

# Developmental and Behavioral Pediatrics

## Division Details

### RESEARCH AND TRAINING DETAILS

Faculty	18
Joint Appointment Faculty	1
Research Fellows and Post Docs	2
Total Annual Grant Award Dollars	\$2,439,901
Total Publications	26

### CLINICAL ACTIVITIES AND TRAINING

Staff Physicians	1
Staff Psychologists	15
Clinical Fellows	6
Inpatient Encounters	50
Outpatient Encounters	24,624



Row 1: S Wiley

Row 2: T Froehlich, S Grether, S Weber, P Manning-Courtney, I Riddle

Row 3: J Schumacher, A Esbensen, J Smith, K Kroeger-Geoppinger

Row 4: R Adams, J Anixt

## Research Highlights

### Jennifer Ehrhardt, MD

Dr. Ehrhardt, MD, MPH, has collaborated with faculty within the [Division of Emergency Medicine \(KJ Phelan, MD, MS\)](#), [Division of General and Community Pediatrics \(Yingying Xu, MS, Kimberly Yolton, PhD\)](#) and [Division of Biostatistics and Epidemiology \(Jane Khoury, PhD\)](#) to evaluate injury risk among children enrolled in the Health Outcomes and Measurement of the Environment (HOME) Study using a developmental framework. This framework found a higher risk for medically attended injuries in the home in children with cognitive delays, especially those with normal motor development. This work lays the foundation for further exploring ways to modify injury prevention efforts for children with developmental delays.

### Julia Anixt, MD

Dr. Anixt, MD, has built a research team with faculty members in the [Division of General and Community Pediatrics \(William Brinkman, MD\)](#) and [Division of Biostatistics and Epidemiology \(Jareen Meinzen-Derr, PhD\)](#) to evaluate the effects of Shared Decision Making (SDM) between clinicians and parents of children with Autism Spectrum Disorders (ASD). Dr. Anixt's research has shown that use of SDM to treat challenging behaviors not only better aligns parent's priorities with the treatment plan, but also reduces the level of decisional conflict care givers using shared decision making not only reduces the level of decisional conflict caregivers face around difficult treatment decisions regarding behavioral medications and has a downstream effects of reducing parenting stress. This study has been crucial in strengthening the physician-caregiver experience, as many many children with ASD cannot describe their reactions to or benefits of medications making decisions challenging for families.

### Patty Manning, MD

Dr. Manning-Courtney, MD, is collaborating with the [Division of Psychiatry \(Craig Erickson, MD, Ernest Pedapati, MD\)](#) to allow our clinical systems to substantially contribute to a national research network, [SPARK \(Simons Foundation Powering Autism Research for Knowledge\)](#) which is a national study focusing on genetic and medical data to improve the lives of children with autism spectrum disorder. Furthermore, Dr. Manning and [Dr. Anixt, MD](#), are involved in network work within the [Interactive Autism Network](#) (established at the [Kennedy Krieger Institute](#)) which strives to lead to advancements in understanding and treating autism spectrum disorder.

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## Significant Publications

Austin J, [Manning-Courtney P](#), Johnson ML, Weber R, [Johnson H](#), [Murray D](#), Ratliff-Schaub K, Tadlock AM, Murray, M. [Improving Access to Care at Autism Treatment Centers: A System Analysis Approach](#). *Pediatrics*. 2016 Feb;137 Suppl 2:S149-57.

Access to evaluation for possible autism spectrum disorder (ASD) or other developmental concerns is notoriously challenging. Researchers gained significant improvement in access in two large clinical programs serving children with ASD using quality improvement methodology and employing well described access principles. While demand for these services may be great, through careful system analysis, improvements made will provide children much needed intervention sooner.

Becker SP, [Froehlich TE](#), Epstein JN. [Effects of methylphenidate on sleep functioning in children with attention-deficit/hyperactivity disorder](#). *J Dev Behav Pediatr*. 2016 Jun;37:395-404.

Children with attention-deficit/hyperactivity disorder (ADHD), whether taking ADHD medications or not, experience more sleep problems than their peers. Stimulant medication is the most common treatment for pediatric ADHD, and there has been long-standing concern that stimulant medication use may complicate sleep problems. As a result, some clinicians and families avoid using stimulant medications or increasing stimulant medication doses in children with ADHD who have pre-existing sleep problems. This randomized, double-blind, placebo-controlled trial of 163 stimulant-naïve children with ADHD showed a general association between increased dose of the stimulant medication methylphenidate and increased sleep problems in children with ADHD, particularly for children of lower weight/body mass index. However, a substantial proportion of children with pre-existing sleep difficulties no longer had sleep problems on the highest methylphenidate dose, suggesting that clinicians should not avoid methylphenidate dose titration in the clinical setting solely on the basis of a child's premorbid sleep problems.

Lipstein EA, Lindly OJ, [Anixt JS](#), Britto MT, Zuckerman KE. [Shared Decision Making in the Care of Children with Developmental and Behavioral Disorders](#). *Matern Child Health J*. 2016 Mar;20(3):665-73.

Using data from the National Survey of Children with Special Health Care Needs, this study compared parent perceptions about receipt of Shared Decision Making (SDM) during pediatric medical visits for a physical health condition (asthma) relative to a behavioral condition (Attention Deficit / Hyperactivity Disorder- ADHD).

Parents were less likely to perceive high levels of SDM in the care of their children with more complex developmental behavioral conditions associated with greater diagnostic and treatment complexity as well as greater functional impairments. Compared to parents of children with asthma, those with ADHD had lower odds (0.73) of reporting consistent SDM. Compared to parents of children with ADHD, those with ASD reported even lower odds of consistent SDM (0.59). This study suggests that disease type, complexity, and need for specialty care may present challenges to implementing SDM.

Sutter C, Nishina A., [Adams RE](#). [How you look versus how you feel: Associations between BMI z-score, body dissatisfaction, peer victimization, and self-worth for African American and white adolescents](#). *J Adolesc*. 2015 Aug;43:20-8.

In a diverse sample of 236 youth (ages 10–16 years), body dissatisfaction predicted decreases in self-worth over time even after controlling for BMI z-score. For African American youth, body dissatisfaction directly predicted decreases in self-worth for African American youth and indirectly via peer victimization for white youth. BMI z-scores predicted decreases in self-worth over time only for white adolescents.

Becker SP, Ciesielski HA, Rood JE, [Froehlich TE](#), Garner AA, Tamm L, Epstein JN. [Uncovering a clinical portrait of sluggish cognitive tempo with an evaluation for ADHD: A case report](#). *Clin Child Psychol Psychiatry*. 2016 Jan;21(1):81-94.

There has been long-standing concern that some children with ADHD show a distinct attentional profile that is not captured in the diagnostic criteria for ADHD and is associated with a differential ADHD comorbidity profile and treatment response. This distinct attentional profile, which is characterized by excessive daydreaming as well as slowed behavior and thinking, has been termed “sluggish cognitive tempo” (SCT). Despite the burgeoning scientific literature examining SCT, very little is known about its clinical presentation. This case study provides a clinical description of SCT in a 7-year-old girl, offering a real-life portrait of SCT while also providing an opportunity to qualitatively differentiate between SCT and ADHD, other psychopathologies (e.g., depression, anxiety), and potentially related domains of functioning (e.g., sleep, executive functioning). Preliminary evidence regarding treatment of SCT-related difficulties is also discussed.

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## Division Publications

1. Adams R, Fredstrom B, Peets K, Hodges EV, Bowker JC, Holleb L, Gilman R. **Validating a Measure of Friends' Responses to Self-Disclosure in Adolescent Obese and Public School Samples.** *J Clin Child Adolesc Psychol.* 2016;1-12.
2. Alsaied T, Marino B, Esbensen A, Anixt J, Epstein J, Cnota J. **Does Congenital Heart Disease Affect Neurodevelopmental Outcomes in Children with Down Syndrome?** *Congenit Heart Dis.* 2016; 11:26-33.
3. Andrews E, Ayers K. **Parenting with a Disability: Experiences of Disabled Women.** In: S Miles-Cohen, C Signore, eds. *Eliminating Inequities for Women with Disabilities: An Agenda for Health and Wellness.* Washington DC: APA; 2016.
4. Anixt JS, Vaughn AJ, Powe NR, Lipkin PH. **Adolescent Perceptions of Outgrowing Childhood Attention-Deficit Hyperactivity Disorder: Relationship to Symptoms and Quality of Life.** *J Dev Behav Pediatr.* 2016; 37:196-204.
5. Austin J, Manning-Courtney P, Johnson M, Weber R, Johnson H, Murray D, Ratliff-Schaub K, Tadlock A, Murray M. **Improving Access to Care at Autism Treatment Centers: A System Analysis Approach.** *Pediatrics.* 2016; 137:S149-S57.
6. Beal SJ, Riddle IK, Kichler JC, Duncan A, Houchen A, Casnellie L, Woodward J, Corathers SD. **The Associations of Chronic Condition Type and Individual Characteristics with Transition Readiness.** *Acad Pediatr.* 2016; 16:660-7.
7. Becker S, Ciesielski H, Rood J, Froehlich T, Garner A, Tamm L, Epstein J. **Uncovering a Clinical Portrait of Sluggish Cognitive Tempo within an Evaluation for Attention-Deficit/Hyperactivity Disorder: A Case Study.** *Clin Child Psychol Psychiatry.* 2016; 21:81-94.
8. Becker SP, Froehlich TE, Epstein JN. **Effects of Methylphenidate on Sleep Functioning in Children with Attention-Deficit/Hyperactivity Disorder.** *J Dev Behav Pediatr.* 2016; 37:395-404.
9. Bowker J, Adams R, Bowker M, Fisher C, Spencer S. **Same- and Other-Sex Popularity and Preference During Early Adolescence.** *J Early Adolesc.* 2016; 36:704-22.
10. Burkett K, Morris E, Manning-Courtney P, Anthony J, Shambley-Ebron D. **African American Families on Autism Diagnosis and Treatment: The Influence of Culture.** *J Autism Dev Disord.* 2015; 45:3244-54.
11. Connolly N, Anixt J, Manning P, Ping ILD, Marsolo KA, Bowers K. **Maternal Metabolic Risk Factors for Autism Spectrum Disorder-an Analysis of Electronic Medical Records and Linked Birth Data.** *Autism Res.* 2016; 9:829-37.
12. Downes A, Anixt J, Esbensen A, Wiley S, Meinzen-Derr J. **Psychotropic Medication Use in Children and Adolescents with Down Syndrome.** *J Dev Behav Pediatr.* 2015; 36:613-19.
13. Esbensen A. **Sleep Problems and Associated Comorbidities among Adults with Down Syndrome.** *J Intellect Disabil Res.* 2016; 60:68-79.
14. Esbensen A, Johnson E, Amaral J, Tan C, Macks R. **Differentiating Aging among Adults with Down Syndrome and Comorbid Dementia or Psychopathology.** *Am J Intellect Disabil.* 2016; 121:13-24.

15. Frank K, Esbensen A. **Fine Motor and Self-Care Milestones for Individuals with Down Syndrome Using a Retrospective Chart Review.** *J Intellect Disabil Res.* 2015; 59:719-29.
16. Johnson K, SE W, Meinzen-Derr J. **Cochlear Implantation in Children with Additional Disabilities.** In: L Eisenberg, ed. *Clinical Management of Children with Cochlear Implants.* San Diego CA: Plural Publishing; 2016.
17. Lingren T, Chen P, Bochenek J, Doshi-Velez F, Manning-Courtney P, Bickel J, Wildenger Welchons L, Reinhold J, Bing N, Ni Y, Barbaresi W, Mentch F, Basford M, Denny J, Vazquez L, Perry C, Namjou B, Qiu H, Connolly J, Abrams D, et al. **Electronic Health Record Based Algorithm to Identify Patients with Autism Spectrum Disorder.** *PLoS One.* 2016; 11:e0159621.
18. Lipstein EA, Lindly OJ, Anixt JS, Britto MT, Zuckerman KE. **Shared Decision Making in the Care of Children with Developmental and Behavioral Disorders.** *Matern Child Health J.* 2016; 20:665-73.
19. Minshawi NF, Wink LK, Shaffer R, Plawecki MH, Posey DJ, Liu H, Hurwitz S, McDougale CJ, Swiezy NB, Erickson CA. **A Randomized, Placebo-Controlled Trial of D-Cycloserine for the Enhancement of Social Skills Training in Autism Spectrum Disorders.** *Mol Autism.* 2016; 7:2.
20. Pedapati EV, Gilbert DL, Erickson CA, Horn PS, Shaffer RC, Wink LK, Laue CS, Wu SW. **Abnormal Cortical Plasticity in Youth with Autism Spectrum Disorder: A Transcranial Magnetic Stimulation Case-Control Pilot Study.** *J Child Adolesc Psychopharmacol.* 2016; 26:625-31.
21. Schonfeld DJ, Adams RE, Fredstrom BK, Weissberg RP, Gilman R, Voyce C, Tomlin R, Speese-Linehan D. **Cluster-Randomized Trial Demonstrating Impact on Academic Achievement of Elementary Social-Emotional Learning.** *Sch Psychol Q.* 2015; 30:406-20.
22. Stewart PA, Hyman SL, Schmidt BL, Macklin EA, Reynolds A, Johnson CR, James SJ, Manning-Courtney P. **Dietary Supplementation in Children with Autism Spectrum Disorders: Common, Insufficient, and Excessive.** *J Acad Nutr Diet.* 2015; 115:1237-48.
23. Sutter C, Nishina A, Adams R. **How You Look Versus How You Feel: Associations between Bmi Z-Score, Body Dissatisfaction, Peer Victimization, and Self-Worth for African American and White Adolescents.** *J Adolesc.* 2015; 43:20-28.
24. Wiley S, Parnell L, Belhorn T. **Promoting Early Identification and Intervention for Children Who Are Deaf or Hard of Hearing, Children with Vision Impairment, and Children with Deafblind Conditions.** *J Early Hearing Detect Interv.* 2016; 1:26-33.
25. Wink LK, Adams R, Wang Z, Klaunig JE, Plawecki MH, Posey DJ, McDougale CJ, Erickson CA. **A Randomized Placebo-Controlled Pilot Study of N-Acetylcysteine in Youth with Autism Spectrum Disorder.** *Mol Autism.* 2016; 7:26.
26. Wink LK, Fitzpatrick S, Shaffer R, Melnyk S, Begtrup AH, Fox E, Schaefer TL, Mathieu-Frasier L, Ray B, Lahiri D, Horn PA, Erickson CA. **The Neurobehavioral and Molecular Phenotype of Angelman Syndrome.** *Am J Med Genet A.* 2015; 167A:2623-8.

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## Grants, Contracts, and Industry Agreements

### Annual Grant Award Dollars

Investigator	Title	Sponsor	ID	Dates	Amount
Ryan E Adams, PHD	Peer-victimization of Adolescents with ASD: Filling the Knowledge Gaps to Create Anti-bullying Interventions	Health Resources & Services Admin (The Univ of California, San Francisco)	R40MC28145	11/1/2014 - 8/31/2015	\$33,590
Julia S Anixt, MD	Development of a Grant Proposal for a Randomized Controlled Trial of a Shared	Maternal & Child Health Bureau (Children's Hospital of Philadelphia)	UA3MC20218	9/1/2015 - 8/31/2016	\$20,000

	Decision Making Intervention to Improve Care and Outcomes for Children with Autism				
Amie Duncan	Exploration of the Development and Trajectory of Daily Living Skills in Children and Adolescents with ASD	Maternal & Child Health Bureau (Massachusetts General Hospital)	UA3MC11054	9/1/2015 - 8/31/2016	\$14,150
Anna J Esbensen, PHD	Treatment of Sleep Disturbances in School-age Children with Down Syndrome	National Institutes of Health	R21 HD082307	8/6/2015 - 6/30/2017	\$234,000
Tanya Froehlich, MD	Partnerships that Promote Integrated, Multidisciplinary Training Models and Increase Healthcare Access for the Ohio Medicaid Population	Ohio Department of Medicaid (ODM) (University of Cincinnati)	G161705003	7/1/2015 - 6/30/2017	\$51,271
Tanya Froehlich, MD	Neurobehavioral Effects of Abrupt Methylphenidate Discontinuation	National Institutes of Health	R01MH105425	12/1/2014 - 11/30/2019	\$541,634
Heather Johnson PSYD	ECHO Autism	Health Resources & Services Admin (Massachusetts General Hospital)	UA3MC11054	9/1/2015 - 8/31/2016	\$9,999
Patty Manning, MD	Autism Treatment Network	Autism Speaks Grant Administration	8928	9/1/2014 - 8/31/2017	\$140,000
Patty Manning, MD	Autism Intervention Research Network on Physical Health	Maternal & Child Health Bureau (Massachusetts General Hospital)	UA3MC11054	9/1/2015 - 8/31/2020	\$30,000
Ilka Riddle, PHD	University of Cincinnati University Center for Excellence in Developmental Disabilities	Admin on Development Disabilities (University of Cincinnati)	90DD0696/01	7/1/2012 - 6/30/2017	\$535,880
Ilka Riddle, PHD	Ohio Family to Family Health Information Centers	Health Resources & Services Admin	H84MC28443	6/1/2015 - 5/31/2018	\$143,489
Ilka Riddle, PHD	Improving the Health of Disabilities through State Based Public Health Programs	Ctr for Disease Control and Prevention (Ohio State University)	U59DD000931	7/1/2015 - 6/30/2016	\$52,000
Jennifer D Smith PSYD	Leadership Education in Neurodevelopmental and Other Related Disabilities (LEND)	Health Resources & Services Admin (University of Cincinnati)	5-T73- MC00032-21- 00	7/1/2011 - 6/30/2016	\$629,888
Stephanie M. Weber PSYD	ACT Early Ambassadors: State, Territory, and Organizational	Assoc of Univ Center on Disabilities	Weber, Steph, AUCD	5/1/2016 - 4/30/2018	\$4,000

Liaisons to CDC's "Learn the  
Signs. Act Early."

**Total Annual Grant Award Dollars**

**\$2,439,901**