

GRANTS

Admin

- **Dr. Kathleen Meert**
 - NIH/National Institute of Child Health and Development: UG1HD050096 Collaborative Pediatric Critical Care Research Network. PI: K. Meert, MD 2005-2020
 - NIH/National Heart Lung Blood Institute: R01HL131544 Improving Outcomes After Pediatric Cardiac Arrest. PI: R. Sutton; Children's Hospital of Philadelphia. Dr. Meert is a site investigator. 2016-2021

Allergy/Immunology/Rheumatology

- **Dr. Pavadee Poowuttikul**
 - Role: Grant Director, Percent Effort: 35%
Title: "Primary Immunodeficiencies Coordinating Center for Severe Combined Immunodeficiency Newborn Screening Program" Source: Michigan Department of Community Health-SCID NBS
Total Period of Support: 1 year 10/2020-09/2021 Total Funding: \$232,380/year
Total Direct Cost: \$71,569/year
 - Role: PI, Percent Effort: 10% (no salary support)
Title: "Immunosuppression from Systemic Steroid Bursts in Asthma"
Source: Children's Hospital of Michigan Foundation R1-2020-78 Total Period of Support: 2 year 01/2020-12/2021 Total Funding: \$48,640
 - Role: PI, Percent Effort: 10% (no salary support)
Title: "Picture-based Asthma Action Plan" Source: American Academy of Allergy, Asthma and Immunology (AAAAI) Total Period of Support: 3 year 11/2017-11/2020
Total Funding: \$6,000

Cardiology

- **Dr. Gautam Singh**
 - Long-Term Outcomes after the Multisystem Inflammatory Syndrome In Children (MUSIC) study. Funded by Pediatric Heart Network, National Heart, Lung, and Blood Institute the National Institute of Allergy and Infectious Diseases. Grant Number: 3U24HL 135691-03S3.
- **Dr. Thomas Forbes**
 - Noble Stitch PFO Closure Trial Planned March 2021)
 - Ascent ASD Trial (Bioabsorbable ASD Closure Device) Planned May 2021
 - Principle Investigator.

Melody™ Transcatheter Pulmonary Valve PB1016 Surveillance Study: Implantation of the Medtronic Melody™ Transcatheter Pulmonary Valve PB1016 using the Ensemble™ Transcatheter Delivery System in Patients with Dysfunctional RVOT Conduits.

This prospective, multi-center study evaluates the results of transcatheter pulmonary valve placement using a smaller size Melody™ Transcatheter Pulmonary Valve.

Sponsor: Medtronic Corp. 1/16 – present. Total Direct Costs: \$75,000.

- Principle Investigator.
GORE® CARDIOFORM ASD Occluder (Assured) Clinical Study: A Study to evaluate safety and efficacy in the treatment of transcatheter closure of ostium secundum atrial septal defects (ASDs). This prospective, multi- center IDE trial is evaluates the new Cardioform ASD Occluder, a new device used to close atrial septal defects. Sponsor: WL Gore and Associates. 11/16 – present Total Direct Costs: \$ 86,900.
- Co-Investigator of the New Bioabsorbable Stent for Use in Infants/Children born with Congenital Heart Disease. Principle Investigator Martin Bocks -NIH SBIR Grant/Tim Moran Head of PediaWorks Awarded March 2018 Total Grant: \$3,400,000
- Principal Investigator (Thomas J. Forbes, MD).
Closure of Ventricular Septal Defects with the AMPLATZER® Atrial Septal Occluder Post Approval Study (ASD PMS II). Sponsor: Abbott Medical Corp February 2010 – present. Total Direct Costs: Total of \$500,000 with \$4,100 per patient per site enrolled.
- Principal Investigator (Thomas J. Forbes, MD).
Closure of Patent Foramen Ovale in Patients Suffering a Cryptogenic Stroke Event (RESPECT PAS) Sponsor: Abbott Medical November 2018 – present. Total Direct Costs: Total of \$500,000 with \$5,000 per patient per site enrolled.
- Site Principal Investigator (National PI: Shayam Sathanandam, MD Memphis, TN).
Closure of Patent Ductus Arteriosus in Neonates < 2000 grams with the Piccolo PDA Occluder Device Sponsor: Abbott Medical Planned March 2019. Total Direct Costs: Total of \$984,000 with \$3,000 per patient per site enrolled. The CCISC will serve as the Coordinating Center for this Study using the PDA Module established with the FDA and Industry.
- Principal Investigator (National PI: , Shabana Shahanavaz MD Washington Univ., St Louis, MO). *Closure of Patent Ductus Arteriosus in Neonates, Infants, and Children with the Medtronic Vascular Plug (MVP) PDA Occluder Device Sponsor: Medtronic Medical Corp Planned June 2020. Total Direct Costs: Total of \$2,000,000 with \$3,000 per patient per site enrolled. The CCISC will serve as the Coordinating Center for this Study using the PDA Module established with the FDA and Industry.*
- Principal Investigator/Data Coordinator (National PI: Shyam Sathanandam MD Le Bonner Children's Hospital, Memphis, TN) *Closure of Patent Ductus Arteriosus in Neonates, Infants < 2000 grams with the Abbott Piccolo PDA Occluder device. Sponsor: Abbott Medical Corp October 2020. Total Direct Costs: Total of \$1,000,000 with \$3,000 per patient per site enrolled. The CCISC serves as the Coordinating Center with a grant of \$200,000 for database development and ongoing maintenance.*

- Principal Investigator (National PI: Guru Hiremath MD Univ of Minnesota/Howaida Saidi MD San Diego Children's Hospital *Closure of Patent Ductus Arteriosus in Neonates, Infants, and Children < 3,000 grams with the KA Vascular Plug (MVP)* Sponsor: CCSIC Consortium Planned February
- **Dr. Yamuna Sanil**
 - Grant from NIH for the study ' Long term Outcomes after the Multisystem Inflammatory Syndrome in Children (MUSIC) study. The grant is currently under process.
- **Dr. Sanjeev Aggarwal**
 - Cardiovascular and Metabolic Abnormalities in Childhood Survivors of Extreme Prematurity. PI Dr Gautam Singh. Children Foundation Grant. Awarded in April 2020.
 - Long-Term Outcomes after the Multisystem Inflammatory Syndrome In Children (MUSIC) study. Funded by Pediatric Heart Network, National Heart, Lung, and Blood Institute the National Institute of Allergy and Infectious Diseases. Grant Number: 3U24HL 135691-03S3. Site CO PI
- **Dr. Raya Safa**
 - Grant application R2-2020-57 accepted by childrens foundation on June 2020. Ongoing study- Title Short Term Outcomes in Patients with Sickle Cell Disease and Sickle Cell Trait Undergoing Surgery for Congenital Heart Disease. Ryan Halas, **Raya Safa**, Sanjeev Aggarwal, Hal Walters, Amrit Misra . Society of thoracic Surgery / Congenital Heart surgery database
- **Robert Ross**
 - 123117MP2E Prognostic Significance of microRNA Expression in Children with Cardiomyopathy, through 2020
 - 111614MP4X CHILDREN'S ONCOLOGY GROUP - ALTE11C2 - Health Effects after Anthracycline and Radiation Therapy (HEART): Dexrazoxane and Prevention of Anthracycline-related Cardiomyopathy, CMU auspices 2020
 - 042114MP2E Cardiac Biomarkers in Pediatric Cardiomyopathy, through 2020
 - 042014MP4E Genotype-Phenotype Associations in Pediatric Cardiomyopathy (PCM GENES) Non-Human Participant Research Determination February 18, 2016 Association of Heart Rate and Dilated Cardiomyopathy Patient Outcomes (PCMR Study), through 2020
 - K12 HD028820 (Opipari) 09/01/2012-11/30/2022 NIH \$449,497 annual direct costs Advancing Child Health through Cellular and Molecular Biology The University of Michigan Child Health Research Career Development Award (CHRCDA) program is designed to support the research career development of promising young

pediatric investigators from C.S. Mott Children's Hospital and The Children's Hospital of Michigan. Role: Advisory Committee Member

- Children's Hospital of Michigan Fellowship Education and Research Support Grant Source of Fund: Children's Hospital of Michigan Foundation, \$10,000

Critical Care Medicine

- **Dr. Lauren Yagiela**
 - K12 Pediatric Critical Care and Trauma Scientist Development Program (Funds: \$223,769)
- **Dr. Jamie Bell**
 - Children's Hospital Foundation 05/01/2019-05/01/2021
Functional Recovery after Kidney Ischemia/Reperfusion Injury: Non-Invasive Application of Specific Wavelength Infra-red Light
- **Dr. Sabrina Heidemann**
 - Understanding COVID-19 among critically ill children in the Pediatric Acute Lung Injury and Sepsis Investigator's (PALISI) Network \$54,750 (subcontract under a federal contract with The Children's Hospital Corporation d/b/a Boston Children's Hospital.
- **Dr. Katherine Cashen**
 - Title: "ARDS in Children and ECMO Initiation Strategies Impact on Neuro-Development (ASCEND)" Role: Site Principal Investigator, Percent Effort: 5%
PI: Barbaro Source: NIH RO1 Date 7/2020 Total Direct Costs: \$14,400
- **Dr. Ajit Sarnaik**
 - Role: Site PI (Main PI: Bradley Kurowski, M.D. Cincinnati Children's Hospital Medical Center)
R01 NS096053-01A1
Title: "Genetic and Environmental Influences on Recovery of Severe Pediatric Brain Injury"
This multi-center, prospective and retrospective observational cohort study of children with severe TBI aims to identify associations between genetic variants on recovery of global, neurocognitive, and behavioral functioning following severe pediatric TBI. Of the 25 patients our site enrolled from the ADAPT Trial (see below), I am currently enrolling and collecting DNA samples Source: NIH/NINDS Status: Active, 2017-current

Emergency Medicine

- **Dr. Ronald Ruffing**
 - 93.889 - National Bioterrorism Hospital Preparedness Program Grant # 1 U3REP190615-01-00. Grantee University Hospitals Cleveland Medical Center. PI Deanna Dahl-Grove. My role-consultant for exercise development and deployable teams
- **Dr. Curt Stankovic**
 - Monitoring the Impact of COVID In Children. The Children's Foundation. R2-2020-66

Endocrinology

- **Dr. Rajeev Thirunagari**
 - Worked in collaboration with colleague endocrinologists in the “The Children's Foundation - Grant R2-2020-49” to support a pediatric diabetes education program.

Gastroenterology

- **Dr. Mohammad El-Baba**
 - Title: “Infliximab Proactive Drug Monitoring in the Pediatric IBD Population”
Role: Co-PI. Source: The Children’s Hospital of Michigan Foundation
Date: May 2019- Present
- **Dr. Kristen Cares**
 - Role: Primary Investigator, Percent effort: 80%
Title: “AN OPEN-LABEL, MULTICENTER STUDY TO EVALUATE THE PHARMACOKINETICS OF SINGLE AND MULTIPLE INTRAVENOUS DOSES OF PANTOPRAZOLE IN TWO AGE COHORTS OF HOSPITALIZED PEDIATRIC SUBJECTS 1 TO 16 YEARS OF AGE WHO ARE CANDIDATES FOR ACID SUPPRESSION THERAPY? Source: Parexel International May 2017-Fall 2020. Total Direct Costs: \$30,772.18
 - Role: Primary Investigator, Percent effort 80%
Title: “Infliximab Proactive Drug Monitoring in the Pediatric IBD Population”
Assessing if proactive drug monitoring of the drug, infliximab, will prevent exacerbation in patients with IBD. Source: Children’s Hospital of Michigan Foundation April 2019-present Total direct costs: \$79,055

General Pediatrics

- **Dr. Sumita Roy**
 - Children’s Foundation ; Community Benefit and Education Grant
R1-2020-51 (01/01/2020-12/31/2020)
R1-2021-33 (01/01/2021-12/31/2021)
Received \$5000 to reimburse honoraria for guest speakers giving grand rounds at the Children’s hospital of Michigan.

Genetics & Metabolic Disorders

- **Dr. Gerald Feldman**
 - Program Director and Principal Investigator, Michigan Department of Community Health: Newborn Screening Management Program. Annual contract, effective 10/1/20-9/30/21, awarded to Children’s Hospital of Michigan, Division of Genetic and Metabolic Disorders, for the management of all infants born in Michigan and diagnosed with an inborn error of metabolism through the Newborn Screening Program; (Budget: \$2,027,231)
 - Program Director and Principal Investigator, Michigan Department of Community Health: Special Supplemental Nutrition Program for Women, Infants and Children (WIC), contract, effective 10/1/20-

- 9/30/21, awarded to Children's Hospital of Michigan, Division of Genetic and Metabolic Disorders, for the management of infants born in Michigan and diagnosed with an inborn error of metabolism through the Newborn Screening Program; (Budget: \$11,745)
- Program Director and Principal Investigator, Michigan Department of Community Health: Newborn Screening Management Program. Annual contract, effective 10/1/19-9/30/20, awarded to Children's Hospital of Michigan, Division of Genetic and Metabolic Disorders, for the management of all infants born in Michigan and diagnosed with an inborn error of metabolism through the Newborn Screening Program; (Budget: \$1,972,251)
 - Program Director and Principal Investigator, Michigan Department of Health and Human Services: Special Supplemental Nutrition Program for Women, Infants and Children (WIC) contract, effective 10/1/19-9/30/20, awarded to Children's Hospital of Michigan, Division of Genetic, Genomic and Metabolic Disorders, for the management of infants born in Michigan and diagnosed with an inborn error of metabolism through the Newborn Screening Program (Budget: \$11,745)
- **Dr. David Stockton**
 - State of Michigan Newborn Screening Lysosomal Storage Disease Coordinating Center A Long-Term Study to Evaluate Growth and Development Outcomes in Patients with Infantile-Onset Pompe Disease who are Receiving Myozyme (Alglucosidase Alfa)
 - Fetal Alcohol Syndrome Diagnostic Clinic from the Michigan Department of Health and Human Services
 - Genetic Services Grant from the Michigan Department of Health and Human Services
 - **Dr. Robert Conway**
 - "An Open-label Extension Study to Evaluate the Safety and Efficacy of Subcutaneous Injections of Pegvaliase (> 40 mg/day Dose) in Adults with Phenylketonuria"
The aim of this trial is to assess the safety of pegvaliase doses higher than that presently approved by the FDA; subjects in this study were rolled over from study BMN 165-302.
Role: Site PI for multi-center trial Funding Source/Sponsor: Biomarin Pharmaceutical
Time Period: 12/6/2018-February 2020 Funding source: Biomarin Pharmaceutical.
Direct cost \$33,592

Hematology/Oncology/Sickle Cell

- **Dr. Ahmar Zaidi**
 - Emmaus Life Sciences Investigator Initiated Grant "L-glutamine and red blood cell membrane health, \$274,000- 15% salary support
 - Novartis Investigator Initiated Grant "Biomarkers of rheology, coagulation, and proteomics in patients receiving crizanlizumab". \$500,000 – 35% salary support
 - CDC Sickle Cell Surveillance Grant, Subject Matter Expert (for all sites) and Site-PI, \$10,000
- **Dr. Katherine Regling**
 - HTRS/Novo-Nordisk Clinical Fellowship Award in Hemophilia and Rare Bleeding Disorders

- **Dr. Michael Callaghan**

- L-glutamine and red blood cell membrane health - Emmaus Life Sciences Investigator Initiated Grant, \$274,000 (Callaghan Co-I, Zaidi PI)
- Hemophilia Biomarkers and Proteomics, Hemostasis Thrombosis Research Society, \$150,0000 (Callaghan Mentor, PI Regling)
- Effect of hydroxyurea on TCD velocity in sickle cell disease, Central Michigan School of Medicine \$3,000 (Callaghan Mentor, PI Peine)
- Effect of hydroxyurea on TCD velocity in sickle cell disease, Blue Cross Blue Shield Foundation \$ 6,000 (Callaghan Mentor, PI Peine)

Clinical Trials

- A Phase 3, Randomized, Double-Blind, Placebo Controlled Study of Voxelotor (GBT440) in Pediatric Participants with Sickle Cell Disease and an Open-label Study in Infants with Sickle Cell Disease (HOPE Kids 2) – Open to accrual – (Site PI)
- A Phase 3 Open-Label, Single-Arm Study To Evaluate The Efficacy and Safety of BMN 270, an Adeno-Associated Virus Vector-Mediated Gene Transfer of Human Factor VIII in Hemophilia A Patients with Residual FVIII Levels ≥ 1 IU/dL Receiving Prophylactic FVIII, Sponsor Biomarin One subject on study \$60,340– (Site PI)
- A Prospective Non-Interventional Study of Bleeding Episodes, Factor VIII Infusions, and Patient-Reported Outcomes in Individuals with Severe Hemophilia A, Sponsor Biomarin One subject on study \$40,200– (Site PI)
- Global Prospective Laboratory Study for Adenovirus-Associated Virus (AAV) Seroprevalence in HemophiliaA Patients with Residual Factor VIII Levels <2 IU/dL Who Were Previously Treated with Factor VIII Concentrates Sponsor Biomarin 17 subject enrolled on study \$26,368– (Site PI)

- **Dr. Sureyya Savasan**

- Clonal T-Large Granular Lymphocyte Proliferations in Pediatric Immune Dysregulation Conditions funded by Children’s Foundation, PI (7/1/2019 – 9/30 2020); \$95, 070
- Extension of the previous grant: Clonal T-Large Granular Lymphocyte Proliferations in Pediatric Immune Dysregulation Conditions funded by Children’s Foundation, PI (7/1/2019 – 6/30 2021); Totaling \$163.205

Hospital Medicine

- **Dr. Chaya Pitman-Hunt**

- Food Insecurity Screening and Training Program The CHM Foundation Grant: R1-2019-18

- **Dr. Sara Haidar-Elatrache**
 - Children's Hospital of Michigan Foundation grant: for Children's Food Insecurity Task Force lecture series

Infectious Diseases

- **Dr. Jocelyn Ang**
 - Site Principal Investigator
Title: (CHARMS) Characterization of Multisystem Inflammatory Syndrome in Children and its relationship to Kawasaki disease (KD) Source: Patient-Centered Outcomes Research Institute
2020- Total Direct Costs: \$12,600 per year
 - Site Principal Investigator
Title: A Phase 1, Non-comparative, Open-Label Study of Pharmacokinetics and Safety of a Single-Dose of ZTI-01 (Fosfomycin for Injection) in Pediatric Subjects (Less than 12 years of Age) Receiving Standard of Care Antibiotic Therapy for Proven or Suspected Infection or for Peri-operative Prophylaxis
Source: Zavante Pharmaceuticals Inc. 2018- present Total Direct Costs: \$83,180.2
 - Site Principal Investigator
Title: A phase III randomized, active-comparator-controlled clinical trial to study the safety and efficacy of MK-1986 (tedizolid phosphate TDZ) and comparator, in subjects 3 months to <12 years of age with Acute Bacterial Skin and Skin Structure Infections (ABSSI)
Source: Merck Pharmaceuticals Inc. 2018-2000 Total Direct Costs: \$245,395.80

Neonatal-Perinatal Medicine

- **Dr. Girija Natarajan**
 - CHM Foundation Award for "Cardiovascular and Metabolic Abnormalities in Childhood Survivors of Extreme Prematurity: \$57, 000 direct costs. Role: Co-investigator. PI: Gautam Singh
 - NICHD Neonatal Research network contributing site. Role: PI.
- **Dr. Sanjay Chawla**
 - Role: PI A Comparison of Neonatal Outcomes of Term Non-vigorous with Meconium Stained Amniotic Fluid Before and After Routine Endotracheal Suctioning Strategy at Birth
Source: Ashok and Ingrid Sarnaik Faculty Research Endowment Grant \$25,000
Salary Support: NONE
 - Role: Site Principal Investigator Transfusion of Premature Study, National Institute of Child Health and Human Development (NICHD)
Source: National Institute of Health (NIH) Percent Effort: 2%
Years: 2019-Present

- **Dr. Sidhartha Tan**

- Role: Principal Investigator, Percent Effort: 40% 1R01 NS114972-01A1
Title: "Neuroprotection by nNOS inhibitors in perinatal hypoxia-ischemia"
The major goal of this study is investigate the mechanisms of injury by nitric oxide produced from nNOS. Source: NIH/NINDS 05/01/2020–02/28/2025
Total Direct Costs: \$ 2,393,590.
- Role: Subcontract PI, R35 GM131788 (Silverman, PI)
Title: "Selective inhibition of nitric oxide synthase for multiple indications".
The major goal of this collaboration is to test new nitric oxide synthase inhibitors in the rabbit model of cerebral palsy. 4/30/20-4/30/24
Total Direct Costs: \$ 231,314 Subcontract Direct Costs: \$18,000
- Role: Principal Investigator, Percent Effort: 20% 1 R01 NS117146-01A1
Title: "Probing Role of Tetrahydrobiopterin in Cerebral Palsy by Using Transgenic Rabbits"
The major goal of this study is to evaluate the origins of tetrahydrobiopterin deficiency in the origins of motor deficits using transgenic rabbits.
12/04/20-11/30/2025 Source: NIH/NINDS
Total Direct Costs: \$ 2,780,920
- Role: Mentor, no salary (February PI)
Title:" Epigenetic Changes in the Neonatal Brain After Perinatal Exposure to Opioids"
Source: Children's Hospital Foundation June 1 2020 to May 31 2021
Total Direct costs: \$99,992

- **Dr. Monika Bajaj**

- Grant (2017-2020) **Role: Coinvestigator 5% salary support** RO1 NICHD grant. Title: Post-discharge Adverse Events among NICU neonates. PI: Tsilimingras, Dennis. Direct costs: \$785,366. Total: \$1,209,239

- **Dr. Prashant Agarwal**

- Ashok and Ingrid Sarnaik Endowment for Junior Faculty Research. Study Title: Effect of DHA Supplementation on the Long Term Neurobehavioral and Cognitive Outcome of the Offsprings of Pregnant Rate Exposed to Alcohol During Pregnancy. PI: Enrique Ostrea. Role: Co-Principal Investigator. Total amount: \$25,000. Awarded March 2020.
- Children's Foundation grant to support the Sophie Womack Lectureship in the division of Neonatal-Perinatal Medicine. Total amount: \$3500. Awarded November 2020.

- **Dr. Indira Bhagat**

- Title: A phase 3, randomized, placebo controlled, double or observer-blinded trial to evaluate the efficacy and safety of a perfusion subunit respiratory syncytial virus (RSV) vaccine in infants born to vaccinated pregnant women
Description: A multi-center study sponsored by the Pfizer Corporation
Total direct cost: Per completed Mother and child: \$18,000
Role: Site Co-Principal Investigator 2020- ongoing

- Title: A Phase 2b/3a, Multi-Center, Randomized, Double-Blind, Placebo-Controlled, Parallel-Group Study of the Efficacy and Safety of AMAG-423, a Digoxin Immune Fab, in Antepartum Subjects with Severe Preeclampsia
Description: A multi-center study sponsored by the AMAG Pharmaceuticals, Inc.
Total direct cost: Per completed subject: \$15,070
Role: Site Co-Principal Investigator 2019- 2020

Nephrology

- **Dr. Gaurav Kapur**
 - A phase 3, open-label, multicenter study of ALXN1210 in children and adolescents with atypical hemolytic-uremic syndrome (aHUS) Role; Regional sub-site Principal Investigator
Funding Source: Alexion Pharmaceuticals 2018 – Ongoing Total Costs; \$ 56,145.67
- **Dr. Amrish Jain**
 - CureGN 2.0: Cure Glomerulonephropathy Network. Site Principal Investigator. Funding Source: The National Institute of Diabetes and Digestive and Kidney Diseases (NIH-NIDDK). 2020-2024

Neurology

- **Dr. Lalitha Sivaswamy**
 - Ongoing grant from CHM Foundation re use of mRNA to study children with concussion. Co PI with Dr Sethuraman.
- **Dr. Aimee Luat**
 - Role: Co-Investigator; Percent Effort: 5%; U54 NS065705
(PI: H. Kim – UCSF; WSU PI: C. Juhász)
Title: “Integrated longitudinal studies to identify biomarkers and therapeutic strategies for Sturge-Weber syndrome”
(NIH Brain Vascular Malformation Consortium)
8/15/19 – 6/30/24
Source: NIH/NINDS
The major goal of this study is to collect and analyze multicenter clinical, blood, and imaging data from patients with SWS in order to identify potential biomarkers associated with clinical phenotypes.
Total Direct Cost: \$450,000
 - Role: Principal Investigator, Percent Effort: 5% R1-2018-06
Title: “Improved detection of pediatric epileptic foci by molecular imaging of neuroinflammation”.
Source: Children’s Hospital of Michigan Foundation
Grant Period: January 1 to December 31, 2021
Total Direct Cost: \$58, 450.00.
 - Role: Co-investigator, no salary requested

Title: "Genetic variants of the innate immune system associated with epilepsy in malformations of cortical development".

Source: NIH/NINDS

Grant Period: Nov 1, 2018 to April 30, 2020

Total Direct Cost: \$68,140.00.

- Role: Principal Investigator Percent Effort: 2% H98MC26257
Principal Investigator: Aimee F. Luat, M.D.
Title: "Telemedicine and Epilepsy."
Multicenter project across the state of Michigan with primary site at Michigan Department of Health and Human Services,
Source: U.S. Department of Health Resources and Human Services Administration.
Grant Period: October 1, 2019 to 9/2023
Total direct cost: \$35,715 or \$15,000 each year for 4 years (2019-2023).
Total grant is \$416,000. Total amount awarded to CHM/CMU is \$15,000
- Role: Co-Investigator, Percent Effort: 3% RO1 NS41922
Principal Investigator: Csaba Juhasz, M.D., PhD.
Title: "Longitudinal neuroimaging in Sturge Weber Syndrome."
The major goal of this project is to identify neuroimaging markers, which may be used as diagnostic predictors of clinical progression of Sturge Weber Syndrome. Source: National Institutes of Health / National Institute of Neurological Disorders and Stroke (NINDS).
Grant Period: March 01, 2020 to February 28, 2025
Total Direct Costs: \$2,4500,000.
- Co-Investigator, 10% effort
Principal Investigator: Alan Dombkowski, PhD
Title: "Biomarkers to characterize subtypes of neuroinflammation in infantile spasms and responsiveness to ACTH"
Source: Mallinckrodt Pharmaceuticals Grant Period: 03/01/18-2/28/20 Total Direct costs: \$252,000

Clinical Trial:

Title: An Open-Label Extension Trial to Assess the Long-Term Safety Of ZX008 (Fenfluramine Hydrochloride) Oral Solution as an Adjunctive Therapy in Children and Young Adults with Dravet Syndrome. Protocol no. Zogenix 1503 Period: 3/19/2018 to 3/18/2021 Total Direct Costs: \$78,060.

Neurology PET Center

- **Dr. Eishi Asano**
 - Title: Software and Hardware Development for Epileptic Seizure Prediction using Deep Learning Techniques. Agency: Wayne State University Summer 2020 Richard Barber Interdisciplinary Research Program (intramural grant). PI: Mohammad Alhawari, PhD. Co-PI:

- Eishi Asano, MD, PhD. Direct cost: \$35,000. Major goal: The major goal of the project is to design an energy-efficient, accurate, and low-cost automated epilepsy prediction system using intracranial EEG (iEEG) and based on deep learning methods. May 2020-April 2021.
- Title: Development of language systems in the human brain. Agency: Wayne State University Grants Boost Program (intramural grant). Application number: 19-1606. PI: Eishi Asano, MD, PhD. Direct cost: \$35,000. Major goal: The major goal of the project is to build the first comprehensive model of the maturational changes in language network dynamics that support normative development of proficiency in naming. September 2019-September 2020.
 - Title: 3D neonatal photoacoustic tomography (3D-NPAT) to detect hypoxic-ischemic brain injury in preterm neonates. Agency: National Institutes of Health / National Institute of Biomedical Imaging and Bioengineering (NIBIB). National Institute of Neurological Disorders and Stroke (NINDS). Application #: R01EB028661. [PI: Kamran Avanaki, PhD] My role: Co-Investigator (for providing my clinical expertise). Effort: 0.5 months (4.2%). Direct cost: \$1,066,792. The major goal is to determine the potential utility of transfontanelle photoacoustic imaging in detection of hypoxic-ischemic brain injury in preterm neonates. Sep 2019 to Sep 2021
 - Title: The role of non-coding RNAs in epilepsy of tuberous sclerosis complex and focal cortical dysplasia type 2B. Agency: National Institutes of Health / National Institute of Neurological Disorders and Stroke (NINDS). Application #: R56. NS079429. [PI: Alan Dombkowski, PhD] My role: Co-Investigator (for EEG data acquisition and analysis) Effort: 5%. Total amount: \$350,000. The goal of this research is to identify non-coding RNAs associated with epileptogenesis in malformations of cortical development. Aug 2019 to Jul 2020
 - Title: Transfontanelle photoacoustic imaging to study pathophysiology of neonatal brain injury. Agency: National Institutes of Health / National Institute of Biomedical Imaging and Bioengineering (NIBIB). Application #: R01EB027769. [PI: Kamran Avanaki, PhD] My role: Co-Investigator (for providing my clinical expertise). Effort: 0.2 months (1.7%). Direct cost: \$1,523,204. Major goal: The major goal is to develop a novel imaging method, referred to as transfontanelle photoacoustic imaging, for accurate detection of neonatal brain injury. Apr 2019 to Dec 2022.
 - Title: Development of memory networks in children. Agency: National Institutes of Health / National Institute of Mental Health (NIMH). Application #: R01MH107512. [PI: Noa Ofen, PhD] My role: Co-Investigator (for acquisition and analysis of electrocorticography data). Effort: 1.2 months (10%). Direct cost: \$1,275,415. Major goal: The major goal of this project is to localize the memory networks in children using electrocorticography and functional MRI. Jun 2016 to Mar 2021.
 - Title: Novel DWI Methods to Minimize Postoperative Deficits in Pediatric Epilepsy Surgery. Agency: National Institutes of Health / National Institute of Neurological Disorders and Stroke (NINDS). Application #: R01NS089659. [PI: Jeong-won Jeong, PhD] My role: Co-Investigator (for acquisition and analysis of stimulation data). Effort: 1.2 months (10%). Direct cost: \$1,050,000. Major goal: The major goal of this project is to localize the language

- areas using functional MRI and diffusion-weighted imaging techniques. Feb 2015 to Dec 2020.
- Title: Functional Brain Mapping in Pediatric Neurosurgery. Agency: National Institutes of Health / National Institute of Neurological Disorders and Stroke (NINDS). Application #: R01NS064033. My role: Principal Investigator. Effort: 3.0 months (25%). Direct cost: \$1,093,750. The major goal of the project is to determine the efficacy of cortical mapping using electrocorticography for prediction of language outcomes to enhance the safety and success of pediatric brain surgery. Funded with a score of top 1.0 percentile. Mar 2009 to May 2021.

Pulmonary

- **Dr. Ibrahim Abdulhamid**
 - Source: Cystic Therapeutic Development Network Grant (CO-PI). Total amount: #146,175
Period of Support: 1/1/2019 – 3/31/2020 Direct Salary Support: 8%
Estimated Funding for period from 2021 is \$ 114,036
 - Pediatric CF Center Annual Grant Source: National Cystic Fibrosis Foundation. Period:
7/1/2020 – 6/31/2021