

# Connecting For A Cure

*June 2021 Newsletter*

This past year has been defined by resilience. Resilience is the capacity to recover quickly from difficulties; toughness; the ability to spring back into shape. Many of us have faced adversity this past year in ways that we could never have imagined. We had to re-learn how to parent, work, and engage in the community, and we had to reassess what is most important in our lives. As we begin to move out of a global pandemic, it is our community and our resilience that will take us to the future; together. At DRC, our community of those impacted by type 1 diabetes (T1D) every day are resilient; our staff and volunteers are resilient; our supporters and donors are resilient; our research community is resilient. And as a result, we have seen more focus and dedication to DRC's vision to support scientific inquiry until diabetes is eliminated than ever before. We depend on our collective resilience to finish this year strong!

## Targeting Polyamine Biosynthesis for the Prevention of T1D

### **Abhishek Kulkarni, Ph.D., University of Chicago**

In this project, Dr. Kulkarni will investigate the role of polyamines by using genetically altered mouse models as well as human islets to decipher the interplay between polyamines,  $\beta$ -cells, and the immune system. The specific goals of this study are 1. Determine the contribution of polyamine synthesis to the incidence of type 1 diabetes in mice. 2. Determine the contribution of islet polyamine synthesis on immune cell activation. With the multidisciplinary expertise of Dr. Kulkarni's lab in islet biology and immunology and by employing state-of-art technologies, this study will fill the critical gaps in the knowledge regarding the inciting events leading to T1D and open doors to potential therapeutics to prevent and/or delay the development of T1D.



## Using Autonomous Artificial Intelligence (AI) to Improve Early Detection of Diabetic Retinopathy in Children with T1D

### **Risa Wolf, M.D., The Johns Hopkins Hospital**

The goal of Dr. Wolf's project is to expand upon a recent pilot study conducted at her institution, where they implemented diabetic retinopathy screening using a camera that does not require pupil dilation and uses an autonomous artificial intelligence (AI) system that provided immediate results. She will expand on this project with a larger clinical study at multiple sites within her institution to determine whether point-of-care autonomous AI: a) improves pediatric DR screening rates compared to standard eye care provider exams; b) improves follow-up for those identified as having diabetic retinopathy, and c) mitigates racial/ethnic disparities associated with access to diabetic eye exams. There is a critical need today to improve access to DR screening, for high-risk T1D youth, especially during the COVID-19 pandemic. By leveraging this new and innovative technology in the pediatric diabetes clinic to provide real-time results, Dr. Wolf's team expects to demonstrate a reduction in the need for a separate visit to the eye-care provider, an improvement in screening rates, and savings in time and money for patients and their caregivers.



**Read More About All of Our Research Projects on Our Website**

[diabetesresearchconnection.org/projects/](https://diabetesresearchconnection.org/projects/)



## Hello Diabetes Research Connection (DRC) Community,

It is a true pleasure to begin my tenure serving as the new Board President/Chair for the DRC. Like my predecessor David Winkler, I remain committed to growing and expanding the DRC so that we can fund as much innovative science as possible. Together, our collective passion and drive will inspire hope while setting a realistic, tempered approach to identify and support the best science in the Type 1 Diabetes (T1D) community. While we continue to learn and grow the organization, we welcome two additional leaders to our team. First is Karen Hooper, our new Executive Director, who joined the team in March. She brings 20 years of non-profit leadership experience with her, building innovative programs and lifetime relationships. Karen is dedicated to the DRC mission and excited to help us expand and reach more scientists and partners across the country. Next is Vincenzo Cirulli, M.D., Ph.D., our new Scientific Director, who has assumed the role previously held by Alberto Hayek, M.D. Vincenzo has spent his career in islet biology and brings both exceptional expertise and vision as the new leader of scientific funding. As you can see, the DRC family is growing and thriving. I invite you to please join me and help DRC fund more meritorious research than ever before. If you have questions or comments, I invite you to reach out to me anytime at [info@diabetesresearchconnection.org](mailto:info@diabetesresearchconnection.org).

Sincerely,

C.C. King, Ph.D. DRC Board Chair

## Staying Connected to Our Community

As the world slowly returns back to normal or shall we say adjusts to a 'new normal' DRC is dedicated to staying connected to our community. We have been delighted to feature a new series called 'Discussing Diabetes.' You can read these posts that address topics such as T1D and stress, traveling, relationships, and more on our website under DRC News.

## Virtual Meet & Greet

On May 25th we hosted a virtual event giving our community the opportunity to meet DRC's new leaders in 2021. This was an exciting time where our partners were free to ask questions about T1D research and learn more about DRC's goals for 2021. You can watch the whole event on our Youtube Channel.

Watch Now



YouTube



## The 4th Annual Dance for Diabetes

will be held in person in 2022 to celebrate DRC's 10-year Anniversary!

## Stay Tuned



### E-Newsletter

Make sure to sign up for our e-newsletter on our website to receive updates on this and other upcoming events.



### Unable to make our last virtual event? Don't worry!

You can schedule a ZOOM call: Coffee with Casey & Karen to connect with DRC's Senior Director of Development and Executive Director to share your ideas! Email Casey Davis at [CDavis@DiabetesResearchConnection.org](mailto:CDavis@DiabetesResearchConnection.org) to schedule a time to meet.