

## REQUEST FOR NETWORK PROPOSALS

### DIABETIC NEPHROPATHY BIOMARKER DISCOVERY AND VALIDATION USING TYPE 1 DIABETES COHORTS:

#### PURPOSE

JDRF is committed to facilitating the translation of therapies to improve outcomes in those with Type 1 Diabetes (T1D) and diabetic nephropathy (DN). Clinical trial design in this area is difficult due to the lack of validated biomarkers to predict progression to more severe disease and/or to predict treatment response ahead of endpoints currently acceptable to regulatory authorities. JDRF wishes to address this gap by utilizing well characterized T1D cohorts to discover and validate such biomarkers. The aim of this request is to catalyze collaborative research between talented research groups with critical clinical and data resources as well as those with appropriate analytic methods in order to accelerate progress in DN biomarker validation towards clinical utility.

#### BACKGROUND

Diabetic nephropathy is a complication of diabetes which contributes significantly to morbidity and mortality. Recent publications suggest that despite improvements in care, the risk of end stage renal disease (ESRD) has not reduced substantially. There is a paucity of validated interventions for clinical adoption to improve outcomes in those with diabetic nephropathy. Information and tools which can contribute to more successful DN clinical trials remains a high priority for JDRF. Given past clinical trial failures and the challenge in treating late stage disease, JDRF wishes to identify better pathways for clinical trials in those with CKD1-3, in particular in order to stratify patients based on risk for progression of disease. Multiple data and sample resources exist to support new learning in this area, but collaboration of groups with appropriate data and sample resources as well as analytic approaches will be essential to move the field forward. Many potential biomarkers for diabetic nephropathy have been proposed, however none of these have been fully validated for use in a clinical research setting. Validation includes confirming a link to a pertinent clinical endpoint or process, as well as development of a robust and appropriate analytical method.

#### OBJECTIVES

Letters of intent are sought from networks of closely collaborating investigators with complementary resources and innovative approaches to discover, correlate and provide validation for novel biomarkers predicting diabetic nephropathy progression and/or treatment response. This request is primarily intended to validate biomarkers to confirm links to disease process. However, where appropriate, this may integrate testing or comparison of analytic approaches for a specific biomarker. Candidate biomarkers should be obtainable by minimally invasive means, for example from serum or urine. Successful projects should leverage multiple data and sample resources, as well as analytic approaches that can identify biomarkers which could be used to improve clinical trial design in diabetic nephropathy.

Multiple projects may be proposed but it is expected that these are integrated with high synergy and interaction between such projects. Projects may include, but are not limited to:

- Novel analysis of existing data from epidemiologic, cohort studies or interventional clinical trials to identify potential biomarkers
  - Systems biology approaches to learning from relevant clinical datasets
- Analysis of stored samples from diabetic nephropathy cohorts or interventional studies to identify novel biomarkers, or to validate promising biomarkers from prior studies

- Ancillary studies to planned or ongoing observational or interventional clinical studies to identify or validate biomarkers
- Development of risk scores for nephropathy progression
- Academic investigators are encouraged to submit collaborative projects leveraging industry involvement
- JDRF Staff may suggest collaborations between investigators submitting LOIs based on the content therein.

It is not expected that new interventional trials be proposed in response to this call.

#### PRE-APPLICATION MEETING

JDRF held a pre-application meeting via web and teleconference on Monday 21<sup>st</sup> April, 2014 to which all interested prospective applicants were invited. A recording is being made available; <https://jdrfmeetings.webex.com/jdrfmeetings/ldr.php?RCID=6222bfb4f3f23575faf2ba25f94e3e24>.

Please contact Gabriela Mogrovejo, information below, to receive a copy of the slide-deck presented.

#### MECHANISM

Funding requested should be concomitant with the study proposed. However, funding requests may not exceed a maximum of \$1,500,000 USD per year, including a maximum of 10% indirect costs, or exceed 3 years duration. If necessary, JDRF may be able to administer individual grants to each project and/or institution within the network, provided a clear collaborative framework is established. Funded projects would be funded as [Strategic Research Agreements](#) subject to quarterly progress reporting and renewal will be contingent upon satisfactory progress on an annual basis, which will be evaluated by JDRF staff and external advisors appointed by JDRF.

#### ELIGIBILITY

Applications may be submitted by for-profit entities as well as nonprofit organizations, public and private universities, colleges, hospitals, laboratories, units of state and local governments. There are no citizenship requirements.

#### LETTER OF INTENT

An approved LOI is required prior to submission of a full proposal. Please see below for complete instructions. Letters of intent should use the template provided and include the following information:

- Background /Rationale and Specific Aims of overall project
- Table of clinical cohorts and studies to be included
- Overview of hypotheses, goals, deliverables and collaborative framework
- Brief overview data and sample sharing plan and logistics
- Expected deliverables and impact of the proposed study
- Title, lead investigator and brief description and specific aims of individual projects (Maximum 6 projects)
- Intellectual Property or commercial efforts associated with the current application
- Total budget / budget by year by project
- Biosketches for all Principal Investigators

#### DEADLINES

- Request for LOI Release Date:.....March 24<sup>th</sup> 2014
- Informational Webinar:.....April 21<sup>st</sup> 2014
- LOI Submission Deadline:.....July 14<sup>th</sup> 2014
- LOI Notification:.....August 2014
- Full Application Deadline:.....October 20<sup>th</sup> 2014
- Response to Applicants Date:.....March 2015
- Earliest Anticipated Start Date:.....April 2015

## **SUBMISSION INSTRUCTIONS**


Applicants should register and submit their completed LOI in RMS360 (<http://jdrf.smartsimple.us>). The deadline to submit a completed LOI is July 14, 2014.

## **REVIEW CRITERIA**

JDRF will review and select LOIs to be developed into full proposals. Please direct queries about the suitability of your proposal to the scientific contact below.

## **SCIENTIFIC CONTACT**


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 212-470-7522

 [hnickerson@jdrf.org](mailto:hnickerson@jdrf.org)

## **ADMINISTRATIVE CONTACT**

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 212-479-7694

 [GMogrovejo@jdrf.org](mailto:GMogrovejo@jdrf.org)

If you have any grant-specific questions as you work within RMS360, please contact the administrative contact listed above. For any **non grant-specific** inquiries or issues, please contact SmartSimple Support Services via email [support@smartsimple.com](mailto:support@smartsimple.com) or phone (866) 239-0991. Support hours are Monday through Friday between 5:00am and 9:00pm US Eastern Standard Time.