Testimony of Amelia Cooper

Age 15, JDRF Children's Congress Delegate

From Kansas City, Missouri

At the Hearing entitled:

"Diabetes Research: Improving Lives on the Path to a Cure"

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Before the

United States Senate Special Committee on Aging

Dirksen Senate Office Building, Room G-50

Washington, D.C.

Thank you Chairman Collins, Ranking Member McCaskill, and Members of the Committee, for inviting me to testify today. My name is Amelia Cooper, and I was diagnosed with type 1 diabetes (T1D) three years ago, at age 12.

As you all know, the teenage years can be a little rough, with pressures to fit in, figure things out and find your way. At a time when many of my peers are worrying about their hair, clothes, and social calendar, I must focus my attention on things vital to my health. Each day, I have to carefully monitor and manage my blood glucose level, which isn't easy since exercise, hormones, diet, and many other factors all have an impact.

Despite these serious challenges, I have many reasons to be grateful. Thankfully, I was diagnosed with T1D after Frederick Banting discovered insulin. Thankfully, I was diagnosed with T1D after insulin pumps and continuous glucose monitors were invented. Thankfully, I have learned to manage my diabetes without allowing it to manage me – even though it is not always easy.

It is only through a very strict blood sugar management routine, and advancements in diabetes treatments and devices, that I have been able to live my life to the fullest.

- 42 The number of countries I have visited. And still counting.
- **13.1** The number of miles in a half-marathon. I have completed two so far.
- **10** The number of things I wish my parents knew when I was diagnosed with T1D. I wrote this list as a published author in the blog diaTribe.
- **4 plus** The number of years after college it takes to become a doctor like my dad, who I look up to. That's my dream job.
- 1 As in type 1, the number associated with my disease. I am hopeful through Congress' support we will move from type 1 to type none.

Through advances in medicine my life has gotten easier, healthier and safer. I use an insulin pump and a continuous glucose monitor (show both here), but I am well aware that those advancements took much time, research, and funding to become a reality.

While I have never participated in a formal clinical trial, I am very excited about a recent research project that I conducted last year. I have always been curious about how and why my blood sugar levels are so erratic when I ski. Changes in altitude and prolonged activity can be very hard on blood sugar control, and after researching the topic, I realized that there was an opportunity to design a study to evaluate the changes my body experiences while skiing, compared to those without diabetes. The results, which I presented at this summer's American Diabetes Association (ADA) meeting in Boston, showed that despite strenuous activity, altitude caused an increased demand for insulin by more than a third. Most importantly, I showed that my blood sugars could be in the same range as my friends with careful monitoring and planning of my carbohydrates and insulin requirements. The use of a continuous glucose monitor was especially helpful in preventing hypoglycemia and ensuring safe blood sugar levels prior to riding a chairlift or skiing.

My project obviously does not compare to those responsible for the significant progress being made towards life-changing treatments for T1D. Projects on beta cell encapsulation and artificial pancreas technology – treatments I hope to have available in the coming years. But my project does represent my strong desire to make an impact.

I am not someone that can just stand-by when there is so much that can be done to improve my quality of life and that of all my friends here before you today.

In closing, I ask for your support in this fight to find a cure for diabetes.

Thank you, Chairman Collins, Ranking Member McCaskill and Members of the Committee, for your time today.