

Fact Sheet

Research Funding

JDRF's research mission is to discover, develop and deliver advances that cure, better treat and prevent type 1 diabetes (T1D). As the global leader in the fight against T1D, JDRF's research programs are comprehensive—addressing the hopes and dreams of every person with T1D for the best quality of life and a cure for this disease. JDRF research unites the best and brightest minds from around the world and supports those programs with the greatest potential of achieving our goals.

JDRF Research Funding Overview

- Since its founding in 1970 (1974 in Canada), JDRF has funded more than \$1.6 billion in T1D research and has dramatically advanced the T1D scientific frontier and the management of this disease. In FY2011 alone, JDRF provided more than \$116 million for T1D research.
- More than 80 per cent of JDRF's expenditures directly support research and research-related education.
- In FY2011, JDRF funded research projects in 18 countries representing the global scope of JDRF's research efforts.
- As more JDRF programs move forward, the number of human or clinical studies has grown. In FY2011, JDRF supported 53 clinical studies, including evaluations of new therapies, studies of the normal course of T1D, and others to collect specific T1D human samples.

JDRF's Research Goals

JDRF research is committed to improving the lives of every person with T1D and to curing this disease. JDRF's research goals are realized by the projects being supported in three basic areas:

CURE

Restoring a person's insulin-producing capability and halting or reversing the body's misguided immune attack on the pancreas.

TREAT

Developing new devices and therapies that optimize blood sugar control and treat or prevent the complications of T1D.

PREVENT

Preventing T1D from occurring or stopping the disease process before it damages the pancreas.

FY2011 JDRF Research Funding (U.S. Funds)

Cure and Prevent (62%)*	
Immune Therapies	\$30.1 million
Beta Cell Therapies	\$27.2 million
Treat (38%)	
Glucose Control	\$14.6 million

Complications Therapies	\$20.2 million
Multi-category (1%)	\$ 1.2 million
Total Regular Funding	\$93.3 million
Special Program Funding**	\$22.8 million

\$116.1 million

JDRF Research Priorities

Total Fiscal Year Funding

JDRF research works across three key T1D categories: Cure, Treat, and Prevent. Within each, JDRF has developed a strategic plan that identifies the top research priorities. These priorities are outlined here.

CURE RESEARCH

Immune Therapies

This research focuses on developing therapies to stop the underlying cause of T1D; the misguided immune system attack on the body's own insulin-producing beta cells in the pancreas.

- * Much of JDRF's current work on Prevent involves immune-related research and is closely tied to JDRF's Cure programs.
- In FY2010, JDRF participated in a special TID funding opportunity with the Government of Canada's Federal Economic Development Agency for Southern Ontario. The Canadian Government provided \$20 million with JDRF contributing \$13.9 to support the creation of the JDRF Canadian Clinical Trial Network. The majority of these funds supported studies of better treatments or devices of TID. These amounts are not included in the regularfunding percentages.

Beta Cell Therapies

This research focuses on developing therapies that restore a person's ability to make their own insulin. Two priority approaches to achieve this include; replacement of beta cells from an external source (transplantation) and regeneration of a person's own insulin-producing beta cells from residual beta cells or from converting other cell types to beta cells.

TREAT RESEARCH

Glucose Control Therapies

This research focuses on developing new therapies and devices to dramatically improve and simplify blood glucose control in people with T1D. One part of this effort is the development of an artificial pancreas; a device combining blood sugar monitors and insulin pumps that automatically regulates blood sugar levels. JDRF is also prioritizing the development of novel insulin products; these might be responsive to blood sugar levels, act faster, be easier to use or be more effective.

Complications Therapies

This research focuses on developing new therapies to free people from the devastating long-term complications that can accompany diabetes, including diseases of the eyes, nerves, and kidneys. JDRF is also prioritizing research to prevent T1D complications, especially eye disease.

PREVENT RESEARCH

JDRF research to prevent T1D is focused on two basic approaches. One is developing vaccines against the primary factors that start the misguided T1D autoimmune attack on a person's pancreas. The other is developing immune therapies that can stop or reverse the autoimmune process at the initial stages to prevent damage to the pancreas and avoid a person becoming dependent on external insulin sources.