

Student Abstracts
Fall 2016 Research Training Symposium

Abebe, Tsehay. Mentor: Paul Robertson, MD. Beta cell self-repair following resolution of high fat diet induced hyperglycemia

Akinnawo, Oluwabamise. Mentor: Scott Luhmann, MD. Congenital scoliosis involvement with other organ anomalies

Alvi, Fatima. Mentors: Kristin Schroeder, MD, MPH; Adetunji Toriola, MD, PhD, MPH. Impact of a pediatric oncology patient navigator on time to oncology evaluation and diagnosis

Amatya, Rina. Mentors: Linfa Wang, PhD; David Wang, PhD. Bats may naturally decrease inflammation by inhibiting NF- κ B-mediated transcription

Anderson, Angelle. Mentor: Jie Zheng, PhD. Diffusive properties of healthy and diabetic calf muscles using diffusion MRI

Arceneaux, Jerome. Mentor: Varun Puri, MD, MSCI. Outcomes of lung transplantation for local vs distant donors

Arnaud, Anna. Mentors: Graham Colditz, MD, DrPH; Aimee James, PhD, MPH; Erin Linnenbringer, PhD, MS. Cancer disparities in rural populations

Averill, Christine. Mentor: Jennifer Strahle, MD. Analysis of scoliosis in patients with Chiari malformation Type I and spinal syrinx from the Park-Reeves Syringomyelia Research Consortium

Bedrick, Bronwyn. Mentor: Emily Jungheim, MD, MSCI. Physical activity and ovarian reserve

Boss, Andrea. Mentors: Devyani Hunt, MD; Heidi Prather, DO. A prospective description of the hip examination in adolescents and young adults with low back pain

Bridges, Joshua. Mentor: Cynthia Rogers, MD. Abnormal cerebellar development and social-emotional development in preterm children

Cameo, Tamara. Mentors: Sharon Oberfield, MD; Ilene Fennoy, MD, MPH. Glucose homeostasis and β -Cell function in adolescents after laparoscopic adjustable gastric banding vs. laparoscopic sleeve gastrectomy

Chavarria, Mary. Mentor: Joan Luby, MD. Understanding of death in healthy and depressed preschoolers

Chen, Teresa. Mentors: Rajendra Apte, MD, PhD; Jonathan Lin. Role of PARP inhibitors in rescuing photoreceptor death

Chen, Lily. Mentor: Carrie Coughlin, MD. Optimal time to provide skin cancer education to pediatric solid organ transplant recipients

Chen, Eileen. Mentors: Ting Wang, PhD; Junchen Gu, PhD. Epigenetic regulation as a mechanism underlying host-bacterial relationships in the gut

Chirumbole, Danielle. Mentor: William Chapman, MD, FACS. Effects of CD47mAb treatment on VEGF signaling and related pathways in the Huh-7 hepatocellular carcinoma cell line

Clark, Reece. Mentor: Babak Razani, MD, PhD. Assessment of the implications of lysosomal acid lipase variants on atherogenesis

Clarke, Julian. Mentors: Gregory Zipfel, MD; Lewis Leng, MD. Sphenoid sinus myxoma: endoscopic endonasal resection case report

Cohen, Kevin. Mentors: Graham Colditz, MD, DrPH; Ying Liu, MD, PhD. Plasma carotenoids and the risk of premalignant breast disease in racially diverse women aged 50 and younger: a nested case control study

Cui, Victoria. Mentor: Michael Avidan, MBBCh. Observational study of early-onset delirium following emergence from general anesthesia

Cusworth, Brian. Mentor: Sandra Klein, MD. Intraosseous and extraosseous blood supply to the medial malleolus

Deliz Gonzalez, Juan. Mentor: Beau Ances, MD, PhD. Exploring the relationship between personality and resting-state functional connectivity in cognitively normal individuals

Diamant, Aristides. Mentors: Grant Hansman, PhD; Götz Hofhaus, PhD; Henry Huang, PhD. Cryo-EM studies of human noroviruses

Evanoff, Anastasia. Mentors: Mark Manary, MD; Indi Trehan, MPH, DTM&H. Outcomes of children under 6 months of age treated with Community-based Management of Acute Malnutrition (CMAM) protocols in rural Malawi

Fears, Fayola. Mentors: Alison Cahill, MD, MSCI; Lorene Temming, MD. Midtrimester fetal growth restriction: risk stratification for neonatal outcomes

Friedman, Daniel. Mentors: Eric Leuthardt, MD; Ashwin Kamath, MD. MRI-guided laser interstitial thermal therapy for intracranial lesions: pearls, pitfalls, and review of 133 cases

Gallo, Robert. Mentors: Aimee James, PhD, MPH; Jean Hunleth, PhD, MPH. A good result: colorectal cancer screening and narratives of risk in a photographic research project

Gang, Margery. Mentors: Timothy Ley, MD; Matthew Christopher, MD, PhD. WT1 loss-of-function mutations in Acute Myeloid Leukemia

Garza, Kevin. Mentor: Graham Colditz, MD, DrPH. Correlates of suboptimal radiotherapy in women with ductal carcinoma in situ

Goldberg, Alexander. Mentor: Jonathan Silva, PhD. Developing molecularly based ion channel models

Graesser, Elizabeth. Mentor: Jeffrey Nepple, MD, MS. Borderline acetabular dysplasia: preoperative clinical characteristics differentiating hip instability and femoroacetabular impingement

Griffin, Natalie. Mentors: David Limbrick, MD, PhD; Joshua Shimony, MD, PhD; Jarod Roland, MD. Resting-state functional connectivity MRI use in pediatric neurosurgery for preoperative planning of cavernoma, tumor, and epileptic focus resections

Hansalia, Vivek. Mentor: Ralph Damiano, MD. Surgical treatment for inappropriate sinus tachycardia: operative results and late outcomes

Hanson, Alex. Mentors: Colin Nichols, PhD; Conor McClenaghan, PhD. Functional characterization of Cant Syndrome-associated mutations in the ABCC9 (SUR2) subunit of the KATP channel

Hawn, Stephen. Mentor: Hawke Yoon, MD. Inhaled Nitric Oxide may increase risk of Retinopathy of Prematurity

Heslop, Gabriela. Mentors: Deborah Rubin, MD; Elzbieta Swietlicki, PhD. Epimorphin regulation of Wnt and bone morphogenetic protein signaling in crypt epithelium

Hickman, Leonard. Mentor: Deanna Barch, PhD. Associations between hippocampal volume and altered frontoparietal-limbic connectivity in children with a history of depression

Hong, Yijia (Helena). Mentors: Jay Piccirillo, MD, FACS; Peter Nagele, MD, MSc; Dorina Kallorgjeri, MD, MPH. Nitrous oxide as treatment for tinnitus: a pilot study

Hsu, Tina. Mentor: Susan Bayliss, MD. Retrospective and prospective evaluation of pediatric cutaneous mastocytosis

Jain, Nirbhay. Mentor: Daniel Osei, MD, MSCI. Risk assessment of poor outcomes following carpal tunnel release: a systematic review

Johnson, Shane. Mentor: Michael Meneghini, MD. The impact of psychological, social, and environmental factors in predicting length of stay in a short-stay/outpatient total joint arthroplasty program

Johnston, William. Mentor: Wilson Ray, MD. Bioresorbable spinal cord stimulator

Jones, Kai. Mentors: Cynthia Herrick, MD, FACP; Yan Yan, PhD. Counseling during pregnancy with gestational diabetes predicts postpartum diabetes screening

Jordan, Yusef. Mentor: Jacob Buchowski, MD, MS. Posterior-only lumbar vertebrectomy for tumors: comparison of expandable cages and cement spacers for reconstruction

Kading, Jacqueline. Mentors: Jonathan Green, MD; Ed O'Neil, MD. Use of low-cost Android tablets by community health workers in Nakisunga subcounty, Mukono District, Uganda: a pilot study

Kang, Lillian. Mentor: Patrick Jay, PhD. AVSD variants in offspring of Small and Large LSAI mouse strains

Keane, Alexandra. Mentor: Alison Snyder-Warwick, MD. Macrophages are recruited to the neuromuscular junction after nerve injury

Khalifeh, Jawad. Mentors: Wilson Ray, MD; Matthew MacEwan, PhD. Bioresorbable direct current electrical stimulator for bone growth

Kim, Elizabeth. Mentors: Nicola Napoli, MD; Gary Weil, MD. Metabolic responses to anti-retroviral therapy among adults and children in Tanzania

Kong, Tracie. Mentors: Samuel Wickline, MD; Hua Pan, PhD. Characterizing amyloid beta-peptide in atherosclerosis and wound healing

Lander, Daniel. Mentor: Joshua Swamidass, MD, PhD. A neural network modeling of Cytochrome p450 2J2

Larson, Ellen. Mentors: Susan Mackinnon, MD; Matthew Wood, PhD. Hypoxia patterns in acellular nerve allografts

Last, Aisling. Mentors: Robyn Klein, MD, PhD; Charise Garber. T-cell persistence, microglial activation, and interferon gamma in west nile virus encephalitis

Liu, Connor. Mentor: Gavin Dunn, MD, PhD. Predicting MHC class II antigens in GL261 and SMA560, two murine tumor models

Lu, Patricia. Mentors: Gregory Van Stavern, MD; Manu Goyal, MD, MSc. Identifying correlations between fluoroscopy-guided lumbar puncture and subsequent low-pressure syndrome in pseudotumor cerebri patients

Manders, Toby. Mentors: Sameer Sheth, MD, PhD; Elliot Smith, PhD. LFP and spikes in the human hippocampus during cognitive control

Mathison, Michael. Mentors: Wilson Ray, MD; Matthew MacEwan, PhD. Wireless electrical stimulation to enhance regeneration across long segmental peripheral nerve defects

McCarron, Weston. Mentors: Wilson Ray, MD; Matthew MacEwan, PhD. Interfacing of a chronically implanted rat sciatic nerve electrode

Miles, Michael. Mentor: Joel Perlmutter, MD. On-period freezing as a clinical indicator of non-Parkinson Disease causes of parkinsonism

Min, Caroline. Mentors: Aimee James, PhD, MPH; Graham Colditz, MD, DrPH. Racial differences in breast cancer care at Christian Hospital in St. Louis

Motowski, Hayley. Mentor: Matthew Ciorba, MD. A phase 1 clinical study to examine the safety and tolerability of the probiotic LGG as a G.I. prophylactic agent in patients receiving cytotoxic cancer therapy

Musharbash, Farah. Mentor: Ralph Damiano, MD. Minimally invasive septal myectomy is as effective as traditional sternotomy for hypertrophic obstructive cardiomyopathy

Padovano, William. Mentor: Muhammad Faraz Masood, MD. Predictors of lymphatic leak following femoral cannulation for venoarterial extracorporeal life support

Page, Joshua. Mentors: John Constantino, MD; Dustin Baldrige, MD, PhD. When is it psychiatry's turn? Implementing personalized medicine in the CAP clinic

Peacock, Jon. Mentor: Kory Lavine, MD, PhD. Pathology of right ventricular failure following LVAD implantation

Pfeifer, Ethan. Mentor: Jacqueline Payton, MD, PhD. Ranking significance of sequence variants by epigenomics, transcription factor binding, and downstream effects

Pham, Hoang. Mentor: Michael Mullins, FACEP, FAACT. Safety and efficacy of non-steroidal anti-inflammatory drugs (NSAIDs) in Copperhead snakebite patients

Phelan, Patrick. Mentor: M. Laurin Council, MD. Atypical fibroxanthoma: contemporary cases and conceptions

Pickersgill, Nicholas. Mentor: Kamlesh Patel, MD. Long-term regression of normative cephalic index following endoscopic repair of sagittal synostosis

Rabe, Brian. Mentors: William Chapman, MD, FACS; Yiing Lin, MD, PhD. Anti-CD47 mAb treatment reduces tumor growth in a mouse xenograft model of hepatocellular carcinoma

Raman, Hari. Mentor: Gregory Zipfel, MD. National survey regarding the issue of problem residents in neurosurgery programs

Reed, Evelyn. Mentor: Susan Mackinnon, MD. Sub-clinical peroneal neuropathy (SCPN) and falling in bariatric surgery patients

Rees, Ryan. Mentor: Brian Fuller, MD, MSCI. Blood product transfusion in emergency department patients: a case-control study of practice patterns and impact on outcome

Schwabe, Maria. Mentor: Cara Cipriano, MD. The utility of 18F-FDG PET/CT in detecting malignant peripheral nerve sheath tumors in patients with Neurofibromatosis Type-1

Senter-Zapata, Michael. Mentors: William Chapman, MD, FACS; Neeta Vachharajani, . Incidence, survival, and risk factors of biliary complications: a single-center perspective

Shah, Nakul. Mentor: Ting Wang, PhD. Identification of oncogenes activated by TE-derived cryptic promoters in H1299 lung cancer cells

Silver, Maya. Mentors: Brad Racette, MD; Susan Searles-Nielsen, PhD. Well-water and risk of Parkinson Disease: a case-control study of US Medicare beneficiaries

Smith, Miya. Mentor: David Limbrick, MD, PhD. Cerebrospinal fluid profiling for assessment of shunt function in pediatric hydrocephalus

Solomon, Mary. Mentor: Christopher Carpenter, MD, MSc, FACEP, FAAEM. Sensitivity, specificity and likelihood ratio of serum and synovial markers alongside clinical findings in acute nongonococcal septic arthritis

Sreevalsan, Nitya. Mentor: Tamara Hershey, PhD. Brain white matter differences in obesity measured by Diffusion Basis Spectrum imaging

Subramanian, Tanvi. Mentors: William Chapman, MD, FACS; Neeta Vachharajani. Mini-incision versus laparoscopic donor nephrectomy in living-donor kidney transplantation

Sze, Chia-Hung. Mentor: Scott Luhmann, MD. Evaluation of complications of Smith-Petersen Posterior Column Spinal Osteotomies in the pediatric spinal deformity patient

Tandon, Damini. Mentor: Kamlesh Patel, MD. Morphologic severity of craniosynostosis: implications for speech and neurodevelopment

Tepper, Sarah. Mentor: Akinobu Itoh, MD, PhD. Left ventricular unloading by Impella device versus direct vent during extracorporeal life support

Thompson, Shomari. Mentor: Allison King, MD, MPH, PhD. Effects of an educational intervention on the transition needs of adolescents with sickle cell disease

Tricarico, Christopher. Mentor: Lukas Wartman, MD. A case of acute myeloid leukemia with promyelocytic features characterized by a chromosome 12 inversion that creates a reciprocal EIF4B-RARG fusion and expression of a truncated RARG transcript

Williams, Conor. Mentors: Robert Figenschau, MD; Gino Vricella, MD. Predictors of readiness to transition in young adults with neurogenic bladder

Woeltje, Maeve. Mentors: Mark Manary, MD; Indi Trehan, MD, MPH, DTM&H. Outcomes for infants under 6 months with acute malnutrition when treated with RUTF or RUSF

Yoon, Jason. Mentor: Richard Wahl, MD. Next-generation radioimmunotherapy: characterizing fully human monoclonal anti-CD20 antibodies labeled with zirconium-89

Yu, Jaclyn. Mentors: Julie Margenthaler, MD, FACS; Amy Cyr, MD. Directed shave margins in breast-conserving surgery: accuracy of intraoperative surgeon assessment

Zerafati-Jahromi, Gazelle. Mentors: Christina Szperka, MD; Bradley Schlaggar, MD, PhD. Goals of pediatric preventive headache treatment

Zhang, Cathy. Mentors: John Pruett, MD, PhD; Daniel Povinelli, PhD. Theory of Mind priming pilot: rating the ambiguity of revised line of sight probe task stimuli

Zhong, Caroline. Mentor: Laura Huff, MD. Survey exploring the etiology of idiopathic scalp pruritus