

CARDIAC NEURODEVELOPMENTAL OUTCOME COLLABORATIVE

# 13th Annual Scientific Sessions of the Cardiac Neurodevelopment Outcome Collaborative

September 17 - 19, 2025  
Aurora, CO

**WEDNESDAY, SEPTEMBER 17, 2025**

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12:00 PM – 7:00 PM

**REGISTRATION**

1:00 PM – 1:05 PM

**CNOC Welcome**

**SESSION 1 | ADVOCACY AND BUILDING PARTNERSHIPS**

1:05 PM – 1:15 PM

**Diamond Host Welcome**

1:15 PM – 1:20 PM

**Diamond Host Dignitary Welcome**

1:20 PM – 1:25 PM

**Diamond Host Patient Representative Welcome**

1:25 PM – 1:27 PM

**Session 1 Introductions**

1:27 PM – 1:42 PM

**Forging a Path Together - Importance of Building Relationships for Successful Advocacy**  
Keila N. Lopez, MD MPH

1:42 PM – 1:55 PM

**Government or ACHA Advocacy /Lobbying**

1:55 PM – 2:08 PM

**Partnering for Peak Impact: The Power of Collaborative Research**

2:08 PM – 2:21 PM

**The Journey Makes the Team: Learning from the Trail to Shape the Future - The PCORI Grant Team**

2:21 PM – 2:34 PM

**Trail Makers and Milestones: The Brett Boyer Foundation - Creating Research and Advocacy Opportunities for the CHD and Down Syndrome Communities**

2:34 PM – 2:47 PM

**Trail Makers and Milestones: Conquering CHD - Creating Visibility and Empowering all those Impacted by CHD**

2:47 PM – 3:05 PM

**Session 1 Q&A**

3:05 PM – 3:35 PM

**BREAK WITH EXHIBITS**

3:35 PM – 3:37 PM

**Session 2 Introductions**

**SESSION 2 | PEAK INSIGHTS: UNPACKING HOT TOPICS IN CARDIAC NEURODEVELOPMENT**

3:37 PM – 3:52 PM

**2024's Research Panorama: A Landscape of Impact**

3:52 PM – 4:07 PM

**Climbing Towards Equity: Addressing Social Determinants of Health and Mitigating Health Disparities Across the Lifespan in Congenital Heart Disease (AHA Scientific Statement)**

**What's on the Horizon: A Selection of Upcoming CNOC Research Initiatives**

4:07 PM – 4:11 PM

**What's on the Horizon: The 2025 RFA Recipient presenting research proposal**

4:11 PM – 4:15 PM

**What's on the Horizon: CNOC Risk Calculator Project**

4:15 PM – 4:19 PM

**What on the Horizon: Premmie Study - A Collaboration with European Colleagues**

4:19 PM – 4:24 PM

**What's on the Horizon: Age at ASO Operation and Neurodevelopmental Outcomes in d TGA - A PC4 and CNOC Collaborative Study**

4:24 PM – 4:39 PM

**The Molecular Landscape of Neurodevelopment: Big Data in Small Populations**

4:39 PM – 4:55 PM

**Session 2 Q&A**

4:55 PM – 5:20 PM

**BREAK WITH EXHIBITS**

5:20 PM – 5:22 PM

**Session 3 Introductions**

**SESSION 3 | SUPPORTING YOUR HIKING PARTNERS - SIBLING CARE IN CHD**

5:22 PM – 5:37 PM

**Lived Experience: How my Brother Shaped Me**

5:37 PM – 5:52 PM	<b>Understanding the Secondary Impact of CHD: A Focus on Siblings</b>
5:52 PM – 6:07 PM	<b>Heart to Heart: Family-Centered Preparation for Siblings Facing Surgery</b>
6:07 PM – 6:22 PM	<b>Involving Every Heart: Child Life's Role in Supporting CHD Siblings</b>
6:22 PM – 6:40 PM	<b>Session 3 Q&amp;A</b>

**WINE & WISDOM WITH EXHIBITS - MODERATED POSTER SESSION - PART 1**  
**6:45 PM - 8:00 PM**

**THURSDAY, SEPTEMBER 18, 2025**

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7:00 AM – 6:00 PM	<b>REGISTRATION</b>
7:00 AM – 8:00 AM	<b>BREAKFAST WITH EXHIBITS</b>
8:00 AM – 8:02 AM	<b>Session 4 Introductions</b>

**SESSION 4 | HIKERS GUIDE TO NEUROPROTECTION - PART 1**

8:02 AM – 8:17 AM	<b>Trail Markers of the Mind: MRI Insights into Brain Injury</b>
8:17 AM – 8:32 AM	<b>How I Protect the Brain and Support Development : Fetal Cardiologist Perspective</b>
8:32 AM – 8:47 AM	<b>Optimizing Delivery Room Care in Order to Protect the Brain: Neonatologist Perspective</b>
8:47 AM – 9:02 AM	<b>Neuroprotection in the Pre-Operative Period: Cardiac Intensivist Perspective</b>
9:02 AM – 9:17 AM	<b>Intraoperative Neuroprotection: Cardiac Surgeon Perspective</b>
9:17 AM – 9:32 AM	<b>Intraoperative Anesthesia: My Role to Support the Brain During Bypass, Medications, Extubation Strategy</b>
9:17 AM – 9:32 AM	<b>Impacting Little Hearts Everywhere: The Role of Outpatient Mentorship in Community Cardiac Care</b>
9:32 AM – 9:47 AM	<b>Neuroprotection in the Early Post-Operative Period: Cardiac Intensivist Perspective</b>
9:47 AM – 10:05 AM	<b>Session 4 Q&amp;A</b>
10:05 AM – 10:45 AM	<b>BREAK WITH EXHIBITS</b>
10:45 AM – 10:47 AM	<b>Session 5 Introductions</b>

**SESSION 5 | HIKER'S GUIDE TO NEUROPROTECTION - PART 2**

10:47 AM – 11:02 AM	<b>Neuroprotection in the Postoperative Period: Nursing Perspective</b>
11:02 AM – 11:17 AM	<b>Neuroprotection in the Postoperative Period: Physical Therapist Perspective</b>
11:17 AM – 11:32 AM	<b>Neuroprotection in the Postoperative Period: Speech, Language, Pathologist Perspective</b>
11:32 AM – 11:47 AM	<b>Neuroprotection in the Postoperative Period: Cardiologist Perspective</b>
11:47 AM – 12:02 PM	<b>Neuroprotection in the Perioperative Period: The Role of Psychosocial Care and Family Support</b>
12:02 PM – 12:17 PM	<b>Neuroprotection in the Perioperative Period: Parent Perspective</b>
12:17 PM – 12:35 PM	<b>Session 5 Q&amp;A</b>
12:35 PM – 2:00 PM	<b>LUNCH WITH EXHIBITS</b>

**SESSION 6 | CONCURRENT BREAKOUT SESSIONS**

**Mapping the Educational Landscape - Supports for CHD Patients Across Ages**

2:00 PM – 2:05 PM	<b>Mapping the Educational Landscape Introduction</b>
2:05 PM – 2:15 PM	<b>Case Study: Inpatient Schooling Transitioning to the Community</b>
2:15 PM – 2:25 PM	<b>Case Study: Early Childhood</b>
2:25 PM – 2:35 PM	<b>Case Study: Elementary/Middle School</b>
2:35 PM – 2:45 PM	<b>Case Study: High School/Post Secondary</b>
2:45 PM – 2:55 PM	<b>Caregiver's Perspective of Accessing Education</b>
2:55 PM – 3:45 PM	<b>Mapping the Educational Landscape Moderated Panel Discussion</b>

## **The Program Building Expedition: Navigating Inpatient and Outpatient Cardiac Neurodevelopmental Programs**

2:00 PM – 2:05 PM	<b>The Program Building Expedition Introductions</b>
2:05 PM – 2:17 PM	<b>Levine: IP and OP Structure</b>
2:17 PM – 2:29 PM	<b>Arkansas: IP and OP Structure</b>
2:29 PM – 2:41 PM	<b>Duke: IP and OP Structure</b>
2:41 PM – 2:53 PM	<b>Australia: IP and OP Programs in Queensland</b>
2:53 PM – 3:45 PM	<b>The Program Building Expedition Moderated Panel Discussion</b>

## **Vital Trails: Neurosurveillance Along the Cardiac Expedition**

2:00 PM – 2:05 PM	<b>Vital Trails Introductions</b>
2:05 PM – 2:19 PM	<b>Breaking Down Brain Injury and Seizures in Perioperative Cardiac</b>
2:19 PM – 2:33 PM	<b>Practical Application of Neuromonitoring in the CICU</b>
2:33 PM – 2:47 PM	<b>EEG Monitoring: What Do Those Squiggly Lines Mean Anyway?</b>
2:47 PM – 3:01 PM	<b>EEG Monitoring in CICU: How Research Impacts Clinical Practice</b>
3:01 PM – 3:15 PM	<b>Looking to the Horizon: Innovation in EEG Technology</b>
3:15 PM – 3:45 PM	<b>Vital Trails Moderated Panel Discussion</b>
3:45 PM – 4:15 PM	<b>BREAK WITH EXHIBITS</b>
4:15 PM – 4:30 PM	<b>CNOC UPDATES 2025</b>

## **SESSION 7 | CNOC UPDATES**

4:30 PM – 4:35 PM	<b>CNOC Advocacy Award History</b>
4:35 PM – 4:40 PM	<b>CNOC Advocacy Award Winner Announced</b>
4:40 PM – 5:00 PM	<b>Advocacy Award Winner Lecture</b>
5:00 PM – 5:15 PM	<b>Advocacy Award Winner Lecture Q&amp;A</b>
5:15 PM – 5:20 PM	<b>CNOC Newburger-Bellinger Award History</b>
5:20 PM – 5:25 PM	<b>Newburger-Bellinger Award Winner Announced</b>
5:25 PM – 5:45 PM	<b>Newbuger-Bellinger Award Winner Lecture</b>
5:45 PM – 6:00 PM	<b>Newburger-Bellinger Award Lecture Q&amp;A</b>

## **CELEBRATION DINNER (Separate Registration Required)**

## **FRIDAY, SEPTEMBER 19, 2025**

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7:15 AM – 5:00 PM	<b>REGISTRATION</b>
7:15 AM – 8:30 PM	<b>BREAKFAST</b>

## **CNOC DATABASE WORKSHOP**

8:30 AM – 8:32 AM	<b>Session 8 Introductions</b>
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## **SESSION 8 | ACCESS TO CARE: PEDALING TOGETHER INSTEAD OF RECREATING THE WHEEL**

8:32 AM – 8:47 AM	<b>Cardiac Neurodevelopmental Care in Uganda</b>
8:47 AM – 9:02 AM	<b>Shared ND Care Practice Model: Intersection of Rurality and Access to Care</b>
9:02 AM – 9:17 AM	<b>Congenital Heart Disease Long-Term Improvements in Functional Health</b>
9:32 AM – 9:47 AM	<b>Integrating Cultural Considerations into Cardiac Neurodevelopmental Evaluation</b>
9:47 AM – 10:02 AM	<b>Interplay Between Genetics and cCHD</b>
10:02 AM – 10:17 AM	<b>Cardiac Neurodevelopment in Trisomy 21: Where Do We Belong?</b>
10:17 AM – 10:30 AM	<b>Session 8 Q&amp;A</b>

10:30 AM – 11:00 AM **BREAK WITH EXHIBITS**

11:00 AM – 11:02 AM **Abstract Introductions**

## **SESSION 9 | BEST OF THE BEST ABSTRACT PRESENTATIONS**

11:02 AM – 11:13 AM **Abstract #1**

11:13 AM – 11:24 AM **Abstract #2**

11:24 AM – 11:35 AM **Abstract #3**

11:35 AM – 11:46 AM **Abstract #4**

11:46 AM – 12:01 PM **Abstracts 1-4 Q&A**

12:01 PM – 12:12 PM **Abstract #5**

12:12 PM – 12:23 PM **Abstract #6**

12:23 PM – 12:34 PM **Abstract #7**

12:34 PM – 12:45 PM **Abstract #8**

12:45 PM – 1:00 PM **Abstracts 5-8 Q&A**

1:00 PM – 1:10 PM **Audience to Vote for Best Abstract Presentation**

1:10 PM – 2:30 PM **LUNCH ON OWN**

2:30 PM – 2:32 PM **Session 10 Introductions**

## **SESSION 10 | CHD & LANGUAGE - MAPPING THE TERRAIN**

2:32 PM – 2:47 PM **Early Feeding Challenges and Language Acquisition**

2:47 PM – 3:02 PM **Early Language Development: The CHD Landscape**

3:02 PM – 3:17 PM **Building Strong Foundations: Evidence-Based Strategies to Support Early Speech and Language Development**

3:17 PM – 3:32 PM **Early Literacy and Language Development in CHD**

3:32 PM – 3:47 PM **The Preschool Language Landscape: Outcomes in Children with Congenital Heart Disease**

3:47 PM – 4:02 PM **What's on the Horizon: Speech and Language Outcomes in CHD**

4:02 PM – 4:20 PM **Session 10 Q&A**

4:20 PM – 4:40 PM **CNOC 2025 WRAP-UP - Abstract Winner, Thank yous, 2026 Announcement**

## **WINE & WISDOM MODERATED POSTER SESSION - PART 2**

**5:00 PM - 7:00 PM**

## **SATURDAY, SEPTEMBER 20, 2025**

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### **POST CONFERENCE CONCURRENT WORKSHOPS - SEPARATE REGISTRATION REQUIRED**

7:00 AM – 12:00 PM **REGISTRATION**

7:00 AM – 8:00 AM **CONTINENTAL BREAKFAST**

### **BASECAMP TO SUMMIT: NAVIGATING THE CHALLENGES, APPLICATIONS, AND IMPACT OF THE BAYLEY ASSESSMENT**

#### *Objectives:*

*A hands-on, interactive workshop designed for professionals looking to refine their skills in administering and interpreting the Bayley Scales of Infant and Toddler Development. Please note: This is NOT a Bayley Certification course. Instead, this workshop offers practical experience with Bayley administration, scoring, report writing, and in-depth discussions on special population considerations and research implications. Participants will engage in case-based learning, hands-on practice, and collaborative discussions to enhance their clinical and research applications of the Bayley Assessment.*

8:00 AM – 8:05 AM **Welcome and Introductions**

8:05 AM – 8:16 AM **Bayley Site Survey**

8:16 AM – 8:30 AM **Domain Specific Principles and Guidelines**

8:30 AM – 8:46 AM **Cognitive**

8:46 AM – 9:02 AM	<b>Receptive Language</b>
9:02 AM – 9:18 AM	<b>Expressive Language</b>
9:18 AM – 9:34 AM	<b>Fine Motor</b>
9:34 AM – 9:50 AM	<b>Gross Motor</b>
9:50 AM – 10:20 AM	<b>BREAK</b>
10:20 AM – 10:22 AM	<b>Moderator Introductions</b>
10:22 AM – 10:33 AM	<b>Tips for Learning the Bayley - How to Prevent Drift</b>
10:33 AM – 10:46 AM	<b>Different Models for Bayley Administration</b>
10:46 AM – 10:59 AM	<b>Range of Use for Clinical Practice</b>
10:59 AM – 11:12 AM	<b>Meaningful Reports for Families and Discussing Results</b>
11:12 AM – 11:25 AM	<b>Limitations of the Bayley</b>
11:25 AM – 11:38 AM	<b>Research Implication</b>
11:38 AM – 11:51 AM	<b>Bayley Growth Curves</b>
11:51 AM – 12:00 PM	<b>Q&amp;A</b>

## **TAKING NEUROIMAGING IN CHD TO NEW HEIGHTS**

### *Objectives:*

*This post-conference workshop will provide a deeper dive into neuroimaging for the CHD population. Data will be presented on how early brain injury leads to long-standing alterations in brain structure and function and how these changes can predict neurodevelopmental outcome. This session will include cutting-edge knowledge in CHD, as well as the latest research from other cognitive neuroscience studies, to improve understanding of adverse brain and neurodevelopmental outcomes for CHD and to stimulate discussion on how these methods might be applied to CHD.*

8:00 AM – 8:05 AM	<b>Neuroimaging Welcome and Introductions</b>
8:05 AM – 8:30 AM	<b>Unlocking Neurodevelopment Through the Structural Connectome</b>
8:30 AM – 8:55 AM	<b>Unraveling Functional Brain Networks to Understand Neurodevelopment</b>
8:55 AM – 9:20 AM	<b>Risk for Early Brain Aging in CHD</b>
9:20 AM – 9:30 AM	<b>Q&amp;A</b>
9:30 AM – 10:00 AM	<b>BREAK</b>
10:00 AM – 10:25 AM	<b>How Social Disparities Shape the Developing Brain</b>
10:25 AM – 10:50 AM	<b>Decoding Dyslexia with Neuroscience</b>
10:50 AM – 11:15 AM	<b>The Intersection of Brain Physiology, Physical Health, and Cognitive Functioning</b>
11:15 AM – 11:25 AM	<b>Q&amp;A</b>
11:25 AM – 11:40 AM	<b>How Might We Apply These Concepts to CHD</b>
11:40 AM – 12:00 PM	<b>Neuroimaging Panel Discussion</b>