

## Funded Research Improves Lives



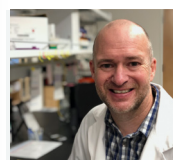
### **BARIATRIC SURGERY REVERSES TYPE 2 DIABETES** **TRACEY LYNN MCLAUGHLIN, MD** **2019-2022**

Dr. McLaughlin worked to understand exactly how gastric bypass surgery can reverse diabetes, especially because this surgery is not appropriate for every patient with type 2 diabetes. The research focused on exactly how gastric bypass surgery reverses diabetes, opening the door to the possibility of mimicking the procedure with less invasive treatments or new medications. Ultimately, this could result in the opportunity to improve or even reverse type 2 diabetes in many more patients.



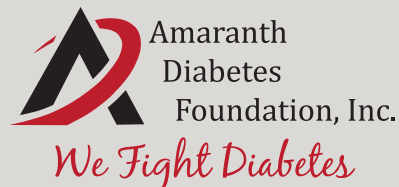
### **STOPPING DIABETES FROM EVEN HAPPENING** **JEFFREY ELMENDORF PhD** **2015-2017**

Dr. Elmendorf found that cholesterol accumulates in fat and muscle cells very early in the development of type 2 diabetes and this may be caused by overeating. The increased cholesterol in the membranes of these cells may contribute to the development of insulin resistance which is a hallmark of the disease. Importantly, he found that lifestyle changes, such as diet and exercise, known to prevent the progression to type 2 diabetes could prevent the toxic accumulation of cholesterol in these tissues.



### **PREVENTING OBESITY AND DIABETES** **GREG MORTON PhD** **2019-2021**

When we are in cold environments, we need to burn more energy to stay warm. This means our heat-generating tissues deplete glucose at a much faster rate and our bodies adapt to meet this increased demand while maintaining normal glucose levels and preventing hypoglycemia. Dr. Morton's work has shown that our brain plays an important role in these metabolic adaptations and a better understanding of the neurocircuitry may lead to novel strategies for treating obesity and type 2 diabetes.



## Contact Information

### ADF Board of Directors

[adf\\_inc.board@amaranth.org](mailto:adf_inc.board@amaranth.org)

### Supreme Council

#### Order of the Amaranth, Inc.

[supremesecretary@amaranth.org](mailto:supremesecretary@amaranth.org)

To order brochures call:

**888-700-7029** or email [giving@diabetes.org](mailto:giving@diabetes.org)

Please indicate that you are calling from the Order of the Amaranth.

For information about diabetes and the American Diabetes Association®:

[diabetes.org](http://diabetes.org)

**1-800-DIABETES**

The American Diabetes Association® and Amaranth Diabetes Foundation, Inc. gratefully accept planned gifts.

For free Estate Planning information:

[diabetes.org/giving](http://diabetes.org/giving)

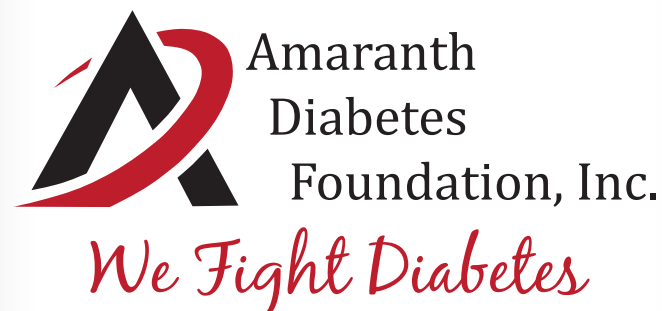
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**The mission of the American Diabetes Association® is to prevent and cure diabetes and to improve the lives of all people affected by diabetes.**



ORDER OF THE AMARANTH  
Amaranth Diabetes Foundation, Inc.



**2024-2025**

**FOR MORE THAN 45 YEARS,**  
The Order of the Amaranth and the American Diabetes Association® (ADA) have worked together to fund numerous researchers and their cutting-edge work **in the fight against diabetes.**

In Partnership With



ORDER OF THE AMARANTH  
Amaranth Diabetes Foundation, Inc.



## About us

The Order of the Amaranth is an international Masonic-related organization that endeavors to develop the moral character of its members through a belief in a Supreme Being and teaching the lessons of Truth, Faith, Wisdom and Charity.

The Amaranth Diabetes Foundation, Inc. (ADF) is a 501c3 organization that serves as the charitable arm of the Order. Since its inception in 1979, ADF donates all monies it raises in the United States to the ADA, where 100% of the funds support promising diabetes research. Our International Order also funds research in their respective areas to help stop the spread of diabetes.

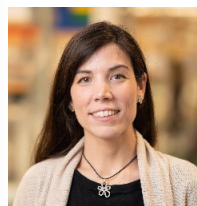
The ADF recognizes that diabetes is a devastating disease that affects nearly 38 million Americans and countless others around the world. Statistics show that 1.4 million Americans are diagnosed with diabetes every year. It is for this reason that the ADF has been a strong supporter of the ADA and its research.

We can make a difference by making a tax-deductible donation to the ADF. In addition to cash gifts, the ADF accepts memorial donations, honorariums, stock, and estate designations. Together, we can help people live longer, healthier lives.

**Truth, Faith, Wisdom,  
and Charity for  
a cure.**

## 2024-2025 Amaranth Diabetes Foundation, Inc. Supported Research Awards and Grants

The Amaranth Diabetes Foundation, Inc. is an integral part of the global effort to stop the spread of diabetes. The Foundation Board selects the ADA-sponsored research projects that are conducted by the following scientists:



**JUDITH AGUDO, PhD** ▶ Dana-Farber Cancer Institute

**Harnessing immune privilege mechanisms from stem cells to protect beta-cells from immune attack**

A true cure for type 1 diabetes involves replacement of missing insulin producing beta-cells. The goal of this project is to develop strategies to ensure the survival of transplanted or regenerated beta-cells, by allowing them to effectively and safely cloak from immune cells. *(Grant funded through June 30, 2025)*



**HOWARD WILLILAM DAVIDSON, PhD** ▶ University of Colorado Denver

**A high throughput test predicting future beta cell loss in subjects with recent onset T1D**

The rate at which insulin producing cells are lost (progression) in someone with type 1 diabetes varies considerably between individuals. We believe that testing proteins and genes together will provide a much more accurate and precise test and overcome the limitations of those currently available. *(Grant funded through June 30, 2025)*



**WILLIAM GEE CHANG, PhD** ▶ Yale University School of Medicine

**Micro vessels-on-a-chip to model diabetic microangiopathy and to advance precision medicine in diabetes**

Diabetes results in hyperglycemia that damages micro vessels throughout the body. This is known as diabetic microangiopathy and can lead to dysfunction of multiple organs including the brain, eyes, heart, kidneys, and nerves. This study will increase understanding of the biological processes driving diabetes-related small vessel disease, generate new biomarkers to track disease, and establish a platform to potentially test new therapeutics. *(Grant funded through June 30, 2025)*



**MEGAN L. BAKER, MD** ▶ Yale University

**Cellular and Molecular Characterization of Human Diabetic Kidney Disease**

This project focuses on investigating the progression of diabetic kidney disease, aiming to unravel the mechanisms leading to kidney failure. The goal is to develop treatments that specifically target these identified pathways, thereby altering the natural course of the disease. Ultimately, this project holds the potential to contribute significantly towards the prevention and treatment of diabetic kidney disease by offering insights into novel therapeutic targets. *(Grant funded through June 30, 2027)*



**LISA R. BEUTLER, MD, PhD** ▶ Northwestern University Medical School

**Dissecting sugar-induced modulation of gut-brain circuits**

Despite its clear link to metabolic disease, very little is known about how a high-sugar diet alters the dynamics of this communication. This project will monitor the activity of several neural populations critical for normal feeding and glucose balance in mice before and after a high-sugar diet. These experiments will enhance understanding of how nutrition impacts brain function, determine how this goes awry during the development of obesity and diabetes, and identify neural targets for preventing and treating these diseases. *(Grant funded through December 30, 2027)*