

Children's Specialized Hospital Research Center Newsletter



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Welcome!

The Children's Specialized Hospital (CSH) Research Center Newsletter provides an overview of research conducted at CSH. We regularly share information about CSH studies, lectures, and resources. Each issue features CSH research news and upcoming events and activities. Please reach out with any suggestions or questions.

About the Research Center at CSH

The Research Center at Children's Specialized Hospital strives to advance pediatric rehabilitation by initiating and supporting evidence-based studies that explore innovative interventions, technologies and approaches to specialized care for children and adolescents.

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JOIN OUR STUDIES

Several research studies are actively recruiting participants. To see which studies you may be eligible to join, and to learn more about how to participate, see our [autism](#), [brain injury](#), [chronic health conditions](#), [cognition](#), and [mobility](#) studies.



Distinguished Lecture Series

Our most recent speaker:

Dr. Keri Rosch (Kennedy Krieger Institute) presented “Cognition & Motivation In ADHD: Understanding Treatment Mechanisms and Sex Differences” on December 8th. Please see [this website](#) for the link to Dr. Rosch's presentation, as well as links for all past speakers. Please contact Tomiko Hackett (thackett@childrens-specialized.org) with any questions.



Next up:

To be determined!
Please contact Tomiko Hackett at thackett@childrens-specialized.org with any suggestions for speakers or topics. It is appreciated!



CSH Recent Publications

Dr. Krishan Yalamanchi (Physiatry, CSH) partnered with Claire Marchetta (Research Center, CSH) and other colleagues at the Kessler Foundation on their study "Examining the use of a rest-activity ratio in a pediatric rehabilitation setting," recently published in *Archives of Physical Medicine and Rehabilitation*. This study found that children with lower functional status at admission, especially in the cognitive domain, had lower rest-activity ratios, suggesting poorer sleep-wake regulation. Similar to findings in adults with acquired brain injuries, this ratio may have utility in tracking sleep-wake regulation in the pediatric rehabilitation setting.

Read the study [here](#). See the full list of CSH research publications [here](#).

Featured CSH Patient/Family

Meet Tyler B.



And read in his own words why Tyler was involved in research:



Please describe your experience as a research participant at CSH:

The study I participated in with Children's Specialized Hospital was through a Zoom meeting, so I didn't get the whole experience. It was still good, though. I was very happy to answer the director's questions. I also enjoyed listening to the other participants share information about themselves and what brought them to the meeting.

Why did you decide to get involved in research at CSH?:

I decided to get involved in the research because I felt it can be very beneficial. The study was very specific and focused on something not many people experience, but it's still very important. I was delighted to realize that people actually care about trying to research this topic. To be clear, the topic was how young people transition back to school after staying in the hospital for a long period of time. Personally, it was one of the most emotionally draining and traumatic things I've had to experience, so I was incredibly grateful for the researchers trying to find out how they can make this transition easier for people in the future. I was passionate about giving them as much advice or information as they needed to help them with the research.

Is there anything else you would like to share?

I'd like to share that every researcher in every hospital does amazing things. The fact that so many people out there dedicate their lives to developing equipment, ideas, scientific research, or whatever they aim for is incredible. These people can change the lives of many and not even be aware of it. That's what I believe as someone who was injured and rehabilitated through Children's Specialized Hospital.

Researcher Highlight: the Chronic Pain research team!



Dr. Katherine Bentley is a pediatric physiatrist at CSH. She is the section chief of physiatry, director of the chronic pain program, director of the continuing medical education department and assistant director of the pediatric rehabilitation medicine fellowship.

Kate Vieni is a pediatric physical therapist at CSH. She is a senior physical therapist and the program lead for physical therapy within the Chronic Pain Management Program.

Kate Hottinger, PhD is a licensed pediatric psychologist and works as the inpatient therapy supervisor for the psychology department at CSH in New Brunswick.

In their own words: "There is a gap in current research in the management of the pediatric population with chronic pain. There are also very limited interdisciplinary team options internationally to support these patients. This has inspired the following research studies: We developed a partnership with Cincinnati Children's to look at validating an observational pain scale as our current pain scales are more appropriate for acute versus chronic pain and functional disability. This study is currently ongoing, with approximately 100 individuals participating. We are also passionate about providing supportive education about pain to our patients in order to empower them to feel safe and improve function. We are looking to adapt both the assessment of education received and the education materials for the pediatric population. Our team has presented preliminary data on our research both nationally and internationally. We are presenting a workshop in the upcoming year at the Society for Pediatric Pain Medicine conference on the use of pain neuroscience education in an inpatient chronic pain program. Kate Vieni is currently completing her Fellowship in Pain Science through Evidence in Motion and Purdue University, which will include ongoing research in the field of pain sciences specific to the needs of the pediatric and adolescent population. Kate is currently working with pain experts, and her fellowship will provide the program at CSH with an evidence-based treatment approach."



Neurodevelopmental Pediatric Research Team Update

Joman Y. Natsheh, MD, PhD, Research Lead of the Developmental and Behavioral Pediatrics section at CSH has received a \$15,000 award from Texas Woman's University, Woodcock Institute for the Advancement of Neurocognitive Research and Applied Practice. The grant will fund a study looking at behavioral patterns in children with autism spectrum disorder (ASD) and in children with a dual diagnosis of ASD and attention-deficit/hyperactivity disorder (ADHD). Children with ASD often show patterns of restricted or repetitive behavior, which can be difficult to change, even in situations where such behavior could lead to negative consequences. This award will allow Dr. Natsheh to investigate whether these restricted interests are due to an over-reliance on reflexive habits at the expense of flexible goal-directed behavior. Dr. Natsheh's previous research found a deficit in goal-directed behavior in children with ADHD, so it is expected that a dual diagnosis of ASD and ADHD will result in a further bias toward habitual control.

The study involves a computer-based cognitive task as well as a battery of neuropsychological assessments. A total of 50 children will be enrolled in the study (25 children with ASD and 25 children with ASD and ADHD). Characterizing the role habits play in ASD and ADHD behavioral manifestations will advance our understanding of the cognitive profile of these disorders, and will inform the development of behavioral interventions that can improve the quality of life of children with ASD and ADHD.

Deeper Dive



This month's focus is on the Center for Discovery, Innovation, and Development (CDID)'s work on social determinants of health (SDOH). Health care delivery drives only 20 percent of health outcomes, with social determinants of health — including housing, living environment, employment status, and access to transportation and healthy food — playing a much bigger role in overall health. Conducting SDOH screening is a family-centered approach for addressing the health outcomes of our patients. Screening for SDOH in a pediatric environment includes many benefits such as improving diagnostic algorithms, identifying children and youth who need more support, improving patient-provider relationships, and collecting data for an epidemiological purpose.

CDID collaborated on a research project with Dr. Manuel Jimenez (Developmental Pediatrician) and Dr. Anna Malia Beckwith (Section Chief - Neurodevelopmental) that initiated a SDOH screening process at the CSH Newark outpatient location in December 2019. After the completion of the research study in Newark, this process was later scaled to all sites and service lines at CSH.

The screening process is currently done via text/email or by a CSH staff member called a family navigator approximately one week ahead of their appointment. A positive screen is a family who self-identified as having a social determinants of health screening issue. The areas that a family may have an issue include food insecurity, housing, living environment, and transportation. All families who have identified a need are given resources within 24 hours of the screening via email. Most families prefer to navigate the resources themselves. If a family has reported an issue, it is the clinician's responsibility to ask the family if they received resources and whether they would like additional help. If they would like additional help, they are connected to a Patient Care Coordinator (PCC) who will further assist.

Thus far, we have learned that approximately 37% of all CSH families have a positive screen, and about 22% of all CSH families are food insecure. While all families are provided with resources that they can navigate on their own or with the assistance of a CSH staff members, CSH also began to build out programming that could directly assist families with their food insecurity issues. Based on this information, CDID has worked with 10 outpatient centers to provide food bags on site that are available to families who identify as food insecure, and one site that is able to connect families with free home delivery services. In 2022, nearly 2,000 families have received food at one of our outpatient sites.



CDID
Center for Discovery,
Innovation and Development

**A huge thank you to Dr. Victoria Porterfield Gregorio,
Director of the Center for Discovery, Innovation &
Development, for this excellent service and write up!**



Join our team! The CSH Research Center is hiring for the following position:

Bilingual Autism Research Assistant

Assists Investigators of Autism Research grants to recruit, consent, and collect data from participants, and enter data into database if applicable. Bilingual Spanish/English. View the job posting [here](#).

DID YOU KNOW?

Upcoming Events/Conferences/Grants

Conferences:

- American Professional Society of ADHD and Related Disorders
January 12-15, 2023. Orlando, FL
- International Neuropsychological Society
February 1-4, 2023. San Diego, CA
- Association of Academic Physiatrists
February 21-24, 2023. Anaheim, CA
- Eastern Society for Pediatric Research
March 10-12, 2023. Philadelphia, PA
- Cognitive Neuroscience Society
March 25-28, 2023. San Francisco, CA
- Society of Biological Psychiatry
April 27-29, 2023. San Diego, CA
- International Society for Autism Research
May 3-6, 2023. Stockholm, Sweden



Grant announcement:

- The Organization for Autism Research's Community Grant Competition (up to \$10,000).
Deadline: April 24, 2023

Meet the CSH Research Center Team

Michael Dribbon, Ph.D.



Vice President of Business Development and Chief Innovation & Research Officer

Research Focus: Intervention outcomes, Social Determinants of Health

Michael likes music, travel, and time with family.

Jill Harris, Ph.D.



Associate Vice President, The Research Center, Coordinator of The Autism Program, Spark Site Coordinator

Research Focus: ASD screening for under-resourced young children, transition to adulthood for youth with disabilities

Jill likes going for walks, listening to books on tape, and vacationing in Maine.

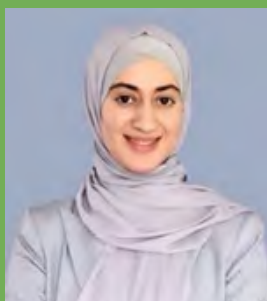
Claire Marchetta, MPH
Research Liaison & Education Director



Research Focus: Epidemiological factors for developmental disabilities and birth defects

Claire enjoys outdoor recreation in all forms – especially hiking, camping, skiing and running.

Joman Y. Natsheh, M.D., Ph.D.
Research Lead, Developmental and Behavioral Pediatrics



Research Focus: Neural and behavioral correlates of action-control in children with neuro-developmental disorders

Joman enjoys reading; especially Arabic literature. She loves to travel and explore, and she can spend hours immersed in graphic design.

Mayank Seth, Ph.D.
Research Lead, Psychiatry



Research focus: identification of factors underlying poor clinical outcomes, with an eye towards developing more efficacious rehab interventions.

Mayank enjoys spending time with family & friends, reading, and listening to music. He also enjoys going on hikes and biking.

Amira Herstic, MS
Research Coordinator, Developmental and Behavioral Pediatrics



Research Focus: Neuroscience of language and motor development in children with ASD and ADHD

Amira enjoys reading, crocheting, traveling, and playing with her baby.

Uriel Richman, MA
Research Assistant, Developmental and Behavioral Pediatrics



Research Focus: Cognition and child development

Uriel enjoys hiking, camping, visual arts and playing tabletop games.

Tomiko Hackett, MPH
Research Engagement Coordinator








Research Focus: Mental health/substance use disorders, children's health, sleep and growth

Tomiko enjoys traveling, being in nature, reading, and spending time with friends.



To learn more about our research, if you are interested in discussing potential collaborations, or if you have questions or comments, please contact us at:

-  **Jill Harris, PhD** Associate Vice President, The Research Center and Coordinator of The Autism Program
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