

## OUR VISION IS TO CREATE A WORLD WITHOUT TYPE 1 DIABETES.

JDRF research and advocacy drives transformational T1D therapies that hold significant promise in turning Type One into Type None.

JDRF's strategic research plan encompasses multiple therapeutic areas designed to deliver a sustained stream of new, life-changing therapies.

JDRF is impacting every stage of the discovery and development pipeline to expedite meaningful scientific progress and speed delivery of advanced therapies to people with T1D.

The path from Type One to Type None is a stream of therapies that steadily remove the daily burden and complications of T1D on the way to a cure and universal prevention.

## RESEARCH UPDATES



### RESTORATION

#### A New Switch Hitter for Type 1 Diabetes Discovered

**Pancreatic cells are more adaptable and possess a greater potential for self-healing than previously assumed**

##### KEY MESSAGES

- The pancreas is more adaptable and possesses a greater potential for self-healing, at least during childhood, than had previously been assumed.
- The discovery of new ways to regenerate lost beta cells for a person with T1D opens new pathways for discovering a drug that stimulates this beta cell regeneration.
- These results represent another step on the path towards discovering therapies to cure T1D.



### PREVENTION

#### A Gut Reaction to Type 1 Diabetes

**JDRF consortium defines roadmap for testing potential links between gut microbes and type 1 diabetes**

##### KEY MESSAGES

- The recent increase in T1D suggests a change in environmental triggers may be driving this. Changes in gut microbes have been linked to T1D and other autoimmune diseases in scientific studies as a potential environmental trigger of these diseases.
- Studying the relationship between gut microbes and T1D is challenging because the gut contains a complex mixture of microbes. Currently we don't understand the normal role that each microbe plays in the gut or in educating the immune system.
- JDRF is taking a leadership role in defining a research plan to understand the role of the microbiome and T1D that could lead to novel T1D prevention therapies.



### ARTIFICIAL PANCREAS

#### Unlocking Type 1 Diabetes Data

**JDRF partners with Tidepool on data integration software for better type 1 diabetes management**

##### KEY MESSAGES

- "Digital health" can improve the life of individuals with T1D.
- It can be frustrating to integrate data from various T1D devices that use different formats. Unlocking the data from these devices with software that facilitates visualization of the aggregate data will allow users, parents and healthcare providers to make better and more frequent recommendations on insulin use.
- JDRF's partnership with Tidepool will help patients who use insulin pumps, continuous glucose monitors, or blood glucose monitors by providing an open data platform and better software applications in which data from different diabetes devices can be easily collected, organized, and visualized, and can be shared freely by users with their healthcare providers, parents and, if authorized, by artificial pancreas systems researchers.