Division Data Summary

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<th>Research and Training Details</th>
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Significant Publications


Using data from a 20-year longitudinal study of sexual abuse survivors, this paper reports on one of the first prospective tests of the Model of Developmental Traumatology. This model postulates that early and chronic stress, such as that experienced by victims of childhood abuse, can result in hypervigilance of the stress response systems thereby manifesting in more circulating cortisol than is functionally necessary. Inordinate amounts of cortisol can have adverse effects on brain development and impair cognitive abilities. Our data show significantly truncated 20-year growth trajectories of receptive language acquisition for sexually abused females as compared to those of non-abused comparison females. We also report lower educational attainment which is discussed as a tangible consequence of lower abilities. We recommend early cognitive and educational intervention as a viable means to assist victims in altering deleterious trajectories and promoting greater life successes.


This is the first study and paper documenting five distinct trajectories of adherence to antiepileptic drug therapy for children with newly diagnosed epilepsy using objective electronic monitors. Results indicated that nearly 60% of children with epilepsy and their caregivers do not take their antiepileptic medications as prescribed and one significant predictor of non-adherence is lower socioeconomic status. These initial findings highlight the need to provide adherence promotion interventions for children with epilepsy early in the course of the disease.

One of the first cross-sectional studies to examine the relationship between known genetic biomarkers of asthma and health-related quality of life in pediatric patients. Participants were 275 children (mean age=9.32 years, SD=3.12 years) and their caregiver. Caregivers provided ratings of asthma specific quality of life for their children. Analyses investigated the association between candidate genes associated with multiple asthma phenotypes and quality of life. Results indicated a significant link between known genetic biomarkers of asthma and health-related quality of life in pediatric patients, at least partly independent from pulmonary functioning.


This is the first study to treat obesity in preschool age children. Obesity in this age group has doubled since the 1980's and yet no studies have focused on interventions to reduce obesity with children between the ages of 2 and 5 years. Recent data indicate that obesity during preschool years increases the risk of being overweight at age 12 years and that shorter life expectancy is associated with being obese over a longer portion of the life span. Data from this pilot study lead to an R01 to conduct a larger randomized controlled trial of the behavioral intervention used in this study.


This study is significant because it established clinical cut offs for the Functional Disability Inventory (FDI). The FDI is the most widely used research tool for measuring outcomes in chronic pain populations. Because there were no empirically established criteria for interpretation of the scores on the FDI its use clinically has been limited. This study combined the databases from four pain centers to yield a large sample of 1300 youth ages 8 to 18 years of age with chronic pain to empirically derive four score classifications for the FDI: No/Minimal Disability; Moderate Disability; and Severe Disability. The results of the this study make the FDI a valid clinical outcome measure of disability in chronic pain patients.

**Division Highlights**

**From Bench to Bedside**

The division continues to expand the number of conditions for which we collect outcome data and use these data to improve care. As of this past year we routinely collect outcomes on patients seen for pain conditions, attention deficit disorder, obsessive compulsive disorder, sleep disorders, and adherence to medical treatment. To optimize patient outcomes faculty and staff psychologists providing direct clinical care systematically review the treatment literature and design operational procedures for getting evidence-based care into practice across all clinicians within the division. We are also working hard at translating treatments found efficacious in randomized clinical trials with highly selected participants to the real world in which patients may have several co-morbid disorders and not just one condition. By examining our outcomes within each patient group we have been able to identify segments of the population for whom modifications in treatment protocols can improve outcomes for those patients. Our clinicians also inform and adopt new clinical applications of research. For example, our faculty in collaboration with four other centers established the criteria for clinically meaningful impairment on the Functional Disability Impairment measure of pain disability. These findings were then immediately translated into clinical care by becoming one of the key outcome measures for children and adolescents being treated for pain conditions.
Faculty Receive CCHMC Place Outcomes Awards

In addition to applying evidenced-based treatment in clinical care our faculty are also leading the way in improving patient care at the bedside through research. The Place Outcomes Award is awarded through CCHMC and was designed to provide funds to improve health outcomes in children by the bridging of research with patient care. Four members of the division have been awarded these grants. Ahna Pai, Ph.D.'s Place Award titled Validation of a Real-time Adherence Assessment System will develop clinical tools that will assess adherence in real-time for the pediatric kidney transplant population. The composite non-adherence risk score and the innovative informatics paradigms developed in this pilot study will be integrated into standard clinical care and will be used in a funded Multisite R01 through NIH/NIDDK to conduct an RCT of a clinic-based intervention to promote optimal outcomes for transplant patients. Sickle cell disease (SCD) is a genetic blood disorder that causes pain episodes, organ damage and medical complications (e.g. stroke) which may increase in young adulthood during the transition to the adult healthcare system. Lori Crosby, Psy.D. received a Place Award titled The Impact of SCD Patient Portal on Transition to Adult Care to develop and pilot an SCD patient portal (i.e. electronic way to access personal health information) to empower these youth, improve the transition process, and guide future SCD transition studies. Lori Stark, Ph.D. received a Place Award to pilot test an innovative approach to bring her evidence-based intervention for improving nutritional outcomes in children with cystic fibrosis to patients through the development of a web-based version of the intervention. Because most patients live a long distance from their CF Center and most Centers do not have access to a behavioral psychologist, development of a web-based intervention will allow patients across the country to have access to this evidence-based treatment. Sandra Cortina, Ph.D. received a Place Award to test an intervention that can be delivered by physicians to address adherence to the medical regimen in Juvenile Rheumatoid Arthritis. This intervention is innovative as it will use data from electronic monitoring of medication adherence to form the basis of an in-clinic problem-solving intervention. This study is among the first to bring findings from what works to improve adherence in well-controlled clinical trials to clinical care.

Division Collaboration

Mayerson Center for Safe and Healthy Children » Putnam, FW
Dr. Robert Ammerman has been working with Dr. Putnam in the Mayerson Center for Safe and Healthy Children. Dr. Putnam is a co-investigator in research on the impact of home visitation on high risk mothers and children, treatment of postpartum depression in first-time mothers in home visitation, and impact of motivational interviewing on retention and adherence in prevention programs.

Division of Biostatistics and Epidemiology » Altaye, M
Dr. Robert Ammerman is working with Dr. Mekibib Altaye from the Division of Biostatistics and Epidemiology. Dr. Altaye is co-investigator and biostatistician on funded studies of retention and adherence in home visitation and treatment of postpartum depression in mothers in home visitation.

Division of Neonatology and Pulmonary Biology » Hall, ES
Dr. Robert Ammerman is working with Dr. Eric Hall from Neonatology and Pulmonary Biology. They are collaborating with Every Child Succeeds examining use of public datasets and geocoding to better understand infant mortality and related clinical issues in high risk mothers.

Division of Child Psychiatry » Harris, E
Dr. Robert Ammerman is working as a co-investigator with Dr. Elena Harris on her pilot study (Dr. Harris is also working with Donald L. Gilbert, M.D. from Neurology and Mark DiFrancesco, Ph.D. from Radiology) on treating
obsessive-compulsive disorder in children using repetitive transcranial magnetic stimulation.

James M. Anderson Center for Health Systems Excellence » Phelan, KJ
Dr. Kieran Phelan is principal investigator of an R01 study (NICHD) in collaboration with Dr. Robert Ammerman (co-investigator) on prevention of childhood injury in Every Child Succeeds.

Division of Emergency Medicine » Mahabee-Gittens, EM
Dr. Robert Ammerman is working with Dr. Melinda Mahabee-Gittens from Emergency Medicine on Dr. Mahabee-Gittens’ research examining smoking cessation interventions for parents of children seen in the pediatric emergency setting.

Division of Pulmonary Medicine; Division of Pediatric Otolaryngology » Amin, RS; Willging, JP
Dr. Dean Beebe has been working as a co-investigator with Drs. Raouf Amin and Paul Willging on the CHAT study, an NIH supported, multi-site study investigating the impact of adenotonsillectomy on the sleep and daytime neurobehavioral functioning of children with obstructive sleep apnea.

Department of Radiology; Neurology Division » DiFrancesco, M; Rose, DF; Holland, SK
In collaboration with Drs. Holland and DiFrancesco from Radiology and Dr. Rose from Neurology, Dr. Dean Beebe is the PI on an NIH-funded study of the impact of experimental sleep restriction on neurobehavioral and functional neural activation in otherwise healthy adolescents.

Division of Rheumatology; Department of Radiology » Brunner, HI; DiFrancesco, M; Holland, SK
Dr. Dean Beebe has been working with Drs. Brunner, Holland, and DiFrancesco as a co-investigator on an NIH-funded grant investigating the neurocognitive and functional neuroimaging sequelae of pediatric lupus.

Division of Cardiology; OT/Patient Services » Marino, BS; Mun-Bryce, SA
Dr. Dean Beebe has been working with Dr. Bradley Marino from Cardiology and Dr. Sheila Mun-Bryce from OT/Patient Services as co-investigator on a study of the medical and neuropsychological predictors of quality of life in survivors of childhood cardiac disease.

Division of Pulmonary Medicine; Division of Pediatric Otolaryngology; Division of Cardiology » Amin, RS; Willging, JP; Kimball, TR
In conjunction with Drs. Amin, Willging, and Kimball, Dr. Dean Beebe has added targeted neurobehavioral outcome measures to an NIH-funded study initially designed to look at the mediators of cardiac morbidity in children with obstructive sleep apnea. The goal of Dr. Beebe’s addition is to gather pilot data on whether those mediators also contribute to neurobehavioral morbidity.

Neurology Division; Division of Pulmonary Medicine » Jain, S; Glauser, TA; Simakajornboon, N
Dr. Dean Beebe has been working with Drs. Jain, Glauser, and Simakajornboon as a co-investigator on a pilot study examining the impact of melatonin treatment on sleep, seizure frequency, and neurobehavioral functioning in children with epilepsy.

Division of Pulmonary Medicine; Division of Cardiology » Amin, RS; Kirk, S
Dr. Dean Beebe has been working with Drs. Amin and Kirk, analyzing data from his now-completed K23 that examines the impact of sleep pathology on the neurobehavioral functioning, metabolic functioning, and dietary choices among overweight children and adolescents. Multiple papers have been published or are under review.

Division of Pulmonary Medicine » Amin, RS; Simakajornboon, N
Dr. Kelly Byars has been working with Dr. Raouf Amin and Dr. Narong Simakajornboon on investigations examining 1) barriers to adherence in children using continuous positive airway pressure to treat obstructive sleep apnea and 2) the prevalence of behavioral sleep disorders in patients referred for evaluation of obstructive sleep apnea.
Dr. Lori Crosby works with Dr. Karen Kalinyak on a variety of Sickle Cell Disease (SCD) related projects including Dr. Monica Mitchell’s project piloting a problem-solving intervention to improve treatment adherence and the SCD Transition Clinic.

**Division of Physical Medicine and Rehabilitation » Wade, S**

Dr. Lori Crosby is a consultant on Dr. Shari Wade’s grant examining an on-line cognitive behavioral treatment for youth with traumatic brain injuries.

**Division of Hematology/Oncology » Shook, L; Joiner, C**

Dr. Lori Crosby is a consultant on a HRSA-funded newborn screening project examining an intervention to improve adherence to medication for young children with sickle cell disease.

**Division of Emergency Medicine » Byczkowski, T**

Dr. Lori Crosby is working with Dr. Terri Byczkowski on her project to develop a transition readiness measure for adolescents and young adults with sickle cell disease.

**Division of Hematology/Oncology » Morgan Dewitt, E**

Dr. Lori Crosby is working with Dr. Esi Morgan Dewitt on her study aimed at developing a new computerized test system (PROMIS – Patient Reported Outcomes Measurement Information System) that will be used to measure health changes.

**Division of Endocrinology » Dolan, LM**

Dr. Dennis Drotar has been working with Dr. Larry Dolan on an R01: multisite descriptive study of adherence and self management in ALL.

**Division of Clinical Pharmacology » Vinks, AA**

Dr. Dennis Drotar has been working with Dr. Sander Vinks on an R01: multi-site randomized trial of problem solving intervention to promote treatment.

**Division of Hematology/Oncology » Perentesis, JP**

Dr. Dennis Drotar has been working with Dr. John Perentesis on an R01: multisite randomized trial of problem solving intervention to promote treatment adherence for ALL.

**Division of Pulmonary Medicine » Seid, M; Grossehme, D**

Dr. Dennis Drotar has been working with Dr. Michael Seid on an R21: cell phone intervention to promote treatment adherence in adolescents with asthma; and he has been working with Dr. Daniel Grossehme on his research on spirituality and adherence.

**Division of Pulmonary Medicine » Kercsmar, CM**

Dr. Dennis Drotar has been working with Dr. Carolyn Kercsmar on a pilot study of the impact of feedback to physicians concerning treatment adherence in pediatric asthma on health outcomes.

**Division of Adolescent Medicine » Britto, MT**

Dr. Dennis Drotar has been working with Dr. Maria Britto on a pilot study of the effectiveness of interventions to promote treatment adherence in adolescents with asthma.

**Division of Gastroenterology, Hepatology, & Nutrition/Liver Transplantation » Bucuvalas, JC**

Dr. Dennis Drotar has been working with Dr. John Bucuvalas on a new multisite R01 to validate a bioassay based measure of treatment adherence.

**Division of Rheumatology » Brunner, HI ; Ting T**

Dr. Dennis Drotar has been working with Drs. Brunner and Ting on a health outcomes grant to study the efficacy of text messaging and motivational interviewing on adherence in adolescents with lupus.
James M. Anderson Center for Health Systems Excellence » Margolis, P

Dr. Dennis Drotar has been working with Dr. Margolis on the Health Services Research Matrix steering committee.

Division of Cardiology » Marino, BS

Dr. Dennis Drotar has been working with Dr. Bradley Marino in ongoing studies of health-related quality of life in congenital heart disease.

Division of Biostatistics and Epidemiology » Ittenbach, RF; Cassedy, A

Dr. Dennis Drotar has been working with Drs. Ittenbach and Cassedy on studies of the measurement of treatment adherence in type I diabetes: measurement properties of the Diabetes Self Management Profile.

Division of Cardiology » Norris, M; Marino, BS

Dr. Dennis Drotar is also working with Drs. Norris and Marino on a study of adherence to treatment in young adults with histories of congenital heart disease.

Division of General and Community Pediatrics » Kahn, R; Brinkman, B

Dr. Dennis Drotar is working with Dr. Rob Kahn on a new R01 on Racial Disparities in Pediatric Asthma Morbidity and is a member of Dr. Bill Brinkman's K23 award mentorship team.

Division of Developmental and Behavioral Pediatrics » Froehlich, TE

Dr. Jeff Epstein is the primary mentor on Dr. Froehlich's K23 award.

Division of Developmental and Behavioral Pediatrics » Gilman, RC

Dr. Jeff Epstein is mentoring Dr. Richard Gilman on a research project he is developing to examine interventions for sleep problems in children with ADHD.

Division of General and Community Pediatrics » Brinkman, WB

Dr. Jeff Epstein is the primary mentor on Dr. Brinkman's K23 award.

Division of General and Community Pediatrics » Lichtenstein, P

Dr. Jeff Epstein collaborates with Dr. Phil Lichtenstein, who is the medical director for the ADHD Collaborative, a community-based intervention to improve the quality of ADHD care in the Cincinnati area.

Division of Child Psychiatry » Delgado, SV

Dr. Delgado is working as the physician on an industry-funded clinical trial for which Dr. Jeff Epstein is the PI.

Division of Child Psychiatry » Harris, E

Dr. Jeff Epstein is the primary mentor on Dr. Harris' KL2 application.

Division of Child Psychiatry » Barzman, D

Dr. Jeff Epstein is a consultant on Dr. Barzman’s KL2 application.

Division of Neurology » Holland, S

Dr. Jeff Epstein is a consultant on Dr. Holland’s C-MIND grant.

Division of Epidemiology and Biostatistics » Altaye, M

Dr. Jeff Epstein is a consultant on Dr. Altaye’s grant submission.

Division of Gastroenterology, Hepatology, & Nutrition » Denson, LA

Dr. Kevin Hommel has been working with Dr. Lee Denson on several grant-funded projects including NIH, P&G Pharmaceuticals, and Digestive Health Center funded studies. Three of these studies are RCTs using behavioral intervention to improve treatment adherence.

Division of Allergy and Immunology » Rothenberg, ME; Franciosi, J

Dr. Kevin Hommel has been working with Drs. Marc Rothenberg and James Franciosi from the Division of
Allergy and Immunology on a study examining treatment adherence and concomitant behavioral factors in children with eosinophil associated gastrointestinal disorders (EGID).

**Health Policy and Clinical Effectiveness » Margolis, P; Seid, M**

Dr. Kevin Hommel has been working with Drs. Peter Margolis and Michael Seid in Health Policy and Clinical Effectiveness as a co-investigator on the Collaborative Clinical Care Network (C3N) in Inflammatory Bowel Disease R01 grant from the NIH. Dr. Hommel leads the Patient Behavior Change and Self-Management aspect of the study.

**Division of Endocrinology » Dolan, L; Crimmins, N**

Dr. Korey Hood is currently collaborating with Drs. Dolan and Crimmins in studies on the links between diabetes, depression, and diabetes management.

**Division of Rheumatology » Lovell, DJ; Ting, T; Morgan DeWitt, E**

Dr. Susmita Kashikar-Zuck is working on a number of collaborative NIH grant-funded projects with investigators in the Division of Rheumatology. She recently completed a multi-site randomized clinical trial of cognitive-behavioral intervention for juvenile fibromyalgia syndrome with Dr. Daniel Lovell and Dr. Tracy Ting and is now leading a project on the longitudinal determination of outcomes of adolescents with fibromyalgia along with the same research team. She is a co-investigator with Dr. Esi Morgan DeWitt on a project focused on assessment of patient-related outcomes (PROMIS) in pediatric pain, rheumatology and rehabilitation. Dr. Kashikar-Zuck also serves as one of the faculty mentors on the Pediatric Rheumatology T32 training grant.

**Pain Management, Department of Anesthesia » Goldschneider, KR; Szabova, A**

Dr. Susmita Kashikar-Zuck and Dr. Anne Lynch-Jordan are working with Dr. Kenneth Goldschneider and Dr. Alex Szabova (Pain Management), and Dr. Lynch-Jordan (BMCP) on the development and validation of measures of adolescent pain behavior and assessment of functional outcomes in pediatric chronic pain through the multidisciplinary pain program.

**Rheumatology ; Human Genetics » Ting, T; Tinkle, B**

Dr. Anne Lynch-Jordan is working with Dr. Tracy Ting from Rheumatology and Dr. Brad Tinkle from Human Genetics on a clinical research collaboration, the Pain Day Treatment Program.

**Division of Clinical Pharmacology » Vinks, AA**

Dr. Sander Vinks serves as a mentor on Dr. Avani Modi’s K23 award to examine the role of adherence in the pharmacokinetic modeling of carbamazepine.

**Neurology Division » Glauser, TA; Morita, DA**

Dr. Glauser serves as a mentor on Dr. Avani Modi’s K23 award. Dr. Modi collaborates on multiple projects related to clinical outcomes in the New Onset Seizure Disorder clinic with both Drs. Glauser and Morita. Studies are focused on examining long-term adherence patterns in children with newly diagnosed epilepsy, validation of a side effects questionnaire, examining quality of life for patients with seizures, and pharmacokinetic modeling of antiepileptic drugs.

**Department of Surgery » Inge, TH**

Dr. Avani Modi has been working with Dr. Inge on a U01 grant examining outcomes of adolescent bariatric surgery, including adherence to the post-operative multivitamin regimen.

**Division of Adolescent Medicine » Dorn, L**

Dr. Jennie Noll is a co-investigator with Dr. Dorn on a new R01 (submitted for the February cycle) focused on the health consequences of smoking and alcohol use on adolescent female development. Specifically, the proposal is Aimed at explicating how early stress can exacerbate the effects of smoking and alcohol use on later bone density and reproductive health. Dr. Noll's key roles include experience with adolescent
development, child abuse research, protocol design, techniques to maintain cohorts, and longitudinal research designs and analyses.

**BioMedical Informatics (BMI) » Kouril, M**

Along with a team of BMI specialists headed by Michal Kouril, Ph.D., Dr. Noll and others have worked to develop software that will allow naturalistic observation of adolescents' "Internet Footprint". This software allows them to gain a thorough understanding of patterns of internet use and quantify adolescents' propensity to visit and spend time on websites containing sexual and other adult content. They have successfully piloted this software on adolescents and have demonstrated efficacy with regard to feasibility and viability. As a result, they developed an R01 application (submitted for the June 2010 cycle) that is aimed at recording and quantifying the compromised internet safety experienced by at-risk adolescents aged 12-18.

**Division of Pulmonary Medicine and Center for Health Care Quality » Seid, M**

Dr. Lisa Opipari-Arrigan has been working with Dr. Michael Seid on a project that involves empirically defining and measuring the clinical encounter and determining how the clinical encounter affects adherence and health outcomes for children with cystic fibrosis.

**Division of Pulmonary Medicine; Center for Health Care Quality; Health Policy and Clinical Effectiveness » Seid, M; Kercsmar, C; McDowell, K; Carle, A**

In collaboration with Dr. Michael Seid, Dr. Gary McPhail, Dr. Raouf Amin, Dr. Barbara Chini, and Dr. Adam Carle, Dr. Opipari-Arrigan is the PI on a Place Outcomes Award to investigate improving adherence and outcomes in cystic fibrosis via physician behaviors during the clinical encounter.

**Biomedical Informatics; Health Policy and Clinical Effectiveness; Adolescent Medicine » Hutton, J; Margolis, P; Britto, M**

Dr. Lisa Opipari-Arrigan has been working with Dr. John Hutton, Peter Margolis, and Maria Britto as a co-investigator on the Building Modular Pediatric Chronic Disease Registries for QI and CE Research R01 grant from AHRQ. Dr. Opipari-Arrigan is focused on the patient activation component of this study.

**Division of Nephrology » Goebel, JW**

Dr. Ahna Pai has been working with Dr. Jens Goebel on a project examining the allocation of treatment responsibility in patients with kidney transplants.

**Division of Nephrology » Goebel, JW**

Dr. Ahna Pai has been working with Dr. Jens Goebel from the Division of Nephrology on a project developing and validating a real-time adherence assessment system.

**Division of Nephrology » Goebel, JW**

Dr. Ahna Pai has been working with Dr. Jens Goebel from the Division of Nephrology on a project examining the relationship between adherence to clinic visits and health outcomes in the pediatric renal transplant population.

**Division of Nephrology » Goebel, JW**

Dr. Ahna Pai has been working with Dr. Jens Goebel from the Division of Nephrology on multisite randomized clinical trial of an intervention to promote adherence in adolescent and young adult kidney transplant patients.

**Division of Hematology/Oncology » Davies, SM**

Dr. Ahna Pai has been working with Dr. Davies on a project examining oral medication adherence in children following stem cell transplant.

**Division of Hematology/Oncology » Perentesis, J**

Dr. Ahna Pai has been working with Dr. Perentesis on a project examining adherence to follow-up medical care in adolescent and adult survivors of childhood cancer.
Division of Hematology/Oncology » Perentesis, J
Dr. Ahna Pai has been working with nurses in the leukemia and lymphoma clinic on a clinic-based nursing intervention to examine adherence to outpatient oral medication regimens in adolescent and adult survivors of childhood cancer.

Developmental and Behavioral Pediatrics » Gurwitch, R
Dr. Erica Pearl is co-investigating a study adapting Parent-Child Interaction Therapy with Military Families at Tripler Army Medical Center and Ft. Hood with Dr. Gurwitch as part of a Substance Abuse Merital Health Services Administration (SAMHSA) grant.

The Headache Center, Neurology Division » Hershey, AD; Kabbouche, MA; Korostenskaja, M; O'Brien, HL
Dr. Scott Powers has been working with the Headache Center on a range of clinical and translational research studies, ranging from genomics to clinical trials to outcomes research.

Diabetes Center, Division of Endocrinology » Dolan, LM
Dr. Scott Powers has been collaborating with the Diabetes Center on studies that focus on type 1 diabetes and type 2 diabetes. Most studies involve NIH T32 fellows. A major line of research is a multi-site effort with Dr. Susana Patton at the Kansas University Medical Center and focuses on dietary adherence and diabetes outcomes in young children with type 1 diabetes.

Cystic Fibrosis Center, Division of Pulmonary Medicine » Amin, RS; McPhail GL; Clancy, JP; Hardie, WD
Dr. Scott Powers is working with the Cystic Fibrosis Center on clinical and translational research in cystic fibrosis, including clinical trials, studies through the CF Foundation Therapeutics Development Network, and health outcomes research.

Department of Radiology » Brody, AS
Dr. Scott Powers has been working with the Division of Radiology on studies funded by the CF Foundation examining lung disease in young children with CF via high resolution CT tests as part of a multi-center NIH funded clinical trial focused on improving growth in young children with CF via behavioral and nutrition treatment.

Division of Rheumatology » Lovell, DJ
Dr. Scott Powers has been working with the Division of Rheumatology on Fibromyalgia trials and institutional studies.

Division of Neurology » Hershey, AD; Kabbouche, MA; O'Brien, H
Dr. Shalonda Slater has been working with the Headache Center on clinical research studies along with clinical care.

Division of Pulmonary Medicine » McPhail, G; Amin, R
Dr. Stephanie Spear collaborates with Drs. McPhail and Amin from the Division of Pulmonary Medicine on ongoing behavior-nutrition research projects and clinical care.

Division of Physical Medicine and Rehabilitation » Wade, S
Dr. Walz has been collaborating with Dr. Wade on studies of child and family outcomes following pediatric traumatic brain injury, as well as randomized controlled trials of behavioral interventions.

Division of Neurosurgery; Critical Care Medicine » Bierbrauer, K; Wong, H
Dr. Walz is collaborating with Drs. Bierbrauer and Wong as the site neuropsychologist on a NIH-NINDS program project grant evaluating moderate hypothermia as a treatment for pediatric traumatic brain injury.

Critical Care; Emergency Medicine; Neurology » Wheeler, D; Wong, H; Geis, G; Hallinan, B
Dr. Walz is collaborating with Drs. Wheeler, Wong, Geis, and Hallinan as the site neuropsychologist on a NIH-
NHLBI program project grant evaluating moderate hypothermia as a treatment for pediatric cardiac arrest.

Department of Surgery » Inge, TH; Jenkins, T

Dr. Meg H. Zeller has been working with Drs. Inge and Jenkins as a Co-Investigator on a U01 consortium grant examining health and quality of life outcomes of adolescent bariatric surgery.

Faculty Members

Lori J. Stark, Ph.D., Professor

Division Director

Research Interests Improving health and nutritional outcomes of children with chronic conditions including cystic fibrosis and obesity through behavioral interventions

Robert Ammerman, Ph.D., Professor

Scientific Director, Every Child Succeeds

Research Interests Development of early childhood preventive interventions to promote optimal child development and reduce negative behavioral and health outcomes.

Dean Beebe, Ph.D., Associate Professor

Research Interests Investigating the daytime cognitive and behavioral effects of pediatric sleep problems

Kelly Byars, Psy.D., Associate Professor

Research Interests The assessment and treatment of pediatric insomnia and pediatric obstructive sleep apnea.

Sandra Cortina, Ph.D., Assistant Professor

Research Interests Understanding and improving adherence to treatment in pediatric chronic illness

Peggy A. Crawford, Ph.D., Assistant Professor

Research Interests Understanding individual and family factors associated with better outcomes in children with diabetes

Lori Crosby, Psy.D., Associate Professor

Director, O'Grady Residency Program in Psychology

Research Interests Understanding psychosocial factors as they impact sickle cell disease, adherence, anxiety, adolescents, and health disparities

Dennis Drotar, Ph.D., Professor

Director, Center for the Promotion of Treatment Adherence

Research Interests Understanding and improving adherence to treatment in pediatric chronic illness

Jeffrey N. Epstein, Ph.D., Professor

Director, Center for ADHD

Research Interests Improving health and behavioral outcomes of children with ADHD through development and dissemination of evidence-based treatments

Michelle Ernst, Ph.D., Assistant Professor

Director, Consultation Liaison Services

Research Interests Clinical effectiveness of pediatric psychology interventions within the inpatient pediatric setting.

Marsha Gragert, Ph.D., Assistant Professor

Director, Postdoctoral Residency in Pediatric Neuropsychology

Research Interests Understanding neurobehavioral outcomes following childhood cancer, pediatric traumatic brain injury, and their clinical interventions
Kevin Hommel, Ph.D., Associate Professor
  Research Interests Improving adherence to treatment regimens in pediatric inflammatory bowel disease, eosinophil and associated gastrointestinal disorders

Korey Hood, Ph.D., Associate Professor
  Research Interests Investigation of the impact of psychological and family factors on type 1 diabetes management and outcomes, the biologic and environmental links between depression and type 1 diabetes

Susmita Kashikar-Zuck, Ph.D., Associate Professor
  Training Director, Psychology Postdoctoral Fellowship Program
  Research Interests Psychosocial issues and behavioral treatment of pediatric chronic pain

Joshua Langberg, Ph.D., Assistant Professor
  Research Interests Development of effective treatments for adolescents with ADHD

Brenna LeJeune, Ph.D., Assistant Professor
  Research Interests Understanding neurobehavioral outcomes following pediatric traumatic brain injury, childhood cancers, and their clinical interventions

Richard Loren, Ph.D., Assistant Professor
  Research Interests Dissemination of effective treatments for ADHD

Anne Lynch-Jordan, Ph.D., Assistant Professor
  Associate Training Director, O'Grady Residency Program in Psychology
  Research Interests Understanding the role of pain expression and factors contributing to decreased functioning such as school attendance/absences in the pediatric chronic pain population.

Michael Mellon, Ph.D., Associate Professor
  Research Interests Measuring the effectiveness of acceptance and commitment therapy for children who have inflammatory bowel disease

Monica J. Mitchell, Ph.D., Associate Professor
  Research Interests To develop culturally-appropriate, family-based interventions for children with sickle cell disease and children with other pediatric conditions, and to improve health outcomes in children

Avani C. Modi, Ph.D., Assistant Professor
  Research Interests Examining adherence to medical regimens for children with chronic illnesses (e.g., epilepsy, cystic fibrosis) and its impact on health outcomes

Jennie G. Noll, Ph.D., Associate Professor
  Research Director
  Director, Data Core
  Research Interests Understanding long-term bio-psycho-social sequelae of childhood abuse

Lisa Opipari-Arrigan, Ph.D., Adjunct
  Research Interests Improving health outcomes and quality of life for pediatric patients with chronic illnesses

Ahna Pai, Ph.D., Assistant Professor
  Research Interests Understanding and improving adherence to transplant regimens including solid organ, stem cell and bone marrow

Erica Pearl, Psy.D., Assistant Professor
  Research Interests Developing and disseminating evidence-based interventions for children exposed to violence

Carrie Piazza-Waggoner, Ph.D., Assistant Professor
Research Interests Understanding the impact of family functioning and chronic illness outcomes

Scott Powers, Ph.D., Professor
  Director of Clinical and Translational Research
  Director, Center for Child Behavior and Nutrition Research and Training
  Co-Director, The Headache Center
  Research Interests Three primary foci, Child Behavior and Nutrition, Pediatric Pain/Headache, and Clinical Trials

Joseph Rausch, Ph.D., Assistant Professor
  Research Interests Elucidating the short- and long-term dynamic interactions between human behavior and health outcomes

Janet R. Schultz, Ph.D., Adjunct
  Research Interests

Chad Shenk, Ph.D., Assistant Professor
  Research Interests Psychological & Physiological responses to severe and chronic stress, namely childhood maltreatment; developing prevention and intervention strategies that facilitate coping with traumatic events.

Shalonda Slater, Ph.D., Assistant Professor
  Research Interests Ensuring the psychological well-being of children under consideration for organ transplantation and children with chronic pain conditions

Stephanie Spear, Ph.D., Assistant Professor
  Research Interests Developing, testing, and disseminating family-based interventions with an early intervention focus to improve the outcomes for young children with chronic illness and obesity

Leanne Tamm, Ph.D., Associate Professor
  Research Interests Numerous aspects of the functioning of children with ADHD including brain-behavior relationships, executive function, efficacy of treatment, and prevention/early intervention

Jessica Valenzuela, Ph.D., Instructor
  Research Interests Programmatic research focused on health care interactions and health disparities that affect children and families

Nicolay Walz, Ph.D., Associate Professor
  Research Interests Understanding and improving child and family outcomes following traumatic brain injury

Meg Zeller, Ph.D., Associate Professor
  Research Interests Psychosocial outcomes of pediatric obesity and adolescent bariatric surgery

Joint Appointment Faculty Members
Richard Ittenbach, PhD, Associate Professor
  Division of Biostatistics and Epidemiology
  Research Interests Measurement of treatment adherence, research bioethics, and mixed methods studies, particularly as they relate to study and design-related issues

Clinical Staff Members
- James Brewer, EdD
- Joanne Carey, Psy.D.
- Sanford Chertock, Ph.D.
Jennifer Creedeon, Ph.D.
Jessica Cyran, Ph.D.
Linda Endres, Ph.D.
William Hansen, Ph.D.
Rebecca Kniskern, Ph.D.
Brenna LeJeune, Ph.D.
Wendi Lopez, Psy.D.
Jessica McClure, Psy.D.
Lynne Merk, Ph.D.
Ann Moser, Ph.D.
James Myers, Ph.D., Lead Satellite Psychologist
Robert Nestheide, Ph.D.
Irina Parkins, Ph.D.
S. Rachelle Plummer, Ph.D.
Jennifer Potter, Ph.D.
Tara Proano-Raps, Psy.D.
Angela Roddenberry, Ph.D.
William Sirbu, Ph.D., Lead, Satellite Psychologist
Beverly Smolyansky, Ph.D., Clinical Director
Christian von Thomsen, Psy.D.

Trainees

- Brandon Aylward, Ph.D., PL-1, University of Kansas, Lawrence, Kansas
- Lisa Clifford, Ph.D., PL-1, University of Wisconsin-Milwaukee, Milwaukee, Wisconsin
- Stacy Flowers, Ph.D., PL-3, Spaulding University, Louisville, Kentucky
- Erin Girio, Ph.D., PL-1, Ohio University, Athens, Ohio
- Wendy Gray, Ph.D., PL-1, University of Florida, Gainesville, Florida
- Shanna Guilfoyle, Ph.D., PL-2, Kent State University, Kent, Ohio
- Marisa Hilliard, Ph.D., PL-1, The Catholic University of America, Washington, DC
- Abigail Johnson, Ph.D., PL-2, Kennedy Krieger Institute, Baltimore, Maryland
- Elizabeth Kuhl, Ph.D., PL-2, Eastern Michigan University, Ypsilanti, Michigan
- Abigail Tissot, Ph.D., PL-2, Wayne State University, Detroit, Michigan
- Aaron Vaughn, Ph.D., PL-2, University of Vermont, Burlington, Vermont
- Alyssa Verbalis, Ph.D., PL-1, Children's National Medical Center, Washington, DC
- Marium Zafar, Ph.D., PL-2, Wright State University, Dayton, Ohio

Significant Accomplishments

**Successful Year for Grants**

Over the past 18 months, 68 percent of all grant applications submitted to the National Institutes of Health or foundations have been funded or received a fundable score. These successes are attributable to several factors. First, we have recruited and retained some of the most talented behavioral scientists in the country, all of whom have remained steadfast and persistent in grant submissions through these difficult funding times. Second, infrastructure investments into the grants office and the Divisional Data Core have promoted the level of support and innovation necessary to produce the most competitive applications. Finally, there is a
commitment to the mentoring structure and to the peer review process such that every application is the product of multiple efforts and is injected with the collective expertise of all research faculty.

Results Published from Key Juvenile Fibromyalgia Treatment Trial
Susmita Kashikar-Zuck, PhD, recently completed a five-year multi-site randomized clinical trial funded by the National Institute for Arthritis and Musculoskeletal and Skin Diseases (NIAMS) in which cognitive behavioral therapy (CBT) was found to be a safe, well-tolerated and effective intervention for reducing disability and depressive symptoms in the treatment of adolescents with juvenile fibromyalgia syndrome. Effects were maintained six months after the treatment was completed, showing that the effects of treatment are durable. This is the first rigorously controlled trial of CBT for pediatric patients with fibromyalgia and results will soon be published in the journal, *Arthritis and Rheumatism*.

Faculty Make Crucial Research Transitions
The transition from K-series career development awards to investigator-initiated R01 grants is an essential step for faculty to successfully establish scientific independence and to demonstrate sustainability for their research programs. Through preliminary and pilot studies generated from his K23 award, Kevin Hommel, PhD, developed a group-based treatment and an individually-tailored telehealth treatment for pediatric inflammatory bowel disease (IBD). Hommel was recently awarded an R01 grant from the NICHD that will examine the effect of these treatments on medication adherence, disease severity, health-related quality of life and health care utilization. Korey Hood, PhD, utilized a K23 award to document the prevalence and correlates of depression in adolescents with type 1 diabetes. This mix of diabetes and depression is dangerous given the negative impact of depression on disease management and health outcomes for adolescents. Hood was recently awarded an R01 grant from the NIDDK to implement a preventive intervention designed to curtail depression and promote optimal health outcomes in this high-risk pediatric population.

Division Publications
43. Langberg JM, Epstein JN, Girio-Herrera E, Becker SP, Vaughn AJ, Altaye M. Materials organization, planning, and homework completion in middle-school students with ADHD: impact on academic


Grants, Contracts, and Industry Agreements

<table>
<thead>
<tr>
<th>Grant and Contract Awards</th>
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<td>Treatment of Maternal Depression in Home Visitation</td>
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<td>The Multidimensional Impact of Migraine in Adolescents Presenting to Specialty Care</td>
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<td>Effect of Adolescent Sleep Restriction on Neural &amp; Neural Behavioral Functioning</td>
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<td>Sickle Cell Treatment Demonstration Program</td>
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<td>Longitudinal Determination of Outcomes of Adolescents with Fibromyalgia</td>
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<td>Novel Adherence Measurement and Intervention in Children with New-Onset Epilepsy</td>
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<td>20-year Intergenerational Longitudinal Followup of Females Abused as Children</td>
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<td>Adult Neurobehavioral Late Effects of Pediatric Low Grade Brain Tumors</td>
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<td>Preventing Teen Pregnancy: Prepregnancy Psychosocial Mechanisms for At-Risk Females</td>
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