# Neuroscience and Novel Therapeutics Unit





## Childhood Irritability Newsletter Spring/Summer 2022

### **Our Mission**

The goal of the Neuroscience and Novel Therapeutics Unit (NNT) is to develop brain-based treatments for children with serious psychiatric disorders. The research conducted in NNT is part of NIMH's mission to transform the understanding and treatment of mental illnesses through basic and clinical research, paving the way for prevention, recovery, and cure.

### **Check Out Our Website**

We have launched a new website where we share our research findings. We have a "Talks and Multimedia" page with some of our recent presentations and we also have a page called "Patients and Families" which describes our current studies. We hope you find it helpful: <a href="https://www.nimh.nih.gov/nnt">https://www.nimh.nih.gov/nnt</a>

### Get to Know Our Team

Our team is made up of clinicians, research assistants, and fellows who are passionate about improving the lives of children with irritability, and those affected by these difficulties.

#### Clinician: Lisa Felber, MSW, LICSW



Lisa has been a clinician in our lab for over a year now. You may have met her on an inperson visit at NIH or talked with her over the phone about your child's mood. Lisa has worked with NIH patients participating in COVID-19, sickle cell transplant, and rare disease clinical studies. In her free time, she enjoys hiking, kayaking, and racing on a dragon boat team.

### Research Assistant: Shannon Shaughnessy, BA



Shannon has worked in the lab for almost 2 years. You may have talked with her if your child has played our mobile game "CALM-IT." She grew up on a farm in Michigan and loves to travel. Before the pandemic, Shannon spent a summer solo-traveling through India. She has committed to attend the University of Miami to pursue a PhD in Clinical Psychology.

### Health and Safety First COVID-19 Precautions



COVID-19 has affected all of us and the way in which we live our day-to-day lives. Here at NIH, we stand together to overcome these new obstacles and protect ourselves and each other. To ensure everyone's safety during your NIH visit, we have established the following precautions:

- ✓ Staff are screened daily for COVID-19.
- ✓ All are required to wear face masks.
- ✓ Visitors undergo a risk assessment screening before visiting the Clinical Center.
- Study participants will be contacted 24-48 hours before their visit to be asked whether they have experienced any symptoms of COVID-19 or had a known exposure as a safety precaution before coming onsite.
- ✓ All visitors will be provided masks and hand sanitizer by the NIH.
- All study participants can be accompanied by two caregivers.
   No siblings should come onsite.
- ✓ Rooms and equipment are disinfected before and after each patient.

### Research Updates: COVID-19 Study Findings

Early data indicates that the COVID-19 pandemic has significantly impacted the lives and mental health of youth and their families.

In our lab, we followed **81 youth and their families** who had completed a clinical evaluation prior to the pandemic to examine how their pre-pandemic clinical symptoms mediated change in their **stress experiences**, **symptoms of anxiety and depression** during the pandemic.



We found that parents and children on average reported increases in both anxiety and depression and that this increase in symptoms was partially mediated by pandemic stress and worries. This means we can directly link pandemic-related stressors, like changes in routines and social contact, to this symptom increase.

### **CBT for Irritability, Where Are We Now?**



We are currently recruiting participants for a study applying a new **cognitive behavioral therapy (CBT)** to target irritability in children and adolescents.

Therapists work with children and parents to create an "anger hierarchy" of situations that the child finds frustrating. They then practice "exposing" the child to these anger-provoking situations in the therapy sessions. For example, during the therapy session, a child might be asked to stop playing a fun video game while trying to tolerate the discomfort. We are not trying to completely erase children's frustration in this treatment, but instead to work with children and parents toward having shorter and less intense temper outbursts when frustrated.

This treatment also includes a **parent management training (PMT)** component to help parents manage their children's behaviors. PMT has been shown to be helpful with children with behavioral difficulties.

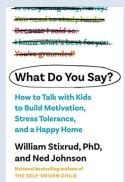
When we previously piloted this treatment, we found that the treatment had an overall impact on the severity of behavioral outbursts many children have.

### Resources

The COVID-19 pandemic has directly and indirectly influenced the lives of youth across the world. To support young people's social, emotional, and mental well-being, the CDC developed the COVID-19 Parental Resource Kit which provides parents/caregivers with age-group specific resources to help them uplift their child(ren) through these challenging times.

Another general parenting resource is Dr. Stixrud and Ned Johnson's book, *What Do You Say?*, which is a practical guide that teaches parents how to communicate effectively with their child in conversations that would typically end in parent/kid standoffs.





### **How Does Your Child Feel in the Moment?**

Ecological momentary assessment (**EMA**) is a digitally-based tool assessing youth's clinical symptoms in real-time, in naturalistic settings, via a user-friendly and engaging application.

Our group developed the first EMA targeting irritability for youth. In a recently published paper (Naim et al., 2021), our data showed that EMA ratings of irritability were significantly related to subjective frustration during a laboratory task eliciting frustration.



Additionally, levels of irritability were higher in children diagnosed with Disruptive Mood Dysregulation Disorder (DMDD) or Attention Deficit/Hyperactivity Disorder (ADHD) compared to children with an anxiety disorder or no psychiatric diagnoses.

### How to continue being involved?

Thank you for your time and helping us learn more about children and emotions. We are now having our participants come onsite to complete MRI scanning research tasks to see how children's brains and symptoms change as they grow up. If interested and your child has not completed an MRI scan research task with us before, they would need to come to NIH to complete a practice scan, also called a "mock" scan where they will practice lying still in a fake MRI machine to simulate the experience of scanning in the real MRI machine. Your child will be compensated for their participation. If you are interested, please contact us at

301-402-0239 or irritablekids@mail.nih.gov

**NNT Website:** 

