**Human Study of Novel T1D Cell Replacement Therapy Planned for This Year**

For people with type 1 diabetes (T1D), every day is a balancing act. They have to count every carbohydrate they eat, test their blood sugar repeatedly, calculate insulin doses, and give themselves multiple insulin shots to stay alive. It’s no wonder that despite their best efforts, less than 50 percent of people with T1D achieve their target blood-sugar level. Yet the consequences of missing that target are severe, ranging from diabetic seizures to long-term complications such as blindness and amputated limbs.

Now that could be changing. JDRF-funded ViaCyte, a leader in encapsulated cell therapies, is getting ready to move a new cell replacement treatment for T1D out of the laboratory and into human studies. Encapsulated cell therapies for T1D involve wrapping insulin-producing beta cells and other cells found in the pancreas in an easily implantable, permeable pouch. The implanted beta cells release insulin when needed, freeing people from the need to constantly test their blood sugar and take insulin for up to two years. Because the pouch stops the body’s autoimmune system from destroying the cells, there is no need to take immunosuppressive drugs.

So far, this encapsulated cell therapy has been effective in animal studies. ViaCyte is working on getting regulatory approval from the FDA to launch the first human clinical trials and hopes to begin testing this year.

“JDRF is investing in this research because this company—and this technology—have reached a critical juncture at which success could lead to a truly revolutionary breakthrough in treatment and quality of life for those living with T1D,” said Jeffrey Brewer, JDRF President and CEO. For more information, watch our video at www.jdrf.org/encapsulation.

To learn more about ways to support JDRF, please contact:

Alan Berkowitz
National Director of Planned Giving
JDRF
26 Broadway, Floor 14
New York, NY 10004

Toll-Free: 877.533.4483
Email: plannedgiving@jdrf.org
www.jdrf.plannedgiving.org

**Supporting the Dream**

It’s not often that someone calls type 1 diabetes (T1D) a “blessing.” But Debbie Sivula does. She’s lived with T1D for 54 years, and it led her to a career she loves and lifelong friendships.

Debbie was 10 years old in 1960 when her mother became worried because she was drinking and urinating excessively. The doctor had Debbie drink a “terrible glucose solution.” As soon as he saw the results, he sent them straight to the hospital. “If much more time had gone by, I probably would have ended up in a coma,” Debbie said.

She spent five days in the hospital while her parents learned how to manage T1D. “I really could have started learning many aspects of my care, but they didn’t do that in those days,” she explained. Her dad gave her one shot a day. The needles, which were about three times thicker than they are now, were painful. And every week, her mom had to sterilize her glass syringes and steel needles.

It was at diabetes camp that Debbie learned how to give herself insulin shots. She also made friends with other kids with T1D. "I have a girlfriend from camp, over 50 years ago," she said. “We went to New York to celebrate our 25- and 50-year anniversaries with T1D. With a friend like that, learning how to give myself my first shot, camp did so much for us. We could be normal. She was also at camp when sugar-free soda became available. “We went crazy because we could never have anything like that before,” she smiled. “They brought Shasta root beer and made us ice cream floats, and oh my, we were in heaven.”

T1D led Debbie to pursue a career in nursing and later become a diabetes educator. She also worked for four diabetes care companies, including two insulin pump companies, over the next 30 years, and many of her customers became good friends. Yet although she loved her work teaching patients how to use the pump, she was reluctant to use one herself. “I didn’t want that attachment, that tubing. It felt like wearing a ball and chain.”

That changed when Nicole Johnson, Miss America 1999 who also has T1D, came to speak at Debbie’s company one day. "I saw her there with the pump and thought, ‘If Miss America can do it, I’ll give it a try.’” Debbie did—and has been using a pump ever since.

A few years ago, Debbie received a special medal from Joslin Diabetes Center in Boston to recognize her 50 years of living with T1D. She also took part in a study there so doctors could try to find out what genetic factors have protected her from developing complications.

(continued on page 4)
Learn More Today!
Return the enclosed reply card to receive your free brochure about wills and bequests.

OR
Visit our website at www.jdrf.plannedgiving.org to learn about other giving options that may meet your goals.

OR
Contact Alan Berkowitz, National Director of Planned Giving, toll-free at 877.533.4483 or plannedgiving@jdrf.org with any questions you have about extending your support into the future.

Remember JDRF in Your Will

Have you ever wished you could make a significant gift to help fight T1D, but worried that you might one day need those funds yourself? Fortunately, you can help JDRF and take care of your own needs—by making a charitable bequest in your will. Bequests are one of the most popular ways to make a lasting difference in the battle against T1D. You retain control of your assets during your lifetime and can modify your plans at any time in response to changing personal circumstances. You can designate JDRF to receive a specific sum or percentage of your estate.

Remembering JDRF in your will is a simple way to create a lasting legacy that will bring us closer to a cure for T1D and improve the lives of future generations. If you’d like to learn more about making bequests, simply complete the enclosed reply slip and return it in the envelope provided.

HOW TO MAKE A CHARITABLE BEQUEST

Many people ask us what they need to make a charitable bequest to JDRF in their will. Our Tax ID Number is 23-1907729 and our address is 26 Broadway, 14th Floor, New York, NY 10004. The following language may be helpful:

I give and devise to JDRF, a nonprofit organization with headquarters in New York, NY, the sum of $__________ (or __________%, % of my estate) to be used for its general support (or to be used exclusively to support T1D research).

When you include JDRF in your estate plans—by making a bequest in your will or trust, naming JDRF as a beneficiary of your retirement plan or insurance policy, or establishing a charitable gift annuity—you are eligible to become a member of our exclusive BETA Society.

The BETA Society is our way of honoring visionary friends whose support ensures T1D research will continue until we find a cure. Members receive a distinctive lapel pin, invitations to research updates, and a listing in JDRF’s annual report (unless anonymity is preferred).

Approval is Good News for Artificial Pancreas Development

The U.S. Food and Drug Administration (FDA) recently approved the marketing of a new glucose control system—what many are calling the first step in the development of artificial pancreas systems for people living with type 1 diabetes (T1D).

Marketed by Medtronic, this novel system, called the MiniMed 530G with Enlite, automatically stops delivering insulin if blood sugar drops below a certain predetermined level. This “low glucose suspend” technology can be a lifesaving feature. It’s designed to prevent people with T1D from continuing to receive insulin if they’re already too low, a situation that can happen, for instance, when they’re sleeping.

JDRF is playing a leadership role in the development of artificial pancreas systems, which will build on this technology. JDRF is playing a leadership role in the development of artificial pancreas systems, which will automatically control blood-sugar levels by dosing insulin based on a person’s minute-to-minute needs. With JDRF support, artificial pancreas systems with more sophisticated features have already proven effective in outpatient testing, and JDRF will continue to work with industry and academic partners to reach our ultimate goal of a fully automated artificial pancreas system.

For more information, watch our video at www.jdrf.org/artificialpancreas.
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Bequests are one of the most popular ways to make a lasting difference in the battle against T1D. You retain control of your assets during your lifetime and can modify your plans at any time in response to changing personal circumstances. You can designate JDRF to receive a specific sum or percentage of your estate.

Remembering JDRF in your will is a simple way to create a lasting legacy that will bring us closer to a cure for T1D and improve the lives of future generations. If you’d like to learn more about making bequests, simply complete the enclosed reply slip and return it in the envelope provided.

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I’m certain I would have had genetic complications if my genetic makeup had been different,” said Debbie. “I’ve seen people who try so hard to maintain good control, yet the outcome is bad. I’ve seen people without legs, people who are blind... it’s sad. We know that control definitely makes a difference. But there’s still a huge genetic component.” Throughout her years as a diabetes educator, Debbie has often referred families to JDRF for support. Recently she included JDRF in her will. “They have a strategic research plan to end T1D,” she said. JDRF’s plan keeps people with T1D healthy and safe while they search for a cure, which is what everyone wants, she added. “We need to support that dream.” JDRF thanks Debbie Sivula for her extraordinary generosity.

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“supporting the dream”

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A gift planning newsletter for friends of JDRF
volume 1 / 2014