

Nov 25

# NF STORIES - DR. WALKER

## A JOURNEY THROUGH NF RESEARCH WITH DR. WALKER



### Where it started

My passion for science started at home, inspired by my mother's enthusiasm for biology and chemistry. That early interest led me to major in biochemistry and eventually to a PhD in cell division research. While that work was foundational, I felt a strong pull toward applying science to specific medical challenges—particularly neurofibromatosis type 1 (NF1).

### What is NF1?

NF1 is a complex, lifelong condition that affects individuals in unique ways. The severity of those can vary dramatically from person to person. Symptoms appear gradually or rapidly over time and affect many different parts of the body. It can cause skin changes, cognitive challenges, bone problems, vision issues, headaches, limited attention span, or even hyperactivity.

**With more than 7,000 known genetic variants, NF1's unpredictability makes research and treatment particularly difficult. Yet, it's also what makes this field so important.**

### Why Gene Therapy?

One of the most promising areas of research is gene therapy, which aims to address NF1 at the genetic level. Unlike treatments tailored to specific mutations, we're exploring approaches that are "variant-agnostic," meaning they could work regardless of the genetic variant. Imagine fixing the underlying issue rather than just managing symptoms—this is the future we're striving toward.

### Challenges and Opportunities

Research is expensive, so funding from organizations like CureNFwithJack makes a major difference in what we can accomplish. From maintaining cell cultures to DNA sequencing equipment, the costs add up. Yet, as I reflect on how far science has come in the last two decades, I'm optimistic. We're seeing improvements in symptom management and even the development of predictive tools to better understand NF1's progression.

**As challenging as the work is, the resilience of individuals living with NF1 and their bravery inspires me to show up every day and push the boundaries of what we know.**

### The Role of Community

Foundations like [CureNFwithJack](#) and communities can play multiple roles from supporting patients, their families and caregivers, sharing information, raising money for care or research, raising awareness in the general public, or being an advocate for government or private investments. All these efforts together make a real difference in our lab. Just making some small contribution—whether it be financial, dedicating time, or just spreading the word is really important.

### The Future of Research

Looking ahead, I believe we're on the brink of transformative advancements in NF1 research. The collaborative efforts of scientists, advocates, and families give me hope that we can achieve a future where effective treatments are within reach.

**Together, we can make this vision a reality. Thank you for your support in this critical journey.**

**Dr. James A. Walker, PhD**

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Do you, a family member, or friend live with NF? We would love to hear your story!

Share an NF Story