, developmentally appropriate care of even the most fragile – but also most needy - infants. IVH prevention protocols are essential, but so is skin-to-skin care – even more so in babies with the most physiologic instability, ones who are often precluded from this care. Likewise, human milk feeding and enabling parents to be essential care team members are crucial to achieving optimal outcomes. Caring for our caregivers is often forgotten but crucial, essential to any success we can achieve in the NICU.

A highlight of the first day’s session was the presentation of the Gravens Award to Dr. Berns in recognition of his years of leadership, including at the Gravens Conference, the March of Dimes, and now at NICHQ. Through his efforts, the role of parents as partners in every step of the NICU journey has become a reality in many NICUs nationwide and internationally.

On day 2, separate developmental care and NICU design tracks were presented. The Infant and Family Centered Developmental Care track (IFCDC) focused on the science and potential implementation strategies for three evidence-based standards and care

competencies. Carol Jaeger provided an overview of the strategies the consensus panel is using to update both the principles in the IFCDC model and the standards to make them more accessible to those NICUs wanting to achieve IFCDC competencies. Dr. Carol McNair provided an excellent overview of evidence-based decision-making strategies for non-pharmacologic and pharmacologic strategies for Alleviating Babies' Pain and Stress, and Jean Powlesland described various implementation strategies for babies' pain and stress. Dr. Britt Pados provided the science background for Feeding, Eating, and Nutrition Delivery standards, and Dr. Erin Ross detailed implementation considerations for professionals feeding babies and supporting families to feed their babies. Dr. Natalie Charpak discussed global findings for better infant and family outcomes when early and prolonged Skin-to-skin has been supported, and Dr. Christie Lawrence discussed specific science-based approaches for successful implementation. Audience discussion was robust, resulting in recommendations for strategies to benchmark practices currently being used to implement the standards.

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Caitlin Potter and Colby Dearman from HKS Architects.

Day 3 of Gravens is designed to equip attendees with the knowledge and skills to actualize their innovative ideas upon returning home. The day begins with immersive workshops, each tailored to address specific aspects of project implementation. Participants engage in activities, discussions, and question-and-answer sessions to deepen their understanding of key concepts and refine their strategies.

Following the workshops, the day transitions into abstract presentations, where individuals and teams showcase their Gravens ideas to their peers and experts in their respective fields. This platform allows attendees to receive valuable feedback, gain insights from diverse perspectives, and cultivate potential collaborations.

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The concluding morning of the Gravens meeting is devoted to the importance of teamwork and exploring ways to work together. Dr. Vincent C. Smith and Ms. Molly Fraust-Wylie provided context for

the morning program and introduced the theme for the day. As a continuation of previous years, Saturday Morning at Graves is a voyage into our understanding of each other as individuals and how different characteristics (e.g., cultural beliefs, religion, race/ethnicity, sexual orientation, gender identity, and socioeconomic factors) about us affect and how we each show up in the NICU and interact with each other. It is crucial for individuals who work in a NICU or with NICU families to understand these issues as they directly or indirectly contribute to the NICU experience.

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***“Dr. Erick Rideout gave a riveting presentation on the power of teamwork in the NICU. He explained how things that seemed impossible when viewed from only one perspective became possible when the whole team contributed to the solution. To illustrate this point, Dr. Rideout shared data on how their unit was able to decrease the number of interventions that preterm infants received in their NICU to 1/3 of what they historically had been, and their unit was also able to go for more than 4000 days without a catheter-associated line infection based on teamwork.”***

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The theme of the morning this year was teamwork and families as partners. Dr. Mia Malcolm and her colleague Emily Revelle described a model program integrating NICU parents and families into almost every aspect of the NICU/hospital environment. This session contained examples of parents’ and families’ roles and offered suggestions on how such programs could be reproduced. Then, Dr. Erick Rideout gave a riveting presentation on the power of teamwork in the NICU. He explained how things that seemed impossible when viewed from only one perspective became possible when the whole team contributed to the solution. To illustrate this point, Dr. Rideout shared data on how their unit was able to decrease the number of interventions that preterm infants received in their NICU to 1/3 of what they historically had been, and their unit was also able to go for more than 4000 days without a catheter-associated line infection based on teamwork. Dr. Rideout’s talk demonstrated numerous ways a NICU could be a more welcoming place for the faculty and staff that work there so that they “never want to leave.”

Dr. Rideout was followed by Dr. Goldman, who discussed the importance and impact of teamwork and kindness in high-stress environments. Dr. Goldman led the audience through a visualization activity that helped emphasize the role of viewpoints when

assessing a situation or circumstance. Specifically, everyone in the room looked at the same image simultaneously, yet the interpretations of what was seen varied widely.

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***“Finally, the last speaker of the morning was Dr. Malathi Balasundaram. Dr. Balasundaram shared her personal story of growing up and moving to the United States and how that affected her motivation and drive. Then, she walked the audience through her interactions with the Gravens conference and how she translated the Gravens conference content and participants into improvement and innovation in her hospital’s NICU.”***

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Finally, the last speaker of the morning was Dr. Malathi Balasundaram. Dr. Balasundaram shared her personal story of growing up and moving to the United States and how that affected her motivation and drive. Then, she walked the audience through her interactions with the Gravens conference and how she translated the Gravens conference content and participants into improvement and innovation in her hospital’s NICU. Dr. Balasundaram gave the audience some pragmatic guidance on making a real tangible and practical difference in their local NICU even if they had no other allies, additional funding, or support. The morning ended with a wrap-up by Drs. Bob White and Joy Browne. Overall, it was a very inspiring and motivational conclusion to an exhilarating conference.

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Corresponding Author



Robert D. White, MD  
Director, Regional Newborn Program  
Beacon Children's Hospital  
615 N. Michigan St.  
South Bend, IN 46601  
Phone: 574-647-7141  
Fax: 574-647-3672  
Email: [Robert\\_White@pediatrix.com](mailto:Robert_White@pediatrix.com)

Corresponding Author



Joy Browne, Ph.D., PCNS, IMH-E(IV)  
Clinical Professor of Pediatrics and Psychiatry  
University of Colorado School of Medicine  
Aurora, Colorado  
Telephone: 303-875-0585  
Email: [Joy.browne@childrenscolorado.org](mailto:Joy.browne@childrenscolorado.org)

Corresponding Author



Vincent Smith, MD, MPH  
Boston Medical Center  
801 Albany Street Room 2009  
Boston, MA 02119  
(617) 414-3989 (T)  
(617) 414-3833 (F)  
Email: [Vincent.smith@bmc.org](mailto:Vincent.smith@bmc.org)

Corresponding Author



Mitchell Goldstein, MD, MBA, CML  
Professor of Pediatrics  
Loma Linda University School of Medicine  
Division of Neonatology  
Department of Pediatrics  
Loma Linda University Childrens Hospital  
Loma Linda, CA  
Email: [mgoldstein@llu.edu](mailto:mgoldstein@llu.edu)

