

STUDY BRIEFING: IN PERSON ASSESSMENTS

As a participant in ARCH or CHARM, you have already contributed to improving child health in Michigan. Now there is an opportunity to do more. Members of our team will contact some of you through Facebook, email or other means, inviting you and your children to come to the MSU East Lansing campus. Participation is purely voluntary, but it also is fun.

The visits include computerized games, physical measurements, collection of samples and filling out survey questionnaires. They are relaxing and are conducted in a jungle-themed room. “It tends to be a fun experience,” said Breanna Kornatowski, follow-up coordinator for CHARM.

Mothers receive a \$100 gift card for participating, and kids get either a \$25 gift card or toy. Help with transportation, childcare, parking and gasoline is offered.

Children that are 4-5 and 10-11 years old are eligible to participate. Visits begin with games for mom and child on an iPad that evaluate cognitive abilities. Height, weight, waist circumference, blood pressure and heart rate are checked.

Mother and child are asked for urine and saliva samples. Children also can give toenail clippings and a small piece of hair – all for later analysis. If a baby tooth has been lost, the mothers can exchange those for \$10 gift card/tooth – a better rate than the tooth fairy offers!

Visits end with playtime after questionnaires are filled out. Initially, mothers and children from Lansing are invited for assessments. Eventually, visits will be offered at all CHARM sites.

These visits “allow us to get a better picture of the overall growth and development of the children,” Kornatowski said. While participants are offered gift cards, most say their incentive isn’t financial. “They’re in it for the research,” Kornatowski said.

INVESTIGATOR SPOTLIGHT: DR. NICOLE TALGE

What happens to children before and shortly after birth can impact them all of their lives. That’s why Nicole Talge, PhD, has dedicated her career to identifying factors that can negatively impact a child’s neurological development. Better understanding of those factors can help identify at-risk children for early interventions, she said.

“A lot of neurodevelopmental problems, we think, develop during the perinatal period,” before and shortly after a child is born, said Talge. She supervises and analyzes CHARM neurodevelopment data. The earlier those factors are identified, the better chance a child has of avoiding later problems.

“Early intervention matters,” Talge said, “as opposed to waiting until a problem is established and then trying to intervene.”

Talge, assistant professor of epidemiology & biostatistics, earned her master’s and doctoral degrees in child psychology at the University of Minnesota. She did post-doctoral studies in perinatal epidemiology at MSU and joined the MSU faculty in 2012.

She has done extensive research designing surveillance

programs, including as part of the CHARM studies, to identify risk factors that threaten the neurological development of children. She has published on the long-term effects of preterm births, low-birth weight, maternal stress and other factors that can adversely affect the neurological health of children.



Even with one or more risk factors, most children will not suffer neurodevelopmental problems. Talge’s challenge is to identify the subset of children who will.

The CHARM studies are important and will “lead to discoveries that will improve child health,” Talge said. “I really think we can find the risk and protective factors to promote optimal health outcomes in children. Without doing these studies we can’t make those leaps.”

None of that would be possible, she added, without the participation of the mothers and children who come in for assessments. “They are contributing to the knowledge base,” she said. “They are making important contributions to the health of children in our society.”

WHAT IS CHARM???

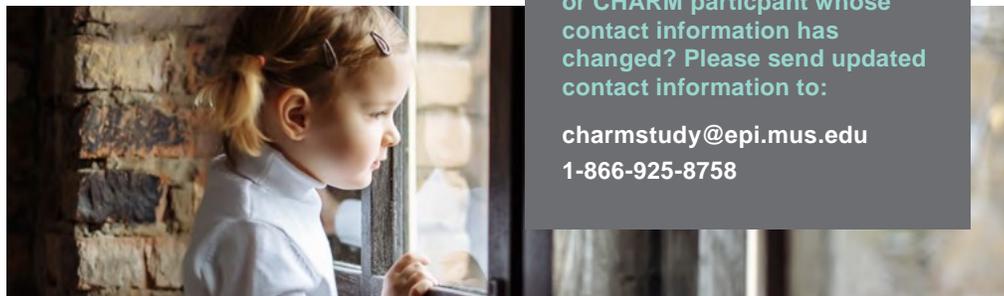
Child Health Advances through Research with Mothers or CHARM is a coalition of researchers and clinicians from Michigan State University, University of Michigan, Wayne State University, Henry Ford Health System, and the Michigan Department of Health and Human Services.

The goal of CHARM is to improve the health of mothers and children in the state of Michigan.

CHARM has produced two study cohorts. The first one began in 2008 primarily in Lansing, MI and is named ARCH (Archive for Research on Child Health). It stopped recruiting in 2016 but continues to follow participating moms and children. The oldest children are approaching 12 years old.

The second study cohort is called MARCH (Michigan Archive for Research on Child Health). It is modeled upon ARCH but is designed to represent the population of Michigan. MARCH will recruit from different cities including Flint, Traverse City, Ann Arbor, Grand Rapids, Detroit, and others.

Funders for CHARM include the ECHO Program in the National Institutes of Health, Office of the Director and the Michigan Health Endowment Fund.



Are you an ARCH, MARCH, or CHARM participant whose contact information has changed? Please send updated contact information to:

charmstudy@epi.mus.edu
1-866-925-8758

TIPS FOR MOMS:

WINTER BLUES

Now that the holidays are over and the decorations are packed away, you might feel a little down. For many, it's a normal reaction to the end of a festive time, but for others, it could be a bout of seasonal affective disorder.

A mild case of the winter blues is common but seasonal affective disorder is a clinical diagnosis that can be treated with lifestyle changes but may require treatment by medical professionals.

Seasonal affective disorder – appropriately abbreviated as SAD – is a disorder triggered by changes in the season. Symptoms include feelings of depression, irritability, lack of interest in everyday things, excessive sleeping, low energy, and difficulty concentrating.

Experts believe lack of sunlight is one cause, explaining why SAD is common in northern latitudes, such as Michigan. Sunlight promotes a brain chemical called serotonin, which helps maintain mood balance and happiness. Darker days can trigger melatonin, causing sleepiness. Other research suggests depression is tied to lack of vitamin D, which the body produces when exposed to sunlight.

Medical treatments may include antidepressants and phototherapy—a lightbox to mimic natural sunlight. Patients also might benefit from counseling and cognitive behavioral therapy.

Some SAD sufferers find their symptoms improve with lifestyle changes including spending more time outside, admitting more natural light inside, eating a diet with fruits and vegetables, getting regular exercise, and maintaining an active social life.

For more information about seasonal affective disorder or to learn how to tell the difference between the normal winter blues and seasonal affective disorder, visit the links below.

Whichever your condition, don't despair. The days already are getting longer. Spring is coming, bringing warmer days and more sunlight.

<https://health4u.msu.edu/articles/2019-seasonal-affective-disorder-sad>

https://www.canr.msu.edu/news/the_winter_blues_or_seasonal_affective_disorder_sad



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Pediatric Cohort

