

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 Grant Selection Committee chooses those projects that we will fund each year through a competitive selection process. We invest in early research – the novel idea that would likely go unfunded if not for our grant. We measure success by following these projects and identifying those that receive subsequent funding from other sources to continue their research. Several of the projects that we gave initial support to have gone on to receive patents and start companies to take their novel idea to clinical trial.

2004 - 2 Grants \$20,000 Awarded

\$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

\$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

\$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

\$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

\$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

\$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

\$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 – Shemenski 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-opthalmic artery 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:

\$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 (Marmer)

\$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: Targeting Glycolysis and the AMPK Regulated Metabolic Networks in Childhood Acute Lymphoblatic Leukemia (Julio Barredo, MD)

2012 – 8 Grants \$235,000 Awarded

Grants to Cincinnati Children's Hospital Medical Center:

\$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: 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:

\$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 Chahrour 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) \$50,000 grant to **Nationwide Children's Hospital**- Columbus, OH 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:

\$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:

\$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 blook cancers – Cranert/Waggoner

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

Grants to Nationwide Children's Hospital

\$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:

\$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 leukemi - Grimes, MD

Grants to Nationwide Children's Hospital (Columbus, Ohio):

\$50,000: CancerFree KIDS Annual Dinner Event Research Grant, in memory of Bubba Hoctor: Leveraging singe-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/MYCNB with small molecules in neuroblastoma -Shah

\$42,500: **CancerFree KIDS Annual Dinner Event Research Grant:** Targeting the chromalin 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 Grants - 15 totaling \$750,000

Grants to Cincinnati Children's Hospital:

\$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 regractory leukemia (AML)

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

\$50,000 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

\$50,000 **Anthem Research Grant:** Dr. Huang, A novel therapeutic strategy for chemo-resistant pediatric leukemia

\$50,000 **Donato's Research Grant:** Dr. Azam, Targeted curative therapy for pediatric brain tumors

Grants to Nationwide Children's Hospital (Columbus, Ohio):

\$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- β Co-Treatment Generates Human Natural Killer Cells with Enhanced Tumor - Foltz Cell Killin

\$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 γ Primed Mesenchymal Stromal Cell Suppression of GVHD - Horowitz

2018 – 17 Grants totaling \$800,000

Grants to Cincinnati Children's Hospital Research: \$525,000-11

\$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 - 6

\$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, Cassady

\$50,000 Celebration of Champions Research Grant with matching support from **ProMach:** A Novel Drub 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 totaling \$850,000

Grants to Cincinnati Children's Hospital: \$500,000 - 11

\$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 - 7

\$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 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 elF4A Inhibitors Rocaglamide and Didesmethylrocaglamide 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 devasting 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 – Cassady

\$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 immunestimulation for much needed new treatment with fewer serious side effects in pediatric brain tumors.

2020 - 16 Grants totaling \$800,000

Grants to Cincinnati Children's Hospital:

DHL Research Grant: Investigating the role of ovarian hormones on secondary breast cancer risk following radiation therapy during puberty. Johnstone, Megan Celebration of Champions Research Grant in honor of Sophia Kappen and Robin Sinclair: Novel glycobiology targets in pediatric AML. H. Leighton Grimes Jersey Mike's Research Grant: The Role of Hemostatic Regulators in Osteosarcoma Metastasis. Francisco/Palumbo/Pressey

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



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

Chemed Foundation Research Grant: Targeting LIGHT to treat Pulmonary Fibrosis in Childhood Cancer Survivors, Herro, Rana

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

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

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:

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

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

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.

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

Understanding epigenetic determinants and consequences of PAX3-FOXO1 activity in rhabdo-myosarcoma, Benjamin Sunkel, PhD (PI)

2021 – 19 Grants totaling \$1,000,000*

Grants to Cincinnati Children's Hospital:

\$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-Dominque Filippi's study titled "Expositing 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"

Grants to Nationwide Children's Hospital:

\$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-grad e 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"

*\$79,000 restricted funding to research project TBD

Total to date: \$7,070,000 invested in 173 research studies