



# JAEB CENTER FOR HEALTH RESEARCH 2019 ANNUAL REPORT

## **Mission Statement:**

*To expand scientific knowledge and improve public health  
by designing and conducting world-class clinical trials  
and epidemiologic research.*

## TABLE OF CONTENTS

<b>OVERVIEW</b> .....	<b>4</b>
<b>STUDIES ACTIVE DURING 2019</b> .....	<b>6</b>
DRCR Retina Network.....	6
Pediatric Eye Disease Investigator Group.....	6
Foundation Fighting Blindness Consortium Rare Retinal Disease Network .....	7
T1D Exchange.....	7
Other Diabetes Studies.....	8
Miscellaneous Studies .....	9
<b>APPENDIX A: STAFF ACTIVITIES AND RECOGNITIONS</b> .....	<b>10</b>
<b>APPENDIX B: JCHR PRINCIPAL/LEAD INVESTIGATORS</b> .....	<b>13</b>
<b>APPENDIX C: GRANTS AND SUB-AWARDS ACTIVE DURING 2019</b> .....	<b>17</b>
National Institutes of Health.....	17
JDRF .....	18
Helmsley Charitable Trust.....	19
Foundation Fighting Blindness Consortium Rare Retinal Disease Network .....	20
Industry-Funded Studies.....	20
<b>APPENDIX D: MANUSCRIPTS AND PRESENTATIONS</b> .....	<b>21</b>
Pediatric Eye Disease Investigator Group.....	21
Published and Accepted Manuscripts .....	21
Presentations.....	22
DRCR Retina Network.....	24
Published and Accepted Manuscripts .....	24
Presentations.....	26
Cornea Preservation Time Study.....	29
Published and Accepted Manuscripts .....	29
Presentations.....	29
Pediatric Diabetes Consortium .....	30
Published and Accepted Manuscript.....	30
Presentations.....	30

T1D Exchange Clinic Network .....30  
    Published and Accepted Manuscripts .....30  
    Presentations.....32  
Other Diabetes Studies.....35  
    Published and Accepted Manuscripts .....35  
    Presentations.....37  
Miscellaneous .....39  
    Presentation .....39

## Overview

In its 27<sup>th</sup> year of operations, the Jaeb Center for Health Research (JCHR) continued to focus its research efforts in eye diseases and diabetes. In addition to several industry contracts, 33 grants or subcontract awards were active from the National Institutes of Health (12), Helmsley Charitable Trust (9), JDRF (8), and Foundation Fighting Blindness (4), with 11 being new grants or subcontract awards received during the year. Remarkably, JCHR ranked fourth nationally among all universities and other research institutions in the annual amount of funding received from the National Eye Institute, behind only Stanford University, Johns Hopkins University, and the University of Washington.

Highlights for JCHR during the year included two approvals by the Food and Drug Administration (FDA) for a drug and a device. The drug approval was for Baqsimi, a glucagon preparation marketed by Eli Lilly. When sprayed into the nose of individuals with diabetes who lose consciousness from hypoglycemia, Baqsimi acts to increase blood sugar to restore consciousness. This was the first drug approval where JCHR served as the coordinating center for the pivotal trials that formed the basis of the FDA approval. The device approval was for the Control-IQ artificial pancreas system to be marketed by Tandem Diabetes, which automates the delivery of insulin to regulate blood glucose levels in adults and children with type 1 diabetes, for which JCHR served as the coordinating center for the pivotal trial.

JCHR projects had 62 manuscripts published or accepted for publication and 76 presentations made at national and international meetings. This included a publication of the previously mentioned Control-IQ study in the *New England Journal of Medicine* and a DRCR Retina Network paper on the results of a randomized trial comparing three treatment strategies for diabetic macular edema with normal or near-normal visual acuity published in JAMA.

In addition to conventional clinic-based clinical trials, JCHR conducted three “direct to-patient” studies in which JCHR staff had direct contact with study participants who provided data via the Internet and from devices: (1) a study to collect device data during exercise in people with type 1 diabetes; (2) a study to initiate continuous glucose monitor (CGM) use at home with virtual training using a Web-based approach; and (3) an observational study of the use of a do-it-yourself artificial pancreas system.

In 2020 and beyond, eye-disease projects will continue in three networks: DRCR Retina Network, which studies diabetic retinopathy and other retinal diseases; Pediatric Eye Disease Investigator Network (PEDIG), which studies a range of eye diseases in children; and Foundation Fighting Blindness Rare Retinal Disease Network, which as

indicated by the name studies retinitis pigmentosa and other rare retinal diseases. Additionally, an ongoing study is evaluating the use of stem cells for cornea diseases.

JCHR's involvement in diabetes studies continued to expand, and its reputation as the premiere coordinating center worldwide for diabetes device studies, particularly artificial pancreas studies continued to grow with the publication of the Control-IQ study results. Artificial pancreas studies and CGM studies are funded by the National Institutes of Health (NIH), JDRF, Helmsley Charitable Trust, and companies. Three important CGM studies in special populations with type 1 diabetes (young children, adolescents and young adults, and older adults) were completed in 2019 and had results presented at the American Diabetes Association meeting.

JCHR's staff total as of December 31, 2019 was 129, which included the hiring of 20 new staff during the year. With certainty, 2020 will be another busy and productive year for JCHR.

## Studies Active During 2019

### DRCR Retina Network

- A Comparative Effectiveness Study of Intravitreal Aflibercept, Bevacizumab, and Ranibizumab for Diabetic Macular Edema – Follow-up Extension Study (Protocol TX)
- A Pilot Study Evaluating Photobiomodulation Therapy for Diabetic Macular Edema (Protocol AE)
- Genetics in Retinal Diseases Project
- Intravitreal Anti-VEGF Treatment for Prevention of Vision Threatening Diabetic Retinopathy in Eyes at High Risk (Protocol W)
- Intravitreal Anti-VEGF versus Prompt Vitrectomy for Vitreous Hemorrhage from Proliferative Diabetic Retinopathy (Protocol AB)
- Peripheral Diabetic Retinopathy (DR) Lesions on Ultrawide-field Fundus Images and Risk of DR Worsening Over Time (Protocol AA)
- Prompt Panretinal Photocoagulation versus Intravitreal Ranibizumab with Deferred Panretinal Photocoagulation for Proliferative Diabetic Retinopathy (Protocol S)
- Randomized Clinical Trial Assessing the Effects of Pneumatic Vitreolysis on Vitreomacular Traction (Protocol AG)
- Randomized Trial of Intravitreal Aflibercept versus Intravitreal Bevacizumab + Deferred Aflibercept for Treatment of Central-Involved Diabetic Macular Edema (Protocol AC)
- Single-Arm Study Assessing the Effects of Pneumatic Vitreolysis on Macular Hole (Protocol AH)
- Treatment for Central-Involved Diabetic Macular Edema in Eyes with Very Good Visual Acuity (Protocol V)

### Pediatric Eye Disease Investigator Group

- A Pilot Randomized Trial of Base-in Prism Spectacles for Intermittent Exotropia (IXT6)
- A Pilot Study of Identifying Chalazia by Photographs (X03)
- A Prospective Observational Study of Adult Convergence Insufficiency, Divergence Insufficiency, and Small-Angle Hypertropia (SAS1)
- A Randomized Clinical Trial of Overminus Spectacle Therapy for Intermittent Exotropia (IXT5)

- A Randomized Clinical Trial to Evaluate Binocular Dig Rush Game Treatment for Amblyopia (ATS20)
- A Randomized Trial of Bilateral Lateral Rectus Recession versus Unilateral Lateral Rectus Recession with Medial Rectus Resection for Intermittent Exotropia (IXT1Ext)
- A Randomized Trial to Evaluate Excimer Laser Surgery as Treatment for Anisometropic Amblyopia (ATS19)
- A Randomized Trial to Evaluate Low-Dose Atropine as Treatment for Myopia (MTS1)
- Evaluation of Accommodative Behavior in Children With and Without Amblyopia (ATS21)
- Pediatric Cataract Surgery Outcomes Registry (C02)
- Pediatric Optic Neuritis Prospective Outcomes Study (PON1)
- Phase 1 Trial of Bevacizumab Treatment for Severe Retinopathy of Prematurity (ROP1)
- Two-Year Follow Up after Treatment of Severe Retinopathy of Prematurity with Low Dose Bevacizumab (ROP2y)

### **Foundation Fighting Blindness Consortium Rare Retinal Disease Network**

- Rate of Progression in EYS Related Retinal Degeneration (Pro-EYS)
- Rate of Progression in USH2A Related Retinal Degeneration (RUSH2A)

### **T1D Exchange**

- A Study to Assess Continuous Glucose Sensor Profiles in Healthy Non-Diabetic Subjects (CGM-ND)
- An Observational Study of Individuals with Type 1 Diabetes Using the Loop System for Automated Insulin Delivery (LOOP)
- Continuous Glucose Monitor Intervention in Teens and Young Adults with Type 1 Diabetes (CITY)
- Strategies to Enhance New CGM Use in Early Childhood: A Randomized Clinical Trial to Assess the Efficacy and Safety of Continuous Glucose Monitoring in Youth < 8 with Type 1 Diabetes (SENCE)
- Wireless Innovation for Seniors with Diabetes Mellitus (WISDM)

## Other Diabetes Studies

- A Pilot Study to Assess the Effectiveness of Direct to Patient Initiation of CGM in Diabetes (ReCGM)
- A Pivotal Study of t:slim X2 with Control-IQ Technology (iDCL-DCLP3)
- A Pivotal Study of t:slim X2 with Control-IQ Technology – Extension Study (iDCL-DCLP3X)
- A Randomized Clinical Trial to Assess the Efficacy of Adjunctive Closed Loop Control Versus Sensor-Augmented Pump Therapy in the Management of Type 1 Diabetes (DCLP1)
- A Randomized Clinical Trial to Assess the Efficacy of Adjunctive Closed Loop Control Versus Sensor and Pump Therapy in the Management of Type 1 Diabetes (DCLP2)
- A Study of t:slim X2 with Control-IQ Technology in Children (iDCL-DCLP5)
- Automated Insulin Delivery in Elderly with T1D (AIDE T1D)
- Closed Loop from Onset in Type 1 Diabetes (CLOuD)
- Closing the Loop in Adults With Type 1 Diabetes Under Free Living Conditions With Extension to Evaluate Home Use of Closed-Loop Applying Faster Insulin Aspart Versus Standard Insulin Aspart (AP@Home04 Phase3)
- Continuous Glucose Monitoring in T2D Basal Insulin Users (MOBILE)
- Continuous Glucose Monitoring in Women with Type 1 Diabetes in Pregnancy Trial (CONCEPTT) CGM Data Coordinating Center
- Day-and-Night Home Closed-Loop in Young People with Type 1 Diabetes (DAN05)
- Evaluation of the Biomedical and Psychosocial Impact of Automated Closed-Loop (Artificial Pancreas) Insulin Delivery in Women with Type 1 Diabetes During Pregnancy (AiDAPT)
- Glycemic Variability and Fluctuations in Cognitive Status in Adults with Type 1 Diabetes (GluCog)
- Hybrid Closed Loop and Verapamil for Beta Cell Preservation in New Onsets with T1D (CLVer)
- Hybrid Closed Loop Insulin Delivery System Data Collection (HYCLO)
- Pediatric Diabetes Consortium Registry (PDC General)
- PERL Continuous Glucose Monitoring Study CGM Coordinating Center (PERL)
- PID vs PID + Fuzzy Logic Crossover Study in Adolescents and Young Adults with Type 1 Diabetes (FLAIR)



- The Artificial Pancreas in the Very Young Children with T1D – RCT (KidsAP02)
- The Insulin-Only Bionic Pancreas Bridging Study (IOBP1)
- Type 1 Diabetes EXercise Initiative Pediatric Pilot – Sports Camp Study (DexiP)
- Type 1 Diabetes EXercise Initiative: The Effect of Exercise on Glycemic Control in Type 1 Diabetes Study (T1DEXI)
- Type 1 Diabetes EXercise Initiative: The Effect of Exercise on Glycemic Control in Type 1 Diabetes Pilot Study (Dexi)
- Type 1 Diabetes EXercise Initiative: The Effect of Exercise on Glycemic Control in Type 1 Diabetes Remote Pilot Study (DexiR)
- Type 2 Diabetes Provider Hypertension and Hyperlipidemia Survey (PDC Provider Survey)

### **Miscellaneous Studies**

- Safety and Feasibility of Cultivated Autologous Limbal Epithelial Cell Transplantation in the Treatment of Limbal Stem Cell Deficiency (CALEC)
- Surgical Idiopathic Intracranial Hypertension Treatment Trial (SIGHT)

## **Appendix A: Staff Activities and Recognitions**

### **Arnold-Bush, Bambi**

- Subject Matter Expert: CDISC Type 1 Diabetes Standards Development Project: Pediatrics and Devices
- Subject Matter Expert: CDISC Type 1 Diabetes Standards Development Project Team for Prevention and Exercise

### **Beaulieu, Wesley**

- Journal Reviewer: JAMA Ophthalmology and Retina

### **Beck, Roy**

- Deputy Editor: JAMA Ophthalmology
- Senior Editor: Diabetes Technology and Therapeutics
- Editorial Board: Diabetes Care
- Recipient of 2019 Diabetes Technology Society Leadership Award
- Grant Reviewer: JDRF
- Journal Reviewer: Acta Diabetologica, JAMA, JAMA Ophthalmology, Diabetes Care, Diabetes Technology and Therapeutics, Lancet Diabetes and Metabolism, Lancet, Journal of Diabetes Science and Technology

### **Calhoun, Peter**

- Grant Reviewer: JDRF
- Journal Reviewer: Diabetes Technology and Therapeutics

### **Dean, Trevano**

- Journal Reviewer: Optometry and Vision Science

### **DuBose, Stephanie**

- Journal Reviewer: Pediatric Diabetes

### **Gal, Robin**

- Subject Matter Expert: CDISC Type 1 Diabetes Standards Development Project: Pediatrics and Devices
- Subject Matter Expert: CDISC Type 1 Diabetes Standards Development Project Team for Prevention and Exercise

**Glassman, Adam**

- Advisory Board Member: Cochrane Eye and Vision
- Editorial Board Member: JAMA Ophthalmology, Retina
- Grant Reviewer: National Eye Institute (NEI), National Institute of Diabetes and Digestive and Kidney Diseases (NIDDK)
- Journal Reviewer: New England Journal of Medicine, JAMA Ophthalmology, Ophthalmology, Ophthalmology-Retina, British Journal of Ophthalmology, Retina, PLOS One, Clinical Trials

**Kollman, Craig**

- Grant Reviewer: National Institutes of Health (NIH)
- Journal Reviewer: Bone Marrow Transplantation

**Li, Zoey**

- Senior Project Mentor/Advisor: Lexington Catholic High School Exemplar Scholars Program Math, Science, and Technology

**Kraker, Raymond**

- Journal Reviewer: JAMA Ophthalmology, Ophthalmology
- Member: Pediatric Ophthalmic Technology Assessment Committee, American Academy of Ophthalmology

**Lum, John**

- Grant Reviewer: JDRF
- Journal Reviewer: American Association of Clinical Endocrinologists, Diabetes Technology and Therapeutics

**Melia, Michele**

- Association for Research in Vision and Ophthalmology (ARVO) Travel Award Recipient
- Chair: Data and Safety Monitoring Committee, Zoster Eye Disease Study (multi-center clinical trial sponsored by the NEI)
- Grant Reviewer: National Institute on Deafness and Communication Disorders
- Journal Reviewer: JAMA Ophthalmology, Retina

**Miller, Kellee**

- Grant Reviewer: JDRF
- Journal Reviewer: Diabetes Care, Diabetes Technology and Therapeutics, Pediatric Diabetes, Diabetic Medicine
- NIH Loan Repayment Program Renewal Award Recipient

**Stockdale, Cynthia**

- Journal Reviewer: JAMA Ophthalmology

## Appendix B: JCHR Principal/Lead Investigators

### *Studies and Other Research Activities*

#### **Ayala, Allison**

- Cornea Preservation Time Study
- FFB Consortium: Rate of Progression in EYS Related Retinal Degeneration (Pro-EYS)
- FFB Consortium: Rate of Progression in USH2A Related Retinal Degeneration (RUSH2A)
- Safety and Feasibility of Cultivated Autologous Limbal Epithelial Cell Transplantation in the Treatment of Limbal Stem Cell Deficiency (CALEC)

#### **Beaulieu, Lindsey**

- Type 2 Diabetes Provider Hypertension and Hyperlipidemia Survey

#### **Chandler, Danielle**

- A Pilot Randomized Trial of Base-in Prism Spectacles for Intermittent Exotropia
- A Randomized Clinical Trial of Overminus Spectacle Therapy for Intermittent Exotropia
- A Randomized Trial of Bilateral Lateral Rectus Recession versus Unilateral Lateral Rectus Recession with Medial Rectus Resection for Intermittent Exotropia
- A Randomized Trial to Evaluate Low-Dose Atropine as Treatment for Myopia

#### **Dean, Trevano**

- Pediatric Cataract Surgery Outcomes Registry

#### **DuBose, Stephanie**

- A Study to Assess Glucose Sensor Profiles in Non-Diabetic Subjects
- Hybrid Closed Loop and Verapamil for Beta Cell Preservation in New Onsets with T1D
- Hybrid Closed Loop Insulin Delivery System Data Collection
- Surgical Idiopathic Intracranial Hypertension Treatment Trial

#### **Foster, Nicole**

- T1D Exchange Clinic Registry
- T1D Exchange Virtual Registry

**Gal, Robin**

- A Pilot Study to Assess the Effectiveness of Direct to Patient Initiation of CGM in Diabetes
- Pediatric Diabetes Consortium
- Type 1 Diabetes EXercise Initiative : Pediatric Pilot – Sports Camp Study
- Type 1 Diabetes EXercise Initiative: The Effect of Exercise on Glycemic Control in Type 1 Diabetes Remote Pilot Study
- Type 1 Diabetes EXercise Initiative: The Effect of Exercise on Glycemic Control in Type 1 Diabetes Study
- Virtual Diabetes Specialty Clinic: A Study Evaluating Remote Initiation of Continuous Glucose Monitoring (Planning Phase)

**Glassman, Adam**

- A Comparative Effectiveness Study of Intravitreal Aflibercept, Bevacizumab, and Ranibizumab for Diabetic Macular Edema – Follow-up Extension Study
- Genetics in Retinal Diseases Project
- Peripheral Diabetic Retinopathy (DR) Lesions on Ultra-wide-field Fundus Images and Risk of DR Worsening Over Time
- Prompt Panretinal Photocoagulation versus Intravitreal Ranibizumab with Deferred Panretinal Photocoagulation for Proliferative Diabetic Retinopathy
- Randomized Clinical Trial Assessing the Effects of Pneumatic Vitreolysis on Vitreomacular Traction
- Randomized Trial of Intravitreal Aflibercept versus Intravitreal Bevacizumab + Deferred Aflibercept for Treatment of Central-Involved Diabetic Macular Edema
- Single-Arm Study Assessing the Effects of Pneumatic Vitreolysis on Macular Hole
- Treatment for Central-Involved Diabetic Macular Edema in Eyes with Very Good Visual Acuity

**Kraker, Raymond**

- A Pilot Study of Identifying Chalazia by Photographs
- A Randomized Clinical Trial to Evaluate Binocular Dig Rush Game Treatment for Amblyopia
- A Randomized Trial to Evaluate Excimer Laser Surgery as Treatment for Anisometropic Amblyopia

- Evaluation of Accommodative Behavior in Children With and Without Amblyopia
- Pediatric Optic Neuritis Prospective Outcomes Study
- Phase 1 Trial of Bevacizumab Treatment for Severe Retinopathy of Prematurity
- Two-Year Follow Up after Treatment of Severe Retinopathy of Prematurity with Low Dose Bevacizumab

### **Lum, John**

- An Observational Study of Individuals with Type 1 Diabetes Using the Loop System for Automated Insulin Delivery
- Clinical Acceptance of the Artificial Pancreas: The International Diabetes Closed Loop Trials:
  - ◆ A Pilot Test of t:slim X2 with Control-IQ Technology
  - ◆ A Pivotal Study of t:slim X2 with Control-IQ Technology
  - ◆ A Pivotal Study of t:slim X2 with Control-IQ Technology – Extension Study
  - ◆ A Randomized Crossover Comparison of Adaptive Model Predictive Control (MPC) Artificial Pancreas Versus Sensor Augmented Pump (SAP)/Predictive Low Glucose Suspend (PLGS) in the Outpatient Setting in Type 1 Diabetes
- Glycemic Control and the Brain in Children with Type 1 Diabetes
- Improving Post-prandial Blood Glucose Control with Afrezza during Closed-Loop Therapy
- Tissue and Blood Lactate Changes in Exercise with Type 1 Diabetes

### **Miller, Kellee**

- Automated Insulin Delivery in Elderly with T1D (AIDE T1D)
- Continuous Glucose Monitor Intervention in Teens and Young Adults with Type 1 Diabetes (CITY)
- Glycemic Variability and Fluctuations in Cognitive Status in Adults with Type 1 Diabetes (GluCog)
- JDRF T1D Coordinating Center
- Strategies to Enhance New CGM Use in Early Childhood: A Randomized Clinical Trial to Assess the Efficacy and Safety of Continuous Glucose Monitoring in Youth <8 with Type 1 Diabetes (SENCE)
- Wireless Innovation for Seniors with Diabetes Mellitus (WISDM)

**Ruedy, Katrina**

- A Study of t:slim X2 with Control-IQ Technology in Children
- Continuous Glucose Monitoring in T2D Basal Insulin Users
- Continuous Glucose Monitoring in Women with Type 1 Diabetes in Pregnancy Trial (CONCEPTT) CGM Data Coordinating Center
- PERL Continuous Glucose Monitoring Study CGM Coordinating Center
- Type 1 Diabetes and the Brain in Children: Metabolic Interventions (DirecNet)

**Sibayan, Judy**

- Closed Loop from Onset in Type 1 Diabetes
- Closing the Loop in Adults With Type 1 Diabetes Under Free Living Conditions With Extension to Evaluate Home Use of Closed-Loop Applying Faster Insulin Aspart Versus Standard Insulin Aspart
- Day-and-Night Home Closed-Loop in Young People with Type 1 Diabetes
- Evaluation of the Biomedical and Psychosocial Impact of Automated Closed-Loop (Artificial Pancreas) Insulin Delivery in Women with Type 1 Diabetes During Pregnancy
- Home Testing of 24-Hour Closed-Loop with Pump Suspend Feature
- PID vs PID + Fuzzy Logic Crossover Study in Adolescents and Young Adults with Type 1 Diabetes
- Pregnancy Intervention With a Closed-Loop System (PICLS) Study
- The Artificial Pancreas in the Very Young Children with T1D – RCT

**Stockdale, Cynthia**

- A Pilot Study Evaluating Photobiomodulation Therapy for Diabetic Macular Edema
- Intravitreal Anti-VEGF Treatment for Prevention of Vision Threatening Diabetic Retinopathy in Eyes at High Risk
- Intravitreal Anti-VEGF versus Prompt Vitrectomy for Vitreous Hemorrhage from Proliferative Diabetic Retinopathy

**Verdejo, Alandra**

- Young Adult Racial Disparities in Type 1 Diabetes



## Appendix C: Grants and Sub-Awards Active During 2019

### National Institutes of Health

- **A Randomized Cross-Over Trial Evaluating Automated Insulin Delivery Technologies on Glycemic Outcomes and Quality of Life in Older Adults with Type 1 Diabetes**  
Principal Investigator: Kellee Miller  
Funded through April 2023
- **Clinical Acceptance of the Artificial Pancreas: The International Diabetes Closed Loop Trial**  
Principal Investigator: Roy Beck  
Subcontract award through University of Virginia  
Funded through December 2019
- **Data Coordinating Center for Artificial Pancreas Studies**  
Principal Investigator: Roy Beck  
Funded through August 2020
- **DRCR Retina Network**  
Principal Investigator: Adam Glassman  
Funded through December 2023  
Additional funding/support from JDRF, Genentech, Regeneron, Kowa, Optovue, Optos, and Zeiss
- **Final Clinical Studies for Submission of a Pre-Market Application to the FDA for a Bionic Pancreas that Automates Type 1 Diabetes Management**  
Principal Investigator: Roy Beck  
Subcontract award through Boston University  
Funded through May 2020
- **Glycemic Variability and Fluctuations in Cognitive Status in Adults with Type 1 Diabetes**  
Principal Investigator: Kellee Miller  
Subcontract award through McLean Hospital  
Funded through March 2023
- **Home Use of MD-Logic Automated Insulin Delivery System: Safety and Efficacy**  
Principal Investigator: Judy Sibayan  
Subcontract award through HealthPartners  
Funded through May 2020

- **One Year Day and Night Home Closed Loop in Young People with Type 1 Diabetes**  
 Principal Investigators: John Lum and Judy Sibayan  
 Subcontract award through University of Cambridge, UK  
 Funded through May 2020
- **Pediatric Eye Disease Investigator Group**  
 Principal Investigator: Raymond Kraker  
 Funded through December 2023
- **Safety and Feasibility of Cultivated Autologous Limbal Epithelial Cell Transplantation in the Treatment of Limbal Stem Cell Deficiency**  
 Principal Investigator: Allison Ayala  
 Funded through June 2021
- **Surgical Idiopathic Intracranial Hypertension Treatment Trial**  
 Principal Investigator: Stephanie DuBose  
 Subcontract award through Icahn School of Medicine at Mount Sinai  
 Funded through February 2020
- **Type 1 Diabetes and the Brain in Children: Metabolic Interventions**  
 Principal Investigator: Katrina Ruedy  
 Subcontract award through Nemours  
 Ended March 2019

## JDRF

- **A Pilot Study Evaluating Photobiomodulation Therapy for Diabetic Macular Edema**  
 Principal Investigator: Adam Glassman  
 Funded through February 2021
- **A Randomized Clinical Trial of Continuous Glucose Monitoring in Older Adults With Type 1 Diabetes**  
 Principal Investigator: Kellee Miller  
 Joint funding: JDRF and Helmsley Charitable Trust  
 Funded through May 2020
- **Artificial Pancreas Project Consortium Coordinating Center**  
 Principal Investigator: Roy Beck  
 Funded through July 2020
- **Continuous Glucose Monitoring in Women With Type 1 Diabetes in Pregnancy Trial CGM Data Coordinating Center**  
 Principal Investigator: Katrina Ruedy  
 Ended June 2019

- **Hybrid Closed Loop and Verapamil for Beta Cell Preservation in New Onsets with T1D: A Proof-of-Concept Study**  
Principal Investigator: Stephanie DuBose  
Subcontract award through the University of Minnesota  
Funded through August 2022
- **Intravitreal Anti-Vascular Growth Factor Treatment for Eyes at High Risk for Development of Vision Threatening Outcomes from Diabetic Retinopathy**  
Principal Investigator: Adam Glassman  
Funded through December 2020
- **JDRF T1D Coordinating Center**  
Principal Investigator: Kellee Miller  
Funded through July 2021

### **Helmsley Charitable Trust**

- **A Pilot Study to Assess the Effectiveness of Direct to Patient Initiation of CGM in Diabetes**  
Principal Investigator: Robin Gal  
Funded through February 2020
- **CGM in Non-Diabetics Aged Less Than 7**  
Principal Investigator: Stephanie DuBose  
Funded through December 2020
- **Continuous Glucose Monitor Intervention in Teens and Young Adults with Type 1 Diabetes**  
Principal Investigator: Kellee Miller  
Funded through August 2020
- **Exercise in Diabetes Initiative: The Effect of Exercise on Glycemic Control in Type 1 Diabetes (Pilot Phase)**  
Principal Investigator: Robin Gal  
Planning grant funded through April 2020
- **Exercise in Type 1 Diabetes Initiative: Large Adult Study**  
Principal Investigator: Robin Gal  
Joint funding: Dexcom and Helmsley Charitable Trust  
Funded through April 2022
- **Improving Family Management and Glycemic Control in Youth < 8 Years Old with Type 1 Diabetes**  
Principal Investigator: Kellee Miller  
Subcontract award through Indiana University  
Funded through March 2020

- **Study to Assess Predictive Value of CGM for Microvascular Complications of Diabetes**  
Principal Investigator: Katrina Ruedy  
Subcontract award through Joslin Diabetes Center  
Funded through January 2020
- **T1D Exchange Clinic Network Coordinating Center**  
Principal Investigator: Roy Beck  
Funded through September 2020

## **Foundation Fighting Blindness Consortium Rare Retinal Disease Network**

- **Coordinating Center Core Grant**  
Principal Investigator: Allison Ayala  
Funded through June 2024
- **Development of a Patient-Reported Outcome (PRO) Measure for Retinitis Pigmentosa**  
In partnership with Evidera  
Funded through December 2020
- **Rate of Progression in EYS Related Retinal Degeneration**  
Principal Investigator: Allison Ayala  
Funded through June 2025
- **Rate of Progression in USH2A Related Retinal Degeneration**  
Principal Investigator: Allison Ayala  
Funded through August 2022

## **Industry-Funded Studies**

- **DCLP5-Tandem**  
Principal Investigator: Katrina Ruedy  
Funded through 2020
- **MOBILE-Dexcom**  
Principal Investigator: Katrina Ruedy  
Funded through 2020

## Appendix D: Manuscripts and Presentations

**Note:** JCHR employees appear in boldface type.

### Pediatric Eye Disease Investigator Group

#### Published and Accepted Manuscripts

- Crouch ER, **Kraker RT**, Wallace DK, Holmes JM, Repka MX, Collinge JE, Bremer DL, Gray ME, Smith HA, Steinkuller PG for the Pediatric Eye Disease Investigator Group. Secondary 12-month ocular outcomes of a phase 1 dosing study of bevacizumab for retinopathy of prematurity. *JAMA Ophthalmol* 2019 (Online Nov 2019).
- Freedman SF, **Kraker RT**, Repka MX, Wallace DK, de Alba Campomanes A, Yanovitch TL, Orge FH, Gearing MD for the Pediatric Eye Disease Investigator Group. Incidence and management of glaucoma or glaucoma suspect in the first year after pediatric lensectomy. *JAMA Ophthalmology* (Online Nov 2019).
- Pediatric Eye Disease Investigator Group, Cotter SA, Mohny BG, **Chandler DL**, Holmes JM, Wallace DK, **Melia BM**, **Wu R**, **Kraker RT**, Superstein R, Crouch ER, Paysse EA. Three-year observation of children 12 to 35 months old with untreated intermittent exotropia. *Ophthalmic and Physiologic Optics* 2019 [In press].
- Pediatric Eye Disease Investigator Group, Holmes JM, Manny, RE, **Lazar EL**, Birch EE, Kelly KR, Summers AI, Martinson SR, Raghuram A, Colburn JD, Law C, Marsh JD, Bitner DP, **Kraker RT**, Wallace DK. A randomized trial of the binocular Dig Rush game treatment for amblyopia in children aged 7 to 12 years of age. *Ophthalmology* 2019;126(3):456-466.
- Pediatric Eye Disease Investigator Group, Kulp MT, Holmes JM, **Dean TW**, Suh DW, **Kraker RT**, Wallace DK, Petersen DB, Cotter SA, Manny RE, Superstein R, Roberts TL, Avallone JM, Fishman DR, Erzurum SA, Leske DA, Christoff A. A randomized clinical trial of immediate versus delayed glasses for moderate hyperopia in 1- and 2-year-olds. *Ophthalmology* 2019;126(6):876-887.
- Pediatric Eye Disease Investigator Group, Mohny BG, Cotter SA, **Chandler DL**, Holmes JM, Wallace DK, Yamada T, Petersen DB, **Kraker RT**, Morse CL, **Melia BM**, **Wu R**. Three-year observation of children age 3 to 10 years old with untreated intermittent exotropia. *Ophthalmology* 2019;126(9):1249-1260.
- Pediatric Eye Disease Investigator Group, Repka MX, **Chandler DL**, Holmes JM, Donahue SP, Hoover DL, Mohny BG, Phillips PH, Stout AU, Ticho BH, Wallace DK. The relationship of age and other baseline factors to outcome of initial surgery for intermittent exotropia. 2019 [In press].

- Pediatric Eye Disease Investigator Group, Repka MX, **Dean TW**, **Kraker RT**, Bothun ED, Morrision DG, Lambert SR, Stahl ED, Wallace DK. Visual acuity and ophthalmic outcomes in the year after cataract surgery among children younger than 13 years. *JAMA Ophthalmology* 2019 137(7):817-824.
- Pediatric Eye Disease Investigator Group, Wallace DK, **Kraker RT**, Freedman SF, Crouch ER, Bhatt AR, Hartnett ME, Yang MB, Rogers DL, Hutchinson AK, VanderVeen DK, Haider KM, Siatkowski RM, **Dean TW**, **Beck RW**, Repka MX. Effectiveness of very low-dose intravitreal bevacizumab for retinopathy of prematurity. *JAMA Ophthalmology* 2019 [Under revision].
- Pediatric Eye Disease Investigator Group. Donahue SP, **Chandler DL**, Holmes JM, Arthur BW, Paysse EA, Wallace DK, Petersen DB, **Melia BM**, **Kraker RT**, Miller AM. A randomized trial comparing bilateral lateral rectus recession versus unilateral recess-resect for basic-type intermittent exotropia. *Ophthalmology* 2019; 126(2): 305-317.
- Pediatric Eye Disease Investigator Group. Holmes JM, Kulp MT, **Dean TW**, Suh DW, **Kraker RT**, Wallace DK, Petersen DB, Cotter SA, Crouch ER, Lorenzana IJ, Ticho BH, Verderber LC, Weise KK. A randomized clinical trial of immediate versus delayed spectacles for moderate hyperopia in children 3 to 5 years of age. *Am J Ophthalmol* 2019;208(142):145-159.

### Presentations

- Crouch ER, **Dean TW**, Holmes JM, **Kraker RT**, Miller AM, Kraus C, Gunton KB, Repka MX, Marsh JD, Del Monte MA, Luke PA, Peragallo JH, Wallace DK, on behalf of the Pediatric Eye Disease Investigator Group. A prospective observational study of adult divergence insufficiency esotropia. Presented at the American Association for Pediatric Ophthalmology and Strabismus Annual Meeting; San Diego, CA; March 2019.
- Lee KT, **Dean TW**, Wallace DK, **Kraker RT**, Holmes JM, Aldrich AE, Beal CJ, Crouch ER, Dagi LR, Daley TJ, Wheeler MB, on behalf of the Pediatric Eye Disease Investigator Group. A prospective observational study of adult small-angle hypertropia. Presented at the American Association for Pediatric Ophthalmology and Strabismus Annual Meeting; San Diego, CA; March 2019.
- Lorenzana IJ, **Lazar EL**, Cotter SA, Erzurum SA, Holmes JM, **Kraker RT**, Crouch ER, Esposito CA, Jenewein EC, Pang Y, Retnasothie DV, Wallace DK, on behalf of the Pediatric Eye Disease Investigator Group. A prospective observational study of adult convergence insufficiency. Presented at the American Association for Pediatric Ophthalmology and Strabismus Annual Meeting; San Diego, CA; March 2019.

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- Repka MX, **Chandler DL**, Holmes JM, Donahue SP, Phillips PH, Stout AU, on behalf of the Pediatric Eye Disease Investigator Group. The relationship of age and other baseline factors to outcome of initial surgery for intermittent exotropia. Presented at the American Association for Pediatric Ophthalmology and Strabismus Annual Meeting; San Diego, CA; March 2019.
- Repka, MX, for the Pediatric Eye Disease Investigator Group. Cataract surgery in children from birth to less than 13 years of age in the PEDIG registry: Status three years following surgery. Presented at the American Association for Pediatric Ophthalmology and Strabismus Annual Meeting; San Diego, CA; March 2019.
- Pineles SL, Repka MX, Liu GT, **Lazar EL**, Waldman AT, Borchert MS, Khanna S, Heidary G, Graves JS, Shah VS, Kupersmith MJ, **Kraker RT**, Wallace DK, on behalf of the Pediatric Eye Disease Investigator Group. A prospective outcomes study of pediatric optic neuritis. Presented at the North American Neuro Ophthalmology Society Annual Meeting; Las Vegas, NV; March 2019.
- Aldrich AE, **Dean TW**, Wallace DK, **Kraker RT**, Holmes JM, Beal CJ, Crouch ER, Dagi LR, Daley TJ, Lee KA, Wheeler MB, on behalf of the Pediatric Eye Disease Investigator Group. A prospective observational study of adult small-angle hypertropia. Presented at the College of Optometrists in Vision Development Annual Meeting; Kansas City, MO; April 2019.
- Lorenzana IJ, **Lazar EL**, Cotter SA, Erzurum SA, Holmes JM, **Kraker RT**, Crouch ER, Esposito CA, Jenewein EC, Pang Y, Retnasothie DV, Wallace DK, on behalf of the Pediatric Eye Disease Investigator Group. A prospective observational study of adult convergence insufficiency. Presented at the College of Optometrists in Vision Development Annual Meeting; Kansas City, MO; April 2019.
- Luke PA, **Dean TW**, Holmes JM, **Kraker RT**, Crouch ER, Miller AM, Kraus C, Gunton KB, Repka MX, Marsh JD, Del Monte MA, Peragallo JH, Wallace DK, on behalf of the Pediatric Eye Disease Investigator Group. A prospective observational study of adult divergence insufficiency esotropia. Presented at the College of Optometrists in Vision Development Annual Meeting; Kansas City, MO; April 2019.



- Kulp MT, Holmes JM, **Dean TW**, Suh DW, **Kraker RT**, Wallace DK, Petersen DB, Cotter SA, Crouch ER, Lorenzana IJ, Ticho BH, Verderber LC, Weise KK, on behalf of the Pediatric Eye Disease Investigator Group. Immediate versus delayed spectacle treatment for moderate hyperopia in children 3 to < 6 years of age. Presented at the Association of Research in Vision and Ophthalmology Annual Meeting; Vancouver, CA; April-May 2019.
- Wallace DK, **Hercinovic A**, Freedman SF, Crouch ER, Bhatt AR, Hartnett ME, Rogers DL, Hutchinson AK, Adams-Chapman I, Yang MB, **Kraker RT**, Holmes JM, Cotter SA, on behalf of the Pediatric Eye Disease Investigator Group. A phase 1 dosing study of intravitreal bevacizumab for retinopathy of prematurity: 24-month ocular and neurological outcomes. Presented at the Advances in Pediatric Retina Meeting; Salt Lake City, UT; June 2019.
- Cotter SA, Wallace DK, **Hercinovic A**, Freedman SF, Crouch ER, Bhatt AR, Hartnett ME, Rogers DL, Hutchinson AK, Adams-Chapman I, Yang MB, **Kraker RT**, Holmes JM, on behalf of the Pediatric Eye Disease Investigator Group. Phase 1 dosing study of intravitreal bevacizumab for retinopathy of prematurity: 24-month ocular & neurological outcomes. Presented at the American Academy of Optometry Meeting; Orlando, FL; October 2019.
- **Kraker RT**, on behalf of the Pediatric Eye Disease Investigator Group. Ocular and neurodevelopmental outcomes 2 years after very low-dose bevacizumab for retinopathy of prematurity. Presented at the American Academy of Optometry Meeting; Orlando, FL; October 2019.
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## DRCR Retina Network

### Published and Accepted Manuscripts

- Aiello LP, **Odia I**, **Glassman AR**, **Melia M**, Jampol LM, Bressler NM, Kiss S, Silva PS, Wykoff CC, Sun JK; for the Diabetic Retinopathy Clinical Research Network. Comparison of early treatment diabetic retinopathy study standard 7-field imaging with ultrawide-field imaging for determining severity of diabetic retinopathy. *JAMA Ophthalmol.* 2019 Jan 1;137(1):65-73. doi: 10.1001/jamaophthalmol.2018.4982.



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- Bressler NM, **Beaulieu WT**, Bressler SB, **Glassman AR**, **Melia BM**, Jampol LM, Jhaveri CD, Salehi-Had H, Velez G, Sun JK; for the DRCR Retina Network. Anti-vascular endothelial growth factor therapy and risk of traction retinal detachment in eyes with proliferative diabetic retinopathy: Pooled analysis of five DRCR Retina Network randomized clinical trials. *Retina*. 2019 Sep 17. doi: 10.1097/IAE.0000000000002633.
- Bressler NM, **Odia I**, Maguire M, **Glassman AR**, Jampol LM, MacCumber MW, Shah C, Rosberger D, Sun JK; for the DRCR Retina Network. Association between change in visual acuity and change in central subfield thickness during treatment of diabetic macular edema in participants randomized to aflibercept, bevacizumab, or ranibizumab: A post hoc analysis of the Protocol T randomized clinical trial. *JAMA Ophthalmol*. 2019 Jun 27. doi: 10.1001/jamaophthalmol.2019.1963.
- Bressler SB, **Beaulieu WT**, **Glassman AR**, Gross JG, **Melia BM**, Chen E, Pavlica MR, Jampol LM, for the Diabetic Retinopathy Clinical Research Network. Photocoagulation versus ranibizumab for proliferative diabetic retinopathy: Should baseline characteristics affect choice of treatment? *Retina*. 2019 Sep;39(9):1646-1654. doi: 10.1097/IAE.0000000000002377.
- Bressler SB, **Odia I**, Maguire MG, Dhoot DS, **Glassman AR**, Jampol LM, Marcus DM, Solomon SD, Sun JK; for the Diabetic Retinopathy Clinical Research Network. Factors associated with visual acuity and central subfield thickness changes when treating diabetic macular edema with anti-vascular endothelial growth factor therapy: An exploratory analysis of the Protocol T randomized clinical trial. *JAMA Ophthalmol*. 2019 Apr 1;137(4):382-389. doi: 10.1001/jamaophthalmol.2018.6786.
- **Glassman AR**, Baker CW, **Beaulieu WT**, Bressler NM, Punjabi OS, **Stockdale CR**, Wykoff CC, Jampol JM, Sun JK; for the DRCR Retina Network. DRCR Retina Network approach to management with initial observation for eyes with center involved diabetic macular edema and good visual acuity: A secondary analysis of a randomized clinical trial. *JAMA Ophthalmol*. 2019 [Accepted]. doi: 10.1001/jamaophthalmol.2019.6035.

- **Glassman AR, Beaulieu WT, Stockdale CR, Beck RW, Bressler NM, Labriola LT, Melia M, Oliver K;** DRCR Retina Network. Effect of telephone calls from a centralized coordinating center on participant retention in a randomized clinical trial. *Clinical Trials*. 2019 [Accepted].
- Hutton DW, Stein JD, **Glassman AR**, Bressler NM, Jampol LM, Sun JK; DRCR Retina Network. Five-year cost-effectiveness of intravitreal ranibizumab therapy vs panretinal photocoagulation for treating proliferative diabetic retinopathy: A secondary analysis of a randomized clinical trial. *JAMA Ophthalmol*. 2019 Oct 24;1-9. doi: 10.1001/jamaophthalmol.2019.4284.
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- Maguire MG, **Liu D, Glassman AR**, Jampol LM, Johnson CA, Baker CW, Bressler NM, Gardner TW, Pieramici D, **Stockdale CR**, Sun JK; for the DRCR Retina Network. Visual field loss over 5 years in patients treated with panretinal photocoagulation or ranibizumab for proliferative diabetic retinopathy. *JAMA Ophthalmol*. [Accepted]
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- Elman, M. Post hoc exploratory analysis of Humphrey visual fields over 5 years. Presented at the 42<sup>nd</sup> Annual Macula Society Meeting; Bonita Springs, FL; February 2019.
- Gottlieb, J. Is anti-VEGF therapy in eyes with PDR associated with increased risk of traction retinal detachment? Presented at the 42<sup>nd</sup> Annual Macula Society Meeting; Bonita Springs, FL; February 2019.
- MacCumber M. Relationship between changes in VA and changes in OCT CST during treatment of DME with anti-VEGF agents. Presented at the 42<sup>nd</sup> Annual Macula Society Meeting; Bonita Springs, FL; February 2019.

- Gardner, T. Humphrey visual field testing data over 5 years. Presented at The Association for Research in Vision and Ophthalmology Annual Meeting; Vancouver, BC, Canada; April 2019.
- **Glassman A**, Baker, C. Treatment for center-involved DME in eyes with good visual acuity (Protocol V). Presented at The Association for Research in Vision and Ophthalmology Annual Meeting; Vancouver, BC, Canada; April 2019.
- Jampol, L. PRP vs ranibizumab for proliferative diabetic retinopathy – five-year-outcomes. Presented at The Association for Research in Vision and Ophthalmology Annual Meeting; Vancouver, BC, Canada; April 2019.
- Jhaveri, C. Is anti-VEGF therapy in eyes with PDR associated with increased risk of TRD? Presented at The Association for Research in Vision and Ophthalmology Annual Meeting; Vancouver, BC, Canada; April 2019.
- Lujan, B. OCT Angiography quality in multicenter clinical studies. Presented at The Association for Research in Vision and Ophthalmology Annual Meeting; Vancouver, BC, Canada; April 2019.
- Pieramici, D. Relationship between changes in VA and OCT CST during treatment of DME with anti-VEGF. Presented at The Association for Research in Vision and Ophthalmology Annual Meeting; Vancouver, BC, Canada; April 2019.
- Silva, A. Comparison of non-perfusion and ultrawide diabetic retinopathy severity. Presented at The Association for Research in Vision and Ophthalmology Annual Meeting; Vancouver, BC, Canada; April 2019.
- Stein, J. Incremental cost-effectiveness of ranibizumab vs PRP for the treatment of PDR: 5-year results. Presented at The Association for Research in Vision and Ophthalmology Annual Meeting; Vancouver, BC, Canada; April 2019.
- Sun, J. DRCR Retina Network overview. Presented at The Association for Research in Vision and Ophthalmology Annual Meeting; Vancouver, BC, Canada; April 2019.
- Baker, C. Treatment for center-involved DME in eyes with good visual acuity (Protocol V). Presented at The American Society of Retina Specialists Annual Meeting; Chicago, IL; July 2019.
- Punjabi, O. DRCR Retina Network approach to initial management with observation for eyes with center-involved diabetic macular edema and good visual acuity (Protocol V). Presented at The American Society of Retina Specialists Annual Meeting; Chicago, IL; July 2019.
- Rosberger, D. Relationship between changes in VA and changes in OCT CST during treatment of DME with anti-VEGF agents. Presented at The American Society of Retina Specialists Annual Meeting; Chicago, IL; July 2019.

- Salehi-Had, H. Is anti-VEGF therapy in eyes with PDR associated with increased risk of traction retinal detachment? Presented at The American Society of Retina Specialists Annual Meeting; Chicago, IL; July 2019.
- Antoszyk, A. Treatment for center-involved DME in eyes with good visual acuity (Protocol V). Presented at the Retina Society Annual Meeting; London, United Kingdom; September 2019.
- Lujan, B. OCT angiography quality in multicenter clinical studies. Presented at the Retina Society Annual Meeting; London, United Kingdom, September 2019.
- Marcus, D. Visual field loss over 5 years in patients treated with panretinal photocoagulation or ranibizumab for proliferative diabetic retinopathy (Protocol S). Presented at the Retina Society Annual Meeting; London, United Kingdom; September 2019.
- Silva, P. Protocol AA: Assessment of fluorescein angiography nonperfusion and diabetic retinopathy severity using ultrawide field retinal imaging. Presented at the Retina Society; London, United Kingdom; September 2019.
- Sun, J. DRCR Retina Network approach to initial management with observation for eyes with center-involved diabetic macular edema and good visual acuity (Protocol V). Presented at the Retina Society Annual Meeting; London, United Kingdom; September 2019.
- Bressler, N. Predicting 2-year outcomes based on visual acuity or OCT changes following 3 anti-VEGF injections for diabetic macular edema. Presented at the American Academy of Ophthalmology Subspecialty Day; San Francisco, CA; November 2019.
- Sun, J. Treatment of centrally involved diabetic macular edema with better vision: Protocol V. Presented at the American Academy of Ophthalmology Subspecialty Day; San Francisco, CA; November 2019.
- Wells J, **Glassman A**, Baker C, Jampol L, Jhaveri C, Sun J. Diabetic retinopathy treatments: Clinically relevant results from the Diabetic Retinopathy Clinical Research Network. Presented at the American Academy of Ophthalmology Course; San Francisco, CA; November 2019.
- Wells, J. Five-year outcomes after aflibercept, bevacizumab, or ranibizumab for DME: Protocol T Extension Study. Presented at the American Academy of Ophthalmology Subspecialty Day; San Francisco, CA; November 2019.

## Cornea Preservation Time Study

### Published and Accepted Manuscripts

- Aldave AJ, Terry MA, Szczotka-Flynn LB, **Liang W**, **Ayala AR**, Maguire MG, **O'Brien RC**, Benetz BA, Bokosky JE, Dunn SP, Gillette TE, Hammersmith KM, Hardten DR, Jeng BH, Jones MF, Lindstrom RL, Maverick KJ, Nirankari VS, Oliva MS, Raber IM, Rapuano CJ, Rosenwasser GOD, Ross KW, Seedor JW, Shamie N, Stoeger CG, Tauber S, Van Meter WS, Verdier DD, Lass JH. Effect of graft attachment status and intraocular pressure on DSAEK outcomes in the Cornea Preservation Time Study. *Am J Ophthalmol*. Published March 6, 2019. pii: S0002-9394(19)30088-1. doi: 10.1016/j.ajo.2019.02.029.
- Benetz BA, Stoeger CG, Patel SV, **O'Brien RC**, Szczotka-Flynn LB, **Ayala AR**, Maguire MG, Menegay HJ, Bedard P, Clover JM, Gupta PC, McCoy KE, Song JC, Lass JH. Comparison of donor cornea endothelial cell density determined by eye banks and by a central reading center in the Cornea Preservation Time Study. Published April 2019. 2019 Apr;38(4):426-432. doi: 10.1097/ICO.0000000000001846.
- Hannush SB, Drury DC, Aldave AJ, **Cohen NJ**, Szczotka-Flynn LB, **Ayala AR**, Maguire MG, Berdy GJ, Lee WB, Macsai MS, Meinecke EE, Mian SI, Nordlund ML, Rosenwasser GOD, Ross KW, Sugar A, Terry MA, Tu EY, Van Meter WS, Lass JH. Impact of the Cornea Preservation Time Study on donor cornea preservation time and surgeon attitudes. *International Journal of Eye Banking*, 6(3).
- Patel SV, Lass JH, Benetz BA, Szczotka-Flynn LB, **Cohen NJ**, **Ayala AR**, Maguire MG, Drury DC, Dunn SP, Jeng BH, Jones MF, Menegay HJ, Oliva MS, Rosenwasser GOD, Seedor JA, Terry MA, Verdier DD. Postoperative endothelial cell density is associated with late endothelial graft failure after Descemet stripping automated endothelial keratoplasty. *Ophthalmology*. Published February 18, 2019. pii: S0161-6420(18)32753-2. doi: 10.1016/j.optha.2019.02.011.
- Ross KW, Stoeger CG, Rosenwasser GOD, **O'Brien RC**, Szczotka-Flynn LB, **Ayala AR**, Maguire MG, Benetz BA, Dahl P, Drury DC, Dunn SP, Farazdaghi SM, Hoover CK, Macsai MS, Mian SI, Nordlund ML, Penta JG, Soper MC, Terry MA, Verdier DD, Williams DV, Lass JH. Pre-lamellar dissection donor cornea thickness is associated with Descemet stripping automated endothelial keratoplasty operative complications in the Cornea Preservation Time Study. *Cornea*. Accepted for publication April 26, 2019.

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- Benetz BA. Updates from the Cornea Preservation Time Study. Presented at the 2019 European Eye Bank Association Annual Meeting; Rotterdam, Netherlands; January 2019.

- Sczotka-Flynn LB. Updates from the Cornea Preservation Time Study. Presented at the Global Specialty Lens Symposium; Las Vegas, NV; January 2019.

## Pediatric Diabetes Consortium

### Published and Accepted Manuscript

- Van Name MA, **Cheng P**, **Gal RL**, **Kollman C**, Lynch J, Nelson B, Tamborlane WV. Children and adolescents with type 1 and type 2 diabetes mellitus in the Pediatric Diabetes Consortium Registries: Comparing clinical characteristics and glycemic control. Accepted for publication.

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- Bacha F, **Cheng P**, **Gal RL**, **Beaulieu LC**, **Kollman C**, Adolph A, Jindal I, Shoemaker A, Wolf R, Klingensmith GJ, Tamborlane WV. Racial differences in comorbidities in youth with T2D in the Pediatric Diabetes Consortium (PDC). Presented at the American Diabetes Association 79<sup>th</sup> Scientific Sessions; San Francisco, CA; June 2019.
- Klingensmith GJ, **Cheng P**, **Gal RL**, **Beaulieu LC**, **Kollman C**, Adams R, Hannon T, Looper L, Tamborlane WV. Healthcare utilization in T2D youth in the Pediatric Diabetes Consortium (PDC). Presented at the American Diabetes Association 79<sup>th</sup> Scientific Sessions; San Francisco, CA; June 2019.
- Tamborlane WV, **Cheng P**, **Gal RL**, **Beaulieu LC**, **Kollman C**, Van Name MA, Isganaitis E, Mastrandrea L, Klingensmith GJ. Is drug treatment required in all youth with T2D early in the disease? Presented at the American Diabetes Association 79<sup>th</sup> Scientific Sessions; San Francisco, CA; June 2019.

## T1D Exchange Clinic Network

### Published and Accepted Manuscripts

- Bethin KE, **Kanapka LG**, Laffel LM, Majidi S, Chaytor NS, MacLeish S, Adams R, **Foster NC**. Autism spectrum disorder in children with type 1 diabetes. *Diabet Med*. 2019 [Epub ahead of print] doi:10.1111/dme.14069.
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- **Foster NC**, **Miller KM**, DiMeglio LA, Maahs DM, Tamborlane WV, Bergenstal RM, Clements MA, Rickels MR, Smith E, Olson BA, **Beck RW**. State of type 1 diabetes management and outcomes from the T1D Exchange in 2016-2018. *Diabetes Technol Thera*. 2019;21(2):66-72.
- Hermann JM, **Miller KM**, Hofer SE, Clements MA, Karges W, **Foster NC**, Fröhlich-Reiterer E, Rickels MR, Rosenbauer J, DeSalvo DJ, Holl RW, Maahs DM. The transatlantic HbA1c gap: Differences in glycemic control across the life-span between the US T1D Exchange and German/Austrian DPV registries. *Diab Med*. 2019 [Epub ahead of print] doi:10.1111/dme.14148.
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- Albanese-O'Neill A, Bailey R, **Foster N**, Rodriguez H, Jackson C, Sherr J. When childcare isn't sweet: Challenges for very young children with type 1 diabetes. Presented at the 12<sup>th</sup> International Conference on Advanced Technologies & Treatments for Diabetes; Berlin, Germany; February 2019.



- Herman JM, **Miller KM**, Schütz-Fuhrmann I, DeSalvo D, Holl RW, Maahs DM. Increasing use of continuous glucose monitoring (CGM) among adults with type 1 diabetes: Differences between the US T1D Exchange Registry and the German/Austrian DPV initiative. Presented at the 12<sup>th</sup> International Conference on Advanced Technologies & Treatments for Diabetes; Berlin, Germany; February 2019.
- **Miller KM, Kanapka LG**, Laffel LM, Hilliard ME, DeSalvo DJ, Harrington KR, Van Name MA, Woerner S, Tamborlane WV, DiMeglio LA. Young children with type 1 diabetes (T1D) spend the majority of time outside of target glucose range. Presented at the 12<sup>th</sup> International Conference on Advanced Technologies & Treatments for Diabetes; Berlin, Germany; February 2019.
- Agarwal S, **Kanapka LG**, Raymond J, Walker A, Gerard-Gonzalez A, Kruger D, Redondo MJ, Rickels MR, Shah VN, Butler A, Miller V, **Verdejo A, Gal RL**, Willi S, Long JA. Unique patterns of racial-ethnic disparities among vulnerable young adults with type 1 diabetes. Presented at the American Diabetes Association 79<sup>th</sup> Scientific Sessions; San Francisco, CA; June 2019.
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- **Beck RW**. Clinical trials: How to interpret study findings. Presented at the 2019 Type 1 Diabetes Fellows Endocrine Society Conference; San Francisco, CA; March 2019.
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- **Beck RW**. Continuous glucose monitors: Device options and utilization. Presented at the American Diabetes Association 79<sup>th</sup> Scientific Sessions; San Francisco, CA; June 2019.
- Brown SA, for the iDCL Trial Research Group. Clinical acceptance of the artificial pancreas: Glycemic outcomes from a 6-month multicenter RCT. Presented at the American Diabetes Association 79<sup>th</sup> Scientific Sessions; San Francisco, CA; June 2019.

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- **Beck RW**. Glycemic outcomes beyond A1C. Presented at the 45<sup>th</sup> Annual International Society for Pediatric and Adolescent Diabetes (ISPAD) Conference; Boston, MA; October 2019.
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## Miscellaneous

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- **Yin, J**, Jurkunas U, Dana R, Johns L. CALEC: New frontier in the treatment of limbal stem cell deficiency. Presented at the New England Ophthalmological Society Conference; Boston, MA; March 2019.