



dedicated to finding a cure

RESEARCH EMPHASIS AREAS

July 1, 2009 - June 30, 2010

INTRODUCTION

Type 1 or “juvenile” diabetes is an autoimmune disease in which the insulin secreting beta cells in the islets of Langerhans of the pancreas are destroyed by targeted immune attack. Beta cells are essential for glucose homeostasis. By the time of clinical diagnosis, patients have lost sufficient functional beta cell mass for glucose homeostasis and are dependent on exogenous insulin to survive. Insulin is not a cure for the disease, however, because it cannot prevent the chronic and devastating complications of kidney failure, blindness, nerve damage, amputation, heart attack and stroke.

A cure for type 1 diabetes will require restoring functional beta cell mass by activation of endogenous regeneration of beta cells or by exogenous replacement or transplantation of a source of glucose-responsive, insulin-secreting cells. Restoration of functional beta cells either by regeneration or transplantation will need to be coupled with the prevention of their immune-mediated destruction. In addition, early preservation of function of regenerated or transplanted beta cells will require interim optimum metabolic regulation, such as provided by a closed loop artificial pancreas, until full function of the regenerated or transplanted beta cells occurs. Use of a closed loop artificial pancreas alone in type 1 diabetes also represents a potential interim, non-biological approach to improved glucose regulation.

In addition, approaches to reverse, treat, and prevent complications of diabetes and prevention of type 1 diabetes are targeted by JDRF.

MISSION, THERAPEUTIC AREAS, AND GOALS

The **mission** of the Juvenile Diabetes Research Foundation International (JDRF) is to find a cure for type 1 diabetes and its complications through the support of research.

To accomplish this mission, JDRF will provide approximately \$100 million in fiscal year 2010, representing ~ \$40M of total new research funding to support relevant exploratory research, discovery research, non-clinical development research, clinical research, and clinical development research relevant to type 1 diabetes in the **therapeutic areas** of:

- Beta Cell Replacement
- Beta Cell Regeneration
- Autoimmunity
- Complications
- Metabolic Control

With a goal of:

- Restoration and maintenance of normal glucose regulation in type 1 diabetes, including restoration of beta cell function, immunoregulation, and metabolic control
- Prevention of type 1 diabetes
- Prevention and treatment of complications of diabetes

PRIMARY OBJECTIVES FOR FUNDING

The primary objective of any research proposal and grant to be considered for funding should be aimed at accomplishing one or more of the following:

- Exploring and elucidating underlying molecular mechanisms and biochemical pathways
- Identifying and validating potential points of interference with the disease process
- Identifying and validating potential drug targets
- Identifying disease modifying small molecules, peptides, proteins, antibodies and cellular approaches
- Translating research discoveries into viable projects that can be tested in non-clinical settings
- Proof of concept studies in animal model systems
- Translating research discoveries into viable projects that can be tested in clinical settings
- Proof of concept studies in humans
- Identification of biomarkers of therapeutic efficacy or for tailoring therapy
- Developing commercially viable products

There are multiple funding mechanisms available both for Academia and Industry. Please consult the [JDRF website](#) for the scope of funding and the corresponding details of the application process.

GENERAL JDRF RESEARCH GOALS IN FY 2010

JDRF will fund research in FY2010 that address significant gaps and challenges for the following long-term goals:

- 1) *Restoring euglycemia and insulin independence by transplanting a replenishable source of glucose-responsive, insulin-secreting cells in the absence of chronic immunosuppression*
- 2) *Activating endogenous beta cell regeneration and survival of endogenous beta cells and reprogramming other cells to become functionally glucose-responsive, insulin-secreting cells*
- 3) *Abrogating immune-mediated destruction of beta cells for the preservation of regenerated or transplanted insulin-secreting cells in established type 1 diabetes, for the preservation of residual beta-cell function in recent-onset type 1 diabetes and at-risk/prediabetes, and for the prevention of disease in at-risk/prediabetes*
- 4) *Preventing, reversing, and treating long-term complications of diabetes*
- 5) *Restoring glucose regulation with device (closed loop artificial pancreas) and non-device approaches*
- 6) *Preventing type 1 diabetes*

JDRF SPECIFIC GOALS IN FY 2010

Beta Cell Replacement

Restoring euglycemia and insulin independence by transplanting a replenishable source of glucose-responsive, insulin-secreting cells in the absence of chronic immunosuppression

The impact of Beta cell replacement on Type 1 Diabetes has been demonstrated by the success of the Edmonton Protocol for islet transplantation at the University of Alberta in Edmonton, Canada. With this procedure, independence from exogenous insulin is achievable in about 80 percent of patients at 1 year by infusion of a sufficient number of cadaveric islets. However, islet function is lost over several years with loss of insulin independence, although often at insulin doses lower than before transplantation and importantly with improvement in the patient's hypoglycemia unawareness status. Currently, modifications of the original Edmonton protocol are beginning to show increased long term insulin independence and success with single donor transplantation. The NIH is supporting a phase 3 registration trial for the use of cadaver islets and phase 2 innovative modifications to a baseline protocol. NICE, UK's Center for Cost Effectiveness has noted the cost-effectiveness of islet transplantation for specific indications.

A major limitation to the use of cadaver islet transplantation is the restricted number of donated human cadaver pancreata available for transplantation. Potential solutions to the limited cell source for transplantation include: use of foreign species or xeno sources of islets or beta cells, generation of glucose-responsive, insulin-secreting cells or their precursors from alternative sources such as human embryonic, fetal or adult stem cells, precursor cells, or reprogrammed human non-beta cells.

Both alloimmune or xenoimmune (foreign tissue-specific) and autoimmune (beta cell-specific) mediated rejection of transplanted beta cells must be prevented. Chronic immunosuppression therapy is not uncommonly associated with side effects and precludes transplanting islets to children. Either physical approaches to thwart immune rejection or immunologically targeted approaches to create stable immune tolerance or an immune privileged site are desirable alternatives to chronic immunosuppression. It has also become apparent that an ability to in vivo image beta cell mass and function could have a direct impact on the success of islet transplantation, as well as other areas of interest to JDRF. Potential clinical solutions to these issues are of particular interest to JDRF.

JDRF will support multidisciplinary research in the development of alternative islet cell sources for the treatment of type 1 diabetes and in controlling rejection of the transplanted cells. Applications may be submitted by non-profit and for-profit institutions, both public and private. In addition, JDRF recognizes that support of research in this area may require innovative and novel public-private partnerships.

Priority Program Areas in Fiscal Year 2010

Transplantable Cell Source

- Identification of the signals and structural components required for beta-cell functional maturation and applying that knowledge to successful in vitro differentiation of human pluripotent stem cells to beta-cells/islets
- Generation of glucose-responsive, insulin-secreting beta cells from pancreatic stem cells or reprogramming of expandable adult cells

Development of platform technologies to support beta-cell replacement

- Development of novel approaches for non-invasive measures of islet mass, function, rejection and inflammation, including imaging and biomarker
- Strategies to prolong islet survival and to prevent islet graft rejection without long-term immunosuppression, with particular emphasis on encapsulation and induction of immune-tolerance

Ancillary studies using the cadaver islet transplantation setting to better understand type 1 diabetes and its complications and evaluate therapeutics including autoimmunity, beta cell regeneration, metabolic control, and complications in type 1 diabetes

Regular Research Grants in Fiscal Year 2010 will be restricted to the following Priority Program Areas:

Transplantable Cell Source

- Identification of the signals and structural components required for beta-cell functional maturation and applying that knowledge to successful in vitro differentiation of human pluripotent stem cells to beta-cells/islets
- Generation of glucose-responsive, insulin-secreting beta cells from pancreatic stem cells or reprogramming of expandable adult cells

Development of platform technologies to support beta-cell replacement

- Strategies to prolong islet survival and to prevent islet graft rejection without long-term immunosuppression, with particular emphasis on encapsulation and induction of immune-tolerance

Important Note: JDRF support for research utilizing human embryonic stem cells is **NOT** limited to cell lines in existence before 9:00 p.m. EDT on August 9, 2001. JDRF requires all applicants to provide evidence of appropriate ethical review of embryonic stem cell research by the investigator's local Institutional Review Board (IRB) or equivalent. In addition, JDRF has convened a Stem Cell Oversight Committee, which will provide independent ethical review for all applications in this area. Approval from both committees is required for funding. Please see the JDRF Guidelines for the use of [human embryos](#) or [fetal tissue in research](#).

Inquiries: Applications in this area should be referred to Julia Greenstein, Ph.D. (jgreenstein@jdrf.org)

Beta Cell Regeneration

Activating endogenous beta cell regeneration and survival of endogenous beta cells and reprogramming other cells to become functionally glucose-responsive, insulin-secreting cells

JDRF is actively supporting research focused on discovering novel therapeutic strategies to regenerate endogenous beta cells, to promote survival of existing beta cells, as well as to re-program other cell types to become beta-cell like. Such Regeneration therapeutics would have the potential to improve glucose control and to prevent complications, prevent diabetes, and ultimately to lead to a cure for type 1 diabetes alone or in combination with immunomodulators. JDRF is uniquely filling a critical scientific gap by supporting team efforts to find cell targets, validate drug targets & pathways, create new animal models of regeneration & to discover new biomarkers. There is a specific interest in elucidating the mechanisms underlying normal beta cell regeneration (such as in pregnancy or obesity) to identify safe and physiologically relevant targets to promote beta cell regeneration. Understanding the potential for human beta cell regeneration in diabetic pregnancy is also of great interest, as is the development of improved animal models for the investigation of regenerative therapies and identification of biomarkers of functional, beta cell mass.

Priority Program Areas in Fiscal Year 2010

- Discovery of the physiologic mechanisms, pathways and druggable targets for promoting beta cell proliferation and survival in the adult and growing animal with validation in human islets and beta cells
- Discovery of the beta cell progenitor/stem cell responsible for beta cell expansion in the adult and growing animal with validation in human islets and beta cells
- Discovery of pharmacological approaches and druggable targets for re-programming of alternative cell types to restore beta cell function in the diabetic condition
- Discovery of New Molecular Entities (NME), both small molecule and biotherapeutics for activating the expansion and survival of beta cells in the diabetic condition
- Proof-of-principle investigations of potential regeneration therapeutics in disease relevant animal models and clinical research studies

Regular Research Grants in Fiscal Year 2010 will be restricted to these Priority Program Areas

Important Note: Applicants for support for research in this area are reminded to explore all available funding sources. Specifically, in this area, the JDRF research program is intended to complement, and not to replace, funding available from national research funding organizations.

Inquiries: Applications in this area should be referred to Patricia Killian, Ph.D. (pkillian@jdrf.org)

Autoimmunity

Abrogating immune-mediated destruction of beta cells for the preservation of regenerated or transplanted insulin-secreting cells in established type 1 diabetes, for the preservation of residual beta-cell function in recent-onset type 1 diabetes and at-risk/prediabetes, and the prevention of disease in at-risk/prediabetes

Type 1 diabetes is an autoimmune disease in which the immune system progressively destroys the insulin-producing beta cells in the pancreas. Solving the problem of autoimmunity in type 1 diabetes is essential to finding a biological cure for the disease. Three stages can be identified in the pathogenesis of type 1 diabetes: at-risk/pre-diabetes, recent-onset diabetes and established diabetes. JDRF is actively supporting research on immunopathogenesis and immunotherapeutic intervention at each stage of type 1 diabetes.

A major goal of JDRF is to gain a better understanding of immunopathogenesis in human type 1 diabetes. Notwithstanding the detailed characterization of autoimmunity in the NOD mouse at the cellular and molecular levels, important questions remain to be answered in the human disease. For instance, further therapeutic advances will require insight into the key functional differences between the immune systems of healthy and the type 1 diabetic subjects. Clarification of a possible causal relationship between islet inflammation triggered via the innate immune system and dysglycemia will be needed in order attempt disease prevention in at-risk/prediabetes subjects. And thirdly, in established type 1 diabetes, little is known about how subject-to-subject variations in autoimmune status might affect the capacity of endogenous beta cells to regenerate and the efficacy of immunotherapy in recipients of beta-cell/islet transplants.

Recent reports of clinical efficacy for antigen-specific and non-specific immunotherapies at the recent-onset stage support the feasibility of immunotherapy in human type 1 diabetes. However, remission of type 1 diabetes has yet to be achieved in the clinic. More effective approaches to suppressing pathogenic T cells in an antigen-specific manner are required in order to provide immunotherapeutics that can prevent beta-cell destruction with an acceptable safety profile. Beta-cell antigen-specific tolerogenic vaccines designed to anergize potentially pathogenic T_{eff} cells and/or activate and expand T_{reg} cells provide an attractive approach in the setting of pre-diabetes or recent-onset diabetes. In established disease, antigen-specific tolerogenic vaccination may be part of combination therapies incorporating beta cell regeneration therapeutics or beta cell replacement approaches.

Priority Program Areas in Fiscal Year 2010

- Characterization of the roles of innate and adaptive immune responses in the immunopathogenesis of **human** type 1 diabetes
- Discovery, and preclinical and clinical development of antigen-specific tolerogenic vaccines and antigen-specific immunotherapies
- Clinical investigation of FDA-approved anti-inflammatory agents and investigation of molecular targets in the innate immune system potentially relevant for therapeutic intervention in at-risk/prediabetes
- Investigation of the role of endogenous immuno-modulation in the recovery of beta-cell function that can occur during pregnancy in established type 1 diabetes

Regular Research Grants in Fiscal Year 2010 will be restricted to the following High-Priority Areas:

- Characterization of the roles of innate and adaptive immune responses in the immunopathogenesis of **human** type 1 diabetes
- Discovery, and preclinical development of antigen-specific tolerogenic vaccines and antigen-specific immunotherapies

Important Note: Applicants for support for research in this area are reminded that the JDRF research program is intended to complement, and not to replace, funding available from national research funding organizations, including NIH-sponsored consortia such as the International Type 1 Diabetes Genetics Consortium (www.t1dgc.org), the Type 1 Diabetes TrialNet (www.diabetestrialnet.org), the Immune Tolerance Network (ITN) (www.immunetolerance.org), and the Autoimmune Disease Prevention Centers (www.niddk.nih.gov/fund/diabetesspecialfunds/consortia/Prevention_Centers.pdf). JDRF efforts were significant in establishing these resources, and JDRF welcomes the participation of all investigators in accessing the available expertise.

Inquiries: Applications in this area should be referred to Barry Jones, Ph.D. (bajones@jdrf.org)

Complications

Preventing, reversing, and treating long-term complications of diabetes

The results of the Diabetes Control and Complications Trial (DCCT) emphasized that intensive glycemic control reduces the risk of, but does not eliminate, complications in individuals with Type 1 diabetes. Although we expect that improvements in metabolic and blood pressure control will further diminish the prevalence and severity of complications, the need for disease-modifying therapeutics to treat these complications is in high demand. JDRF intends to support basic and clinical research to accelerate development of therapies for treatment and arrest of further progression of long-term (chronic) complications of Type 1 diabetes. The program also seeks to support development of sensitive methods or biomarkers to assess risk, track progression, and measure drug efficacy. The Complications program encourages submission of cutting-edge research projects investigating basic disease mechanisms, disease-specific targets, and plausible interventions related to complications of Type 1 diabetes.

Priority Program Areas in Fiscal Year 2010

Areas receiving the highest priority for the upcoming grant year are retinopathy, peripheral neuropathy, nephropathy, and common mechanisms underlying multiple complications and specifically:

- Novel approaches to elucidate susceptibility and resistance to inflammatory and metabolic stress mechanisms underpinning multiple complications
- Unbiased approaches to pathway and target identification affecting retina, kidney or peripheral nerve
- Validation of disease-specific targets
 - Retinal targets complementing VEGF inhibition
 - Renal tubular fibrosis
 - Peripheral nerve regeneration
- Mechanism-based, disease modifying interventions to prevent and arrest progression of complications of Type 1 diabetes retinal, renal fibrosis and peripheral nerve disease
- Sensitive biomarkers and study endpoints in diabetic retinal, kidney or peripheral nerve disease

Regular Research Grants in Fiscal Year 2010 will be restricted to the following High-Priority Areas:

- Novel approaches to elucidate inflammatory and metabolic stress mechanisms underpinning multiple complications
- Unbiased approaches to pathway and target identification affecting retina, kidney or peripheral nerve

*Although JDRF recognizes the importance of research investigating other conditions that qualify as complications of diabetes, our priorities for this year will **exclude** atherosclerosis and vascular diseases, myocardial infarction and stroke, wound healing, analgesia and pain research, embryopathy, cognitive impairment, depression, periodontal disease and osteoporosis. Researchers*

with an interest in acute complications of diabetes such as ketoacidosis and hypoglycemia are referred to the Metabolic Therapeutic Area.

Inquiries:

All applications proposing clinical research or clinical trials must receive direct permission from the Staff. Each application is expected to follow the [JDRF Guidelines for Clinical Investigations](#) on the JDRF website.

Qualified investigators interested in applying are encouraged to discuss the scope and alignment of their research proposal with JDRF objectives with any of the Complications Scientific Program Director: Barbara Araneo, Ph.D. (baraneo@jdrf.org)

Metabolic Control

Restoring glucose regulation with device (closed loop artificial pancreas) and non-device approaches

Research consistently shows that glycemic control directly impacts the risks associated with diabetes, including hypoglycemia, heart disease, kidney disease, eye disease, and peripheral nerve disease. It is well documented that elevated mean glucose is directly linked to the formation of these diabetic complications. Despite considerable progress in treatments and technology, glycemic control goals, as measured by time spent in target glucose ranges vs. elevated mean blood glucose and hypoglycemic exposure, for people with diabetes often remain out of reach. New technologies to measure glucose and dispense insulin have matured and the potential exists to apply new technology (continuous glucose sensors for example) to enhance control, as well as to couple that technology to insulin delivery to automatically regulate blood sugar levels.

In addition to preventing complications, optimal glucose regulation is important to preserve the viability of either regenerated or transplanted beta cells and to preserve beta cell mass and function in recent onset type 1 diabetes and probably also in the prediabetes state.

Hypoglycemia is an acute complication in type 1 diabetes that arises from intensive insulin therapy to achieve optimal glucose control. Hormonal control of glucose counter-regulation fails in diabetes, the result of combined deficiencies of glucagon and epinephrine responses to falling glucose levels. Research is needed to delineate the mechanisms of glucose sensing, counter-regulation, and brain function during hypoglycemia and to develop therapeutic approaches to prevent hypoglycemia and its potential effects on brain function.

Therapeutic approaches to treat beta cell metabolic stress and prevent hypoglycemia are maturing and we are interested in examining the potential utility of repositioning FDA approved and labeled metabolic-focused therapeutics for type 1 diabetes indications. Research will be supported to perform pilot studies of such drugs and to delineate mechanisms leading to metabolic dysregulation in type 1 diabetes that may be amenable to therapeutic targeting.

Priority Program Areas in Fiscal Year 2010

- Quantification of the benefit of continuous glucose sensors in sub-populations of people with diabetes – we are particularly interested in the use of these technologies to improve outcomes in pregnancy
- Identification of strategies to develop glucose-responsive insulin formulations
- Identification of strategies to develop ultra-fast-acting insulin formulations
- Clinical application of technologies to predict and prevent nocturnal and post-exercise hypoglycemia
- Novel approaches to prevent hypoglycemia, or support cerebral function during hypoglycemic episodes
- Preclinical development of new therapeutics for prevention or treatment of hypoglycemia
- Clinical application of FDA-approved metabolic-focused therapeutics in all stages of type 1 diabetes
- Investigations of the mechanisms of beta cell metabolic stress in type 1 diabetes that may be amenable to therapeutic targeting

Regular Research Grants in Fiscal Year 2010 will be restricted to these Priority Program Areas

Inquiries: Applications in this area should be referred to: Aaron Kowalski, Ph.D. (akowalski@jdrf.org)

Prevention of Type 1 Diabetes

The incidence of type 1 diabetes has been increasing about 3-4% annually for the last several decades. Both genetic and environmental factors contribute to disease. Major efforts are underway to identify genes conferring susceptibility or resistance to human type 1 diabetes. Several genes have been identified to date, but the underlying mechanism(s) of action of these gene products have not been fully elucidated. Furthermore, understanding the role of susceptibility and resistance genes may enable the development of new diagnostics for determining risk and staging of disease, may help in the design of prevention trials, and may lead to new therapeutic targets for prevention or cure of type 1 diabetes. Environmental factors and gene-environmental interactions contributing to type 1 diabetes have not been well elucidated and have not led to date to viable approaches to prevention.

Priority Program Areas in Fiscal Year 2010

- Clinical trials of therapeutic agents for disease prevention in genetically susceptible, islet autoantibody positive, dysglycemic subjects at high risk of developing T1D
- Validation of candidate biomarkers with increased accuracy and precision to monitor the progression to development of type 1 diabetes, or the development of new technologies to monitor biomarkers in well-defined patient populations
- Understanding the mechanisms of action of genes that confer susceptibility or resistance to human type 1 diabetes

Regular Research Grants in Fiscal Year 2010 will be restricted to the following High-Priority Areas:

- Validation of candidate biomarkers with increased accuracy and precision to monitor the progression to development of type 1 diabetes, or the development of new technologies to monitor biomarkers in well-defined patient populations
- Understanding the mechanisms of action of genes that confer susceptibility or resistance to human type 1 diabetes

Inquiries: Applications in this area should be referred to Teodora Staeva, Ph.D. (tstaeva@jdrf.org; Tel: 212-479-7547) and specifically for genetic studies to Concepcion Nierras, Ph.D. (cnierras@jdrf.org; Tel: 212-479-7589).

Summary of Funding Grant Mechanisms in FY2010 – see JDRF [application guidelines](#) for a full description.

▪ **Regular Research Grants: up to \$165,000/yr total costs for 3 years.**

Regular Research Grants are intended to provide investigators with support to address JDRF research emphasis areas and are considered to be on the leading edge of diabetes research. Please see the detailed application guidelines for more information. **Because of restricted research funding budgets in FY2010, JDRF will not be able to fund as many Regular Research Grants as in some prior years, and thus, is strictly limiting proposals for Regular Research Grants in Fiscal Year 2010 to the High-Priority Areas designated above.**

▪ **Career Awards and Training Fellowships**

Career Development Award: up to \$150,000/yr total costs for up to 5 years.

JDRF Career Development Awards provide salary and research support for exceptional scientists in research related to diabetes who are beginning their careers as junior faculty. These awards provide support during the crucial first 5 years as an independent investigator. Please see the detailed [application guidelines](#) for more information.

Early Career Patient-Oriented Diabetes Research Award: up to \$150,000/yr total costs for up to 5 years.

The JDRF Early Career Patient-Oriented Diabetes Research Award will provide support to promising physicians or clinical doctoral recipients who pursue a career in patient-oriented, diabetes-related clinical investigation. These awards are made in the late stages of training and include the support for recipients to transition to independent faculty or research appointments. Please see the detailed [application guidelines](#) for more information.

Advanced Postdoctoral Fellowships: up to \$90,000/year for up to 3 years.

The JDRF Advanced Postdoctoral Fellowship will allow the most promising postdoctoral fellows to continue to receive critical research training and to position themselves to work at the leading-edge of their field of diabetes-related research. The award includes the ability to apply for funding to assist fellows in the transition to independent faculty appointments. Fellows are eligible to apply for up to \$110,000 for 1 year in transition funding after a faculty position has been obtained. Please see the detailed [application guidelines](#) for more information.

Postdoctoral Fellowships: \$41,068– \$52,492/year for 2 years.

JDRF Postdoctoral Fellowships provide crucial training support to M.D. or Ph.D. recipients who will focus on research related to diabetes. Emphasis is placed on postdoctoral fellows whose focus is in clinical research. These awards are highly competitive, and focused on recruiting outstanding junior scientists. It is strongly recommended that eligible individuals also apply to the US National Institutes of Health postdoctoral (F32) or other available programs. Please see the detailed [application guidelines](#) for more information.

▪ **Innovative Grants: up to \$110,000 total costs for 1 year.**

Innovative grants are intended to fund researchers with promising new approaches with high impact that may not be supported by extensive preliminary data. Funding will be provided for 1 year to develop preliminary data and/or to test the feasibility of an innovative idea. Please see the detailed [application guidelines](#) for more information.

- **JDRF High Priority, Short-Term Award: up to \$55,000 total costs for 1 year.**
JDRF recognizes the need at this time to support the research of investigators whose research is being curtailed or delayed by failure to receive funding. It is beneficial and of mutual interest to both the scientific community and JDRF to keep these scientists in the field, to help them receive funding for their proposals, and to have them help accelerate the JDRF mission. This award will provide one year of funding for research grant applications that address a high priority research area for JDRF and scored within 10% of the funding payline for a review cycle of a research funding agency up to a year prior to the request to JDRF. The goal of this “bridge” funding is to help investigators generate additional supporting data for an amended, competitive application.

- **Industry Discovery & Development Partnerships.**
JDRF Industry Partnership Grants are intended to support applications from companies or for-profit entities proposing research programs that are closely focused on the JDRF mission. In particular, JDRF encourages applications to perform proof of concept clinical trials of novel type 1 diabetes therapeutics. Applicants must demonstrate a fiscal commitment to the proposed project at least equal to the fiscal amount requested from JDRF. Please see the detailed [application guidelines](#) for more information.

- **JDRF will not be funding Program Project Grants (PPG) or Clinical Investigational Research Grants (CIRG) in FY2010** but instead will fund multidisciplinary preclinical research and clinical trials through its Academic Research and Development (Academic R&D) Cooperative Agreements.

- **Academic Research and Development (Academic R&D) Cooperative Agreements**
JDRF’s Academic R&D Cooperative Agreements were created to provide preclinical and clinical research funding for single or multiple investigators to address critical gaps and challenges in type 1 diabetes. The focus of the proposal is developed with input from JDRF. The award has a higher level of ongoing oversight through brief, interim quarterly reporting on milestones and interaction with JDRF staff to help address roadblocks and accelerate the research. The budget and duration of funding are variable and continued funding is based on satisfactory effort and progress on milestones. Submission of a proposal requires permission from JDRF and is initiated with a letter of intent submitted to the upcoming “JDRF Project Concept Proposal Portal” (look for an announcement on the JDRF website soon). Project Concepts meeting JDRF selection criteria will be invited to submit a formal Letter of Intent prior to preparation and submission of a full research application. Each stage of the application will be developed by JDRF in partnership with the investigator. For further information and how to apply, please visit the JDRF Website for updated [Applicant Guidelines](#).

For more information please visit the [JDRF website](#)