

Oncology

Division Details

RESEARCH AND TRAINING DETAILS

Faculty	28
Joint Appointment Faculty	3
Research Fellows and Post Docs	4
Research Graduate Students	7
Total Annual Grant Award Dollars	\$2,566,350
Total Annual Industry Award Dollars	\$2,587,017
Total Publications	58

CLINICAL ACTIVITIES AND TRAINING

Staff Physicians	8
Clinical Fellows	3
Inpatient Encounters	11,508
Outpatient Encounters	17,393



Row 1: R Drissi, B Weiss, J Perentesis, J Mangino, L Privette-Vinnedge, E Breese

Row 2: R Salloum, C Phillips, B Turpin, J Pressey

Row 3: R Nagarajan, T Hummel, J Geller, L Chow

Division Publications

1. Abruzzo TA, Geller JI, Kimbrough DA, Michaels S, Correa ZM, Cornell K, Augsburger JJ. **Adjunctive Techniques for Optimization of Ocular Hemodynamics in Children Undergoing Ophthalmic Artery Infusion Chemotherapy.** *J Neurointerv Surg.* 2015; 7:770-6.
2. Adams A, Bolanos L, Dexheimer P, Karns R, Aronow B, Komurov K, Jegga A, Casper K, Patil Y, Wilson K. **Irak1 Is a Novel DNA Transcriptional Target and Is Essential for Head and Neck Cancer Cell Survival.** *Oncotarget.* 2015; 6:43395-407.
3. Adams DM, Trenor CC, 3rd, Hammill AM, Vinks AA, Patel MN, Chaudry G, Wentzel MS, Mobberley-Schuman PS, Campbell LM, Brookbank C, Gupta A, Chute C, Eile J, McKenna J, Mellow AC, Fei L, Hornung L, Seid M, Dasgupta AR, Dickie BH, et al. **Efficacy and Safety of Sirolimus in the Treatment of Complicated Vascular Anomalies.** *Pediatrics.* 2016; 137:e20153257.
4. Alsaied T, Mohameden M, Lee L, Lawson S, Mantell B, Saqr A, Nagarajan R. **Abdominal Pain, Fatigue, and Constipation in a Teenager Female: Is It Worth Further Investigations?** *Clin Pediatr (Phila).* 2016; 55:986-9.

5. Anderson CP, Matthay KK, Perentesis JP, Neglia JP, Bailey HH, Villablanca JG, Groshen S, Hasenauer B, Maris JM, Seeger RC, Reynolds CP. **Pilot Study of Intravenous Melphalan Combined with Continuous Infusion L-S,R-Buthionine Sulfoximine for Children with Recurrent Neuroblastoma.** *Pediatr Blood Cancer.* 2015; 62:1739-46.
6. Bielack SS, Smeland S, Whelan JS, Marina N, Jovic G, Hook JM, Krailo MD, Gebhardt M, Papai Z, Meyer J, Nadel H, Randall RL, Deffenbaugh C, Nagarajan R, Brennan B, Letson GD, Teot LA, Goorin A, Baumhoer D, Kager L, et al. **Methotrexate, Doxorubicin, and Cisplatin (Map) Plus Maintenance Pegylated Interferon Alfa-2b Versus Map Alone in Patients with Resectable High-Grade Osteosarcoma and Good Histologic Response to Preoperative Map: First Results of the Euramos-1 Good Response Randomized Controlled Trial.** *J Clin Oncol.* 2015; 33:2279-87.
7. Breese E, Buechele C, Dawson C, Cleary M, Porteus M. **Use of Genome Engineering to Create Patient Specific MII Translocations in Primary Human Hematopoietic Stem and Progenitor Cells.** *Plos One.* 2015; 10:e0136644.
8. Buechele C, Breese EH, Schneidawind D, Lin CH, Jeong J, Duque-Afonso J, Wong SH, Smith KS, Negrin RS, Porteus M, Cleary ML. **MII Leukemia Induction by Genome Editing of Human Cd34+ Hematopoietic Cells.** *Blood.* 2015; 126:1683-94.
9. Bukowski AJ, Burns KC, Parsons K, Perentesis JP, O'Brien MM. **Toxicity of Cancer Therapy in Adolescents and Young Adults (Ayas).** *Semin Oncol Nurs.* 2015; 31:216-26.
10. Cajaiba M, Jennings L, Rohan S, Perez-Atayde A, Marino-Enriquez A, Fletcher J, Geller J, Leuer K, Bridge J, Perlman E. **Alk-Rearranged Renal Cell Carcinomas in Children.** *Gene Chromosome Canc.* 2016; 55:442-51.
11. Cajaiba MM, Jennings LJ, Rohan SM, Leuer KM, Anagnost MR, Fahner JB, Fulton BK, Geller JI, Perlman EJ. **Expanding the Spectrum of Renal Tumors in Children: Primary Renal Myoepithelial Carcinomas with a Novel Ewsr1-Klf15 Fusion.** *Am J Surg Pathol.* 2016; 40:386-94.
12. Cajaiba MM, Khanna G, Smith EA, Gellert L, Chi YY, Mullen EA, Hill DA, Geller JI, Dome JS, Perlman EJ. **Pediatric Cystic Nephromas: Distinctive Features and Frequent Dicer1 Mutations.** *Hum Pathol.* 2016; 48:81-7.
13. Chlon TM, Ruiz-Torres S, Maag L, Mayhew CN, Wikenheiser-Brokamp KA, Davies SM, Mehta P, Myers KC, Wells JM, Wells SI. **Overcoming Pluripotent Stem Cell Dependence on the Repair of Endogenous DNA Damage.** *Stem Cell Reports.* 2016; 6:44-54.
14. Conry RM, Rodriguez MG, Pressey JG. **Zoledronic Acid in Metastatic Osteosarcoma: Encouraging Progression Free Survival in Four Consecutive Patients.** *Clin Sarcoma Res.* 2016; 6:6.
15. Cramer SL, Wei S, Merrow AC, Pressey JG. **Gorham-Stout Disease Successfully Treated with Sirolimus and Zoledronic Acid Therapy.** *J Pediatr Hematol Oncol.* 2016; 38:e129-32.
16. Dahl NA, Michaels ST, McMasters RL, Chandra S, O'Brien MM. **Azacitidine and Sorafenib Therapy in a Pediatric Patient with Refractory Acute Myeloid Leukemia with Monosomy 7 and Somatic Ptpn11 Mutation.** *Pediatr Blood Cancer.* 2016; 63:551-3.
17. Dandoy CE, Hariharan S, Weiss B, Demmel K, Timm N, Chiarenzelli J, Dewald MK, Kennebeck S, Langworthy S, Pomaes J, Rineair S, Sandfoss E, Volz-Noe P, Nagarajan R, Alessandrini E. **Sustained Reductions in Time to Antibiotic Delivery in Febrile Immunocompromised Children: Results of a Quality Improvement Collaborative.** *BMJ Qual Saf.* 2016; 25:100-9.
18. Dasgupta B, Chhipa RR. **Evolving Lessons on the Complex Role of Ampk in Normal Physiology and Cancer.** *Trends Pharmacol Sci.* 2016; 37:192-206.
19. Davis J, Kreppel A, Brady R, Jones B, Stevenson C, Fouladi M, Hummel T. **Nocardia Farcinica Meningitis Masquerading as Central Nervous System Metastasis in a Child with Cerebellar Pilocytic Astrocytoma.** *J Pediatr Hematol Oncol.* 2015; 37:482-85.
20. Dome J, Graf N, Geller J, Fernandez C, Mullen E, Spreafico F, Van den H-E, M, Pritchard-Jones K. **Advances in Wilms Tumor Treatment and Biology: Progress through International Collaboration.** *J Clin Oncol.* 2015; 33:2999-U94.

21. Ehrlich PF, Hamilton TE, Gow K, Barnhart D, Ferrer F, Kandel J, Glick R, Dasgupta R, Naranjo A, He Y, Perlman EJ, Kalapurakal JA, Khanna G, Dome JS, Geller J, Mullen E. **Surgical Protocol Violations in Children with Renal Tumors Provides an Opportunity to Improve Pediatric Cancer Care: A Report from the Children's Oncology Group.** *Pediatr Blood Cancer.* 2016; 63:1905-10.
22. Geller JI. **Current Standards of Care and Future Directions for "High-Risk" Pediatric Renal Tumors: Anaplastic Wilms Tumor and Rhabdoid Tumor.** *Urol Oncol.* 2016; 34:50-6.
23. Geller JI, Ehrlich PF, Cost NG, Khanna G, Mullen EA, Gratijs EJ, Naranjo A, Dome JS, Perlman EJ. **Characterization of Adolescent and Pediatric Renal Cell Carcinoma: A Report from the Children's Oncology Group Study Aren03b2.** *Cancer.* 2015; 121:2457-64.
24. Glait-Santar C, Desmond R, Feng X, Bat T, Chen J, Heuston E, Mizukawa B, Mulloy J, Bodine D, Larochelle A. **Functional Niche Competition between Normal Hematopoietic Stem and Progenitor Cells and Myeloid Leukemia Cells.** *Stem Cells.* 2015; 33:3635-42.
25. Hoffman L, DeWire M, Ryall S, Buczkowicz P, Leach J, Miles L, Ramani A, Brudno M, Kumar S, Drissi R. **Spatial Genomic Heterogeneity in Diffuse Intrinsic Pontine and Midline High-Grade Glioma: Implications for Diagnostic Biopsy and Targeted Therapeutics.** pmc/PMC4700584. *Acta Neuropathol Commun.* 2016; 4:1.
26. Hoffman LM, Fouladi M, Olson J, Daryani VM, Stewart CF, Wetmore C, Kocak M, Onar-Thomas A, Wagner L, Gururangan S, Packer RJ, Blaney SM, Gajjar A, Kun LE, Boyett JM, Gilbertson RJ. **Phase I Trial of Weekly Mk-0752 in Children with Refractory Central Nervous System Malignancies: A Pediatric Brain Tumor Consortium Study.** *Childs Nerv Syst.* 2015; 31:1283-9.
27. Hummel TR, Salloum R, Drissi R, Kumar S, Sobo M, Goldman S, Pai A, Leach J, Lane A, Pruitt D, Sutton M, Chow LM, Grimme L, Doughman R, Backus L, Miles L, Stevenson C, Fouladi M, DeWire M. **A Pilot Study of Bevacizumab-Based Therapy in Patients with Newly Diagnosed High-Grade Gliomas and Diffuse Intrinsic Pontine Gliomas.** *J Neurooncol.* 2016; 127:53-61.
28. Jones BV, Linscott L, Koberlein G, Hummel TR, Leach JL. **Increased Prevalence of Developmental Venous Anomalies in Children with Intracranial Neoplasms.** *AJNR Am J Neuroradiol.* 2015; 36:1782-5.
29. Kieran MW, Chi S, Goldman S, Onar-Thomas A, Poussaint TY, Vajapeyam S, Fahey F, Wu S, Turner DC, Stewart CF, Moses M, Packer RJ, Jakacki R, Banerjee A, Boyett JM, Fouladi M, Kun L. **A Phase I Trial and Pk Study of Cediranib (Azd2171), an Orally Bioavailable Pan-Vegfr Inhibitor, in Children with Recurrent or Refractory Primary Cns Tumors.** *Childs Nerv Syst.* 2015; 31:1433-45.
30. Kim MO, Wang X, Liu C, Dorris K, Fouladi M, Song S. **Random-Effects Meta-Analysis for Systematic Reviews of Phase I Clinical Trials: Rare Events and Missing Data.** *Res Synth Methods.* 2016.
31. Kim S-H, Ezhilarasan R, Phillips E, Gallego-Perez D, Sparks A, Taylor D, Ladner K, Furuta T, Sabit H, Chhipa R. **Serine/Threonine Kinase Mlk4 Determines Mesenchymal Identity in Glioma Stem Cells in an Nf-Kappa B-Dependent Manner.** *Cancer Cell.* 2016; 29:201-13.
32. Klionsky D, Abdelmohsen K, Abe A, Abedin M, Abeliovich H, Arozena A, Adachi H, Adams C, Adams P, Adeli Kea. **Guidelines for the Use and Interpretation of Assays for Monitoring Autophagy (3rd Edition).** *Autophagy.* 2016; 12:1-222.
33. Lu F, Chen Y, Zhao C, Wang H, He D, Xu L, Wang J, He X, Deng Y, Lu EE, Liu X, Verma R, Bu H, Drissi R, Fouladi M, Stemmer-Rachamimov AO, Burns D, Xin M, Rubin JB, Bahassi el M, et al. **Olig2-Dependent Reciprocal Shift in Pdgf and Egf Receptor Signaling Regulates Tumor Phenotype and Mitotic Growth in Malignant Glioma.** *Cancer Cell.* 2016; 29:669-83.
34. Lulla RR, Goldman S, Yamada T, Beattie CW, Bressler L, Pacini M, Pollack IF, Fisher PG, Packer RJ, Dunkel IJ, Dhall G, Wu S, Onar A, Boyett JM, Fouladi M. **Phase I Trial of P28 (Nsc745104), a Non-Hdm2-Mediated Peptide Inhibitor of P53 Ubiquitination in Pediatric Patients with Recurrent or Progressive Central Nervous System Tumors: A Pediatric Brain Tumor Consortium Study.** *Neuro Oncol.* 2016; 18:1319-25.

35. Matrka MC, Hennigan RF, Kappes F, DeLay ML, Lambert PF, Aronow BJ, Wells SI. **Dek over-Expression Promotes Mitotic Defects and Micronucleus Formation.** *Cell Cycle*. 2015; 14:3939-53.
36. McCarthy CE, O'Brien M, Andrews J, Zoland JM, Macasiray E, Wong W, Lo C, Glader B, Tamaresis J, Jeng M. **Updated Analysis: Central Venous Access Device Infection Rates in an Expanded Cohort of Paediatric Patients with Severe Haemophilia Receiving Prophylactic Recombinant Tissue Plasminogen Activator.** *Haemophilia*. 2016; 22:81-6.
37. Michaels ST, Abruzzo TA, Augsburger JJ, Correa ZM, Lane A, Geller JI. **Selective Ophthalmic Artery Infusion Chemotherapy for Advanced Intraocular Retinoblastoma: Cchmc Early Experience.** *J Pediatr Hematol Oncol*. 2016; 38:65-9.
38. Patel A, Johansson G, Colbert M, Dasgupta B, Ratner N. **Fatty Acid Synthase Is a Metabolic Oncogene Targetable in Malignant Peripheral Nerve Sheath Tumors.** *Neuro Oncol*. 2015; 17:1599-608.
39. Poussaint TY, Vajapeyam S, Ricci KI, Panigrahy A, Kocak M, Kun LE, Boyett JM, Pollack IF, Fouladi M. **Apparent Diffusion Coefficient Histogram Metrics Correlate with Survival in Diffuse Intrinsic Pontine Glioma: A Report from the Pediatric Brain Tumor Consortium.** *Neuro Oncol*. 2016; 18:725-34.
40. Prada C, Hufnagel R, Hummel T, Lovell A, Hopkin R, Saal H, Schorry E. **The Use of Magnetic Resonance Imaging Screening for Optic Pathway Gliomas in Children with Neurofibromatosis Type 1.** *J Pediatr* 2015; 167:851.
41. Rao R, Salloum R, Xin M, Lu Q. **The G Protein G Alpha(S) Acts as a Tumor Suppressor in Sonic Hedgehog Signaling-Driven Tumorigenesis.** *Cell Cycle*. 2016; 15:1325-30.
42. Rayes A, McMasters RL, O'Brien MM. **Lineage Switch in Mll-Rearranged Infant Leukemia Following Cd19-Directed Therapy.** *Pediatr Blood Cancer*. 2016; 63:1113-5.
43. Robinson GW, Orr BA, Wu G, Gururangan S, Lin T, Qaddoumi I, Packer RJ, Goldman S, Prados MD, Desjardins A, Chintagumpala M, Takebe N, Kaste SC, Rusch M, Allen SJ, Onar-Thomas A, Stewart CF, Fouladi M, Boyett JM, Gilbertson RJ, et al. **Vismodegib Exerts Targeted Efficacy against Recurrent Sonic Hedgehog-Subgroup Medulloblastoma: Results from Phase II Pediatric Brain Tumor Consortium Studies Pbtc-025b and Pbtc-032.** *J Clin Oncol*. 2015; 33:2646-54.
44. Romick-Rosendale L, Hoskins E, Vinnedge L, Foglesong G, Brusadelli M, Potter S, Komurov K, Brugmann S, Lambert P, Kimple R. **Defects in the Fanconi Anemia Pathway in Head and Neck Cancer Cells Stimulate Tumor Cell Invasion through DNA-Pk and Rac1 Signaling.** *Clin Cancer Res*. 2016; 22:2062-73.
45. Rutter MM, Jha P, Schultz KA, Sheil A, Harris AK, Bauer AJ, Field AL, Geller J, Hill DA. **Dicer1 Mutations and Differentiated Thyroid Carcinoma: Evidence of a Direct Association.** *J Clin Endocrinol Metab*. 2016; 101:1-5.
46. Salloum R, Fox CE, Alvarez-Allende CR, Hammill AM, Dasgupta R, Dickie BH, Mobberley-Schuman P, Wentzel MS, Chute C, Kaul A, Patel M, Merrow AC, Gupta A, Whitworth JR, Adams DM. **Response of Blue Rubber Bleb Nevus Syndrome to Sirolimus Treatment.** *Pediatr Blood Cancer*. 2016; 63:1911-4.
47. Salloum R, Hummel TR, Kumar SS, Dorris K, Li S, Lin T, Daryani VM, Stewart CF, Miles L, Poussaint TY, Stevenson C, Goldman S, Dhall G, Packer R, Fisher P, Pollack IF, Fouladi M, Boyett J, Drissi R. **A Molecular Biology and Phase II Study of Imetelstat (Grn163l) in Children with Recurrent or Refractory Central Nervous System Malignancies: A Pediatric Brain Tumor Consortium Study.** *J Neurooncol*. 2016; 129:443-51.
48. Sharp SE, Trout AT, Weiss BD, Gelfand MJ. **Mibg in Neuroblastoma Diagnostic Imaging and Therapy.** *Radiographics*. 2016; 36:258-78.
49. Shi Y, Geller JI, Ma IT, Chavan RS, Masand PM, Towbin AJ, Chintagumpala M, Nuchtern JG, Tiao GM, Thompson PA, Vasudevan SA. **Relapsed Hepatoblastoma Confined to the Lung Is Effectively Treated with Pulmonary Metastasectomy.** *J Pediatr Surg*. 2016; 51:525-29.
50. Smith E, Matrka M, Wells S. **Hpv Virology: Cellular Targets of Hpv Oncogenes and Transformation.** In: D Miller, M Stack, eds. *Human Papillomavirus (Hpv)-Associated Oropharyngeal Cancer*. New York: Springer; 2015:69-101.

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52. Studebaker A, Bondra K, Seum S, Shen C, Phelps DA, Chronowski C, Leasure J, Smith PD, Kurmasheva RT, Mo X, Fouladi M, Houghton PJ. **Inhibition of Mek Confers Hypersensitivity to X-Radiation in the Context of Braf Mutation in a Model of Childhood Astrocytoma.** *Pediatr Blood Cancer*. 2015; 62:1768-74.
53. Sturm D, Orr BA, Toprak UH, Hovestadt V, Jones DT, Capper D, Sill M, Buchhalter I, Northcott PA, Leis I, Ryzhova M, Koelsche C, Pfaff E, Allen SJ, Balasubramanian G, Worst BC, Pajtler KW, Brabetz S, Johann PD, Sahm F, et al. **New Brain Tumor Entities Emerge from Molecular Classification of Cns-Pnets.** *Cell*. 2016; 164:1060-72.
54. Tiao G, Geller J, Timchenko N. **Generation of Plc-Pdx Platforms for Pediatric Liver Cancer: A Critical Stage in the Development of Anti-Cancer Treatments.** *Hepatology*. 2016; 64:1017-9.
55. Trout A, Sharp S, Turpin B, Zhang B, Gelfand M. **Optimizing the Interval between G-Csf Therapy and F-18 Fdg Pet Imaging in Children and Young Adults Receiving Chemotherapy for Sarcoma.** *Pediatric Radiol*. 2015; 45:1001-06.
56. Trout AT, Towbin AJ, Klingbeil L, Weiss BD, von Allmen D. **Single and Multidimensional Measurements Underestimate Neuroblastoma Response to Therapy.** *Pediatr Blood Cancer*. 2016.
57. Tuttle T, Mierzwa M, Wells S, Fox S, Ben-Jonathan N. **The Cyclic Gmp/Protein Kinase G Pathway as a Therapeutic Target in Head and Neck Squamous Cell Carcinoma.** *Cancer Letters*. 2016; 370:279-85.
58. Warren M, Turpin BK, Mark M, Smolarek TA, Li X. **Undifferentiated Myxoid Lipoblastoma with Plag1-Has2 Fusion in an Infant; Morphologically Mimicking Primitive Myxoid Mesenchymal Tumor of Infancy (Pmmti)--Diagnostic Importance of Cytogenetic and Molecular Testing and Literature Review.** *Cancer Genet*. 2016; 209:21-9.

Grants, Contracts, and Industry Agreements

Annual Grant Award Dollars

Investigator	Title	Sponsor	ID	Dates	Amount
Najim Ameziane, PHD	Towards the Identification of Biomarkers and Druggable Targets for FA Head and Neck Cancer	Fanconi Anemia Research Fund	FARF	3/1/2016 - 2/28/2017	\$6,500
Timothy M Chlon, PHD	Training Program in Cancer Therapeutics	National Institutes of Health (University of Cincinnati)	T32 CA117846	7/1/2015 - 6/30/2016	\$47,244
Lionel Chow, MD-PHD	A Novel Genetically Engineered Mouse Model for Angiosarcoma: Molecular Characterization and Comparison to Human Angiosarcoma to Develop Targeted Therapy	Sarcoma Foundation of America	Chow, Lionel, Sarcom	6/1/2016 - 5/31/2017	\$50,000
Lionel Chow, MD-PHD	Molecular Targeting of Pediatric High-grade Glioma	St. Baldrick's Foundation	Chow, Lionel, St Bal	7/1/2014 - 6/30/2016	\$115,000
Biplab DasGupta, PHD	Regulation of Forebrain Neurogenesis by the Energy	National Institutes of Health	R01 NS072591	7/1/2012 - 6/30/2016	\$334,688

Sensor AMP Kinase

Mariko DeWire, MD	An early Phase 2 Study of LEE011, a CDK4/6 Inhibitor, following Radiation Therapy in Children with Newly Diagnosed Non-Biopsied Diffuse Pontine Gliomas (DIPG) and Rb+ Biopsied DIPG and High Grade Gliomas (HGG)	The Cure Starts Now Foundation	LEE011	12/1/2015 - 11/30/2016	\$100,000
Rachid Drissi, PHD	Comprehensive Molecular-Based Cross-Species Comparison of DIPG Biology	The Cure Starts Now Foundation (Children's National Medical Center)	3.00E+11	1/1/2016 - 12/31/2016	\$17,916
Megan P Elam	Pet Research Study conducted through the CancerFree KIDS/Impact 100 Family Pet Center at CCHMC	Cancer Free Kids	Elam, Megan, CFK	7/1/2015 - 6/30/2016	\$10,000
Maryam Fouladi, MD	Establishment of an International Diffuse Intrinsic Pontine Glioma (DIPG) Registry	The Cure Starts Now Foundation	DIPG - Fouladi	1/1/2012 - 12/31/2016	\$233,311
Maryam Fouladi, MD	COG NCTN Network Group Operations Center	National Institutes of Health (Children's Hospital of Philadelphia)	U10 CA180886	4/11/2014 - 2/28/2019	\$7,500
Maryam Fouladi, MD	Pediatric Brain Tumor Consortium (PBTC)	National Institutes of Health (St Jude's Children's Hospital)	UM1 CA081457	4/1/2014 - 3/31/2019	\$238,717
Harry Leighton Grimes, PHD	11th International Workshop on Molecular Aspects of Myeloid Stem Cell Development and Leukemia	Taub Foundation Program for MDS Research	Grimes, Leighton, Ta	10/1/2015 - 9/30/2016	\$25,000
Adrienne Hammill, MD	Brain Vascular Malformation Consortium: Predictors of Clinical Course	National Institutes of Health (The Regents of the Univ of California)	U54 NS065705	9/30/2014 - 7/31/2019	\$2,106
Lindsey Marie Hoffman DO	Comprehensive Genetic Analysis of Matched Primary and Relapsed Pediatric Gliomas	Cancer Free Kids	Hoffman, Lindsay, CF	7/1/2015 - 6/30/2017	\$45,000
Lindsey Marie Hoffman DO	Intra-tumoral Heterogeneity in Diffuse Intrinsic Pontine	The Cure Starts Now Foundation	DIPGcollab	11/1/2015 - 10/31/2016	\$200,000
Lindsey Marie Hoffman DO	Comprehensive Genomic Analysis of Matched Primary and Progressive, Recurrent	A Kids' Brain Tumor Cure Foundation	Hoffman, Lindsay, KB	9/1/2015 - 8/31/2016	\$100,000

	or Malignantly Transformed Pediatric Low Grade Glioma				
Trent Hummel, MD	Developing Evidence-based Criteria for Initiating Treatment for NF1-OPG	The Children's Tumor Foundation	ENDINGNF	11/1/2015 - 10/31/2019	\$6,600
Nanki Hura	A Contribution to the Improvement of the DIPG CARE and to the Research for the CURE	Joshua's Wish	hura, Nanki, joshua	6/1/2015 - 5/31/2016	\$5,000
Benjamin Mizukawa, MD	Targeted Inhibition of Cdc42 GTPase in the Acute Myeloid	St. Baldrick's Foundation	St. Bladrack_Mizukaw	7/1/2013 - 6/30/2016	\$110,000
John P Perentesis, MD	John Perentesis -Vice Chair AYA Committee	American Family Life Assurance Company (Children's Hospital of Philadelphia)	aflac	1/1/2015 - 12/31/2018	\$11,628
John P Perentesis, MD	NCTN BIQSFP AALL0932	National Institutes of Health (Children's Hospital of Philadelphia)	U10 CA180886	3/1/2016 - 2/28/2019	\$60,000
Joseph Pressey, MD	Investigation of Physical Activity in Adolescent and You	University of Cincinnati Cancer Center	Pressey, Joe, UCCC	7/1/2015 - 6/30/2016	\$50,000
Lisa Marie Privette Vinnedge, PHD	Using RNA Nanoparticles for Non-invasive Detection and Therapy of Breast Cancer	University of Cincinnati	Pilot	10/1/2015 - 9/30/2016	\$46,000
Ralph Salloum, MD	Medulloblastoma and PNET Outcomes Across Three Decades of Diagnosis	National Institutes of Health (St Jude's Children's Hospital)	U24 CA055727	12/1/2015 - 11/30/2016	\$46,800
Satarupa Sengupta, PHD	Testing a Novel Approach to Treat Pediatric Brain Tumors	Cancer Free Kids	sengupta,satarupa, c	7/1/2015 - 6/30/2017	\$45,000
Brian D Weiss, MD	A Phase I/II Study of the Mitogen Activated Protein Kinase (MEK) 1 Inhibitor Selumetinib in Children with Neurofibromatosis Type 1 (NF1) and Inoperable Plexiform Neurofibromas (PN)	Johns Hopkins School of Medicine	2001824052	1/1/2016 - 12/31/2018	\$132,873
Brian D Weiss, MD	2014-01 phase I study of SF1126 for Patients with Relapsed or Refractory Neuroblastoma	National Institutes of Health (Children's Hospital Los Angeles)	P01 CA081403	7/7/2015 - 5/31/2017	\$2,760
Susanne Wells, PHD	Metabolic Predictors of	Hyundai Hope on Wheels	34723OH	10/1/2014 -	\$125,000

	Childhood Cancer Development and Outcomes			9/30/2016	
Susanne Wells, PHD	Role and Regulation of the Human DEK Proto-Oncogene	National Institutes of Health (National Cancer Institute)	R01 CA116316	9/5/2012 - 6/30/2016	\$266,707
Susanne Wells, PHD	Targeting Lipid Metabolism in FA for the Prevention and Treatment of Squamous Cell Carcinoma	Fanconi Anemia Research Fund	Wells, Sue, FARF	3/1/2016 - 2/28/2018	\$125,000
Total Annual Grant Award Dollars					\$2,566,350

Annual Industry Award Dollars

Investigator	Industry Sponsor	Amount
Mariko DeWire, MD	Novartis Pharmaceuticals	\$764,448
Maryam Fouladi, MD	Celgene Cellular Therapeutics	\$18,000
Lindsey Marie Hoffman DO	Epizyme, Inc.	\$140,115
Maureen O'Brien, MD	Celgene Cellular Therapeutics	\$8,000
John P Perentesis, MD	Amgen, Inc.	\$10,000
John P Perentesis, MD	Bristol -Myers Squibb	\$21,000
John P Perentesis, MD	Celgene Cellular Therapeutics	\$30,000
John P Perentesis, MD	Eisai Medical Service	\$7,079
John P Perentesis, MD	Eli Lilly and Company	\$24,400
John P Perentesis, MD	Seattle Genetics, Inc	\$10,000
Joseph Pressey, MD	Epizyme, Inc.	\$144,770
Rachana Shah, MD	Millennium Pharmaceuticals	\$721,540
Brian D Weiss, MD	GlaxoSmithKline	\$412,665
Brian D Weiss, MD	Johns Hopkins School of Medicine	\$275,000
Total Annual Industry Award Dollars		\$2,587,017