



Children's Specialized Hospital Research Center Newsletter

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Volume 3 Issue 3

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 also 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

Join us for on Oct. 3 to hear Dr. Alan Mendelsohn (NYU School of Medicine/Bellevue), present “Promoting Equity in Early Child Development through Pediatric Primary Care and Partnerships with the Community” (overarching focus: promoting resilience in children). To register to attend virtually, please **[click this link.](#)**



December 2023 speaker:

Be on the lookout for more information about upcoming speakers, and please contact thackett@childrens-specialized.org with any suggestions for speakers/topics. It is appreciated!

CSH RESEARCH ENGAGEMENT



Research Center Site Visits

On August 24th, Tomiko Hackett visited staff at the CSH-Rutgers University Center for Autism Research, Education, and Service (RUCARES), bringing pizza and giveaways and chatting about their impressive research and how the Research Center can support them. Additionally, the Research Center has planned site visits to Bayonne and Newark, and they look forward to chatting with staff and answering any questions about research and how they can get involved!

Featured CSH Patient/Family: A call for participants!

Are you a CSH research participant or family member reading this and would like to share your story? Or a researcher who knows of a family who you think would like to be featured in this section? Please contact Tomiko Hackett at thackett@childrens-specialized.org. It is very much appreciated!

Deeper Dive

This issue's focus is on the research of Dr. Charles Borgen and his study “Comparing In-Person and Virtual Attendance Rates for Autism Evaluations.” This study seeks to understand the attendance patterns and the difference in rates between virtual and in-person appointments, specifically for autism evaluations conducted at CSH through the psychology department based out of Mountainside/Union. Although virtual appointments increase flexibility for patients, their families, and clinicians for outpatient appointments and have been evidenced to have decreased no-show rates in outpatient treatment, there has been a dearth of research on attendance rates for autism evaluations, examining and comparing virtual and in-person appointments. The preliminary findings of this study found that no-show percentage rates for telehealth assessment for ASD were higher than that of in-person appointments when comparing two 12-month time blocks; June 2020 through July 2021 for virtual evaluations (374 total appointments) and June 2021 through July 2022 for in-person appointments (663 total appointments). The current study intends to analyze some of the predictive factors that influenced rates of attendance, including: time spent on the waitlist, existing diagnoses prior to the evaluation, birth order of the patient being evaluated, severity of autism symptoms reported prior to evaluation, and insurance type. By investigating these factors, this study can gain insight into what impacts appointments conducted in-person versus those conducted through telehealth, and whether they impact attendance rates. Moreover, the study findings will contribute to identifying areas requiring attention to improve attendance rates for appointments, regardless of the mode of delivery.

A big thank you to Dr. Borgen for this write-up about his study!

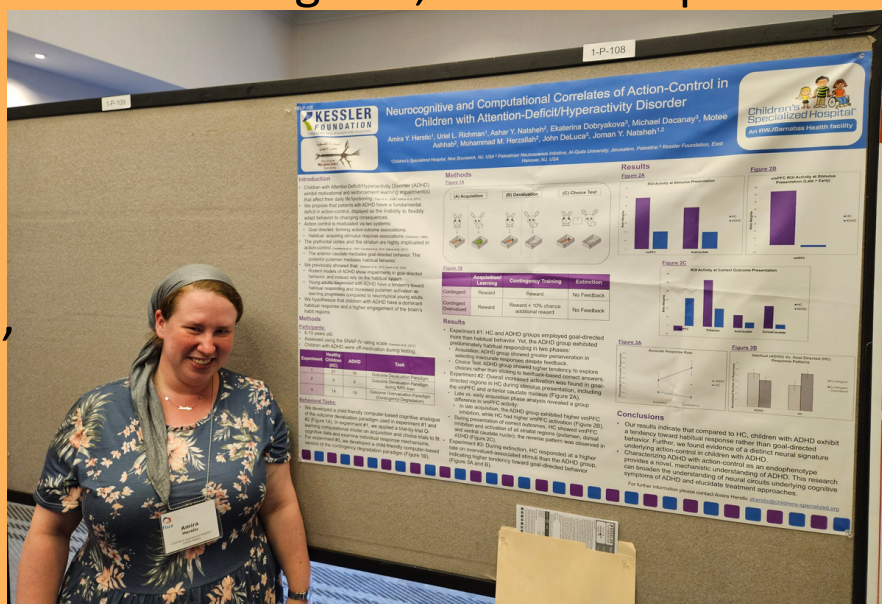


Developmental and Behavioral Pediatrics Research Team Update

Amira Herstic, Research Coordinator of the Developmental and Behavioral Pediatric research team, participated in the 2023 Flux Congress, a conference that was held in Santa Rosa, CA between September 6th and 9th. As part of an ongoing study, Amira presented a poster entitled “Neurocognitive and Computational Correlates of Action-Control in Children with Attention-Deficit/Hyperactivity Disorder.” This poster described three experiments that were designed to study action-control, the process of flexibly adapting behavior to changing consequences. The results showed that children with ADHD had distinct behavioral and neural patterns, including a tendency to rely on habitual rather than goal-directed behavior, and differences in activation in relevant brain regions, when compared to typically developing children.

The poster sparked many interesting discussions at the conference, including how to assess working memory and learning in children with ADHD, and how these experiments could be used for behavioral training in ADHD.

Thank you Amira, for this write-up about FLUX!



New Developmental and Behavioral Pediatrics Research Team Volunteer: Christina George

Christina George is a recent medical graduate from Medical University of the Americas, pursuing a residency in Family Medicine. Her past research interests have included neurocognitive processing in the setting of disordered eating behaviors, as well as persistent migraine with aura. In her free time, she enjoys learning new recipes, and spending time with her dog.

Featured Researcher: Dr. Mayank Seth Research Lead, Physiatry

Mayank Seth, PhD, is the Research Lead for Physiatry at Children's Specialized Hospital. He is also a Research Assistant Professor at Rutgers New Jersey Medical School. His research interest focuses on exploring various modifiable and non-modifiable factors that contribute towards poor clinical outcomes, with an eye towards developing more efficacious clinical/rehabilitation interventions and informing patient care. He completed his Postdoctoral training at University of Delaware where his work centered on investigating clinical outcomes in individuals with limb amputation. He has a PhD in Health and Rehabilitation Sciences, from Stony Brook University, and has previously completed a Masters in Bioengineering (University of Strathclyde, UK) and Bachelors in Prosthetics and Orthotics (AIIPMR, India). At Children's Specialized Hospital, Dr. Seth's work is primarily centered on establishing, promoting, and supporting clinical research projects within the Physiatry section. Please see his [Google Scholar Profile](#) and [LinkedIn Profile](#) for more information about his research and background.



Dr. Seth's ongoing research delves into the impact of an in-patient intensive interdisciplinary pain treatment program at CSH on the outcomes of children with chronic pain. Pediatric chronic pain, defined as pain lasting more than 3 months, is a debilitating condition, and is a leading cause of disability and disease burden worldwide. Despite the profound impact of pediatric chronic pain on the functioning and quality of life of children and adolescents, research on its management is somewhat limited and interdisciplinary support teams for chronic pain patients are scarce worldwide. Dr. Seth and his team's research, has highlighted the positive effects of inter-disciplinary chronic pain treatment and management on patient outcomes. Primarily, the program has demonstrated marked enhancements in both the functional capabilities and quality of life of children with chronic pain following their participation. Concurrently, patients reported diminished pain intensity. Additionally, Dr. Seth and his team's research evidenced an association between a patient's self-reported function and their change in pain. In essence, patients with higher self-reported function tend to experience more substantial reductions in their perceived pain. Building upon this evidence, the research has led to the proposition of anchors or cut-points for several commonly employed functional assessments. These anchors are designed to predict change in pain following treatment. These research findings will be disseminated via publications and conference presentations including two talks at the upcoming 100th American Congress of Rehabilitation Medicine conference.


And please click on [this link](#) to watch Dr. Seth's video where he describes why he thinks it's important to conduct research.

A huge thank you to Dr. Seth for this section!




Meet Our Fall Interns!

Theresa Carlos




Theresa is a junior at the New Jersey Institute of Technology and is majoring in biomedical engineering. She will be working with the CIMP research team. Her other research interests include autoimmune conditions, neuromuscular disorders, and the effects of assistive technology on clinical outcomes. In her free time she enjoys cooking, listening to music, and learning languages.

Stuti Mohan



Stuti is a senior at the New Jersey Institute of Technology and is majoring in biomedical engineering. She will be working with the Psychiatry research team. Her other research interests include leveraging data-driven approaches to create more accessible and affordable interventions. In her free time, she enjoys dancing, skiing, and traveling.

Angelina Paoline



Angelina is a senior at Seton Hall University and is majoring in psychology. She will be working with the Developmental and Behavioral Pediatrics research team. Her other research interests include how disorders such as schizophrenia/ personality disorders affect interpersonal relationships in teenagers and young adults. In her free time she enjoys reading, baking, and hanging out with friends and family.



CSH Recent Publications

Researchers at CSH, in collaboration with partners at the Kessler Foundation and Rutgers, recently published their article "Transfer Timing and the Length of Medication Weaning for Neonatal Opioid Withdrawal Syndrome" in *Hospital Pediatrics*.

From the abstract: "Many infants with neonatal opioid withdrawal syndrome (NOWS) from prenatal exposure to opioids require transfer to a pediatric inpatient unit for medication weaning. The purpose of this study was to assess the difference in the duration of medication weaning between infants transferred by day of life (DOL) 14 versus later (DOL 15 and after) to a tertiary care setting for pharmacological and nonpharmacological management of NOWS. This single-site retrospective cohort study used medical chart data from infants with NOWS transferred to specialized care between May 2016 and June 2021 (n = 87). The majority of the infants in this sample were transferred from acute to tertiary care after DOL 15 (62% versus 38% by DOL 14). The predicted number of days to wean is 14.2 among those infants transferred by DOL 14, whereas the duration of weaning is 6.6 days longer among the later transfer group (20.8 days), adjusting for key covariates. The duration of weaning is also prolonged among infants with greater NOWS symptom severity and with prenatal exposure to psychotropic medications. **In conclusion, delayed treatment prolongs NOWS symptoms and increases the burden on the health care system. Earlier referral from NICUs to pediatric inpatient units with environmental supports could reduce prolonged medication exposure and length of hospitalization for infants diagnosed with NOWS.**"

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

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.

Claire Marchetta, MPH



Interim Director of Research

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

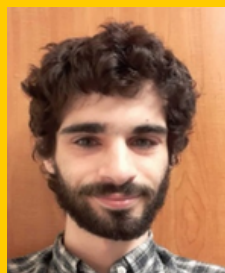


Amira enjoys reading, crocheting, traveling, and playing with her baby.

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 as well as other chronic illnesses



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

DID YOU
KNOW?

Upcoming Events/Conferences/Grants

Sample of Conferences/Events:

- Association of Pediatric Hematology/Oncology Nurses
September 21-23, 2023. Cleveland, OH
- Pediatric Complex Care Association
October 18-20, 2023. Oklahoma City, OK
- American Academy of Pediatrics
October 20-24, 2023. Washington, DC
- American Academy of Child and Adolescent Psychiatry
October 23-28, 2023. New York, NY
- American Congress of Rehabilitation Medicine
October 30-November 2, 2023. Atlanta, GA
- American Public Health Association
November 14-15, 2023. Atlanta, GA
- American Speech and Hearing Association
November 16-18, 2023. Boston, MA



CONTACT US



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

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- **Mayank Seth, PhD** Research Lead, Physiatry
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- **Tomiko Hackett, MPH** Research Engagement Coordinator
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