

Children's Specialized Hospital Research Center Newsletter



An RWJBarnabas Health facility

June 2023

Volume 3 Issue 2

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.

In this issue:

- 1 Welcome/About the Research Center/Join Our Studies
- 2 Distinguished Lecture Series
- 2 Meet Our Interns
- 3 Featured CSH Patient/Family
- 4 Neurodevelopmental Update
- 5 Featured Researcher
- 6 Deeper Dive
- 6 Upcoming Conferences
- 7 Recent Publication
- 7 Goodbye Dr. Jill Harris!
- 8 Meet the Research Center Team
- 9 Contact Us

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

Most recent speaker:

Dr. Karishma Datye (Vanderbilt University Medical Center) presented “Beyond the Blood Sugar: Caring for the Pediatric Patient with Type 1 Diabetes” virtually on June 14th from 12-1:30pm. For more information about the DLS as well as links for all past speakers, please visit [this website](#). Contact Tomiko Hackett (thackett@childrens-specialized.org) with any questions.



September 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!

Meet Our Summer Interns!

Animesh Borad



Animesh will be a sophomore at Rutgers University-Camden and is majoring in Biology.

He is working with the Psychiatry research team. His other research interests include orthopedics and sports medicine. In his free time, he enjoys watching 76ers games with his friends and playing club soccer.

Dahlia Cohen



Dahlia will be a junior at the University of Michigan and is majoring in Public Health Sciences.

She is working with the Neurodevelopmental research team. Her other research interests include hormonal contraceptives and effects of religion on healthcare. In her free time, she enjoys dancing, cooking, and running with her dog.

Shruti Subramanian



Shruti will be a junior at the University of Michigan and is majoring in Neuroscience.

She is working with the Chronic Illness Management Program research team. Her other research interests include autoimmune disorders and motor neurological diseases. In her free time, she enjoys running, hiking, and hanging out with family and friends.

Featured CSH Patient/Family

Meet the Lee family!



Read why the Lee family is involved in research:



Please describe your experience as a research participant at CSH:

CSH became a clinical site for the SPARK autism research study so our family Wain (Dad), Lily (Mom), Nicole (daughter) and Eric (son) decided to participate in the world's largest autism research study. After creating online accounts, SPARK sent saliva collection kits to our home and after gathering the saliva samples, we sent them back to SPARK for genetic analysis by researchers. Providing the saliva sample was a relatively easy procedure for our son Eric with autism but our daughter Nicole with autism needed some prompting. Lily's first sample contained insufficient DNA, so she needed to send in another saliva sample.

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

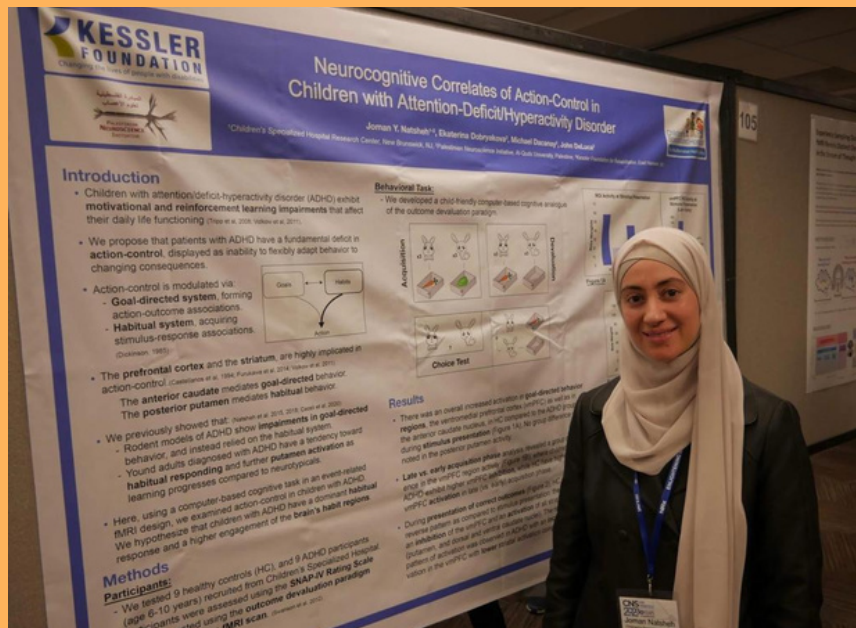
We wanted to be part of any genetic research that can help in advancing the understanding of autism. We were especially interested that SPARK is looking for genetic changes that contribute to autism.

Is there anything else you would like to share?

Since joining the SPARK research study, Lily has become a member of the SPARK Community Advisory Council. The council helps guide SPARK's research and community activities. Some activities included participating in SPARK marketing focus groups, brainstorming on social media improvements, and providing feedback on the participant dashboard.



Developmental and Behavioral Pediatrics Research Team Update



Dr. Joman Y. Natsheh, Research Lead of Developmental and Behavioral Pediatrics, participated in the 2023 Cognitive Neuroscience Society (CNS) conference that was held in San Francisco, CA between March 25th and 28th. As part of an ongoing study, Dr. Natsheh presented a poster entitled “Neurocognitive Correlates of Action-Control in Children with Attention-Deficit/Hyperactivity Disorder.”

This study aims to investigate action-control patterns in the brains and behavior of children with ADHD. Action-Control refers to the process of selecting and executing actions through habitual or goal-directed behaviors. This research used an outcome devaluation paradigm, a behavioral computer game that is used to assess goal-directed behavior, that participants completed while undergoing an fMRI brain scan. The results of this study showed that children with ADHD displayed a distinct pattern of activation in the brain. Specifically, they exhibited lower activation than neurotypical children of goal-directed regions/circuits, which include the ventromedial prefrontal cortex and the anterior caudate nucleus. These findings could inform our understanding of the neurocognitive mechanisms underlying ADHD symptoms, and therefore, help advance behavioral interventions in children with this disorder.

New Developmental and Behavioral Pediatrics Research Team Volunteer: Nami Mahajan



Nami is a rising Junior at the University of Pittsburgh double majoring in Biological Sciences and Business. Her research interests include psychology, specifically how young children's cognitive skills are influenced by their parents and their environment. In her free time, she enjoys spending time with friends, watching TV, and trying new restaurants.



Featured Researcher: Dr. Wayne Fisher with CSH-RUCARES

Dr. Wayne Fisher is the Henry Rutgers Endowed Professor of Pediatrics in the Robert Wood Johnson Medical School and a core faculty member of the Brain Health Institute. He is also the inaugural director of the Rutgers University Center for Autism Research, Education, and Service (RUCARES), a board-certified behavior analyst at the doctoral level (BCBA-D), and a licensed psychologist. He was previously a tenured professor at the University of Nebraska Medical Center (UNMC) and at the Johns Hopkins University School of Medicine and the Kennedy Krieger Institute, where he built clinical-research programs in autism and developmental disabilities with international reputations for excellence. Dr. Fisher's methodologically sophisticated research has focused on several intersecting lines, including mathematical models of behavior, preference assessment, choice responding, and the assessment and treatment of autism and severe behavior disorders. His research has been notable for the creative use of concurrent schedules of reinforcement, which have become more commonplace in clinical research primarily because of his influence.

He has published over 200 peer-reviewed papers in over 30 different behavioral and/or medical journals, including: *the Journal of Applied Behavior Analysis*; *Psychological Reports*; *American Journal on Intellectual and Developmental Disabilities*; *Pediatrics*; *the Journal of Autism and Developmental Disorders*; *the Journal of Developmental and Behavioral Pediatrics*; and *The Lancet*. Fisher has had near-continuous federal grant support for his research for over 23 years. He is a past editor of the *Journal of Applied Behavior Analysis*, a past president of the Society for the Experimental Analysis of Behavior (SEAB), and a fellow in the Association for Behavior Analysis International.

He is the recipient of: the *Bush Leadership Award*; the *Award for Outstanding Contributions to Applied Behavioral Research from the American Psychological Association (APA), Division 25*; the *UNMC Distinguished Scientist Award*; the University of Nebraska system-wide award for *Outstanding Research and Creative Activity*; the *Don Hake Translational Research Award* from Division 25 of the APA, the *Outstanding Mentor of Graduate Students Award* from UNMC; the *Michael Hemingway Behavior Analysis Award* from the Behavior Analysis Certification Board; the *Joseph V. Brady Significant Research Contribution Award* from SEAB; and the *Journal of Applied Behavior Analysis Seminal Article Award* from SEAB. **To see a more complete list of all of Dr. Fisher's many impressive publications, please refer to [this Google Scholar link](#). For a more in-depth look at Dr. Fisher's recent research, please watch the video linked below!**

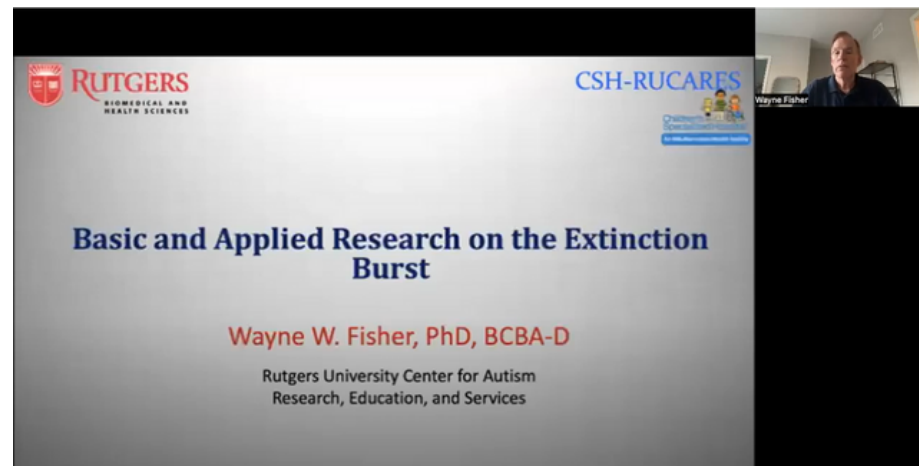


Deeper Dive

This issue's focus is on the research of Dr. Wayne Fisher. Please watch [this video](#) for more details about his work, as well as a large grant he and his team were recently awarded!

As Dr. Fisher notes: "We were recently awarded an R01 grant from the NIH to study the extinction burst...So what is an extinction burst?... Why is an extinction burst important?"

Please watch the video to learn the answers!



DID YOU KNOW?

Upcoming Events/Conferences/Grants

Sample of Conferences/Events:

- Rehabilitation Engineering and Assistive Technology Society of North America
July 24-26, 2023. New Orleans, LA
- Organization for Human Brain Mapping
July 22-26, 2023. Montreal, Canada
- Association of Rehabilitation Nurses
August 14-18, 2023. Providence, RI
- FLUX Society
September 6-9, 2023. Santa Rosa, CA
- Society for Developmental and Behavioral Pediatrics
September 7-11, 2023. Minneapolis, MN
- American Academy for Cerebral Palsy and Developmental Medicine
September 7-11, 2023. Chicago, IL
- Association of Pediatric Hematology/Oncology Nurses
September 21-23, 2023. Cleveland, OH





CSH Recent Publications

Dr. Jill Harris, in collaboration with researchers at Thomas Jefferson University, recently published their article "Caregivers' Views on Cannabis Use for Their Children with Autism" in *Research in Autism Spectrum Disorders*.

Autism is a neurodevelopmental disorder that is characterized by social communication challenges and restricted and repetitive behaviors. There has been recent interest in the potential use of cannabis to address autism symptoms or co-occurring conditions. Despite the increasing accessibility of cannabis, there is limited guidance about its use and usefulness for autism. The purpose of the study was to survey caregivers of autistic children about their experience, knowledge and interest in medical cannabis use for their children. Surveys were used to gather this information from caregivers of autistic children between 5-10 years old. Caregivers were recruited through Children's Specialized Hospital and the Autism Speaks website. Of the 4385 surveys sent, 568 responded. Respondents were primarily white or Latino, female, and without a college education. Most were not familiar with cannabis use in autism; 7.2% had experience providing their child with cannabis. Information they said they knew about cannabis was drawn mainly from the Internet. Eighty-five percent of participants reported that they were willing to try cannabis for their child with ASD to address difficulty focusing, hyperactivity, sensory sensitivities, and anxiety. About half of those respondents were concerned about interactions between cannabis and current medications. Findings suggest a willingness among caregivers to use cannabis for their children with ASD, but a need for more informed guidance on this topic. More studies are needed to understand whether cannabis is safe and effective for autistic individuals; clear and reputable information about cannabis and ASD is also needed.

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



As the words behind Dr. Jill Harris, Associate Vice President, The Research Center, Coordinator of The Autism Program, and Spark Site Coordinator state: Congratulations, and we will miss you! After 34 years, she is transitioning to one day a week on July 1, continuing to focus on the CSH Autism Center of Excellence. Jill began her career at CSH as a psychologist and has held a number of leadership roles since then, promoting the growth of both the Autism Program and Research Center at CSH. Jill is known for her work ethic, friendliness, positive energy and valuable contributions to numerous initiatives across the organization. The Autism Program and Research Teams are grateful for Jill's guidance and mentorship over the years. We wish her all the best in this new chapter where she'll have more time to spend with her grandson Wiley, as well as walking, listening to books on tape, enjoying restaurants and vacationing in Maine! Please join us in congratulating Jill on this exciting transition and thanking her for all of her incredible work over these many years!

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

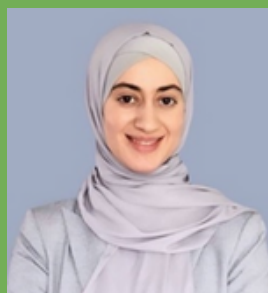


Research Focus: Epidemiological factors for developmental disabilities and birth defects

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

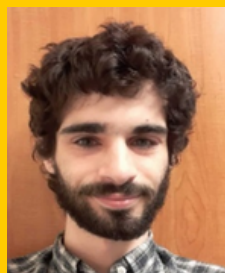


Research Focus: Neuroscience of language and motor development in children with ASD and ADHD

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 as well as other chronic illnesses


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:

 **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

 **Mayank Seth, PhD** Research Lead, Physiatry
mseth@childrens-specialized.org

 **Tomiko Hackett, MPH** Research Engagement Coordinator
thackett@childrens-specialized.org, 732-258-7296