



TEDDY Family DNA

Can we find a cure in a teaspoon?

Genes are an important part of who we are and how our bodies work. They are the “blueprints” or instructions in our cells that are passed down to us from our parents. Genes determine a lot about us, including: eye color, height, blood type, whether we have freckles or not, and whether we develop certain diseases or not. Each one of our TEDDY kids is unique, but they have one factor in common. They each have inherited genes that put them at a greater risk for developing type 1 diabetes (T1D).

Type 1 diabetes is a “complex” disease, which means that it is caused by multiple genes in combination with lifestyles and environmental factors. One clue to the diabetes puzzle lies in how T1D genes are passed down in families—what are the differences between the group of TEDDY kids that will have developed diabetes by the end of the study and those who will not? Watching the patterns of how genes are passed from one generation to the next may help us understand who may be more likely to develop T1D. Knowing that certain gene patterns make us more likely to get T1D might also help us develop preventions or even cures for T1D; like gene therapy, the



Spencer & Keagan Pruitt watch dad get his blood drawn for DNA testing.

developing technology that can replace a damaged or changed gene with a healthy one. Research in this area may lead to new ways to treat or even prevent many diseases, including T1D.

Family DNA sampling in TEDDY is optional. If you have already contributed a blood sample, thank you for your help! We have collected 400 family DNA samples from 228 TEDDY families at our three sites! If you are part of the 308 families in GA/FL that have not yet participated in this part of TEDDY that would like to; we welcome your sample at any time during a regular TEDDY visit. You may also make a separate appointment to just

run in and give us a quick sample. It’s easy! All it takes is your signature on a consent form, and giving a one-time-only small blood sample from a vein: 5 milliliters (just a teaspoon). If you like, we can even test your blood for the diabetes autoantibodies, the sign that the process that causes T1D is active in your body.

That teaspoon of blood can hold a lot of information, and maybe unlock some important information about the complex disease, T1D.

TEDDY Family DNA

Another reason to participate...One family’s story

TEDDY mom, Lisa Story of Augusta, shares her family’s DNA experience.

What made you decide to participate in TEDDY Family DNA?

“My little brother was diagnosed at 2 years old and my cousin was diagnosed at 18 months. I knew (type 1 diabetes) was genetically playing its role in our family, when I found out that my son was at a higher risk I wanted to learn more about it.”

What was your reaction to the DNA diabetes autoantibody results?

“It was informative. I was, however, shocked. All of our family has children diagnosed. To find out that I, at age 31, had a HIGH number come back, when the last year I had nothing, was a bit shocking.”

How did your participation in TEDDY impact your diagnosis of diabetes?

“It was so easy for me to go from no diagnosis to being diagnosed. It could have been a long, drawn-out, horrible experience. Instead, I had the assistance of Ms. Diane Hopkins from the TEDDY Study who was able to have a letter written up about my results and some advice from the pediatric doctor for TEDDY in Florida/Georgia, Dr. Schatz, on what he thought should happen. When I gave this letter to my PCP she was so excited that I had so much information and was easily able to diagnose and treat me. I am now on a sliding scale with a Humalog Kwik Pen and I feel so much better.”

What would you like to share with other TEDDY families?

“Having your child in the TEDDY study is a blessing. Not only are the staff/team following your child, they are following your family. I expected to only get results for my son in the TEDDY Study, and instead I ended up getting results that will change all of our lifestyles, positively. The more you put into the TEDDY Study, the more you will get out of it. Make time for your child’s appointment. It could be you or one of your other family members who could get a call back with a positive reading. Either way, this helps your family stay on top of a possible diagnosis and from experience with some very sick young kids in our family, an early detection is much easier than a long stay in the hospital wondering what is going on.”



“My whole family. My brother (Dx at age 2) and I (Dx at age 32) are Type 1. Out of my 7 nieces and nephews and children that were in the blood draw at University/MCG when they were born, three came back as high risk and are now in the study.”



Ask the TEDDY Doctor

Dr. Desmond Schatz,
TEDDY Pediatric Endocrinologist for the GA/FL clinical centers, answers parents' most common questions about diabetes autoantibodies.



If my child has been autoantibody negative for 8 years, what does this mean about his/her diabetes risk?

We still don't know what causes diabetes. That's why we are doing TEDDY. We do know from other studies that autoantibodies can occur for the first time at any age during childhood and adolescence.

Does having autoantibodies mean my child's going to get diabetes for sure?

If the child has tested positive for more than one autoantibody AND at more than one point in time (in TEDDY, we call this "persistent"), then the five year risk is more than 50%. Recent data suggests that the 10 year risk is over 70%.

How long does it take to go from being autoantibody positive to getting type 1 diabetes?

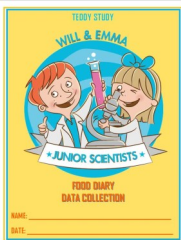
The time period is variable. In some cases, a diagnosis is made soon after finding autoantibodies; in other cases, it may take weeks, months, or years. At a younger age, more autoantibodies are associated with more rapid progression to symptoms and diagnosis.

Desmond A. Schatz, M.D.; **University of Florida**, Professor and Associate Chairman of Pediatrics; Medical Director of the **Diabetes Center**; Vice President, Medicine and Science, **American Diabetes Association**

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Junior Scientists Food Diary Data Collection

Our TEDDY kids are getting older and are able to do more on their own. Coming soon, TEDDY kids age 9 and up will get their first lesson on recording diet records. They will receive their very own diet record designed just for them, along with instructions on how to determine the amount of food consumed and other information needed. To start, our goal is to have them record lunches and after-school snacks with guidance from teachers, siblings or parents. Eventually, we will be able to turn the entire task over to them for completion!

TEDDY SITE SNAPSHOTS

ATLANTA



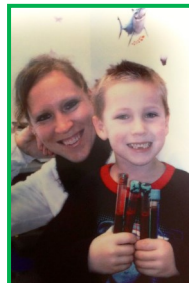
Joseph Lee & mom celebrate reaching the half-way point of the 15 year study.

AUGUSTA



Jocelyn Trinidad wears the Jr. Scientist lab coat, holds test tubes, and helps the TEDDY staff.

GAINESVILLE



Joey Galasso & mom love coming to TEDDY visits and helping to find a cure!

TEDDY FAMILY PORTAL

You can now fill out forms for the next TEDDY visit online, at your convenience. The information you enter goes directly into the database. This means less in-clinic paperwork. Call your TEDDY office for more information.

ATLANTA SITE OFFERS EXTENDED HOURS FOR BUSY FAMILIES

We are now taking appointments from 4 to 6pm one day each week. Each week we choose a different day for late visits to help accommodate busy family schedules.

ATLANTA OFFICE LOST & FOUND

Please call the office if you have lost a silver rattle.
404-252-0844

The Atlanta Site's Playroom Gets an Update!



Jonas & Lucia Gravel enjoy the new double decker fort, arts area and playing the new Wii!



Elizabeth Rogers plays on the top level of the fort.



How to Draw a Bear!

