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. Nancy Cheak-Zamora (Department of Health Sciences, University of Missouri) presented "To Independence and Beyond: Facilitating the Transition to Adulthood for Autistic Youth" on September 22nd. Please see this website for the link to Dr. Cheak-Zamora's presentation, as well as links for all past speakers. Please contact Tomiko Hackett (thackett@childrens-specialized.org) with any questions.



Next up:

On December 6th, 2022, Dr. Keri
Rosch (Kennedy Krieger Institute)
will present "Cognition &
Motivation In ADHD:
Understanding Treatment
Mechanisms and Sex Differences."
Stay tuned for more details,
including how to register. Please
contact Tomiko Hackett with any
questions.



Featured CSH Patient/Family

Meet the Mina family!



And read in their own words why the Mina family is involved in research:



Please describe your experience as a research participant at CSH:

Kiko enjoyed being in the study. Aside from the socialization with the researchers which he looked forward to every visit, he got engaged with the way the study was conducted. He watched closely at the screen which showed his pattern of walking and how his hips and knees bent on his paralyzed side. He witnessed how he wasn't bending as he should on his left side and how bending can change his way of walking. Dr. Barrance's team was not only very supportive and excellent in guiding Kiko throughout the study, they made it fun too.

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

Children's Specialized Hospital is very special to us! Our son, Kiko who had multiple brain surgeries including a Right Anatomical Hemispherectomy (the right half of his brain was removed) at age 2 is able to walk, talk, and function well because of all the dedicated doctors and therapists at CSH. Despite being given a prognosis of 1-year, and having a left sided paralysis and blindness on the left half of both eyes, Kiko recently marched with the high school seniors in our town. After Kiko's first 2 brain surgeries, we lived in CSH for over a month and he got extensive PT, OT, Speech, Recreational, and Aquatic therapies. Without Dr. Michael Armento, Kiko's very thorough and exceptional physiatrist and all the many dedicated therapists he had for many years, he would not be at the functional level he is now. CSH is Kiko's saving grace, a contributory reason to our participation. Primarily, however, we hope that this study would benefit children afflicted with a disability affecting their gait.

Did participating in research help you/your family? If so, how?:

The study gave Kiko a sense of awareness that a simple knee and hip flexion deliberately thought of can make a change in his gait pattern. However, we just have to reiterate that as often as we could as it is tough for him to be in that frame of thinking. Hopefully, as he matures, this will make more sense to him.



Meet Our Fall Interns!



Katherine McCabe



Katherine is a recent graduate from Boston College. She majored in Neuroscience.

She will be working with the Autism research team. Her other research interests include intellectual and learning disabilities, and accessibility. In her free time, she enjoys graphic design and photography.

Rida Saad



Rida is a junior at New York University majoring in Psychology.

She will be working with the Chronic Illness research team. Her other research interests include topics in developmental psychology. In her free time, she enjoys music, reading, and time with friends and family.

Elyse Quiñones



Elyse is a junior at Rutgers University majoring in Biotechnology.

She will be working with the Chronic Pain research team. Her other research interests include neurological disorders and sexual/reproductive health. In her free time, she enjoys time with friends and reading.

For more information about our research internship program, please click here.

Deeper Dive:



This month's focus is on a new study conducted by the Developmental and Behavioral Pediatrics research team. This proposed study will investigate the relationship between blood pressure and attentiondeficit/hyperactivity disorder (ADHD). It will further examine this relationship in children with ADHD who are prescribed methylphenidate (MPH), a psychostimulant that has been shown to have cardiogenic effects with chronic use. Heart rate and blood pressure have been investigated and closely monitored to ensure the safety of MPH use. However, no studies have investigated the interplay between ADHD, blood pressure, and psychostimulant usage through age-appropriate blood pressure measurements in pediatric populations. Therefore, we will review patient medical records to study the effects of MPH on ADHD symptoms while also monitoring blood pressure measurements during follow-up visits. Interested CSH clinical staff can get involved with this study by reaching out to our research team (see "Contact Us" section).

This study will
explore the
relationship between
blood pressure and
ADHD in children.



CSH Recent Publications

This study found that children with more Adverse Childhood Experiences had fewer preventative dental visits, and more primary care sick and ER visits.

Dr. Manuel E. Jimenez (Pediatrics, RWJUH-New Brunswick and CSH) partnered with Dr. Chidiogo Anyigbo (Cincinnati Children's Hospital) and Dr. David W. Sosnowski (Johns Hopkins University) on their paper "Association between Adverse Childhood Experiences (ACEs) at age 5 years and healthcare utilization at age 9 years," recently published in *The Journal of Pediatrics*. This paper was about a study they conducted examining children's number of ACEs at age 5 years on 4 types of healthcare utilization at age 9 years. They found associations between having ≥4 ACEs at age 5 and lower odds of preventative dental care visits, and higher odds of primary care sick and ER visits at age 9, compared with no reported ACEs at age 5. Importantly, these findings support that suboptimal healthcare utilization patterns for people exposed to adversity begin in early childhood, which could result in an accumulation of healthcare costs across the life course.

Read the study <u>here</u>. See the full list of CSH research publications <u>here</u>.



Upcoming Events/Conferences/Grants

Conferences:

- 2022 State-of-the-Science on Disability Statistics October 6-7, 2022. Washington, DC (hybrid)
- Society for Developmental and Behavioral Pediatrics
 October 21-24, 2022. Denver, CO
- 2022 RUCARES 2nd Annual Symposium (Autism) October 26, 2022. Piscataway, NJ
- American Congress of Rehabilitation Medicine November 8-11, 2022. Chicago, IL
- <u>Society for Neuroscience (Neuroscience 2022)</u> November 12-16, 2022. San Diego, CA (hybrid)



Grant announcement:

 New Jersey Health Foundation's <u>Annual Grant Program</u> (up to \$35,000). Deadline: Nov. 7, 2022

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 neurodevelopmental disorders

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



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



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



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.



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 jharris@childrens-specialized.org, 908-301-2525
- Claire Marchetta, MPH Research Liaison & Education Director cmarchetta@childrens-specialized.org, 732-258-7288
- Joman Y. Natsheh, MD, PhD Research Lead, Developmental and Behavioral Pediatrics jnatsheh@childrens-specialized.org, 908-588-9608
- **Tomiko Hackett, MPH** Research Engagement Coordinator thackett@childrens-specialized.org, 732-258-7296