

## Bradley Hospital Enrolling Teens with Tic Disorder for Research Study

*Study will examine how the brain and environment interact to influence tics*

PROVIDENCE – The Pediatric Anxiety Research Center at Bradley Hospital has begun enrolling teens for a study focused on the relationship between brain activity and tics – sudden sounds or movements of the body that a person cannot control – in hopes of developing a more effective treatment.

Tics are the most common movement disorder in children. Up to 20 percent of youth will have tics at some point, and one percent will have chronic tics lasting at least one year. Tics can be associated with many challenges, including physical pain, bullying or teasing, poor self-esteem, academic problems and family conflict. Nearly 80 percent of youth with tics also have other emotional and behavioral difficulties, such as obsessive compulsive disorder (OCD) and attention deficit hyperactivity disorder (ADHD). Currently there is no cure for tic disorders. Existing treatments for tics are designed to improve tic suppression, but are not

highly effective for many children.

“Previous research has shown that a part of the brain called the supplementary motor area (SMA) is overactive in people with tics. The SMA is very important in selecting a motor action that is appropriate for a given situation,” said **CHRISTINE CONELEA, PhD**, principal investigator for the study. “We also know from previous studies that environment can affect tic expression. For example, some kids have worse tics when they are in a place that is overstimulating or when people make comments about tics. However, we don’t yet understand how the SMA and the environment interact in tics. Our goal is to learn if we can improve tics by reducing activity in the SMA, while also creating an environment that supports teens’ efforts to suppress.”

The study will include teens between the ages of 13 and 18 who have a tic disorder or Tourette syndrome. The study involves an assessment of symptoms,

an MRI brain scan and transcranial magnetic stimulation (TMS).

“TMS research involves holding a hand-sized magnet over someone’s scalp, which can either temporarily inhibit or activate the brain cells underneath. We are using TMS to learn if temporarily reducing the overactivity in the SMA makes tics easier to suppress,” said Conelea. “Afterward, we look at how often the teens had tics right before and after the TMS.”

Previous research on tic treatment has always examined the separate effects of either a biological treatment, such as medication or TMS, or a behavioral treatment, such as behavior therapy. By better understanding how the brain and environment interact to influence tic suppression, the study team hopes to pave the way for the development of new treatments that involve a combined behavioral and biological approach. ❖

## Bradley Hospital continues to expand inpatient capacity for children and teens locally, regionally

*Renews contract with Boston Children’s Hospital to provide world-class psychiatric care*

EAST PROVIDENCE – Bradley Hospital has renewed a contract with Boston Children’s Hospital (BCH) to continue to provide inpatient psychiatric care to children served by BCH. Now entering its second year, the agreement was essential to allowing Bradley to increase bed capacity from 60 to 70, a move that was intended to also benefit Bradley patients and families from across Southeastern New England.

“This partnership with Boston Children’s Hospital is not only great because it allows us to help more children and teens in the greater Boston area who need mental health care, but it has also allowed us to increase our capacity to help children right here in our backyard,” said Dan Wall, Bradley Hospital president.

Last year, nearly 40 Rhode Island families benefitted from the additional beds, and to date more than 80 patients have been successfully referred from Boston Children’s.

“If you are a parent in the midst of a mental health crisis with your child, you understand how critical it is to have a resource like this available immediately and close to home,” said **HENRY SACHS, MD**, chief medical officer at Bradley Hospital. “Families, pediatricians and other providers elsewhere don’t necessarily have this safety net.”

The Children’s and Adolescent Inpatient Programs at Bradley provide care for children from 3 to 18 years old, and offer a total of 45 private and semi-private rooms in small, quiet pods, enabling staff to closely monitor and respond to each patient. Inpatient treatment at Bradley Hospital includes a multidisciplinary care team of psychiatrists, family therapists, psychologists, nurses, pediatricians, nurse practitioners and milieu therapists. Additionally, Bradley’s inpatient programming also features a Medical/Psychiatric Program and the Center For Autism and Developmental Disabilities (CADD). ❖