

## **Behavioral Medicine and Clinical Psychology**

#### **Division Photo**



First Row: L. Stark, S. Powers; Second Row: T. Proano-Raps, S. Spear, A. Roddenberry, B. Smolyansky, M. Gragert, K. Byars; Third Row: R. Kniskern, B. LeJeune, J. Cyran, R. Plummer, M. Mitchell, J. McClure, L. Crosby, I. Parkins, W. Lopez, R. Ammerman, C. Piazza-Waggoner, S. Slater; Fourth Row: J. Carey, J. Rausch, J. Potter, J. Creedon, A. Moser, S. Kashikar-Zuck, J. Valenzuela, A. Lynch-Jordan, A. Modi; Fifth Row: K. Hood, J. Myers, W. Hansen, M. Mellon, L. Tamm, J. Langberg, K. Hommel, J. Brewer, R. Loren, S. Chertock, B. Sirbu; Missing: D. Beebe, S. Cortina, S. Cotton, P. Crawford, D. Drotar, L. Endres, J. Epstein, M. Ernst, L. Merk, B Nestheide, J. Noll, A. Pai, E. Pearl, J. Schultz, N. Walz, M. Zeller

#### **Division Data Summary**

#### **Research and Training Details** Number of Faculty 35 Number of Joint Appointment Faculty 1 Number of Research Fellows 10 Number of Research Students 18 Number of Support Personnel 96 \$4,907,232 Direct Annual Grant Support Direct Annual Industry Support \$89,342 Peer Reviewed Publications 80 **Clinical Activities and Training** Number of Clinical Staff 21 Number of Clinical Fellows 3 5 Number of Clinical Students Number of Other Students 40 Inpatient Encounters 3,683 **Outpatient Encounters** 26,820

## Significant Publications

Stark LJ, Quittner AL, Powers SW, Opipari-Arrigan L, Bean JA, Duggan C, Stallings VA. Randomized clinical trial of behavioral intervention and nutrition education to improve caloric intake and weight in children with cystic fibrosis. Archives of Pediatrics and Adolescent Medicine 2009;163(10):915-21.

This is the first randomized clinical trial to demonstrate the superiority of behavioral intervention for improving nutritional outcomes for children with cystic fibrosis. As nutritional status is highly correlated with pulmonary outcomes for children with CF, efficacious interventions to improve nutritional status are critical to children with this disease.

Wang X, Xiang J, Wang Y, Pardos M, Meng L, Huo X, Korostenskaja M, Powers SW, Kabbouche MA, Hershey AD. Identification of abnormal neuromagnetic signatures in the motor cortex of adolescent migraine. Headache 2010:50(6):1005-16.

The Editor of *Headache* noted in the introduction to the June 2010 issue that each year this is the "flagship" issue published in concert with the American Headache Society's annual scientific meeting. He noted a few of the articles in the issue, specifically commenting on our group's search for morphologic "signatures" in the cortex of adolescents with migraine. Our report suggests that there are neurophysiological changes in the motor cortices of children with migraine that can be measured with neuromagnetic imaging techniques. While many children with migraine report difficulty with motor functioning, this is the first application of magnetoencephalography (MEG) technology in pediatric migraine to examine motor-evoked magnetic activation. These initial findings of our Headache Center team contribute novel information to the field.

Ernst MM, Wooldridge JL, Conway E, Dressman K, Weiland J, Tucker K, Seid M. Using quality improvement science to implement a multidisciplinary behavioral intervention targeting pediatric inpatient airway clearance. Journal of Pediatric Psychology 2010;35(1):14-24.

This manuscript described a successful inpatient multi-disciplinary, behaviorally-based intervention which improved adherence by adolescents with CF to their inpatient airway clearance. This publication is one of the first detailing an inpatient pediatric psychology clinical effectiveness study with the end-result of changing routine clinical care provision and achieving evidence-based treatment for children with CF.

Pai AL, Drotar D. Treatment adherence impact: the systematic assessment and quantification of the impact of treatment adherence on pediatric medical and psychological outcomes. Journal of Pediatric Psychology 2010;35(4):383-93.

This manuscript presents a new model for conceptualizing the impact of nonadherence on patient outcomes. It documents the necessity of the assessment of multiple outcomes on multiple levels of the patient's ecological system (i.e., family, community, etc.).

Epstein JN, Langberg JM, Lichtenstein PK, Altaye M, Brinkman WB, House K, Stark LJ. Attention-deficit/hyperactivity disorder outcomes for children treated in community-based pediatric settings. Archives of Pediatrics and Adolescent Medicine 2010:164(2):160-5.

Demonstration of efficacy of evidence-based ADHD care on child outcomes. Moreover, the study demonstrated that while medication improves ADHD symptoms, medication does not exert an effect on functional impairment which emphasizes the need for adding other modalities of treatment to medication.

#### **Division Highlights**

Sustaining Programs of Research: Ensuring Faculty Have the Right Resources

Sustaining a long-term research career in today's competitive atmosphere for federal funding requires more than sound scientific ideas and methodology. It requires that faculty tackle important issues that will have a significant impact on health outcomes using innovative technology. Sustainability also requires considerable long-term planning of a programmatic line of investigation to prevent gaps in funding. It also requires judicious use of resources and welcoming of critical feedback. Recognizing these realities, the faculty within the Division of Behavioral Medicine and Clinical Psychology have set up several innovative approaches to support investigators in attaining and sustaining external funding and ultimately in achieving long-term research careers. First, the faculty recognized that even the best ideas and methods can be improved with critical and constructive feedback and have therefore set up the Psychology Review Group (PRG), a mandatory monthly meeting of research faculty within the division to review grants before submission. In addition to everyone reading and commenting on the grant proposal three faculty reviewers are assigned to each project to ensure thorough review. The reviews focus not only on the science and importance but on the optimal presentation of the material. Four members of the division currently serve on standing NIH study sections and can therefore bring a perspective of what the study section reviewers will likely perceive as strengths and weaknesses—this is especially important given recent NIH application restructuring and reviewer emphasis on impact and innovation. Second, the faculty recognized the essential need for innovative technology and methodology. Therefore the division invested in creating the Data Core in collaboration with the Divisions of Biostatistics and Bioinfomatics. The Data Core not only functions as a key resource fulfilling a host of collective research needs, but functions as a data management and coordinating center as well. Via web-based innovation, the data core has transformed our means of assessment, data capture and intervention/treatment delivery. The business plan to sustain the Data Core has been successful beyond initial expectation with nearly 100% of costs being covered by NIH grants. Third, the faculty recognize the need to be planful and utilize resources wisely and created the Steps to Success guidelines for getting grants submitted in a timely and efficient way. The "Steps" outline every fiscal and scientific step of the grant application process with suggested time lines for completion of each. By following the steps, investigators produce professional quality grant applications and the division can support the submission of multiple grants per cycle without imposing undo stress and burnout within our grants support staff. By garnering the resources of the Data Core and other resources offered through the CTSA such as the behavioral core, investigators can focus on producing their most innovative science with the highest impact potential. Finally, last year the division created a Director of Research position that was filled by Dr. Jennie Noll who has been empowered to coordinate all of the aforementioned initiatives and to assist faculty with their career trajectories. For example, Dr. Noll meets with every faculty member continually and through encouragement, mentoring, and the garnering innovation and collective resources, assists in the planning of grant submissions and the sustaining of research programs and funding streams. The efforts we have devoted to these initiatives are beginning to bear fruit as this year, the division yielded a large dividend from our investment; 9 out of 18 grants submitted were funded and four of these were scored at a 4th percentile or lower.

Faculty Receive ARRA Stimulus Dollars to Supplement Ongoing Projects

This year several BMCP faculty received NIH stimulus American Recovery and Reinvestment Act (ARRA) grants

including Scott Powers, Ph.D., Jennie Noll, Ph.D., Dennis Drotar, Ph.D., Lori Stark, Ph.D., and Meg Želler, Ph.D. Most notably, Dr. Zeller was awarded several ARRA grants to propel her ongoing research program into new avenues of impact and innovation. Dr. Zeller is a leader in the field of childhood obesity and conducts studies characterizing the psychosocial adjustment of obese youth as well as the impact of adolescent bariatric surgery. This year some of her key findings were published in *Obesity*, attesting to the long-term improvements in psychosocial functioning, quality of life, and developmental adaptation for bariatric surgery patients. ARRA funds were awarded to Dr. Zeller from NIDA to extend these findings by documenting the development of high-risk behaviors (e.g., alcohol/tobacco/drug use, sexual behaviors, and suicidal behaviors) post bariatric surgery. Dr. Zeller received a second ARRA supplemental grant to convert these studies to a web-based format ensuring long-term retention in these critical longitudinal studies as these adolescents mature into young adulthood.

Grants Awarded to BMCP Faculty to Impact Children with ADHD

**Joshua M. Langberg, Ph.D.** has partnered with Cincinnati and Northern Kentucky school districts to develop a school-based intervention to improve academic outcomes for children and adolescents with attention deficit hyperactivity disorder (ADHD). Through these innovative collaborations, Dr. Langberg has exemplified the spirit of community and translational research. This year Dr. Langberg was awarded a large NIH multi-site R01 and another grant from the U.S. Department of Education to implement these programs more broadly.

Evidence Based Intervention Improving Nutritional Outcomes for Children with CF Published

Lori J. Stark, Ph.D., ABPP, Division Director of BMCP and Professor of Pediatrics is a leading researcher in nutritional outcomes in children with cystic fibrosis (CF). This year the randomized clinical trial of the behavioral intervention developed by Dr. Stark to improve nutritional outcomes in children with CF was published in the *Archives of Pediatrics and Adolescent Medicine*. This publication led directly to funding by the CF Foundation for Dr. Stark to translate this successful face-to-face intervention to a web-based format so that every child with CF can receive the evidence-based treatment for nutrition regardless of the availability of a specially trained psychologist in their CF Center.

Faculty Publishes Key Resource Book for Teens With Type 1 Diabetes

**Korey Hood, Ph.D.** conducts clinical trials research focusing on improving how teens, families and practitioners manage type 1 diabetes. This year Dr. Hood published a book for teens with type 1 diabetes, Type 1 Teens: A Guide to Managing Your Life with Diabetes, in which he translated evidence based research to guide teens in how to make diabetes care a higher priority, reduce barriers to adherence, obtain support, and negotiate the tough world of adolescence – e.g., dating, alcohol and drugs, and social networks. The book will become a helpful resource to teens, their families, and diabetes care providers.

New Grant Awarded to Treat Maternal Depression

Robert T. Ammerman, Ph.D. conducts research to understand, identify, and treat depression in mothers who are participating in home visitation prevention services; this research has expanded and accelerated in the past year. He was recently awarded a new R01 award from the National Institute of Mental Health to evaluate a novel in-home treatment for postpartum depression and to study the impact of continued and remitted depression on child development. In addition, using the maternal depression treatment model developed in Every Child Succeeds, Dr. Ammerman's team disseminated the treatment approach to other sites, including to home visitation programs in the state of Connecticut and in Boston.

#### Division Collaboration

Collaboration with Mayerson Center for Safe and Healthy Children

Collaborating Faculty: 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.

Collaboration with Division of Biostatistics and Epidemiology

Collaborating Faculty: Altaye, M

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

Collaboration with Health Policy and Clinical Effectiveness

Collaborating Faculty: Donovan, EF

Dr. Robert Ammerman has been working with Dr. Edward Donovan from Health Policy and Clinical Effectiveness. Dr. Donovan is a co-investigator in ongoing research efforts in Every Child Succeeds examining infant mortality and related clinical issues.

Collaboration with Division of Child Psychiatry

Collaborating Faculty: 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.

Collaboration with Center for Health Care Quality

Collaborating Faculty: Margolis, P

Dr. Peter Margolis has been collaborating with Dr. Robert Ammerman by providing consultation and support for the Quality Improvement program in Every Child Succeeds.

Collaboration with Division of Pulmonary Medicine; Division of Pediatric Otolaryngology

Collaborating Faculty: 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.

Collaboration with Department of Radiology; Neurology Division

Collaborating Faculty: 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.

Collaboration with Division of Rheumatology; Department of Radiology

Collaborating Faculty: 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.

Collaboration with Division of Cardiology; OT/Patient Services

Collaborating Faculty: 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.

Collaboration with Division of Pulmonary Medicine; Division of Pediatric Otolaryngology; Division of Cardiology

Collaborating Faculty: 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.

Collaboration with Neurology Division; Division of Pulmonary Medicine

Collaborating Faculty: 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

Collaboration with Division of Pulmonary Medicine; Division of Cardiology

Collaborating Faculty: 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.

Collaboration with Division of General and Community Pediatrics

Collaborating Faculty: Yolton, K

Dr. Dean Beebe has been working with Dr. Yolton on a longitudinal NIH-funded research project that investigates the effects of environmental factors on child development from infancy through 36 months. The goal of the collaboration will be to examine the interrelationship between these environmental conditions, sleep, and neurobehavioral development over time. Collaboration with Division of Physical Medicine and Rehabilitation

Collaborating Faculty: Wade, S

Dr. Dean Beebe has been working with Dr. Shari Wade to convert integrated sleep measures into an ongoing, NIH-funded longitudinal study of outcome following traumatic brain injury (TBI) in preschool children. The goals of this collaboration include examining the impact of TBI on sleep over time, as well as whether sleep predicts neurobehavioral recovery after TBI.

Collaboration with Division of Developmental and Behavioral Pediatrics

Collaborating Faculty: Gilman, RC

Dr. Dean Beebe has been working with Dr. Richard Gilman and two others from the Division of Developmental and Behavioral Pediatrics. Dr. Beebe oversees the sleep assessment aspects of Dr. Gilman's pilot study of the impact of improved sleep on the behaviors of children with ADHD.

Collaboration with Division of Gastroenterology, Hepatology, & Nutrition

Collaborating Faculty: Heubi, JE

Through the GCRC Behavioral Core, Dr. Dean Beebe is involved with Dr. Heubi in the CLiC study, which examines longitudinal outcomes in children with intrahepatic cholestasis.

Collaboration with Division of Nephrology

Collaborating Faculty: Strife, CF
Through the GCRC Behavioral Core, Dr. Dean Beebe is involved with Dr. Strife's Chronic Kidney Disease (CKID) study, examining the causes and consequences of chronic kidney disease in children.

Collaboration with Division of Gastroenterology, Hepatology, and Nutrition

Collaborating Faculty: Bucuvalas, JC

Through the GCRC Benavioral Core, Dr. Dean Beebe is involved in Dr. John Bucuvalas' Biliary Atresia Research Consortium (BARC) study, examining the causes and consequences of biliary atresia in children.

Collaboration with Division of Gastroenterology, Hepatology, and Nutrition

Collaborating Faculty: Bucuvalas, Jo

Through the GCRC Behavioral Core, Dr. Dean Beebe is involved in Dr. John Bucuvalas' Functional Outcomes in Pediatric Liver Transplantation (FOG) study.

Collaboration with Neurology Division

Collaborating Faculty: Glauser, TA

Through the GCRC Behavioral Core, Dr. Dean Beebe is involved in Dr. Tracy Glauser's Childhood Absence Epilepsy (CAE) study examining the impact of different medication regimens on children with new onset absence epilepsy.

Collaboration with Division of Pulmonary Medicine

Collaborating Faculty: 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.

Collaboration with Division of Hematology/Oncology

Collaborating Faculty: Kalinyak, k

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.

Collaboration with Division of Physical Medicine and Rehabilitation

Collaborating Faculty: 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.

Collaboration with Division of Hematology/Oncology

Collaborating Faculty: 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.

Collaboration with Division of Emergency Medicine

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

Collaboration with Division of Rheumatology

Collaborating Faculty: 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.

Collaboration with Division of Endocrinology

Collaborating Faculty: Dolan, LM

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

Collaboration with Division of Clinical Pharmacology

Collaborating Faculty: 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.

Collaboration with Division of Hematology/Oncology

Collaborating Faculty: 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.

Collaboration with Division of Pulmonary Medicine

Collaborating Faculty: Seid, M

Dr. Dennis Drotar has been working with Dr. Michael Seid on an R21: cell phone intervention to promote treatment adherence in adolescents with asthma.

Collaboration with Division of Pulmonary Medicine

Collaborating Faculty: 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.

Collaboration with Division of Adolescent Medicine

Collaborating Faculty: 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.

Collaboration with Division of Allergy/Immunology

Collaborating Faculty: Hershey, GK

Dr. Dennis Drotar has been working with Dr. Neeru Hershey on data analysis and a manuscript concerning the genetics of health-related quality of life in pediatric asthma.

Collaboration with Division of Gastroenterology, Hepatology, & Nutrition/Liver Transplantation

Collaborating Faculty: 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.

Collaboration with Division of Rheumatology

Collaborating Faculty: Brunner, HI

Dr. Dennis Drotar has been working with Dr. Brunner on a health outcomes grant to study the efficacy of text messaging and motivational interviewing on adherence in adolescents with lupus.

Collaboration with Division of Health Policy and Clinical Effectiveness

Collaborating Faculty: Margolis, P; Simpson, L

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

Collaboration with Division of Cardiology

Collaborating Faculty: 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.

Collaboration with Division of Biostatistics and Epidemiology

Collaborating Faculty: Ittenback, RF; Cassedy, A

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

Collaboration with Division of Pediatric Urology

Collaborating Faculty: Reddy, P

Dr. Dennis Drotar is working with Dr. Pramod Reddy on a study of treatment adherence in patients with urological disease.

Collaboration with Division of Cardiology

Collaborating Faculty: 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.

Collaboration with Division of Health Policy and Clinical Effectiveness

Collaborating Faculty: Simpson, L; Fairbrother, G; Carle, A

Dr. Dennis Drotar is working with Drs. Lisa Simpson, Gerry Fairbrother, and Adam Carle on a U18 proposal on pediatric quality measurement and with Dr. Carle on a study of the measurement of fathers' involvement in diabetes management. Collaboration with Division of General and Community Pediatrics

Collaborating Faculty: 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 K22 award.

Collaboration with Division of Developmental and Behavioral Pediatrics

Collaborating Faculty: Froehlich, TE

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

Collaboration with Division of Developmental and Behavioral Pediatrics

Collaborating Faculty: 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.

Collaboration with Division of General and Community Pediatrics

Collaborating Faculty: Brinkman, WB

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

**Collaboration with Division of General and Community Pediatrics** 

Collaborating Faculty: Lichtenstein,

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

Collaboration with Division of Child Psychiatry

Collaborating Faculty: Delgado, SV

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

Collaboration with Division of Child Psychiatry

Collaborating Faculty: Kowatch, RA

Dr. Jeff Epstein and one of his post-doctoral fellows have been working with Dr. Robert Kowatch on a project examining emotion dysregulation in children with ADHD and bipolar disorder.

Collaboration with Division of Pediatric Urology

Collaborating Faculty: Reddy, P

Dr. Epstein worked with Dr. Reddy to prepare a grant submission examining the relationship between attention deficit hyperactivity disorder (ADHD) and lower urinary tract symptoms.

Collaboration with Division of Gastroenterology, Hepatology, & Nutrition

Collaborating Faculty: 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.

Collaboration with Division of Allergy and Immunology

Collaborating Faculty: 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).

Collaboration with Health Policy and Clinical Effectiveness

Collaborating Faculty: 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.

Collaboration with Division of Endocrinology

Collaborating Faculty: 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.

Collaboration with Division of Rheumatology

Collaborating Faculty: 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 collaborator with Dr. Esi Morgan-DeWitt on a project focused on assessment of patient-related outcomes in pediatric pain, rheumatology and rehabilitation. Dr. Kashikar-Zuck also serves as one of the faculty mentors on the Pediatric Rheumatology T32 training grant. Collaboration with of Pain Management, Department of Anesthesia

Collaborating Faculty: 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 of a measure of adolescent pain behavior and assessment of functional outcomes in pediatric chronic pain through the multidisciplinary pain program.

Collaboration with Neurology Division

Collaborating Faculty: 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 validation of a side effects questionnaire, examining quality of life for patients with seizures, and pharmocokinetic modeling of antiepileptic

Collaboration with Department of Surgery

Collaborating Faculty: 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.

Collaboration with Division of Pulmonary Medicine

Collaborating Faculty: Acton, JD; Wooldridge, Jamie

Dr. Avani Modi has been working with Dr. James Acton and Dr. Jamie Wooldridge on collaborative studies conducted in the area of CF that involve the examining of psychosocial issues that face children with CF and their caregivers. These studies have focused on examining anxiety and depressive symptoms, as well as health-related quality of life in patients with CF and

Collaboration with Division of Adolescent Medicine

Collaborating Faculty: Dorn, L

Dr. Jennie Noll is a coinvestigator 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.

Collaboration with BioMedical Informatics (BMI)

Collaborating Faculty: 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. Collaboration with Division of Pulmonary Medicine and Center for Health Care\Quality

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

Collaboration with Division of Pulmonary Medicine; Center for Health Care Quality; Health Policy and Clinical **Effectiveness** 

Collaborating Faculty: Seid, M; Kercsmar, C; McDowell, K; Carle, A
In collaboration with Dr. Seid, Dr. Kercsmar, Dr. McDowell, and Dr. Carle, Dr. Opipari-Arrigan is the PI on a Place Outcomes Award to investigate improving asthma adherence and outcomes via physician behaviors during the clinical encounter. Collaboration with Division of Nephrology

Collaborating Faculty: 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.

Collaboration with Division of Nephrology

Collaborating Faculty: 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.

Collaboration with Division of Nephrology

Collaborating Faculty: 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.

Collaboration with Division of Hematology/Oncology

Collaborating Faculty: Davies, SM

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

Collaboration with Division of Hematology/Oncology

Collaborating Faculty: 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.

Collaboration with Developmental and Behavioral Pediatrics

Collaborating Faculty: 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 Menatal Health Services Administration (SAMHSA) grant.

Collaboration with The Headache Center, Neurology Division

Collaborating Faculty: Hershey, AD; Kabbouche, MA
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.

Collaboration with Diabetes Center, Division of Endocrinology

Collaborating Faculty: 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 University of Michigan and focuses on dietary adherence and diabetes outcomes in young children with type 1 diabetes. Collaboration with Cystic Fibrosis Center, Division of Pulmonary Medicine

Collaborating Faculty: Acton, JD; Wooldridge, JL

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. Collaboration with Department of Radiology

#### Collaborating Faculty: 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.

Collaboration with Division of Pulmonary Medicine

Collaborating Faculty: Acton, J; Wooldridge, J; Amin, R
Dr. Stephanie Spear collaborates with Drs. Acton, Wooldridge, and Amin from the Division of Pulmonary Medicine on ongoing behavior-nutrition research projects and clinical care.

Collaboration with Division of Health Policy and Clinical Effectiveness;

#### **Collaborating Faculty: Lannon, C; Simpson,**

Dr. Jessica Valenzuela has been collaborating with Drs. Lannon and Simpson, as well as other colleagues around the hospital, in the Healthy Kids Ohio learning collaborative. Dr. Valenzuela provides consultation, training, and support related to culturally competent care. The initiative is aimed at working with providers to improve the response to pediatric obesity in local primary care systems.

Collaboration with Division of Health Policy and Clinical Effectiveness

#### Collaborating Faculty: Seid. M

Dr. Jessica Valenzuela has collaborated with Dr. Seid on a manuscript examining barriers to care in diverse youth with diabetes and cardiovascular risk factors. This work is part of a large, CDC funded, multi-center study of diabetes in children

Collaboration with Division of Health Policy and Clinical Effectiveness

#### Collaborating Faculty: Fairbrother, G

Dr. Jessica Valenzuela has been assisting Dr. Fairbrother in a study examining the effects of the economic downturn on communities and their access to health benefits. She has provided consultation and support related to inclusion of Latino families in this assessment.

Collaboration with The Heart Institute, Division of Cardiology

#### Collaborating Faculty: Siegel, R

Dr. Jessica Valenzuela has been working closely with Dr. Bob Siegel and collaborators in the Division of General and Community Pediatrics on several grassroots practice-based research initiatives within the Cincinnati Pediatric Research Group (CPRG), including a study with community pediatrician Camille Graham, MD, FAAP examining disparities in flu vaccination.

Collaboration with Division of General and Community Pediatrics

#### Collaborating Faculty: Vaughn, L

Dr. Jessica Valenzuela, Lori Crosby, and Monica Mitchell collaborated with Dr. Lisa Vaughn to conduct a pilot study of Photovoice methodology examining the experience of youth with sickle cell disease. The youth held an exhibit with their work, and themes will be presented at the 2010 Annual Sickle Cell Research & Education Day.

Collaboration with Divison of Physical Medicine and Rehabilitation

#### Collaborating Faculty: 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.

Collaboration with Division of Neurosurgery; Critical Care Medicine

#### Collaborating Faculty: 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.

Collaboration with Critical Care; Emergency Medicine; Neurology

Collaborating Faculty: 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.

#### Faculty Members

#### Lori J. Stark, PhD, 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, PhD, 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, PhD, Associate Professor Clinical

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

#### Kelly Byars, PhD, Associate Professor Clinical

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

#### Sandra Cortina. PhD. Assistant Professor Clinical

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

#### Peggy A. Crawford, PhD, Assistant Professor Clinical

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

Lori Crosby, PsyD, Associate Professor Clinical; Director, O'Grady Residency Program in Psychology

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

#### Dennis Drotar, PhD, Professor; Director, Center for the Promotion of Treatment Adherence

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

#### Jeffrey N. Epstein, PhD, Associate 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, PhD, Assistant Professor Clinical; Director, Consultation Liaison Services

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

#### Kevin Hommel, PhD, Research Assistant Professor

Research Interests: Improving adherence to treatment regimens in pediatric inflammatory bowel disease, eosinophil and associated gastrointestinal disorders

#### Korey Hood, PhD, Research Assistant 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, PhD, Associate Professor; Training Director, Psychology Postdoctoral Fellowship Program

Research Interests: Psychosocial issues and behavioral treatment of pediatric chronic pain

#### Joshua Langberg, PhD, Research Assistant Professor

Research Interests: Development of effective treatments for adolescents with ADHD

#### Brenna LeJeune, PhD, Assistant Professor Clinical

Research Interests: Understanding neurobehavioral outcomes following pediatric traumatic brain injury, childhood cancers, and their clinical interventions

#### Richard Loren, PhD, Assistant Professor Clinical

Research Interests: Dissemination of effective treatments for ADHD

# **Anne Lynch-Jordan, PhD,** Assistant Professor Clinical; *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.

#### Monica J. Mitchell, PhD, 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, PhD, Research 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, PhD, Associate Professor; Director, Data Core

Research Interests: Understanding long-term bio-psycho-social sequelae of childhood abuse

# Marsha Nortz, PhD, Assistant Professor Clinical; *Director, Postdoctoral Residency in Pediatric Neuropsychology*Research Interests: Understanding neurobehavioral outcomes following childhood cancer, pediatric traumatic brain injury, and their clinical interventions

#### Lisa Opipari-Arrigan, PhD, Adjunct Associate Professor

Research Interests: Improving health outcomes and quality of life for pediatric patients with chronic illnesses

#### Ahna Pai, PhD, Research Assistant Professor

Research Interests: Understanding and improving adherence to transplant regimens including solid organ, stem cell and bone marrow

#### Erica Pearl, PsyD, Instructor Clinical

Research Interests: Developing and disseminating evidence-based interventions for children exposed to violence

#### Carrie Piazza-Waggoner, PhD, Assistant Professor Clinical

Research Interests: Understanding the impact of family functioning and chronic illness outcomes

# **Scott Powers, PhD,** Professor; Director of Clinical and Translational Research; Director, Center for Child Behavior and Nutrition Research and Training; Co-Director, The Headache Center

Research Interests: Two primary foci, Child Behavior and Nutrition and Pediatric Pain

#### Joseph Rausch, PhD, Research Assistant Professor

Research Interests: Elucidating the short- and long-term dynamic interactions between human behavior and health outcomes

#### Douglas Ris, PhD, Professor; Director, Neuropsychology Program

Research Interests: Investigating the neurobehavioral outcomes of children treated for brain tumors and those exposed to lead

#### Helmut Roehrig, PhD, Assistant Professor Clinical

Research Interests: Pediatric obesity determinants and treatment, adolescent pregnancy after bariatric surgery

Patricia Ryan, PhD, Adjunct Assistant Professor

Research Interests: Understanding radiation late-effects in treatment for pediatric brain tumors

Janet R. Schultz, PhD, Adjunct Associate Professor

Nicolay Walz, PhD, Assistant Professor Clinical

Research Interests: Undertanding and improving child and family outcomes following traumatic brain injury

Meg Zeller, PhD, 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

Measurement of treatment adherence, research bioethics, and mixed methods studies, particularly as they relate to study and design-related issues

#### Clinical Staff Members

- o James Brewer, EdD
- Joanne Carey, PhD
- o Sanford Chertock, PhD
- Jennifer Creedeon, PhD
- Jessica Cyran, PhD
- Linda Endres, PhD
- William Hansen, PhD
- Wendi Lopez, PsyD
- Jessica McClure, PsyD
- · Lynne Merk, PhD
- Ann Moser, PhD
- James Myers, PhD
- Robert Nestheide, PhD
- o Irina Parkins, PhD
- Tara Proano-Raps, PsyD
- o Angela Roddenberry, PhD
- William Sirbu, PhD
- o Beverly Smolyansky, PhD

#### Trainees

- Stacy Flowers, PhD, PL-1, Spaulding University, Louisville, Kentucky
- o Michele Herzer, PhD, PL-1, Rosalind Franklin University, North Chicago, Illinois
- · Lisa Ingerski, PhD, PL-1, University of Florida, Gainesville, Florida
- o Natalie Kelly, PhD, PL-1, IUPUI, Indianapolis, Indiana
- o Jennifer Potter, PhD, PL-2, University of Cincinnati
- o Megan Ratcliff, PhD, PL-1, University of Georgia, Athens, Georgia
- Paul Rosen, PhD, PL-1, University of Kentucky, Lexington, Kentucky
- o Chad Shenk, PhD, PL-2, University of Nevada-Reno
- o Shalonda Slater, PhD, PL-2, University of Florida
- Stephanie Spear, PhD, PL-2, University of Nevada-Reno
- Jessica Valenzuela, PhD, PL-2, University of Miami
- · Laura Williams, PhD, PL-2, University of Florida

#### Significant Accomplishments

**Developing best practices** 

Our Division took several steps this year to study, develop and disseminate best practices for the treatment of Attention Deficit Hyperactivity Disorder (ADHD), pain management and Obsessive Compulsive Disorder (OCD).

Center completes 6-year ADHD project

The Center for Attention Deficit Hyperactivity Disorder, a multidisciplinary center hosted by our Division, completed a sixyear project funded by the Cincinnati Children's Patient Innovation Fund. The project trained 200 pediatricians to provide evidence-based care for children ages 6-12 with ADHD. Data from the project showing improvements in care practices and patient outcomes were published in Archives of Pediatrics and Adolescent Medicine.

The center's director Jeff Epstein, PhD, received two NIH awards to further investigate the effectiveness of disseminating this model of care. Epstein developed the ADHD web portal, which allows pediatricians to collect ADHD assessments from parents and teachers online, and provides sophisticated algorithms for scoring assessments and diagnosing the disorder. The portal also allows pediatricians to monitor and titrate medication in real time. This year, the Center began marketing the portal to pediatricians nationwide.

#### Improved technology

The division also uses technology to improve outcomes in pain management and obsessive compulsive disorder. After moving to a system of electronic medical records for our patients earlier this year, we asked patients to enter their outcome data directly into their medical records. This innovation resulted in patient outcomes being collected at 100 percent of visits. Measuring these outcomes allows our psychologists to more effectively deliver evidence-based, individualized care. The system also allows the division to identify and better treat underserved segments of the patient population.

#### **Division Publications**

National Institutes of Health

National Institutes of Health

K23 DK 073340

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### Grants, Contracts, and Industry Agreements

	Aillidai L	Direct / Project Period Direct		
Beebe, D				
Effects of Adolescent Sleep Restriction on Neural and Neurobehavioral Functioning National Institutes of Health				
R01 HL 092149	09/01/09 - 07/31/13	\$347,001 / \$1,264,29		
		, , , , , , , , , , , , , , , , , , ,		
Drotar, D				
Self-Management of Type 1 Diabeth National Institutes of Health	etes During Adolescence			
R01 DK 069486	08/01/07 - 07/31/11	\$427,066 / \$1,872,33		
Self-Management of Type 1 Diabe		ψ .=.,σσσ . ψ .,σ. =,σ.		
National Institutes of Health	ties builing Adolescence			
R01 DK 069486	07/17/09 - 06/30/11	\$19,500 / \$19,5		
Promoting Treatment Adherence i	n Adolescent Leukemia			
National Institutes of Health				
R01 CA 119162	09/28/07 - 07/31/13	\$90,274 / \$2,941,60		
R01 MH 074770	06/01/06 - 03/31/11			
	gnitive Training Program for Children witl			
National Institutes of Health		n ADHD		
	gnitive Training Program for Children with	n ADHD		
National Institutes of Health R21 MH 085842 Gragert, M	04/01/09 - 03/31/11	n ADHD		
National Institutes of Health R21 MH 085842  Gragert, M  Neurobehavioral Late-Effects in P	04/01/09 - 03/31/11 Pediatric Brain Tumors	n ADHD		
National Institutes of Health R21 MH 085842  Gragert, M  Neurobehavioral Late-Effects in P Baylor College of Medicine (Nationa	04/01/09 - 03/31/11  Pediatric Brain Tumors Il Institutes of Health)	\$122,279 / \$272,0°		
National Institutes of Health R21 MH 085842  Gragert, M  Neurobehavioral Late-Effects in P	04/01/09 - 03/31/11 Pediatric Brain Tumors	\$218,475 / \$880,42 1 ADHD \$122,279 / \$272,01 \$67,020 / \$146,93		
National Institutes of Health R21 MH 085842  Gragert, M  Neurobehavioral Late-Effects in P Baylor College of Medicine (Nationa R01 CA 112182	04/01/09 - 03/31/11  Pediatric Brain Tumors Il Institutes of Health)	\$122,279 / \$272,0		
National Institutes of Health R21 MH 085842  Gragert, M  Neurobehavioral Late-Effects in P Baylor College of Medicine (Nationa R01 CA 112182  Hommel, K  Behavioral Treatment of Nonadhe	04/01/09 - 03/31/11  Pediatric Brain Tumors Il Institutes of Health)	\$122,279 / \$272,0 \$67,020 / \$146,93		
National Institutes of Health R21 MH 085842  Gragert, M  Neurobehavioral Late-Effects in P Baylor College of Medicine (Nationa R01 CA 112182  Hommel, K  Behavioral Treatment of Nonadhe National Institutes of Health	04/01/09 - 03/31/11  Pediatric Brain Tumors I Institutes of Health) 06/01/09 - 05/31/11  rence in Pediatric Inflammatory Bowel Dis	\$122,279 / \$272,0° \$67,020 / \$146,93 sease		
National Institutes of Health R21 MH 085842  Gragert, M  Neurobehavioral Late-Effects in P Baylor College of Medicine (National R01 CA 112182  Hommel, K  Behavioral Treatment of Nonadhe National Institutes of Health K23 DK 079037	04/01/09 - 03/31/11  Pediatric Brain Tumors Il Institutes of Health) 06/01/09 - 05/31/11  Pence in Pediatric Inflammatory Bowel Dis 01/01/08 - 04/30/12	\$122,279 / \$272,00 \$67,020 / \$146,93 sease		
National Institutes of Health R21 MH 085842  Gragert, M  Neurobehavioral Late-Effects in P Baylor College of Medicine (Nationa R01 CA 112182  Hommel, K  Behavioral Treatment of Nonadhe National Institutes of Health K23 DK 079037  Bone Health in Pediatric Crohn Di	04/01/09 - 03/31/11  Pediatric Brain Tumors Il Institutes of Health) 06/01/09 - 05/31/11  rence in Pediatric Inflammatory Bowel Dis 01/01/08 - 04/30/12	\$122,279 / \$272,0° \$67,020 / \$146,93 sease		
National Institutes of Health R21 MH 085842  Gragert, M  Neurobehavioral Late-Effects in P Baylor College of Medicine (Nationa R01 CA 112182  Hommel, K  Behavioral Treatment of Nonadhe National Institutes of Health K23 DK 079037	04/01/09 - 03/31/11  Pediatric Brain Tumors Il Institutes of Health) 06/01/09 - 05/31/11  rence in Pediatric Inflammatory Bowel Dis 01/01/08 - 04/30/12	\$122,279 / \$272,01 \$67,020 / \$146,93		

08/01/07 - 07/31/11

Family-based, Psychosocial Intervention for Depressed Youth with Type 1 Diabetes

\$126,626 / \$408,437

R03 DK 081711	04/01/09 - 02/28/11	\$49.500 / \$99.500
NU3 DK 001/11	0 <del>4</del> /01/09 - 02/20/11	D49.000 / D99.000

R03 DK 081711	04/01/09 - 02/28/11	\$49,500 / \$99,500
Kashikar-Zuck, S		
Longitudinal Determination of Outcome National Institutes of Health	es of Adolescents with Fibromyalgia	
R01 AR 054842	08/01/09 - 07/31/14	\$276,748 / \$1,423,769
Behavioral Interventions and Long Ter National Institutes of Health	m Outcomes in Juvenile Fibromyalgia Syndrome	
K24 AR 056687	08/01/09 - 07/31/14	\$96,007 / \$517,355
Langberg, J		
Organizational Skills Interventions for US Department of Education		
R305A090305	07/01/09 - 06/30/12	\$145,757 / \$493,613
National Institutes of Health	reatment Approaches for ADHD Adolescents	
R01 MH 082865	08/01/09 - 06/30/14	\$225,000 / \$1,125,000
Mitchell, M		
Sister Circles for Professional African Kent State University (National Institutes	of Health)	
R21 MH 076722	03/01/08 - 06/30/10	\$26,402 / \$57,606
The Ohio State University Center for C Ohio State University (National Institutes		
UL1 RR 025755	09/17/09 - 09/16/11	\$31,364 / \$68,702
Cincinnati Center for Clinical & Transla	ational Sciences and Training	. , . ,
University of Cincinnati (National Institute	s of Health)	
UL1 RR 026314	04/03/09 - 03/31/14	\$40,887 / \$89,098
Modi, A		
	tervention in Children with New-Onset Epilepsy	
National Institutes of Health K23 HD 057333	02/15/08 - 01/31/13	\$119,028 / \$587,296
NoII, J		
Preventing Teen Pregnancy National Institutes of Health		
R01 HD 052533	03/10/07 - 02/29/12	\$336,646 / \$1,666,627
Preventing Teen Pregnancy		
National Institutes of Health R01 HD 052533	06/01/09 - 09/30/10	\$5,000 / \$5,000
Adult Neurobehavioral Late Effects of		φ3,000 / φ3,000
Baylor College of Medicine (National Insti		
R01 CA 132899	06/01/09 - 04/30/14	\$20,897 / \$20,897
Powers, S		
Behavioral & Nutrition TX to Help CF F National Institutes of Health	Preschoolers Grow	
R01 DK 054915	07/01/05 - 07/31/10	\$418,173 / \$2,187,565
Behavioral Treatment for Dietary Adhe National Institutes of Health	rence in Children	
K24 DK 059973	07/01/06 - 06/30/11	\$159,061 / \$778,314
Drug & Non-Drug Treatment of Pediatr National Institutes of Health	ric Chronic Headache	
R01 NS 050536	07/01/06 - 06/30/11	\$264,028 / \$1,232,223
Drug & Non-Drug Treatment of Pediatr	ic Chronic Headache	
National Institutes of Health R01 NS 050536	09/30/09 - 08/31/10	\$42,600 / \$42,600
Research Training in Child Behavior a		ψ <del>τ</del> ∠,000 / ψ <del>1</del> ∠,000
National Institutes of Health	TAGENON	
T32 DK 063929	07/01/08 - 06/30/13	\$122,541 / \$998,059

<u></u>		Total \$4,996,574
	Current Year Direct Receipts	\$89,342
Epstein, J Eli Lily and Company		\$ 89,34
dustry Contracts	Current Year Direct	\$4,90 <i>1</i> ,23 <i>2</i>
	Current Year Direct	\$4,907,232
Adolescent Bariatrics: Controlled Longitu National Institutes of Health R01 DK 080020	udinal Study of Psychosocial Development 01/10/10 - 12/31/10	\$53,761 / \$53,76
University of Pennsylvania (National Institute R01 DK 080783	es of Health) 06/01/08 - 04/30/13	\$34,165 / \$170,93
	olescents who Undergo Bariatric Surgery	Ψ-20,502 / Ψ2,122,10
	udinal Study of Psychosocial Development	\$423,562 / \$2,122,10
Zeller, M		
Walz, N Social Competence With Peers Following National Institutes of Health R03 HD 055218	g Early Childhood Traumatic Brain Injury 08/01/08 - 06/30/11	\$50,000 / \$100,00
	01/01/10 - 12/31/10	\$165,673 / \$165,67
Web-Based Behavior Treatment for Weig Cystic Fibrosis Foundation Therapeutics, Inc.		
Behavioral Rx & Nutrition in Pediatric Ch National Institutes of Health K24 DK 059492	09/15/09 - 08/31/11	\$50,000 / \$50,00
Behavioral Rx & Nutrition in Pediatric Ch National Institutes of Health K24 DK 059492	09/26/06 - 08/31/11	\$164,152 / \$820,76
Stark, L		
R21 NR 020857	06/01/08 - 05/31/11	\$41,449 / \$63,40
University of Rochester (National Institutes		<b>** *** *** *** ** ** ** </b>