

## 2015 Research Annual Report

## **Mayerson Center for Safe and Healthy** Children

RESEARCH AND TRAINING DETAILS



Click to view members

Faculty	3
Joint Appointment Faculty	9
Research Students	1
Support Personnel	7
Direct Annual Grant Support	\$415,593
Peer Reviewed Publications	4
CLINICAL ACTIVITIES AND TRAINING	
Clinical Staff	9
Clinical Fellows	2
Other Students	17
Inpatient Encounters	70
Outpatient Encounters	1,949

## **Research Highlights**

#### Diagnosis of Child Abuse

The Child Abuse Team at the Mayerson Center treats more than 2,000 children annually for whom abuse is suspected. This accredited Child Advocacy Center provides forensic interviewing, physical examination, and trauma-focused mental health therapies, and collaborates with community partners in the investigation, treatment, and prevention of childhood adversity throughout the Greater Cincinnati region. The Mayerson Center is striving to improve the diagnosis of child abuse by performing research to identify factors that differentiate abusive injuries from accidental injuries and to create clinical decision rules to standardize the assessment of children who present with a bruise or skull fracture. The Mayerson Center is also collaborating with the Ohio Children's Hospital Association hospitals on a quality improvement project to better identify "sentinel injuries" - injuries in infants under 6 months of age, such as bruises, cuts, or fractures that are highly suspect of physical abuse – and intervene early in order to prevent recurrent child abuse.

#### Epidemiology and Prevention of Childhood Adversity

The Mayerson Center is performing research to evaluate the prevalence of adverse childhood experiences as well as to determine their impact on child health and development. Specifically, studies are assessing whether and how the adverse childhood experiences of parents impact the health and development of young children before the age of 2 and whether and how the adverse experiences of children with attention deficit hyperactivity disorder impact treatment response and educational, legal, and health outcomes. The Mayerson Center is also spearheading the implementation of the Safe Environment for Every Kid (SEEK) program in three community primary care practices. The SEEK parent screening questionnaire is used to identify risk factors for child maltreatment, including food insecurity, depression, stress, substance abuse, harsh discipline, and intimate partner violence, in families with children 0 to 5 years of age at their well-child visit. For families who screen positive, the health professionals perform motivational interviewing to assess for problems, to educate and provide resources, and to potentially refer to community resources or a social worker if needed in order to support the parents and reduce risk to the child's health and safety.

#### Developmental and Mental Health Outcomes of Childhood Adversity

Furthermore, research is being conducted by the Mayerson Center to evaluate the long-term developmental outcomes of children who have suffered an abusive head injury as well as the mental health and behavioral outcomes of children who are treated with the Child and Family Traumatic Stress Intervention following a traumatic experience.

## **Significant Publications**

Antonini TN, Raj SP, Oberjohn KS, Cassedy A, **Makoroff KL**, Fouladi M, Wade SL. A pilot randomized trial of an online parenting skills program for pediatric traumatic brain injury: Improvements in parenting and child behavior. *Behav Ther.* 2014 Jul;45(4):455-68.

Mast JE, Antonini TN, Raj SP, Oberjohn KS, Cassedy A, **Makoroff KL**, Wade SL. Web-based parenting skills to reduce behavior problems following abusive head trauma: A pilot study. *Child Abuse Negl.* 2014 Sep;38(9):1487-95.

These two publications demonstrate the preliminary effectiveness of a web-based parenting skills intervention on improving positive parenting behaviors and reducing child behavioral problems in families with young children who experienced a traumatic brain injury. The intervention was also effective for the families of children with abusive head trauma and was most effective for families from lower socioeconomic backgrounds.

### **Division Publications**

- Antonini TN, Raj SP, Oberjohn KS, Cassedy A, Makoroff KL, Fouladi M, Wade SL. A pilot randomized trial of an online parenting skills program for pediatric traumatic brain injury: improvements in parenting and child behavior. Behav Ther. 2014; 45:455-68.
- 2. Makoroff K. **Education of Physicians in Residency Training**. In: RM Reece, RF Hanson, J Sargent, eds. *Treatment of Child Abuse: Common Ground for Mental Health, Medical, and Legal Practitioners*. Baltimore, MD: The Johns Hopkins University Press; 2014:284-290.
- 3. Mast JE, Antonini TN, Raj SP, Oberjohn KS, Cassedy A, Makoroff KL, Wade SL. Web-based parenting skills to reduce behavior problems following abusive head trauma: a pilot study. Child Abuse Negl. 2014; 38:1487-95.
- 4. Shapiro R, Farst K, Chervenak C. **Child Abuse**. In: RE Rakel, D Rakel, eds. *Textbook of Family Medicine*. Philadelphia, PA: Elsevier; 2015:468-476.

## Faculty, Staff, and Trainees

#### **Faculty Members**

#### Robert Shapiro, MD, Professor

**Leadership** Division Director, Mayerson Center for Safe & Healthy Children; Program Director, Pediatric Sexual Assault Nurse Examiner (PSANE)

**Research Interests** Diagnosis of child abuse and the epidemiology and prevention of adverse childhood experiences and toxic stress

#### Kathi Makoroff, MD, MEd, Associate Professor

Leadership Medical Director, Mayerson Center for Safe and Healthy Children; Fellowship Director, Child Abuse Pediatrics; Director, Child Abuse Pediatrics Resident/Medical Student Elective; Medical Director, CME; Chair of CME Committee

Research Interests Diagnosis of child abuse and the developmental outcomes of abusive head trauma

#### Mary Greiner, MD, Assistant Professor

Leadership Director, CHECK Foster Care Clinic-within General & Community Pediatrics

**Research Interests** Outcomes of children in foster care including: standardized screening; community collaboration for improving outcomes; infectious disease; mental health interventions and optimizing medical care for transitioning out of foster care.

#### **Joint Appointment Faculty Members**

#### Elena Duma, MD, Assistant Professor (Emergency Medicine)

Research Interests Education and diagnosis of child abuse

#### Erica Messer, PsyD, Assistant Professor (Behavioral Medicine and Clinical Psychology)

Research Interests Effectiveness of Parent Child Interaction Therapy (PCIT), Child Adult Relationship Enhancement (CARE) Training, and Child and Family Traumatic Stress Intervention (CFTSI) for children who have experienced trauma

#### Heather Bensman, PsyD, Assistant Professor (Behavioral Medicine and Clinical Psychology)

Research Interests Effectiveness of Parent Child Interaction Therapy (PCIT), Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), and Child and Family Traumatic Stress Intervention (CFTSI) for children who have experienced trauma

Julie Bemerer, PsyD, Adjunct (Behavioral Medicine and Clinical Psychology)

Research Interests Effectiveness of Parent Child Interaction Therapy (PCIT), Trauma-Focused Cognitive Behavioral Therapy (TF-CBT), and Child and Family Traumatic Stress Intervention (CFTSI) for children who have experienced trauma

#### Maurizio Macaluso, PhD, Professor (Biostatistics and Epidemiology)

**Research Interests** Development and validation of diagnostic tools for assessing child abuse and adverse childhood experiences

#### Ted Folger, PhD, Instructor (Biostatistics and Epidemiology)

Research Interests Epidemiology and transgenerational impact of adverse childhood experiences

#### Amy Cassedy, PhD, Instructor (Biostatistics and Epidemiology)

**Research Interests** Validation of diagnostic tools for evaluating adverse childhood experiences and differentiating abusive and accidental injuries

#### Erna Olafson, PsyD, Associate Professor (Program of Childhood Trauma and Maltreatment)

**Research Interests** Implementation and effectiveness of trauma-informed treatment on reducing the post-traumatic stress symptoms of at-risk youth in schools and the justice system

#### Barbara Boat, PhD, Associate Professor (Childhood Trust)

**Research Interests** Effectiveness of Trauma and Grief Component Therapy for incarcerated youth; associations between animal cruelty and traumatic stress symptoms

#### **Clinical Staff Members**

- Heidi Malott, MSW, LISW-S, Clinical Program Manager
- April Barker-Casey, MSW, LISW-S, Child and Family Traumatic Stress Intervention (CFTSI) Therapist
- Tracy Colliers, MSW, LSW, Post Injury Clinic Coordinator
- Cecilia Freihofer, MSW, LISW, HIV Follow-up Specialist
- Andrea Powers, LISW-S, ACSW, BCD, Darkness to Light/Stewards of Children Facilitator
- Andrea Richey, MSW, LSW, Darkness to Light/Stewards of Children Facilitator
- Mina DeVine, RN-II, Pediatric Sexual Assault Nurse Examiner (PSANE)
- Devin Robinson, RN-II, Pediatric Sexual Assault Nurse Examiner (PSANE)
- Alex Kruthaupt, BS, Social Work Assistant

#### **Trainees**

- Melissa Jimenez, MD, PGY-7, Tulane University
- Kirsten Simonton, MD, PGY-6, Levine Children's Hospital

## **Grants, Contracts, and Industry Agreements**

**Grant and Contract Awards** 

**Annual Direct** 

#### Messer, E

#### **Parent Child Interaction Therapy Training**

Health Resources & Services Administration (Ohio Department of Health)

Olafson, E		
Indiana Department of Child Services TF-CB	T Training Contract	
Indiana Department of Child Services		
	1/1/2014-12/31/2015	\$33,000
The Center for Trauma Recovery and Juven	ile Justice (CTRJJ)	
Substance Abuse & Mental Health Service Adr	ministration (University of Connecticut Health Cen	iter)
U79 SM061273	9/30/2012-9/29/2016	\$140,277
Shapiro, R		
Child Advocacy Training Support		
Crime Victims Assistance Office		
	10/1/2014-9/30/2015	\$3,735
Child Advocacy Center Equipment Support		
Crime Victims Assistance Office		
	10/1/2014-9/30/2015	\$1,430
State Chapter Support to Children's Advoca	cy Centers	
Department of Justice (National Children's Allia	ance)	
	1/1/2012-12/31/2016	\$9,000
Victims of Crime Assistance		
Department of Justice (Crime Victims Assistance	ce Office)	
	10/1/2012-9/30/2017	\$38,087
Child Abuse Prevention and Treatment		
Ohio Department of Jobs and Family Services		
	7/1/2013-6/30/2015	\$106,064
SEEK in Primary Care		
Interact for Health		
	2/24/2015-8/31/2016	\$60,000
	Current Year Direct	\$415,593

# Mayerson Collaborations Drive Insights Into Childhood Adversity



Robert Shapiro, MD

The Mayerson Center for Safe and Healthy Children created a new key collaboration this year with its colleagues in Biostatistics and Epidemiology to co-explore the effects of — and solutions to — childhood adversity.

"As a division, we are most excited about the research focus we have developed and are expanding that revolves around childhood adversity and toxic stress," says Robert Shapiro, MD, Director of the center's Child Abuse Team.

Living in an adverse, unsafe, or unstable environment can lead to the release of stress hormones throughout the body and developing brain of a child. If a child does not have the resources to effectively cope with this stress, the prolonged release of these hormones can have a toxic impact.

This "toxic stress" can cause harmful physiological changes and damage to the regions of the brain essential for memory, learning, and behavior. These changes can alter a child's capacity to learn and reason, to develop healthy attachments and behaviors, and to navigate social relationships.

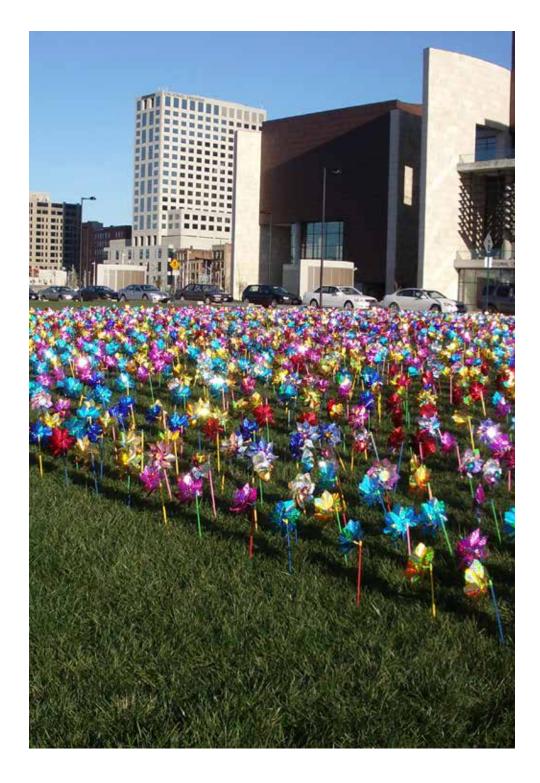
A child may also adopt risky behaviors to help them cope with the stress that may compromise their health. Childhood adversity has been strongly associated with an extensive list of health problems in adulthood.

The Mayerson Center is teaming up with Biostatistics and Epidemiology to design and conduct studies examining the biological processes of how childhood adversity disrupts normal brain development, the impact of parental adverse childhood experiences on child development, and the prevention, detection, and early intervention for adversity in families.

The Mayerson Center has partnered with local pediatricians to begin adversity screening and brief interventions in primary care practices to identify and address social risk factors in families. The Center also has created a new community-wide initiative called Joining Forces for Children to build a public health response system to childhood adversity.

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Pinwheels symbolize healthy and happy childhoods. The Mayerson Center is a leader in drawing attention to child-abuse treatment and prevention, including events such as this display in Cincinnati. Each pinwheel represents a case of reported child abuse in Hamilton County that year.