



Minnesota Lions Diabetes Foundation (MLDF) Update

MLDF Physical Activity Challenge

Lions, friends and family members, the general public continue to register for our Strides Physical Activity Challenge – our annual fundraiser this Lions year. Clubs and the general public are welcome to put together teams, or register or donate as individuals.

If you have not registered yet, it is not too late. Go to MNLionsDiabetes.org and select STRIDES Physical Activity Challenge on the home page. Our challenge continues through April 30.

MLDF is also continuing to accept sponsorships from clubs and individuals for our Challenge fundraiser.

Minnesota Lions Diabetes Foundation Annual Update

Our 13th Annual Update was held in person on March 19 in St. Cloud. Five University of Minnesota researchers presented information about advancements they've made in their research – and highlighted their research goals for this coming year.

Among the Annual Update highlights, researchers reported how they are working to identify and control destructive immune cells that destroy insulin-producing beta cells in the pancreas so they can be converted into cells that will help prevent diabetes. Additionally, researchers talked about the collaborative work to develop non-invasive methods that will support development of a bio-artificial pancreas as a treatment for diabetes. Also noted were the results of research that maintained long-term survival and function of transplant pancreas islets after complete discontinuation of all anti-rejection drugs on the 21st day following transplant. The potential to discontinue use of long-term use of anti-rejection medication is significant because people taking the drugs face the risk of serious infections and cancer and other non-immunological side effects such as hypertension and kidney toxicity.

Using Pig Organs for Transplants

This month we are highlighting work being done by world-renowned experts Bernard Hering, M.D.; Andrew Adams, M.D., Ph.D.; and Christopher McGregor, M.D. Through MLDF, their work at the University of Minnesota has been supported by Lions. Their current collaborative research is focused on the production of genetically-engineered pigs as donors of organs for use in the treatment and complications of diabetes.

The demand for organs for human transplantation is enormous, but the supply is extremely limited. As of March, more than 106,000 people in the U.S. are on the waiting list for an organ transplant. Each year, 8,000 die – an average of 22 each day – before they receive a transplant. For decades, patient and medical communities have dreamed of having an unlimited supply of high-quality organs for transplant. Pigs can provide that unlimited supply and transplanting porcine tissue to humans to replace failing kidneys, hearts, and pancreatic islet cells would be a game-changer for patients.

Safe and successful transplant processes from genetically-engineered animals would herald a new era of medicine in which readily available tissue could be used to treat many different diseases and conditions. Successful transplants would be more than technological and medical breakthroughs. They would save thousands of lives each year while improving the life expectancy and quality of life for many more people.

Drs. Hering, Adams and McGregor, are passionate about their goal to achieve the next major milestone in transplant advances: the first successful kidney, heart, and islet transplants in human patients using cells and organs from genetically-engineered donor pigs. During 2021-2022 they plan to maximize cell and tissue supply and finalize strategy for pre-clinical studies.

Raising funds for diabetes research is a core mission of Minnesota Lions Diabetes Foundation. Both Type 1 and Type 2 Diabetes are increasing throughout our population in all age groups. MLDF support of research is critical to identifying new treatments and a cure for diabetes. The funds that MLDF grants for diabetes research is made possible by all our clubs in 5M5. *Your hard work, fundraising, and gifts to MLDF make it possible for us to support diabetes research. Thank you for those donations!*

For further information please contact your 5M-5 MLDF Trustees

www.mnlionsdiabetes.org