



# The Louisa Adelynn Johnson Fund

*for Complex Disease*

<https://tlajfundforcomplexdisease.com/>

## WHAT ARE PANS AND PANDAS?

Pediatric acute-onset neuropsychiatric syndrome (PANS) and pediatric autoimmune neuropsychiatric disorders associated with streptococcal infections (PANDAS) are neuroimmune disorders that produce devastating, life-altering symptoms in children and young adults. Patients may endure severe OCD, tics, joint pain, gastrointestinal distress, extreme sleep disturbance, separation anxiety, disordered eating, aggression, irritability, emotional lability and more as a result of immune system dysfunction.

## DID YOU KNOW?

- Many PANS and PANDAS patients also are diagnosed with POTS.
- Researchers at Stanford found children with PANS have an increased risk of developing arthritis and other autoimmune diseases compared with the general pediatric population, particularly enthesitis-related arthritis.<sup>1</sup>



## ABOUT LOUISA “LULU” JOHNSON

At age 11 Lulu’s life changed overnight following a strep infection. On January 2, 2019, she awoke with a different body and mind that she no longer controlled. Lulu suffered from terrifying neuropsychiatric symptoms, fatigue, pain, extreme sensory sensitivities, gastroparesis, POTS and more for over two years homebound and in hospitals battling PANDAS and co-morbidities until her passing. Through the fund we support researchers investigating conditions from which she suffered in the hopes of a brighter future for patients like Lulu.