

## Six Therapeutic Targets for the Next Five Years

### Along the path to a cure

In the next five years, some \$2.5 billion will be spent on type 1 diabetes research around the world. That total not only includes projected JDRF funds of \$500 million, but industry activity as well as \$750 million in federal funding for the U.S. National Institutes of Health for type 1 diabetes research, passed last year as a result of JDRF advocacy. JDRF will play a unique role in setting the global direction of this extraordinary cure enterprise, to ensure that these resources are used as effectively as possible to bring about a world without type 1 diabetes.

To that end, we have set six bold and significant therapeutic targets in the next five years. At JDRF, we will focus on:

**1** perfecting islet transplantation—without chronic immunosuppression—to permanently restore normal blood sugar levels in people with type 1 diabetes;

**2** creating a stable, replenishable, “universal donor” source of insulin-secreting cells for transplantation;

**3** regenerating the body’s own beta cells without islet transplantation—and simultaneously inducing immune tolerance to restore normal blood sugar levels;

**4** developing a closed-loop artificial pancreas;

**5** creating novel approaches and therapeutics for predicting, preventing, and treating complications; and

**6** preventing type 1 diabetes by maintaining or restoring immune tolerance in new-onset patients.

### Funding approach

JDRF is uniquely positioned to play the role of catalyst in bridging the funding gap that exists in translating discoveries to human application. This means contemplating some bold shifts in our research funding strategy. While continuing to invest in basic research, we have determined that we must also direct increased resources to fill the gaps in clinical development. To that end, JDRF is creating two new types of funding approaches:

- Industry Discovery and Development Partnerships, focused on establishing collaborative opportunities with pharmaceutical and biotechnology companies, and promoting cross-disciplinary collaborations between academia and the private sector.
- Novel Funding Mechanisms focused on research programs that are outcome-oriented and milestone driven. The programs will exploit new opportunities, support high risk/high reward innovative research and integrate diabetes research conducted at multiple sites to accelerate therapeutics development wherever we find traction.



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