

## CancerFree KIDS Research Grants

Childhood cancer research is a smart investment. The mission of CancerFree KIDS is to eradicate childhood cancer as a life-threatening disease in children by funding research that might otherwise go unfunded. The world renowned CancerFree KIDS Scientific Review Council chooses those projects that we will fund each year through a competitive selection process. We invest in early research – the high risk/high potential ideas that would likely go unfunded if not for the CancerFree KIDS grant.

### **2004 - 2 Grants \$20,000 Awarded to Cincinnati Children's Hospital**

**\$10,000:** Improving Donor Selection in Bone Marrow Transplantation (Mehta)

**\$10,000:** Development of a Novel Anti-Neuroblastoma Agent (Qi)

### **2005 - 4 Grants \$40,000 Awarded to Cincinnati Children's Hospital**

**\$10,000:** Molecular Mediators of Childhood T-Cell Leukemia (Layh-Schmitt)

**\$10,000:** The Role of Rac GTPases in Leukemias (Shore)

**\$10,000:** Assessment of MGMT as a Therapeutic Target for Neuroblastoma (Wagner)

**\$10,000:** Identification of the Genes Regulated by Leukemia Fusion Proteins and the Role they play in Leukemia Development (Mulloy)

### **2006 – 4 Grants \$80,000 Awarded to Cincinnati Children's Hospital**

**\$20,000:** A New Drug Target for T-Cell Acute Lymphoblastic Leukemia (Horman/Grimes)

**\$20,000:** Squamous Cell Carcinoma in Children with Epidermolysis Bullosa (Adams)

**\$20,000:** Musculoskeletal Tumor Center Tissue Repository (Cripe)

**\$20,000:** Micro RNA Expression in Neuroblastoma (Jansen/Davies)

### **2007 – 5 Grants \$100,000 Awarded to Cincinnati Children's Hospital**

**\$20,000:** Immune System Evasion by Cancer (Jordan)

**\$20,000:** Targeting Leukemia Stem Cells (Horman, Roehrs, & Grimes)

**\$20,000:** How the RB Protein contributes to progression of Lymphoblastic Leukemia (Geiger)

**\$20,000:** Identification of New Mini-Molecules (microRNAs) Causing Pediatric Lymphomas After Transplantation and new Targets for Therapy (Absalon and Perentesis)

**\$20,000:** New Drug Discovery for Treatment of High Risk Neuroblastoma (Perentesis and Radloff)

### **2008 – 5 Grants \$160,000 Awarded to Cincinnati Children's Hospital**

**\$40,000:** The role of the RB protein in leukemia progression (Geiger)

**\$40,000:** Personalized neuroblastoma cancer signatures and targeted therapy (Li and Perentesis)

**\$35,000:** Delivery and production of a secretable universal cancer biomarker and its detection in the blood by a novel continuous sampling microtechnology (Browne)

**\$25,000:** Identifying and targeting the source of neuroblastoma metastasis (Cripe)

**\$20,000:** Identification of response markers in children receiving combination therapy with chemotherapy and bevacizumab (Wagner)

### **2009 – 5 Grants \$180,000 Awarded to Cincinnati Children's Hospital**

**\$36,000:** Decreasing the Side Effects of Radiation Therapy for Cancer (Drissi and Cripe)

**\$36,000:** Molecular Profiling of High-Grade Gliomas in Children (Fouladi, Aranow and Ratner)

**\$36,000 - Butterfly Walk Research Grant:** Developing a "Triple Threat" Treatment of a Neuroblastoma Model (Frischer)

**\$36,000:** A Potential Cure for Acute Myeloid Leukemia (Grimes)

**\$36,000:** Chemosensitization of the Leukemic Stem Cell through Targeting Its Interaction with the Marrow Niche (Mizukawa)

### **2010 – 8 Grants \$225,000 Awarded to Cincinnati Children's Hospital**

**\$20,000:** A novel targeted therapy for infant leukemia (Kumar)

**\$20,000 – Butterfly Walk Research Grant:** Nanoparticles with siRNA therapy (Grimes)

**\$20,000 – Family of Courage Grant in honor of the Jessica Elam Family:** Epigenetic control of tumorigenesis in Ewing's Sarcoma family of tumors (Sumegi)

**\$20,000:** Vav as a molecular target in pediatric acute lymphoblastic leukemia (Cancelas)

**\$20,000 – Shemanski Foundation Grant:** Inhibition of Pediatric Brainstem Glioma by genetic inhibition of AMP Kinase (Dasgupta)

**\$40,000:** A pilot trial of catheter assisted delivery of intra-ocular chemotherapy for retinoblastoma (Geller)

**\$40,000:** A preclinical trial of targeting the self-renewal pathway to eradicate leukemic stem cells (Chou)

**\$45,000:** Virotherapy for neuroblastoma stem cells (Wang)

**2011 – 12 Grants      \$200,000 Awarded**

**Grants to Cincinnati Children's Hospital Medical Center: \$180,000**

- \$30,000: **The Shemenski Foundation Grant** - Inhibition of Pediatric Glioma growth by genetic inhibition of AMP Kinase (Dr. Dasgupta)  
\$30,000: The Role of Dendritic Cells in Oncolytic Virotherapy (Jennifer Leddon)  
\$30,000: **The Butterfly Walk Grant** - Development of RC-16 as a new cancer therapy (Dr. Orienti)  
\$15,000: NAB-Paclitaxel and SPARC in pediatric sarcoma (Dr. Wagner)  
\$15,000: A new target in T cell acute lymphoblastic leukemia (Dr. Grimes)  
\$10,000: Pilot Study to assess minimal residual disease in Ewing Sarcoma (Marmor)  
\$10,000: Correlative biology studies in the first Phase 1 trial of a Telomerase inhibitor in children with recurrent solid tumors (Dr. Drissi)  
\$10,000: Phase 1 Study of MK2206, an AKT inhibitor, in children with recurrent solid tumors or leukemias (Dr. Fouladi)  
\$10,000: Targeted inhibition of EGFR as a new drug therapy for acute myeloid leukemia (Dr. Marnie Ryan Hall)  
\$10,000: Personalized Medicine: Targeting Cdc42 in Acute Myeloid Leukemia (Dr. Wei Liu)  
\$10,000: **The Jordan Fund** – supporting the research and clinical trials of Dr. Tim Cripe  
**Grant to UM/Sylvester Comprehensive Cancer Center's Children's Cancer Program, University of Miami: \$20,000**  
\$20,000: Targeting Glycolysis and the AMPK Regulated Metabolic Networks in Childhood Acute Lymphoblastic Leukemia (Julio Barredo, MD)

**2012 – 8 Grants      \$235,000 Awarded**

**Grants to Cincinnati Children's Hospital Medical Center: \$155,000**

- \$40,000: Suppressing a tumor suppressor RUNX1: a novel approach to treat pediatric acute leukemia. (Susumu Goyama/Mulloy Lab)  
\$20,000: **The Shayna Flannery Survivor Grant:** Targeting the "Warburg Effect" in Cancer: A Proof of Concept Study for the next generation targeted therapies. (Gang Huang, Ph.D.)  
\$30,000: Identification of Drug Development Pathway for Improving Prognosis of Pediatric Leukemia. (Shan Lin/Mulloy Lab)  
\$40,000: **The Butterfly Walk Grant:** Etv2 Functional Knockdown: a novel strategy for inhibiting tumor-induced angiogenesis. (S. Sumanas PhD/Tim Cripe, MD, PhD)  
\$24,000: Identification of PAX3-NCOA1 and PAX3-NCOA2 target genes. (Sumegi, Janos MD, PhD)  
**Grants to Nationwide Children's Hospital (Columbus, OH): \$30,000**  
\$30,000: Synergy between Measles Virus and PI3K/Akt Inhibitors in the treatment of Atypical Rhabdoid/Teratoid Tumor. (Adam Studebaker)  
\$10,000: **DIPG Pediatric Brain Cancer Symposium** – CCHMC  
\$40,000: **UM/Sylvester Comprehensive Cancer Center's Children's Cancer Program, University of Miami:** Grant to purchase BioPlex 200 for research.

**2013 - 8 Grants      \$285,000 Awarded**

**Grants to Cincinnati Children's Hospital: \$235,000**

- \$40,000 **Butterfly Walk grant** to: Identification and Targeting Mutations of a Novel Tumor Suppressor SETD2 in Pediatric Cancer (Aili Chen, PhD candidate)  
\$50,000: Coagulation Therapeutics to Prevent Metastasis (Joe Palumbo, MD)  
\$40,000: Innovative targeted therapy for treatment of acute myeloid leukemia (Sara E. Meyer Ph.D. (Grimes Lab)  
\$30,000: Can targeting fat cure MPNST? (Ratner, N)  
\$25,000: Targeting bone marrow niche to eradicate childhood acute myeloid leukemia (AML) (Yuxin Feng, PhD)  
\$25,000 **Chaker Chahrouh Grant** to: Identifying survival factors for Diffuse Intrinsic Pontine Glioma (DIPG) stem cells. (Rishi Raj Chhipa PhD, (Dasgupta Lab)  
\$25,000: A new leukemia treatment using an old drug (Ashish Kumar, MD, PhD)  
**Grant to Nationwide Children's Hospital- Columbus, OH**  
\$50,000: Targeted therapies to improve survival rates for treatment resistant Rhabdomyosarcoma using splicing modulation. (Dawn Chandler, PhD.)

**2014 – 10 Grants      \$370,000 Awarded**

**Grants to Cincinnati Children's Hospital: \$290,000**

- \$50,000 **General Electric Aircraft Grant:** Therapeutic targeting of de novo and acquire resistance in childhood leukemia (Mohammad Azam, MD)  
\$48,000 **Rusty Ball Research Grant:** Atypical protein kinase C as safe, effective target in leukemic stem cells (Jose Cancelas, MD)  
\$50,000 **Butterfly Walk Grant:** Using a novel mouse model to develop an effective therapy for angiosarcoma (Lionel M.L. Chow (with Denise Adams, MD)  
\$40,000 **Tackle Childhood Cancer Grant:** Discovery of novel therapeutic targets for the treatment of MLL-AF4 infant acute lymphoblastic leukemia (Shan Lin (Mulloy)  
\$40,000 **Night for the Fight Grant:** Personalizing Melphalan Dosing based on Novel Bedside Pharmacokinetics in Children undergoing Bone Marrow Transplantation (Mehta, MD, Chandra, MD)  
\$30,000 **Annual CancerFree KIDS Dinner Grant:** Mobilization with CASIN as a preparative regimen in bone marrow transplant therapy (Ahmad Rayes, MC (Cancelas lab)  
\$22,000 **Paxton's Golf Outing Grant:** A study of the role of macrophages in the development of testicular germ cell tumors (Sarah Potter, MD, (DeFalco)  
\$10,000: **Pet Research Study** conducted through the CancerFree KIDS/Impact 100 Family Pet Center at CCHMC (Mary Kay Irwin)  
**Grant to Nationwide Children's Hospital – Columbus, OH**  
\$50,000 grant: Targeted Bone Marrow Delivery of Anti-Leukemia Therapy (Edwin M. Horwitz, MD, PhD)  
**Grant to University of Miami – Miami, FL**  
\$30,000: Using NAMPT inhibitors to increase efficacy of neuroblastoma chemotherapies (Regina M. Graham, PhD)

## 2015 - 13 Grants \$400,000 Awarded

### Grants to Cincinnati Children's Hospital: \$295,000

\$45,000 **Tackle Childhood Cancer Grant:** Testing a Novel Approach to Treat Pediatric Brain Tumors - Sengupta/Drissi

\$45,000 **CancerFree Christmas Grant:** Understanding Induction Chemotherapy Failure – Grimes

\$45,000: **“Fund-a-Cure” Grant:** Comprehensive genetic analysis of matched primary and relapsed pediatric gliomas – Hoffman/Salloum/Fouladi

\$11,000: **Night for the Fight Grant:** Blocking MBNL1 to treat leukemia – Itskovich

\$45,000: **Paxton's Golf Outing Grant:** Induction of anti-tumor responses by RI-guided high intensity ultrasound – Janssen

\$35,000: **Cincinnati Bell Research Grant:** Targeting Eyes Absent Proteins in the Treatment of Ewing Sarcoma – Riffle/Hegde

\$15,000: **Anesthesia Associates of Cincinnati Grant:** Unraveling the mystery of how bad homes and bad cells can lead to leukemia development and relapse – Wong-Hochstetler/Zheng

\$45,000: **Rat Race Research Grant:** Using NK cells to treat pediatric blood cancers – Cranert/Waggoner

**CancerFree KIDS/Impact 100 Family Pet Center Research Project \$10,000**

### Grants to Nationwide Children's Hospital: \$85,000

\$15,000: **Butterfly Walk Research Grant:** Targeted Tumor Delivery of Anti-Cancer Therapy – Horwitz

\$25,000: **Butterfly Walk Research Grant:** Developing Sgt1 inhibitors as anti-pediatric cancer drugs – Kitagawa/Li

\$45,000: **Butterfly Walk Research Grant:** The metabolic and therapeutic intervention in neuroblastoma – Wang

### Grants to University of Miami Sylvester Children's Cancer Center

\$20,000; **Reason to Run Research Grant:** Targeting the NEDD8 Pathway for therapeutic gain in ALL – Barredo

## 2016 – 13 Grants \$575,000 Awarded

### Grants to Cincinnati Children's Hospital Medical Center: \$34,500

\$50,000: **CancerFree Christmas Research Grant:** A new therapeutic approach in pediatric AML – Barreyro/Starczynowski

\$42,500: **Paxton's Golf Outing Research Grant:** Overcoming Signaling Deficiencies in MPNST (malignant peripheral nerves sheath tumors) - Coover/Ratner

\$30,000: **Night for the Fight Research Grant:** Seeking a novel, less toxic therapy for Childhood T-Cell Acute Lymphoblastic Leukemia (T-ALL) - Evelyn/Zheng

\$50,000: **ProMach Research Grant:** Identifying novel therapeutic targets for pediatric leukemia - Filippi

\$50,000: **Jersey Mike's Day of Giving Research Grant** The Lesser of two evils: weakening infant leukemia through forced lineage switch – Mizukawa/Mulloy

\$50,000: **CancerFree KIDS Annual Dinner Research Grant:** A Novel Strategy For Blocking Tumor Angiogenesis - Sumanas

\$25,000 - **Colleen and Brad Johansen Research Grant:** Clinical trial for less toxic treatment in relapsed/refractory pediatric myeloid leukemia (AML) - Phillips

\$50,000 - **Chard Snyder Research Grant:** Novel targets to cure pediatric leukemia - Grimes, MD

### Grants to Nationwide Children's Hospital (Columbus, Ohio): \$227,500

\$50,000: **CancerFree KIDS Annual Dinner Event Research Grant, in memory of Bubba Hctor:** Leveraging single-cell transcriptomics to identify mediators of lung tropism in osteosarcoma - Roberts

\$50,000: **Butterfly Walk Research Grant, in memory of Hanna Paribello:** Targeting the neuroblastoma microenvironment to activate immunity and immune therapy - Horwitz

\$35,000: **Butterfly Walk Research Grant, in memory of Hanna Paribello** Synergistic Inhibition of MYC/MYC/NB with small molecules in neuroblastoma - Shah

\$42,500: **CancerFree KIDS Annual Dinner Event Research Grant:** Targeting the chromatin regulatory machinery co-opted by EWS/FLI in Ewing Sarcoma - Theisen

\$50,000: A Phase I/II study of combination viroimmunotherapy and chemotherapy for pediatric patients with relapsed or refractory non-CNS solid tumors - Streby

## 2017 – 15 grants \$700,000 Awarded

### Grants to Cincinnati Children's Hospital: \$430,000

\$50,000 **Jersey Mike's Research Grant:** Dr. Lin, A new drug for AML - a difficult to treat childhood leukemia

\$50,000 **CancerFree Christmas Research Grant:** Melgar/Starczynowski, Novel mechanisms and therapeutic strategies in refractory leukemia (AML)

\$50,000 **Butterfly Walk Research Grant:** Dr. Muhammed, Exploiting proteotoxic stress in pediatric brain tumors

\$40,000 **Annual Angel Investors Research Grant with matching support from ProMach:** Ramkissoon/Ratner, A novel therapeutic for malignant peripheral nerve sheath tumors

\$50,000 **Night for the Fight Research Grant:** Dr. Grimes, A new target for the therapy of hard to treat (AML) leukemia in neutropenic children

\$50,000 **Paxton's Golf Outing Research Grant:** Dr. Dasgupta, Targeting tumor metabolism in DIPG cells.

\$50,000 **Evelo Singer Sullivan Research Grant in honor of Annie Horner:** Dr. Drissi, Novel therapeutic targeting proteins to treat DIPG

\$45,000 **Anthem Research Grant:** Dr. Huang, A novel therapeutic strategy for chemo-resistant pediatric leukemia

\$45,000 **Donato's Research Grant:** Dr. Azam, Targeted curative therapy for pediatric brain tumors

### Grants to Nationwide Children's Hospital (Columbus, Ohio): \$270,000

\$20,000 **Butterfly Walk Research Grant:** Didesmethylocaglamide as a Potential Treatment for Meningiomas – Chang

\$50,000 **Butterfly Walk Research Grant:** Targeting the Tumor Stromal Microenvironment to Enhance Oncolytic Virotherapy – Chen

\$50,000 **Night for the Fight Research Grant:** Combined IL-21 & TGF- $\beta$  Co-Treatment Generates Human Natural Killer Cells with Enhanced Tumor - Foltz Cell Killing

\$50,000 **Celebration of Champions Research Grant:** Defining the mechanisms of LSD1 drug resistance in Ewing sarcoma - Pishas

\$50,000 **Friends of CancerFree KIDS Research Grant in honor of Annie Horner:** Targeting GABA metabolic shunt in Rhabdomyosarcoma - Wang

\$50,000 **Celebration of Champions Research Grant:** Enhancing Interferon  $\gamma$  Primed Mesenchymal Stromal Cell Suppression of GVHD - Horowitz

## 2018 – 17 Grants \$800,000 Awarded

### Grants to Cincinnati Children's Hospital Research: \$525,000

\$36,000 **Masons of NJ:** Investigating DC244 as a new Therapeutic Target for Immune Checkpoint Inhibition – Agresta, Janssen

\$50,000 **Night for the Fight:** Targeting of Cdc42 as a Cancer Immunotherapy for Pediatric Medulloblastoma – Guo

\$50,000 **Chard Snyder:** Understanding and stopping MBNL1 overexpression in order to Cure Infant Leukemia – Gurunathan, Kumar

\$50,000 **Moeller Court Challenge:** A Novel Therapeutic Strategy for Refractory and Relapsed FLT3-mutant AML – Jones, Starczynowski

\$41,000 **Paxton's Golf Outing:** Therapeutic Targeting of High-Risk B-ALL – Kesarwani

\$50,000 **Amazing Race:** Targeting Cyclin-Dependent Kinases in MLL-rearranged Acute Leukemia - Lee

\$48,000 **Jersey Mike's:** Innovative Targeting of Chemo-Resistant Pediatric MPNST – Ramkissoon, Ratner

\$50,000 **DHL:** Improving the Outcome of Aggressive Childhood Lymphomas – Sertorio, Zheng

\$50,000 **Donatos:** Improving the Treatment of Challenging Fanconi Anemia Cancers by Proton Precision Therapy – Wells

\$50,000 **Flying Pig Marathon:** Combination of Target Therapy and Radiation for Curing Medulloblastoma in Pre-Clinical Models – Zhao, Lu, Fouladi

\$50,000 **This is Our Fight Basketball Game in memory of Liz Lothrop:** Understanding Chemotherapy Failure in AML: Resistance Mechanisms to a Nanoparticle Chemotherapy Delivery System – Absalon (awarded in 12/17)

### Grants to Nationwide Children's Hospital Research: \$275,000

\$50,000 **CBTS:** Sensitizing Pediatric Osteosarcoma to Chemotherapy by Nanoparticle Delivered Targeting of DeltaNp63 – Cam

\$25,000 **Celebration of Champions Research Grant with matching support from ProMach:** Targeting Intratumoral Macrophages to Enhance Oncolytic Virotherapy for Ewing Sarcoma – Cripe

\$50,000 **Butterfly Walk:** Augmenting T Cell Activity after Viroimmunotherapy for Durable Antitumor Response – Ghonime, Cassidy

\$50,000 **Celebration of Champions Research Grant with matching support from ProMach:** A Novel Drug Combination Targeting RTKs and mTOR to Treat Malignant Peripheral Nerve Sheath Tumors – Oblinger, Chang

\$50,000 **Night for the Fight:** Longitudinal Quantification of Circulating Tumor Cells in Response to the Presence or Absence of an IL-6 Producing Tumor in Canine Patients with Osteosarcoma - Saraf, Hinckley, Roberts

\$50,000 **Butterfly Walk:** A Phase 1 Safety Study of BXQ-350 Administered as a Single Agent by Intravenous Infusion in Children and Young Adults with Recurrent or Relapsed Solid Tumors or Recurrent Malignant Brain Tumors or Newly Diagnosed Diffuse Intrinsic Pontine Glioma (DIPG)- Setty, Abdel-Baki, Cripe

## 2019 – 18 Grants \$850,000 Awarded

### Grants to Cincinnati Children's Hospital: \$500,000

\$50,000: **Jersey Mike's Research Grant:** Discovery of New Therapeutics for Childhood Recurrent Respiratory Papillomatosis – Bedard

\$42,500 **Night for the Fight Research Grant in honor of Kelly Higgins:** Evaluating Cardiac Aminoglycoside, Digoxin, in the Treatment of Medulloblastoma – Huang

\$40,000 **Butterfly Walk Research Grant in memory of Butterfly Walk Angels:** Targeting Reprogrammed Metabolic Pathways in Pediatric Brainstem Glioma – Dasgupta

\$42,500 **DHL Research Grant:** Overcome mTOR Targeting Resistance in Childhood Acute Myeloid Leukemia Therapy – Fan

\$50,000 **Phi Beta Psi Research Grant:** Three Stones for One Bird: A Less Toxic Cocktail Therapy for a Complete Cure of Pediatric Leukemia – Feng

\$50,000 **Loveland Schools Research Grant:** Defining the Landscape of Pediatric AML Vulnerabilities – Grimes

\$50,000 **Chard Snyder Research Grant:** SCRIBBLE: A Novel Target for Chemotherapy-Resistant Pediatric B-ALL – Hegde

\$25,000 **Tom Fitz Research Grant:** Identification of Novel Therapeutic Targets for NF2 Schwannomas – Hennigan

\$50,000 **Paxton's Golf Outing Research Grant:** Novel Drug for Therapy-Resistant Pediatric Leukemia – Nassar

\$50,000 **Celebration of Champions Research Grant in honor of Bob Herzog:** Adoptive Natural Killer Cell Immunotherapy and Radiotherapy in Pediatric Sarcoma Patient Derived Xenografts – Turpin/Waggoner

\$50,000 **Adam Clapp Research Grant:** Differential Effects of Proton vs. Photon Radiotherapy on Brain Inflammation and Necrosis – Vatner

### Grants to Nationwide Children's Hospital, Columbus OH: \$350,000

\$50,000 Phase I Study of Intra-Tumoral Injections of Autologous Ex Vivo Expanded Natural Killer Cells in Children with Recurrent High Grade Gliomas - AbdelBaki  
Exciting, innovative study using immune cells to treat pediatric High Grade Gliomas to improve outcomes – a collaboration with 18 North American institutions.

\$50,000 Establishment of Matched Marrow Tumor Humanized Mouse PDX's for Studies of Immunotherapy – Arnold/Cripe  
Innovative study creating mice models that have human immune systems to use in testing immune-based therapies that could lead to clinical trial.

\$50,000 Novel eIF4A Inhibitors Rocaglamide and Didesmethylocaglamide to Treat Ewing Sarcoma – Chang  
Five year survival for children with Ewing Sarcoma is only 65-75%. This study seeks to identify a potent chemotherapeutic agent that stops tumor growth or completely eradicates these devastating pediatric malignancies. To improve long-term outcomes and minimize side effects of current treatments.

\$50,000 **Butterfly Walk Research Grant in honor of The Paribello and Tipton Families:** Development of an Inducible, AAV-encoded BiTE for the Treatment of Neuroblastoma – Hutzen/Cripe

\$50,000 **Donato's Research Grant:** Improving Immune Targeting of Shared Antigens on Pediatric Solid Tumors – Cassidy

\$50,000 Generating Novel CAR-NK Cells to Mediate Superior Antitumor Effects – Kararoudi  
Using genetically modified primary Natural Killer (immune) cells for safer and more effective treatment for leukemia and neuroblastoma

\$50,000 Immuno-stimulation by CD40 Agonists Enhance Herpes Virotherapy in Medulloblastoma – Studebaker  
Novel study using virotherapy and immune-stimulation for much needed new treatment with fewer serious side effects in pediatric brain tumors.

## 2020 – 16 Grants totaling \$800,000 Awarded

### Grants to Cincinnati Children's Hospital: \$500,000

\$50,000 **DHL Research Grant:** Investigating the role of ovarian hormones on secondary breast cancer risk following radiation therapy during puberty. Johnstone, Megan

\$50,000 **Celebration of Champions Research Grant in honor of Sophia Kappen and Robin Sinclair:** Novel glycobiology targets in pediatric AML. H. Leighton Grimes

\$50,000 **Jersey Mike's Research Grant:** The Role of Hemostatic Regulators in Osteosarcoma Metastasis. Francisco/Palumbo/Pressey

\$50,000 **Chard Snyder Research Grant:** Role of gut microbial signals on treatment-resistant AML cells, Puneet Agarwal, PhD (Research Fellow), Daniel T. Starczynowski, PhD

\$50,000 **Paxton's Golf Outing Research Grant:** Targeting Neuronal Activity for Treating Pediatric Malignant Brain Tumors, Kalen Berry, PhD., Dr. Richard Lu, Dr. John Perentesis, MD and Dr. Trent Hummel, MD

\$50,000 **Chemed Foundation Research Grant:** Targeting LIGHT to treat Pulmonary Fibrosis in Childhood Cancer Survivors, Herro, Rana

\$50,000 **Tri-Health Research Grant:** Development and Testing of CAR-NK Cells for Relapsed Pediatric Acute Myeloid Leukemia, Mark Wunderlich, MS; Benjamin Mizukawa, MD

\$50,000 **Butterfly Walk Research Grant in honor of Owen Vonderhaar:** Preclinical treatment of matched primary and recurrent medulloblastoma with an orally active proteasome inhibitor, CEP-18770 Jian Xu, MD, Mentors: Frank Huang PhD, Mariko DeWire-Schottmiller MD, Richard Lu PhD)

\$50,000 **Cincinnati Bell Research Grant:** PRC2 in maintaining an immunologically 'cold' microenvironment in DIPG tumors, Vishnu Modur, PhD, Faculty advisors: Yi Zheng, PhD, and Richard Lu, PhD

\$50,000 **The Berke Family Research Grant:** AML Phase I Clinical Trial, John Perentesis, MD, FAAP, Stella Davies, MBBS, PhD, MRCP

### **Grants to Nationwide Children's Hospital: \$300,000**

\$50,000 **The Night for the Fight Research Grant in memory of Jonathon Boerner:** Developing a high-throughput system for screening agents that target "anchor" cells. James Reinecke, MD, PhD (non-faculty) and Ryan Roberts, MD, PhD (faculty mentor)

\$50,000 **ProMach Research Grant:** Metabolic starvation in tumor cells potentiates cellular survival via changes in alternative splicing. Safiya Khurshid, PhD

\$50,000 **Joy Snyder and Ken Chard Research Grant:** NK cell-based Immunotherapy for the treatment of patients with neuroblastoma PI: Prashant Trikha, Ph.D. Co-Investigator: Dean Lee, MD PhD

\$50,000 **Champions Challenge Research Grant in honor of 2020 inaugural riders:** Using Antisense Oligonucleotides to Promote Therapeutic Alternative Splicing Events in Ewing Sarcoma, Akila Venkataramany, PI: Dawn Chandler, Ph.D., Timothy P. Cripe, M.D., Ph.D.

\$50,000 Genome-wide CRISPR Screen in Natural Killer Cells, From Identifying Novel Targets to Therapeutics, Meisam Naeimi Kararoudi, DVM, Ph.D.

\$50,000 Understanding epigenetic determinants and consequences of PAX3-FOXO1 activity in rhabdo-myosarcoma, Benjamin Stanton, PhD (PI)

### **2021 – 19 Grants \$1,001,000 Awarded**

#### **Grants to Cincinnati Children's Hospital: \$486,000**

\$50,000 **Chard Snyder Research Grant:** Biplab Dasgupta's study titled "One carbon and nucleotide metabolism are novel targets in pediatric tumors"

\$50,000 **Coho Creative Research Grant:** Andrew Volk's study titled "The chromatin assembly complex as a druggable target in pediatric leukemia"

\$46,000 **ProMach Research Grant:** Nancy Ratner's study titled "RAS-specific combination therapies for MPNST"

\$50,000 **Anthem Research Grant:** La Man (Natalie) Wu's study titled "Targeting tumor-initiating stem cell metabolism for MPNSTs"

\$50,000 **Jersey Mike's Research Grant:** Michael Jordan's study titled "Harnessing insights from immune regulatory diseases to improve CAR-T cell therapy"

\$50,000 **Butterfly Walk Research Grant in memory of Grant Wolf:** Dazhuan Eric Xin, Richard Lu, John Perentesis study titled "Innovative proton radiotherapy for pediatric malignant medulloblastoma"

\$50,000 **Legacy Research Grant in honor of outgoing Board members Amy Wagner, Kristy Moster, Andy Kaiser and Max Flannery:** Zhaowei Tu's study titled "Overcoming chemo-resistant RUNX1 mutant AML"

\$50,000 **Celebration of Champions Research Grant in honor of Gracie Tapp:** Marie-Dominique Filippi's study titled "Exposing metabolic vulnerability of pediatric leukemia for developing new therapeutics"

\$50,000 **Paxton's Golf Outing Research Grant:** Frank Huang's study titled "Preclinical treatment with ouabain in matched primary and recurrent medulloblastoma"

\$40,000 Nancy Ratner's study titled "Novel eIF4A inhibitors rocaglamide and didesmethylrocaglamide to treat sarcoma and NF-associated tumors".

#### **Grants to Nationwide Children's Hospital: \$515,000**

\$50,000 **Cincinnati Bell Research Grant:** Kevin Cassady's study titled "Development and characterization of an IL-27 expressing oncolytic virus with improved anti-glioma activity"

\$50,000 Siddhi Nath Paudel's study titled "Developing a new therapeutic strategy for MPNSTs"

\$50,000 John William Sherman's study titled "An epigenetic link to the mitochondria"

\$50,000 Maren Cam and Ryan Roberts study "Anchor-induced wound responses in non-osteosarcoma lung metastasis"

\$25,000 **Night for the Fight Research Grant in honor of Top Student Fundraiser Eliana Boerner:** Jack Tokarsky's study titled "Investigating the influence of mitochondrial dysfunction on the epigenetics and drug resistance in Ewing Sarcoma"

\$50,000 Dawn Chandler's study titled: "From RNA vaccines to RNA cancer therapeutics: Targeting cancer cells with RNA"

\$50,000 Ralph Salloum and Margaret Lazow's study titled "Radionuclide therapy for somatostatin receptor-positive high-grade central nervous system tumors in children"

\$50,000 **TQL Research Grant:** Meisam Naeimi Kararoudi's study titled "Engineering CAR-expressing NK cells against nucleolin for childhood cancer therapy"

\$50,000 Emily Theisen's study titled "Tumor spheroid multiomics to assess the impact of epigenetic therapy on tumor heterogeneity"

\$50,000 Meisam Naeimi Kararoudi's study titled "Designing novel NK cell specific CARs for enhanced antitumor activity"

\$40,000 Long-Sheng Chang's study titled "Novel eIF4A inhibitors rocaglamide and didesmethylrocaglamide to treat sarcoma and NF-associated tumors".

### **2022 – Grants \$1,200,000 Awarded**

#### **Grants to Cincinnati Children's Hospital: \$750,000**

\$50,000 **The Butterfly Walk Research Grant:** Lai Man Natalie Wu, Ph.D. - Harnessing novel irradiation strategies to improve immunotherapy for systemic elimination of high-risk neuroblastoma

\$50,000 **The altafiber Research Grant:** Jennifer Yeung, Ph.D. - Characterizing the pathogenesis role of endogenous retroviruses (ERVs) in pediatric Acute Myeloid Leukemia

\$50,000 **The Interlink Cloud Advisors Research Grant:** Bailee Kain, Ph.D. (Mentor: Leighton "Lee" Grimes, PhD) - Functionalizing novel mutations underlying health disparities in AML

\$50,000 **The Wirtz Family Research Grant in memory of Jacob:** Ashley Cochran, Ph.D - A novel therapeutic strategy for treating death-resistant leukemic cells

\$50,000 **The Celebration of Champions Research Grant in memory of Annie M. Igoe** Tafadzwa Chihanga, Ph.D. - Targeting a novel HPV-induced epithelial compartment to prevent viral infection and carcinogenesis

\$50,000 **The CBTS Research Grant:** Zaili Luo, Ph.D. - Novel chimeric antigen receptor T cell immunotherapy for diffuse midline gliomas

\$50,000 **The Sycamore Capital Research Grant:** Yuan Lin - Aberrant RhoA signaling in pediatric Burkitt's Lymphoma as a drug target

\$50,000 **The Night for the Fight Research Grant in honor of Dra' White and Jeff Clarke:** Laura B. Ramsey, Ph.D. - Using methotrexate pharmacogenomics to remedy racial and ethnic disparities in childhood cancer treatment

\$50,000 **The Paxton's Golf Outing Research Grant:** Linde A. Miles, Ph.D. - Delineation of clonotype-immunophenotype relationships in pediatric myeloid leukemias

\$50,000 **The CTI Research Grant:** Nawal Merjaneh, MD, MS - The Sequential Treatment of RCM-1 and Anti-Apoptotic BCL2 Family Protein Inhibitors in Rhabdomyosarcoma

\$50,000 **The Chard Snyder Research Grant:** Lynn H. Lee, M.D. - Target Discovery with Forward CRISPR Genomic Screens in Leukemia Xenografts  
Accelerator Awards

\$100,000 **The ProMach Research Grant:** Biplab Dasgupta, Ph.D. - "Targeting One carbon Metabolism in DIPG"

\$100,000 Accelerator Award - **The Wolf Pack Research Grant** in memory of Grant Wolf: Dazhuan Eric Xin, Ph.D. - Innovative proton radiotherapy for pediatric malignant medulloblastoma

#### **Grants to Nationwide Children's Hospital \$450,000**

\$50,000 **The Clark Schaefer Hackett Research Grant:** Ezgi Elmas - Discovering novel pathways to overcome immunosuppression in NK cells against High-grade Gliomas

\$50,000 **The Kingpin's Alley Research Grant in honor of Alison and Doug Bohannon:** Akila Venkataramany - Delivering Splice-switching Oligonucleotides Via Adeno-Associated Viruses: Taking the Next Steps Toward Novel Therapies for Ewing Sarcoma

\$50,000 **The Tom and Lorri Simpson Research Grant:** Kevin A. Cassidy, M.D. - Improving immunotherapy in pediatric neuronal tumors with EV delivery of immune modulators

\$50,000 **The Night for the Fight Research Grant in honor of Eliana Boerner:** Rachel Dreher - LSD1 is a Novel Member of the ChAHP Complex in Ewing Sarcoma

\$50,000 **The Mark and MC Anderson Research Grant:** Janet L. Oblinger, Ph.D. - The role of ARID1A in the malignant progression of NF2-related meningioma

\$50,000 **The Reader Author Research Grant in honor of Lori Foster:** Chun-Yu Chen, Ph.D. - Targeting the immunosuppressive tumor microenvironment with a novel immunomodulatory HSV to enhance adoptive NK cell therapy

\$50,000 **The Al and Lauren Early Research Grant:** Pin-Yi Wang - Targeting Osteosarcoma with Gene-Based Bispecifics

\$100,000 Accelerator Award - **The Celebration of Champions Research Grant:** Long-Sheng Chang, Ph.D. - A novel drug combination targeting RTKs and mTOR to treat malignant peripheral nerve sheath tumors

#### **2023 – Grants \$1,250,000 Awarded**

##### **Grants to Cincinnati Children's Hospital: \$600,000**

\$50,000 **The altafiber Research Grant:** Arman Bayat; Targeting DIPG/DMG with innovative proton therapy

\$50,000 **DBL Law Research Grant:** Daniel Starczynowski, PhD; Developing novel UBE2N inhibitors for cancer using DNA-encoded library screen

\$50,000 **Gusweiler Friends & Family Research Grant:** Xin Duan; Developing a Novel Strategy to Treat Juvenile Myelomonocytic Leukemia

\$50,000 **Interlink Cloud Advisors Research Grant:** Bailee Kain, PhD; Utilizing a human stem cell derived bone marrow organoid model to study AML

\$50,000 **Jersey Mike's Research Grant:** Liang Hu, RDMS; Agonist therapy for malignant peripheral nerve sheath tumors

\$50,000 **Maddie's Hope Research Grant:** Anusha Anukanth, MD; Exploring the role of feeder cells in NK cell priming

\$50,000 **Schroth Family Research Grant:** Ramesh Nayak, PhD; SATB2, a novel target to eradicate leukemia initiating cells (LIC) in B-cell acute lymphoblastic leukemia.

\$50,000 **Wirtz Family Research Grant in Memory of Jacob:** Mohammad Azam, PhD; Targeting immune-resistance to CAR-T cell therapy in B-ALL

\$100,000 Accelerator Award - **Wolf Pack Research Grant in memory of Grant Wolf:** Zaili Luo, PhD; Novel chimeric antigen receptor T-cell immunotherapy for diffuse midline gliomas

\$100,000 Accelerator Award - **The ENGRAFT Learning Network**

The BFF Fund Research Grant: Stella Davies, MBBS, PhD, MRCP; ENGRAFT - a Transplant and Cellular Therapy Learning Network

##### **Grants to Nationwide Children's Hospital \$650,000**

\$50,000 **Butterfly Walk Research Grant in honor of Marko:** Elizabeth Garfinkle, PhD; Mapping spatial heterogeneity of the tumor immune microenvironment and its contribution to immune evasion in pediatric rhabdoid tumors

\$50,000 **Chard Snyder Research Grant:** Masako Shimamura, MD; Optimizing Virus Specific T cells against Adenovirus after Pediatric Hematopoietic Cell Transplantation

\$50,000 **CTI Research Grant:** Genevieve Kendall, PhD; CRISPRCas13 targeting of PAX3::FOXO1 for treatment of rhabdomyosarcoma

\$50,000 **Donatos Research Grant:** Rachel Hoffman, PhD; Investigating epigenomic and genomic instability in fusion-positive rhabdomyosarcoma

\$50,000 **MariClaire and Mark Anderson Research Grant:** Ravi Dhital, MSc, PhD; CXCL10 and IL-21 therapy to improve humoral activity against malignant glioma antigens.

\$50,000 **Naperville Marathoners Research Grant:** Brian Hutzen; Combination Therapy of Off-The-Shelf CRISPR/AAV Generated Gamma/Delta CAR-T Cells and Oncolytic Viruses for Neuroblastoma

\$50,000 **Night for the Fight Research Grant in Honor of Eliana Boerner:** Julie Tomolonis, MD, PhD; Targeting Pediatric Solid Tumor Stroma with Gene-Based Bispecifics

\$50,000 **Paxton's Golf Outing Research Grant:** Long-Sheng Chang, PhD; Combining a multi-kinase inhibitor with an mTORC1-selective inhibitor to effectively shrink meningioma

\$50,000 **Sycamore Capital Research Grant:** James Reinecke, MD; Elucidating the role of microenvironmental induced cell state switching in medulloblastoma leptomeningeal metastasis

\$100,000 Accelerator Award - **ProMach Research Grant: John Sherman;** An epigenetic link to the mitochondria

\$100,000 Accelerator Award - **Visionary Society Research Grant:** Meisam Naeimi Kararoudi, DVM, PhD; Engineering CAR-expressing NK cells against Nucleolin for Childhood Cancer Therapy

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**Total to date: \$9.45 million invested in 215 research studies**