



JDRF Requests Expressions of Interest for the Assessment of Human Autoimmune Memory related to type 1 diabetes in the Context of Pancreas and Islet Transplantation

Purpose of Request

JDRF is soliciting expressions of interest (EOI) for the study of specific autoimmune recurrence in type 1 diabetic (T1D) patients following pancreas or islet transplantation.

Background

Recent studies have shown recurrent beta cell specific autoimmunity in T1D patients - following simultaneous pancreas-kidney (SPK), pancreas alone or islet transplantation in a subset of patients – despite immunosuppression that prevents allograft rejection. These findings underscore the robustness of the autoimmune response and reveal a unique opportunity to gain insights into the effector memory immune responses in patients with T1D. JDRF would like to take advantage of the current and past SPK, pancreas and islet transplantation efforts to define the intrinsic properties of T1D-specific memory cells and to exploit these findings for developing improved therapeutic approaches.

Specific Goals of Request

Expressions of interest are sought from investigators interested in studying human immune memory responses in T1D in the context of pancreas and islet transplantation from: 1) existing stored samples (sample access must be secured by the investigator and demonstrated in the EOI); or 2) samples obtained through a prospective trial of pancreas or islet transplantation (sample access will be facilitated by JDRF). This initiative encourages collaborations between experts in immune memory, immunopathogenesis of T1D, and pancreas/islet transplantation. However, we also welcome investigators with assays or hypothesis relevant to this initiative.

Examples of pertinent topics include, but are not limited to:

- Define the intrinsic properties of islet-specific memory T cells.
- Understand the persistence of memory T cells and the role of residual islet antigens in the generation and maintenance of memory responses.
- Elucidate the sensitivity of memory T cells to regulation.
- Study the effect of transplantation related lymphopenia on memory T cell responses.
- Identify biomarkers related to the expansion and/or activation of memory T cells.
- Understand the role of islet-specific memory cells in autoimmune recurrence and investigate means to exploit this knowledge for the development of more effective therapies targeting effector memory cells.
- Investigators with ideas or resources that might benefit this initiative should also submit their ideas via an expression of interest.

Expressions of intent should be no more than two pages in length including the following information:

- Name, title and institution of principal investigator (PI), co-investigator and/or key collaborator(s)
- Brief details of approach proposed, including hypothesis, scientific rationale and references to published or preliminary data (preliminary data need not be presented in detail)
- Type of human samples to be used and proof of sample access (if stored samples will be used)
- Type of human samples and volumes required for studies. Desired sample collection frequency and any special sample requirements (if samples from the prospective trial will be used)
- Biosketches of PI and co-investigators/collaborators (does not count towards page limit)
- Total estimated budget and project duration (not to exceed 3 years and not to exceed \$200,000/year). JDRF will not be supporting the cost of the transplantation procedure for the grants funded through this initiative.

Inquiries in this area should be referred to Teodora Staeva Ph.D. tstaeva@jdrf.org; tel: +1-212-479-7547 or Julia Greenstein, Ph.D. jgreenstein@jdrf.org; tel: +1-212-479-7682

Key Dates:

- Expressions of interest should be submitted via proposalCENTRAL (<https://proposalcentral.altum.com>) no later than September 1, 2010.
- Submitted expressions of interest will be acknowledged with brief responses as to their suitability for further development by the JDRF no later than October 15, 2010.