

June
2022



THE CHILDREN'S HOSPITAL

AT SAINT PETER'S UNIVERSITY HOSPITAL
A MEMBER OF SAINT PETER'S HEALTHCARE SYSTEM

Safely treating you better...for life.

At the Forefront of Research: Saint Peter's Pediatric Specialist Seeks Answer for Earlier Diagnosis of Autism Spectrum Disorder

Autism spectrum disorder (ASD) is a complex developmental disorder that can cause substantial social, communication and behavioral challenges. Some children show ASD symptoms within the first 12 months of life while symptoms in others may not show up until 24 months of age or later. ASD will last throughout a person's life, although symptoms may improve over time.

The abilities of people with ASD can vary significantly. As children with ASD grow up, they may find it hard to develop friendships, communicate with peers and adults, or understand what behaviors are expected in school or at work. They may also have conditions such as anxiety, depression, attention-deficit/hyperactivity disorder (ADHD) or seizure disorder, which occur more often in people with ASD than in people without ASD.

The world still has a lot to learn about the causes of ASD and how these disorders affect people in different ways. Current treatments for ASD seek to reduce symptoms that interfere with daily functioning and quality of life.



Harumi Jyonouchi, MD, a board-certified pediatric allergist and immunologist at The Children's Hospital at Saint Peter's University Hospital, was recently awarded funds from The Brain Foundation and the O'Sullivan Foundation in support of her research focusing on neuro-immune interactions and epigenetic regulation (how a person's behaviors and their environment can cause changes that affect the way their genes work) in children with ASD. Her research focuses on epigenetic regulations of innate immune responses that have a profound effect on neuronal development and neuroinflammation.

Dr. Jyonouchi's research is significant because diagnosing ASD can be difficult since current diagnosis of ASD is based on subjective behavioral symptoms and there is no medical test to diagnose the disorder. That is, physicians look at the child's behavior and development to make a diagnosis. As a result, patients diagnosed with ASD are expected to be highly variable, and effects of genetic and environmental factors likely differ in each ASD patient.

Ideally, physicians would be able to diagnose ASD based on underlying mechanisms that cause these disorders. Such a diagnostic measure is called "endotyping." This research proposes to develop a measure of endotyping for ASD, focusing on a subset of ASD patients in whom development of ASD is associated with immune mediated inflammation.

There are some people with ASD who get sick easily with infections, have food or medication allergies, and/or chronic stomach problems. Dr. Jyonouchi's research has found that children with ASD who have such symptoms may suffer from harmful reactions of the immune system. Her study examines how a child's immune system, especially called innate immunity, reacts to various things such as germs. Her study examines what types of small molecules in the immune cells change due to such reactions in children with ASD and how these changes are affected by epigenetic regulation.

Individuals with autism suffer from co-morbid conditions, including immune mediated inflammation not only of the brain but of other organs. Dr. Jyonouchi's research examines inflammation that's associated not only with environmental factors but potentially driven by innate immune memory (IIM) responses generated by metabolic and epigenetic changes triggered by an initial stimulus.

Dr. Jyonouchi's research highlights the underlying mechanisms of immune mediated inflammation, something that can aid in endotyping ASD subjects.

By identifying the underlying mechanisms that cause ASD, physicians will be better able to diagnose ASD and treat it. ASD can sometimes be detected at 18 months of age or younger and by age two, a diagnosis by a physician can be considered reliable. However, many children do not receive a final diagnosis until they are much older. Some people are not diagnosed until they are adolescents or adults, which can cause a delay in getting the care that they need.

Outcomes from the research are expected to be helpful for assessing the role of immune mediated inflammation in ASD and what biomarkers will be helpful for assessing presence of immune mediated inflammation in ASD. If ASD patients are shown to have a component of immune mediated inflammation, the knowledge could be beneficial for physicians when evaluating different treatment options.

Dr. Jyonouchi's research is approved by Saint Peter's Institutional Review Board and 180 patients from across the U.S. are participating in this study via telemedicine.

Dr. Jyonouchi has received funding for various research projects from The Brain Foundation, The Jonty Foundation and the New Jersey Department of Health.



To schedule an appointment with Dr. Jyonouchi at the Division of Pediatric Allergy and Immunology at The Children's Hospital at Saint Peter's University Hospital, please call 732.339.7780.

Saint Peter's Nurses Earn Beacon Award for Excellence

PEDIATRIC INTENSIVE CARE AND CARDIAC PROGRESSIVE CARE UNITS RECOGNIZED

The Pediatric Intensive Care Unit (PICU) has earned the Silver Beacon Award for Excellence by the American Association of Critical-Care Nurses (AACN) for the 2022-2025 term. Saint Peter's Cardiac Progressive Care Unit (CPCU) has also earned the Silver Beacon Award for Excellence and this is the second consecutive time the CPCU has earned this coveted award.

"The Beacon Award for Excellence is a reflection of our nurses' commitment to providing exceptional patient care at the bedside every day," said Linda Carroll, MSN, RN, RN-BC, vice president of Patient Care Services and chief nursing officer, Saint Peter's Healthcare System. "This recognition means even more given the many challenges our nurses faced in the midst of the COVID-19 pandemic, yet always making quality and patient safety their focus above all else."

The Beacon Award for Excellence, a significant milestone on the path to exceptional patient care and healthy work environments, recognizes unit caregivers who successfully improve patient outcomes and align practices with AACN's six Healthy Work Environment Standards. Units that achieve this three-year, three-level award meet national criteria consistent with Magnet® Recognition, the Malcolm Baldrige National Quality Award and the National Quality Healthcare Award. Saint Peter's received its sixth consecutive Magnet® designation for Nursing Excellence in November 2020.

"I'm so proud of our pediatric intensive care nurses for achieving the Beacon Award," said Jacqueline K. Maloney, BSN, RN, PED-BC, nurse manager of the Pediatric Unit, Pediatric Intensive Care Unit and Pediatric Emergency Department at The Children's Hospital at Saint Peter's University Hospital. "They care for some of the

most vulnerable patients at Saint Peter's, from those that are only days old to adolescents. Each day, but especially throughout the COVID-19 pandemic, our nurses support parents often facing extremely challenging circumstances and they do it with the highest level of skill and compassion."

Earning the Beacon Award signifies how Saint Peter's PICU and CPCU nurses use continuous learning and effective systems to provide high-quality patient care. Units that receive the Beacon Award set the standard for excellence in patient care environments by collecting and using evidence-based information to improve patient outcomes, as well as patient, family and staff satisfaction. For patients and their families, the Beacon Award signifies exceptional care through improved outcomes and greater overall satisfaction. For nurses, a Beacon Award means a positive and supportive work environment with greater collaboration between colleagues and leaders.

"The CPCU nurses are a tightly-knit group that supports each other while treating every patient like they're a member of our own family," said Eliza Sanchez, BSN, RN-C, nurse manager of the Cardiac Progressive Care Unit at Saint Peter's. "The Beacon Award is an endorsement of how our nurses go above and beyond when it comes to caring for their patients."

In addition to the PICU and CPCU, Saint Peter's Adult Intensive Care Unit and Neonatal Intensive Care Unit have earned the Beacon Award for a sixth and third consecutive time, respectively.

To see more of Saint Peter's recognitions, please visit saintpetershcs.com/award.



COMMUNITY GOLF OUTING

BENEFITING THE CHILDREN'S HOSPITAL AT SAINT PETER'S UNIVERSITY HOSPITAL

June 27, 2022 | Forsgate Country Club | Banks & Palmer Courses

THE CHILDREN'S HOSPITAL
AT SAINT PETER'S UNIVERSITY HOSPITAL
A MEMBER OF SAINT PETER'S HEALTHCARE SYSTEM

For registration and sponsorship information, contact 732.745.8542 or spfoundation@saintpetersuh.com.

Community Calendar

For more information or to register for a program, call the contact number listed or visit saintpetershcs.com/Events. Most programs are **FREE** unless noted; please call for information.

Cancer Support

- Bone Marrow Transplant**
For patients who have had an allogeneic transplant
Call for information: 732.235.8522
- Breast Cancer**
Call for information: 732.235.7011
- Gynecologic Cancer**
In partnership with the Cancer Support Community Central New Jersey
Call for information: 732.235.6792
- Living with Cancer**
Call for information: 732.235.7557

Diabetes Education*

- For information about classes, call the numbers listed below.
- Diabetes Self-Management Education**
Call for information: 732.339.7630
 - Gestational Diabetes Self-Management Education**
Call for information: 732.339.7630
 - Prevent T2 Program**
Call for information and registration: 732.339.7772

The pediatric specialists in the Division of Pediatric Infectious Disease at The Children's Hospital at Saint Peter's University Hospital diagnose and treat children with infections, fevers and immune deficiencies.

THE CHILDREN'S HOSPITAL
AT SAINT PETER'S UNIVERSITY HOSPITAL
A MEMBER OF SAINT PETER'S HEALTHCARE SYSTEM

Parent Education

Parenting classes are currently being held online. Register at saintpetershcs.com/Services/Parent-Education. Once registered for a class, access information will be provided to you. For information about the following classes, please call Parent Education at 732.745.8579

- Baby Care
- Marvelous Multiples
- Birth Center Class (for moms under midwifery care)
- New Daddy Class
- Breastfeeding Class
- New Mom Support Group
- Breastfeeding Support Group
- Prenatal Yoga & Exercise Class
- Grandparents Class
- Prepared Childbirth/Lamaze Classes
- Hypnobirthing
- Sibling Class

Cancer Survivorship: A Virtual Education Series

This free four-week educational series focuses on aspects of cancer survivorship. Join us via Zoom on Wednesdays in June. To register, visit saintpetershcs.com/events

June 1 • 12 pm – 1pm Restoring Strength, Mobility and Endurance	June 15 • 12 pm – 1pm Emotional Wellbeing in the Face of Cancer
June 8 • 12 pm – 1pm Eating Healthy after Cancer	June 22 • 12 pm – 1 pm Intimacy after Cancer

Support Groups

- Bariatric Nutrition Support Group**
2nd Thursday of each month
Next meeting: June 9 • 6 to 7 pm
Call 732.339.7450 for Zoom meeting information
- Bereavement**
Call Pastoral Care for information: 732.745.8565
- Craniofacial Teen Girls**
Call for information: 732.745.8600, x8113
- MyGoal Autism Family**
2nd Sunday of each month
Next meeting: June 12 • 3 pm
Call 877.886.9462 or email info@mygoalautism.org for virtual meeting details
- SHARE**
3rd Thursday of each month
Next meeting: June 16 • 7 to 9 pm
Call 732.745.8522 or email imariano@saintpetersuh.com for Zoom link
- Spouse/Partner Caregiver**
Call for information: 732.745.8600, x8653
- Weight Loss Seminars**
4th Tuesday of each month
Next meetings: June 28
English 4 to 5 pm • Spanish 5 to 6 pm
For information call 732.745.8555



Need a doctor? To find a Saint Peter's physician, visit saintpetershcs.com/findaphysician. Online scheduling is also available with select Saint Peter's Healthcare System physicians via Zocdoc at BookMySPDoc.com

This calendar is for information only. Do not rely on it to make healthcare decisions on your own; instead, talk with your healthcare provider for advice and treatment. Do not ignore medical advice or delay seeking it because of something you read here. We do not suggest or endorse that you have any tests, use products, or use other information in this document without advice from your healthcare provider.

SAINT PETER'S HEALTHCARE SYSTEM

254 Easton Avenue, New Brunswick, NJ 08901
732.745.8600 | 800.269.7508 | saintpetershcs.com

Sponsored by the Roman Catholic Diocese of Metuchen State-designated children's hospital and regional perinatal center

