



# NEC SOCIETY VIRTUAL SESSIONS

MAY 19 - 21, 2021

## MEETING SUMMARY

# BUILDING A WORLD WITHOUT NEC

The NEC Society presented the NEC Virtual Sessions in partnership with Cincinnati Children's Hospital, May 19 - 21, 2021. The Virtual Sessions attracted nearly **300** diverse stakeholders from **16** countries and **40** US states, with **16** groups providing support. This was the third internationally-attended conference hosted by the NEC Society. The executive summary of the 2017 NEC Symposium is available [here](#), and the executive summary of the 2019 NEC Symposium is available [here](#).



**MULTI-DISCIPLINARY** PEDIATRIC SURGEONS  
NEONATOLOGISTS INDUSTRY SCIENTISTS  
NON-PROFITS NURSES PATIENT-FAMILIES

[illegible]

A pie chart illustrating the distribution of respondents by profession. The chart is divided into six segments, each with a colored dot and a label. The segments are: Healthcare provider (pink, largest), Personally affected by NEC (blue), Other (purple, smallest), Non-profit (green), Industry (yellow), and Researcher (red).

Profession	Color
Healthcare provider	Pink
Personally affected by NEC	Blue
Other	Purple
Non-profit	Green
Industry	Yellow
Researcher	Red

"I was so inspired by  
this conference!"  
- Meeting Attendee

"I will most remember  
the stories from  
families directly  
impacted by NEC."  
- Meeting Attendee





In addition to healthcare providers and researchers, 35 patient-families participated in the Sessions. Each Session was dedicated to families who have been personally affected by necrotizing enterocolitis.

Following the “[All-In Meeting](#)” framework, the NEC Society adapted its in-person strategies to fit the community’s needs during a pandemic. Accordingly, the Virtual Sessions were more inclusive and accessible to all stakeholders than prior meetings. The NEC Society is committed to ensuring that future conferences are equally accessible, even when in-person meetings resume post-pandemic.

To build a sense of community and allow stakeholders to expand their connections, the Virtual Sessions hosted small breakout groups focused on opportunities for participants to increase their engagement in the movement to build a world without NEC.

Most participants received a gift box to help build their connection to the virtual meeting. The gift boxes were made possible by contributions from our corporate supporters.





As a patient-led nonprofit organization, the NEC Society is uniquely able to nurture connections that propel collaborations and advance research. The Virtual Sessions have paved the way for new projects and studies that will bring us closer to a world without necrotizing enterocolitis.

As the NEC Society advances research, education, and advocacy, the organization will dedicate particular attention to the following efforts:

**Building a patient-led NEC research network**

**Supporting and expanding the NEC Biorepository and Registry**

**Identifying and addressing NEC research priorities**

**Becoming a long-term financially sustainable organization**

You can review the agenda and learn about the presentations that took place throughout the Virtual Sessions in the following summaries. If you would like to support the NEC Society's vision of building a world without NEC, please visit [NECsociety.kindful.com](https://NECsociety.kindful.com)

**"I appreciated the opportunity to learn so much about NEC. There is nowhere else to get this diversity."**  
**- Meeting Attendee**

# KEYNOTE SPEAKERS



## **Diana W. Bianchi, MD**

National Institute of Child Health and Human Development (NICHD)

“NEC and the 4 Ns: Nutrition, NIH, NICHD, and Neonatal Research”

Dr. Bianchi outlined how the NIH and NICHD are working to support nutrition and NEC research. Dr. Bianchi emphasized the NICHD’s commitment to elevating the needs and voices of patient-families, highlighting the value, “No research about us without us.” The recording of Dr. Bianchi’s presentation is available [here](#).



## **Professor Neena Modi, MB, ChB, FRCP, FRCPCH, FFPM**

Imperial College London

“Collaborative, Patient-Informed Multicentre Randomised Controlled Trial to Optimize Very Preterm Nutritional Management”

Prof. Modi revealed the dramatic variation in feeding practices between and within countries such as the United States and the United Kingdom. She outlined the urgent need to rapidly advance research to optimize nutritional practices and reduce the risks of NEC. The recording of Prof. Modi’s presentation is available [here](#).



## **NEC Research Prioritization Efforts, presented by Jennifer Canvasser, MSW and Ravi Patel, MD, MSc**

NEC Society

Emory University School of Medicine

The NEC Society has received an Engagement Award from the Patient-Centered Outcomes Research Institute to build the organization’s capacity to advance research that is meaningful to patients and families. The NEC Society created a project team that includes 11 patient-families who have been personally affected by NEC as well as 11 clinician-researchers who have dedicated their careers to preventing NEC. Together, this team is working to build a prioritized research agenda, with input from the broad, international NEC community, to tackle the research topics and questions that are most urgent and important.



# ABSTRACT PRESENTATIONS

**A Critical Evaluation of Current NEC Definitions Using Statistics and Machine Learning**, presented by Shiloh Lueschow, MS, University of Iowa Department of Microbiology and Immunology

**A Prenatal Strategy against Necrotizing Enterocolitis**, presented by Marla Sacks, MD, Loma Linda University Children's Hospital

**Maternal Diet Supplementation with Ahr Ligands Protects Newborn Mice against Necrotizing Enterocolitis**, presented by Peng Lu, PhD, Johns Hopkins University School of Medicine and the Johns Hopkins Children's Center

**Antenatal Butyrate Supplementation Reduces Postnatal Gastrointestinal Injury in a Murine Model of Colitis**, presented by Maria (Stefi) Barbican, MD, Emory University and Children's Healthcare of Atlanta

**Immunoglobulin A in Colostrum is Lower in Infants Who Go on To Develop Necrotising Enterocolitis (NEC)**, presented by Claire Granger, MD, Newcastle University and Newcastle Neonatal Service

**Exposure to Experimental Chorioamnionitis Results in Il-6 Dependent Upregulation of Interferon Lambda Expression and Neonatal Paneth Cell Loss**, presented by Sarah Watson, MD, University of Iowa Hospital and Clinics

**Human Milk Oligosaccharide DsInt and Gut Microbiome in Preterm Infants Predicts Necrotising Enterocolitis**, presented by Andrea Masi, MRes, Newcastle University

**Exaggerated Inflammation and Injury Mediate NEC-Induced Brain Injury in a Novel "Nec in A Dish" Mouse Organoid Model**, presented by Maame Efua Sampah, Johns Hopkins Children's Center

**Cholestasis is Associated with Higher Rate of Complications in Infants with Necrotizing Enterocolitis**, presented by Sujir Pritha Nayak, MD, University of Texas Southwestern Medical Center

**In Neonatal Onset Surgical Short Bowel Syndrome Survival is High, and Enteral Autonomy is Related to Residual Bowel Length**, presented by Muralidhar Premkumar, Baylor College of Medicine, Texas Children's Hospital



# ABSTRACT PRESENTATIONS

Human B Defensin-2 Significantly Improves Wound Healing and Intestinal Barrier Structure as a Potential Mechanism for Reduction Of Experimental NEC, presented by Timothy Boly, DO, University of Iowa Stead Family Children's Hospital

A Novel Toll-Like Receptor 4 Inhibitor Treats Established NEC in Newborn Mice, presented by Andres Gonzalez Salazar, MD, Johns Hopkins University

Remote Ischemic Conditioning: A Novel Treatment for Necrotizing Enterocolitis, presented by Niloofar Ganji, MSc Candidate, University of Toronto, Hospital for Sick Children

Remote Ischemic Conditioning Is Neuroprotective in Necrotizing Enterocolitis, presented by George Biouss, MSc., The Hospital for Sick Children

Multi-Omics Approach Suggests a Novel Molecular Mechanism of Necrotizing Enterocolitis in the Preterm Infant Gut Microbiome, presented by Karl Sylvester, MD, Stanford University

Feeding *B. infantis* EVC001 to VLBW Infants is Associated with Significant Reduction in Rates of Necrotizing Enterocolitis, presented by Brian Scottoline, MD, PhD, Oregon Health & Science University

Comparison of Liquid Cow's Milk-Based and Human Milk-Based Human Milk Fortifiers on Short Term Outcomes in Infants Less Than or Equal to 1250g Birthweight, presented by Patti Perks, MS, NICU RDN, CNSC, University of Virginia Children's Hospital

Enteral Feeding, Probiotic Supplementation, and Intestinal Oxygenation Responses to Red Blood Cell Transfusion in Preterm Infants, presented by Ravi Patel, MD, MSc, Emory University School of Medicine

Phase 1 Feasibility and Safety Trial On Remote Ischemic Conditioning in Premature Infants With Necrotizing Enterocolitis, presented by Carlos Zozaya, MD, The Hospital for Sick Children in Toronto

Long Term Outcomes and Life Impacts of NEC: Voices of Survivors and Parents, presented by Jennifer Canvasser, MSW  
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## THANK YOU TO OUR INDUSTRY SUPPORTERS



## THANK YOU TO OUR NONPROFIT SUPPORTERS



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We are grateful for the individuals, families, and groups who believe in our vision of a world without NEC!

**BUILDING A WORLD WITHOUT NEC**

# NEC SOCIETY VIRTUAL SESSIONS

PRESENTED BY THE NEC SOCIETY, IN PARTNERSHIP WITH CINCINNATI CHILDREN'S

## THANK YOU TO OUR TEAM!

### EVENT CO-CHAIRS

Jennifer Canvasser, MSW  
Founder, Executive Director,  
NEC Society

Jae Kim, MD, PHD  
Director, Division of Neonatology,  
Perinatal Institute  
Cincinnati Children's

Erin Umberger, M. Arch  
Director, NEC Society

### CONTINUING MEDICAL EDUCATION

Sarah DeLaat, CMP, CTA  
Conference & Meeting Planner  
Continuing Medical Education

Andrea Thrasher, MEd  
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Continuing Medical Education

### SPECIAL THANKS TO:



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## NEC SOCIETY SCIENTIFIC ADVISORY COUNCIL:

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## NEC SOCIETY SCIENTIFIC ADVISORY COUNCIL (CONTINUED):

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Mark A. Underwood, MD  
Emeritus Professor of Pediatrics  
UC Davis School of Medicine

The next NEC Symposium will take place in-person, in partnership with Cincinnati Children's, at the Westin Cincinnati Hotel in the spring of 2023. Stay tuned for dates and details!

[NECsociety.org](https://NECsociety.org)