

DREAM CATCHER NEWS

MN Lions Diabetes Foundation, Inc. "Catch the Dream" Life Without Diabetes!



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Mission Statement

The Minnesota Lions Diabetes Foundation, Inc. (MLDF) is dedicated to improving the quality of life for people with diabetes by funding research to cure diabetes, providing education and sponsoring preventive health activities.

Foundation News

At the 2015 University of Minnesota Research Update -- Many "Thank You's" were extended by the U of M Researchers for the generous donations made by Lions through the Minnesota Lions Diabetes Foundation (MLDF). MLDF has been a huge part of enabling these scientists to continue and further their diabetes research at the University of Minnesota.



There are a variety of research projects being conducted at the U of M. Though each scientist has his or her own unique approach, they all share one common goal to Prevent, Optimally Treat, and Ultimately Cure both Type 1 and Type 2 diabetes. Thanks to the Lions, we are helping them to move even closer to achieving those goals. There are three diabetes research projects the Lions are currently supporting at the University.

- The first, Dr. Brian Fife's immunology work is aimed at **preventing** diabetes.
- The second project, led by Dr. Elizabeth Seaquist is focused on **optimally** treating diabetes.
- The third project, transplanting islets into an encapsulation device, then oxygenating them and imaging the islets, led by Dr. Mike Garwood, is aimed at curing diabetes.

Dr. Brian Fife's work:

In Type 1 diabetes, the body's own immune system attack insulin-producing islet cells in the pancreas. Now that scientists have discovered the specific cells in the body that are present when someone has diabetes, Dr. Fife and his team have discovered ways to "find" those cells amongst the millions of cells in one's body. The next step in the process is to learn how to "silence", or stop those cells from attacking the body. Dr. Fife's long term goal is to develop a vaccine that will be given to high-risk individuals that will then prevent them from ever getting diabetes. He was able to comically demonstrate how the immune system works by sharing a video where a person in a car was under attack/threatened by a car thief. The car owner received protection from a wrench wielding monkey hiding in the trunk, who jumped out and attacked the would be car thief. Dr. Fife likened the human immune

system to the "trunk monkey" –always ready to fight off any foreign matter.

The second area of research the Lions support is the work led by Dr. Elizabeth Seaquist.

Dr. Seaquist is heading up a second phase of research to understand the long term effect of both low and high blood sugar on the brain of people with diabetes. She began this study with 25 diabetics and 25 controls in 2008. Seaquist and her team have focused their current investigation on the metabolic changes experienced by people who suffer recurrent hypoglycemia. The research being conducted should help investigators understand the risk of memory loss faced by some people who have diabetes – Type 1 and 2. It is with this understanding Dr. Seaquist and her team look to develop better treatment options.

The third area of research supported by the Lions involves imaging transplanted islet cells that are placed into a small mesh-like pouch known as a bio-artificial pancreas. This device is then implanted into the body. A major challenge in placing islet cells in this tiny device is the need for the islets to have a rich supply of oxygen in order to thrive. Dr. Garwood and his team are diligently working to develop an oxygenator that would push oxygen through the device thereby maintaining the life of the cells while keeping out any cells that might harm them.

Finally, each Lion was able to visit both the imaging center and an immunology lab.

In the imaging center we were able the see the world's largest animal and human scanning devices. The 10.5 Tesla, whole-body human magnetic resonance imaging magnet is nearly 10 times stronger than most medical MRI scanners. We also saw the 16.4 Tesla animal magnet. As part of the tour we saw the magnets where Dr. Garwood's islet imaging work is being conducted (the 16.4 Tesla magnet) and the magnets where Dr. Seaquist studies brain metabolism in people who have diabetes.

In the immunology tour we saw the tools Dr. Fife and his team use to be able to "find" the correct immune attacking cells amongst the millions of cells in our body.

We are in awe of the great world-leading diabetes research taking place at the University of Minnesota. The morning of education affirmed our unwavering commitment to provide the financial resources to help these scientists advance our mutually agreeable goal in preventing, optimally treating, and ultimately curing diabetes.

If you would like more information regarding the research taking place at the University of Minnesota, please visit: http://www.diabetes.umn.edu.

Duluth Lions Club Supports the ADA in "STEP OUT WALK to Stop Diabetes"

Saturday, March 28th, in Duluth's own Miller Hill Mall, the ADA held their annual Duluth fundraiser. The Walk has been at the Miller Hill Mall since 2004. Over 300 participants registered for the Walk and raised over \$50,000 (with money still coming in). Duluth Lions Club had their own team which raised over \$700 for the Walk and supported the event with a \$1,500 donation.

The event started with our National Anthem performed by The Sterling Strings from Duluth

East High School. This was followed by Duluth East High School Cheerleaders "cheering on" the start of the Walk. The first lap was started by 2015 Walk Ambassador, Britta Koski. Along the Walk course there was live music provided by Duluth East High School Jazz Band, Two Bridges String Quintet, Suzuki Music Students, and a duet called "Me & Paul". Great fun was had by all.

Also along the walk were a "Kids Zone" with face painting, coloring and crazy hair plus individual massages and vendor/wellness expo displays.



The Duluth Lions Club had a booth promoting our Club and our community involvement. Team photos were taken by John D'Auria. Door prizes and

\$1.00 prize drawing were available with donations from many local individuals and businesses. Healthy snacks were available before, during and after the Walk. The Walk was visited by a local clown, Tiki from Edgewater, Roary from Duluth Lions Club and UMD's mascot Champ.

The event closed at 10:30am with announcements from event DJ's from KDWZ 102.5 radio.

"Every 12 seconds someone is diagnosed with diabetes".

Mark Your Calendars ----

Minneapolis Tour de Cure - May 5, 2015 ADA Expo in Minneapolis – October 10, 2015 World Diabetes Day – November 14, 2015 U of M Research Update – March 26, 2016

Camps Full of Adventure -

The purpose of <u>Camp</u> <u>Needlepoint</u> is to provide a fun and safe camping experience for children living with diabetes. It gives kids the opportunity to meet other kids



just like them as well as help them gain confidence and independence in managing their diabetes. Camp Needlepoint is located at YMCA Camp St. Croix, south of Hudson, WI on a wooded bluff along the St. Croix River. <u>http://www.diabetes.org/in-my-</u> <u>community/diabetes-camp/camps/needlepoint-</u> 1.html

<u>Camp Sioux</u> is held at Park River Bible Camp in Park River, North Dakota. Facilities include: a 24 hour health center, dining hall, crafts barn, pool, nature trails, basketball and 4-square courts, soccer fields, archery range, high ropes



course and a gaga pit. (If you don't know what a gaga pit is you'll just have to come to camp and find out!) - See more at: http://www.diabetes.org/i

n-my-community/diabetes-camp/camps/sioux-1.html

<u>Camp Sweet Life Adventures</u> is located at Kiwanis Camp Patterson near Madison, MN. It provided youth with Type 1 diabetes opportunities to connect with other kids with T1D, learn how to take better care of themselves, and have loads of fun in a carefree summer camp environment. www.camppatterson.org

Take Care of yourself

Find time to enjoy this MN Season while incorporating more movement into your days. Try something new - Walk, Swim, Garden, Dance, Play Ball, Bike, Fish, etc. Have Fun!