

## **CURRICULUM VITAE**

### **Eric E. Nelson, Ph.D.**

Principal Investigator and Director Neuroimaging Research  
Center for Bio-Behavioral Health  
The Research Institute at Nationwide Children's Hospital  
Columbus, Ohio

Professor  
Department of Pediatrics  
The Ohio State University College of Medicine  
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#### **CITIZENSHIP AND VISA STATUS**

U.S. Citizen

#### **OFFICE ADDRESS**

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## **EDUCATION**

B.A.	Psychology University of Wisconsin, Madison	1983-1987
Ph.D.	Behavioral Neuroscience & Psychology Bowling Green State University Jaak Panksepp (Advisor)	1989-1995

## **POST-GRADUATE TRAINING**

Postdoctoral Fellowship	Indiana University, Bloomington Developmental Psychobiology Jeffrey Alberts (Advisor)	1995-1998
Postdoctoral Fellowship	University of Wisconsin, Madison Emotions Training Program Ned Kalin/Richard Davidson (Advisors)	1998-2001

## **ACADEMIC APPOINTMENTS**

Principal Investigator III	Center for Biobehavioral Health, Abigail Wexner Research Institute, Nationwide Children's Hospital Columbus, Ohio	2016 -
Professor	Department of Pediatrics College of Medicine, Ohio State University, Columbus, Ohio (Adjunct professor in Psychology)	2016-
Psychologist	Section of Developmental and Affective Neuroscience Intramural Research Program National Institute of Mental Health Bethesda, Maryland	2001-2016

## **SERVICE**

### **ACADEMIC ADMINISTRATIVE RESPONSIBILITIES**

Director	Brain Development and Social Cognition Lab Abigail Wexner Research Institute Nationwide Children's Hospital	2016 -
Director	Neuroimaging Behavior Research Group Abigail Wexner Research Institute Nationwide Children's Hospital	2017 -
Study Section	Intramural Funding Program Nationwide Children's Hospital	2017 -
Steering Committee	Postdoctoral Training Program Center for Biobehavioral Health Center for Injury Prevention	2017 -
Steering Committee	Neuroscience Research Affinity Group Abigail Wexner Research Institute Nationwide Children's Hospital	2019 -
Steering Committee	Diversity and Inclusion Committee Center for Biobehavioral Health Nationwide Children's Hospital Abigail Wexner Research Institute	2020 -
Faculty Member	Diversity and Inclusion Committee Training, Inclusivity and Culture subcommittee	
MRI Research Committee	Division of Radiology Nationwide Children's Hospital	2017-2019
Study Section	Center for Clinical and Translational Science TL1A Study Section	2019

Grant Pre-reviewer OSU School of Health and Rehabilitation Sciences 2022

Doctoral Thesis Outside Member University of Ghent, Belgium, January 2023

## **RESEARCH SUPPORT**

### **ONGOING RESEARCH**

**1. *The Impact of Pubertal Suppression on Neural and Mental Health Trajectories***

R01MH123746 NIMH

Total Award \$3,741,119

7/1/2021- 6/31/2026

Role: Principal Investigator (multisite – mPI (John Strang, Children’s National; Diane Chen, Lurie Children’s))

The goal of this project is to assess the effects of pharmacological suppression of puberty on mental health and development of brain, emotion, and cognitive function in transgender adolescents.

**2. *Neurodevelopmental Mechanisms Underlying the Onset of Depression among At-risk Youth: The Role of Dysregulation in the Negative Valence System***

R01 revision submitted July 2022, pending review

Role: Co-Investigator (Katie Burkhouse PI) –

The goal of this project is to assess neural networks that underlie negative emotion responses in adolescents at risk for depression to identify potential risk biomarkers. Study employs a variety of physiological and brain markers of emotional responding in teens at risk.

**3. *Impact of Pediatric Acquired Demyelination Syndromes on Neurocognitive and Functional Outcomes.***

Intramural Funding Submission December 2022

Role: co-investigator (Hutchinson, Wilson PIs).

The goal of this project is to assess the impact of acquired demyelination syndromes on cognitive and neural development across late childhood and adolescence.

**4. *Social Learning, Vigilance, and Emotion Regulation in Young Children of Depressed Mothers*** new submission planned February 2023

Role: Multiple Principal Investigator (with Xin Feng, OSU Department of Family Studies)

The goal of this project is to assess development of cognitive function and brain response to emotional experiences in 4- year old children of mothers with a history of depression. Study

employs assessment of interactive behavior, autobiographical memory, attention to emotional probes using eyetracking and fNIRS methods.

**5. *Brain Network Integrity, Neurocognitive Functioning, Plasma Metabolites, and their interaction in first-episode psychosis, medication-naïve patients***

Internal Funding (Clinical Scholar Project) Role MPI (Yilanli, Turner).

The goal of this project is to identify markers of functional impairment in youth experiencing first episode psychosis. Study will obtain metabolites from blood and obtain measures of neural integrity using resting state, diffusion tensor imaging and task based functional probes in magnetic resonance imaging. Measures will be obtained twice once during initial presentation and a second time 6-8 months later.

**6. *Effects of Gonadal Hormone Administration on Brain Development and Social-Emotional Behavior in Gender Dysphoric Adolescents* – Internal funding**

Role: Principal Investigator

The goal of this project is to assess the effects of administration of testosterone and estradiol to transgender adolescents on symptoms of anxiety, depression and suicidality.

**7. *Social Outcomes of Adolescents Born Very Preterm* –**

R01 submission June 2022

Resubmission planned June 2023

Role: Multiple Principal Investigator (MPI) (with H.G. Taylor)

The goal of this project is to characterize cognitive and brain development as it relates to social development in adolescents born very preterm.

**8. *Brain Recovery and Neurodevelopment in Young Kids* – (Internal funding)**

R01 submitted October 2020,

Resubmission planned June 2023

Role: Co- Investigator (Yvonne Wu UCSF, PI)

The goal of this project is to assess cognitive and brain development in 8-9 year old children following neonatal hypoxic ischemic encephalopathy.

## **COMPLETED RESEARCH**

### ***1. Non-Suicidal Self-Injury in Children: Brain/Behavior Relations and Risk for Suicidal Behavior***

Role: Consultant (Daniel Dickstein, McClean, PI)

The goal of this project is to assess brain and behavior in children and adolescents who engage in non-suicidal self-injury. R01MH110379. NIMH. 03/22/17-02/28/22

### ***2. The Effects of Childhood Epilepsy and Social Cognition and Brain Development***– Internal funding (startup)

Role: Principal Investigator

The goal of this project is to investigate the impact of epilepsy on brain development and social cognition by comparing functional imaging and structural imaging data of children with intractable epilepsy to healthy control youth. R01 not funded

### ***3. Neuroimaging Biomarkers of Risk in Children Exposed to Cannabis Prenatally***

Role: coPI (Sarah Keim, Mark Klebanoff, NCH)

The goal of this study was to identify functional and structural effects of prenatal exposure to Cannabis in 7-year olds.

Gifts Foundation      2017-2018

R01 The Impact of Prenatal Exposure to Marijuana on Brain and Behavior Approaching Adolescence: Ongoing Follow-up of Prospective Prenatal Cohort

CoPI (Sarah Keim NCH) – not funded

### ***4. HPA and Neural Response to Peer Rejection: Biomarkers of Adolescent Depression Risk***

Role: Consultant (Laura Stroud, Brown U. PI)

The goal of the study was to identify biomarkers of response to social rejection in adolescent girls at risk for depression relative to those with depression and healthy controls

R01 MH092450      2011-2018

**5. *Puberty and Threat/Reward Processing in the Trajectory from Anxiety to Depression***

Role: Consultant (Jennifer Silk, Univ of Pittsburgh PI)

This study focused on early adolescence as a sensitive period for the development of depression among anxious youth, focusing on peri-pubertal change in the processing of social evaluative threat and reward responding

R01 MH091327      2010-2014

**6. *Emotion Regulation in Adolescence: A Social Affective Neuroscience Approach***

Role: Consultant (Jennifer Silk, Ron Dahl, Univ Pittsburgh coPI).

The goal of this study was to develop a developmentally appropriate toolbox for the assessment of emotional reactivity and emotion regulation in adolescents using fMRI

R21 DA 024124      NIMH 2007-2011

**7. *Brain Circuitry of Altruistic Love***

Role: CoPI (Jack Nitschke, Univ Wisconsin)

The goal of this study was to identify brain regions involved in new mothers' response to stimuli of their own and unfamiliar infants.

Fetzer Institute      2002-2004



## PUBLICATIONS

1. Singer HS, Hahn I-H, Krowiak E, **Nelson E**, Moran TH (1990) Tourette's Syndrome: a neurochemical analysis of postmortem brain tissue. *Annals of Neurology*, 27, 443-446.
2. Yates G, Panksepp J, Ikemoto S, **Nelson E**, Conner R (1991). Social isolation effects on the "behavioral despair" forced swimming test. Effects of age and the duration of testing. *Physiology and Behavior*, 49, 347-353.
3. Panksepp J, **Nelson E**, Siviy S (1994). Brain opioids and mother-infant social motivation. *ACTA Paediatrica, Suppl 83*, 40-46.
4. **Nelson E**, Panksepp J, Ikemoto S (1994). The effects of melatonin on social isolation distress in chickens. *Pharmacology, Biochemistry, and Behavior*, 49, 327 - 333.
5. **Nelson E**, Panksepp J (1996). Oxytocin mediates acquisition of maternally associated odor preferences in preweanling rat pups. *Behavioral Neuroscience*, 110, 583-592.
6. Panksepp J, **Nelson E**, Bekkedal M. (1997). Brain systems for the mediation of social separation-distress and social-reward. Evolutionary antecedents and neuropeptide intermediaries. *Annals of the New York Academy of Sciences*, 807, 78-100.
7. **Nelson EE** Alberts JR (1997). Oxytocin induced paw suckling in 10-day old rats. *Annals of the New York Academy of Sciences*, 807, 543-546.
8. **Nelson E**, Panksepp J (1998). Brain substrates of infant mother attachment - contributions of norepinephrine, opioids and oxytocin. *Neuroscience and Biobehavioral Reviews*, 22, 437-452.
9. **Nelson E**, Alberts JR, Tian Y, Verbalis JG (1998). Oxytocin is elevated in plasma of 10-day-old rats following gastric distension. *Developmental Brain Research*, 111, 301-303.
10. **Nelson E**, Alberts JR (2001). Gastric distension inhibits ultrasonic vocalization and brown adipose tissue activation in 10-day-old rats. *Developmental Psychobiology*, 40, 160-167.
11. **Nelson EE**, Shelton SE, Kalin NH (2003). Individual differences in innate snake fear in rhesus monkeys. *Emotion*, 3, 3-11.
12. Monk, CS, McClure EB, **Nelson EE**, Zarahn E, Bilder RM, Leibenluft E, Charney DS, Ernst M., Pine DS (2003). Adolescent immaturity in attention-related brain engagement to emotional facial expressions. *Neuroimage* 20, 420-428.
13. **Nelson EE**, McClure EB, Monk CS, Zarahn E, Liebenluft,E, Pine DS, Ernst M (2003). Developmental differences in neuronal engagement during implicit encoding of emotional faces: an event-related fMRI study. *Journal of Child Psychology and Psychiatry* 44, 1015-1024.
14. Monk CS, Grillon C, Baas JM, McClure EB, **Nelson EE**, Zarahn E, Charney DS, Ernst M, Pine D.S. (2003). A neuroimaging method for the study of threat in adolescents. *Developmental Psychobiology* 43, 359-366.
15. McClure EB, Monk CS, **Nelson EE**, Zarahn E, Leibenluft E, Bilder RM, Chaney DS, Ernst M, Pine DS (2004). A developmental examination of gender differences in brain engagement during evaluation of

threat. *Biological Psychiatry* 55, 1047-1055.

16. Nitschke JB, **Nelson EE**, Rusch BD, Fox AS, Oakes TR, Davidson RJ. (2004). Orbitofrontal cortex tracks positive mood in mothers viewing pictures of their newborn infants. *Neuroimage* 21, 583-592.
17. Ernst M, **Nelson EE**, McClure EB, Monk CS, Munson S, Eshel N, Zarahn E, Leibenluft E, Zemetkin A, Towbin K, Blair J, Charney D, Pine DS (2004). Choice selection and reward anticipation: an fMRI study. *Neuropsychologia* 42, 1585-1597.
18. Monk CS, **Nelson EE**, Woldehawariat G, Montgomery LA, Zarahn E, McClure EB, Guyer AE, Leibenluft E, Charney DS, Ernst M, Pine DS (2004). Experience-Dependent Plasticity for Attention to Threat: Behavioral and Neurophysiological Evidence in Humans. *Biological Psychiatry* 56, 607-610.
19. **Nelson EE**, Leibenluft E, McClure EB, Pine DS (2005). The social-reorientation of adolescence: a neuroscience perspective on the process and its relation to psychopathology. *Psychological Medicine* 35, 163-174.
20. Ernst M, **Nelson EE**, Jazbec S, McClure EB, Monk CS, Leibenluft E, Blair J, Pine DS (2005). Amygdala and nucleus accumbens responses to receipt and omission of gains in adults and adolescents. *Neuroimage* 25, 1279-1291.
21. Roberson-Nay R, McClure EB, Monk CS, **Nelson EE**, Guyer AE, Zarahn E, Charney DS, Leibenluft E, Blair RJR, Ernst M, Pine DS (2006). Increased amygdala activity during successful memory encoding in adolescent major depressive disorder: an fmri study. *Biological Psychiatry* 60, 966-973.
22. Monk CS, **Nelson EE**, McClure EB, Mogg K, Bradley BP, Leibenluft E, Blair RJR, Chen G, Charney DS, Ernst M, Pine DS (2006). Ventrolateral prefrontal cortex activation and attention bias to angry faces in adolescents with generalized anxiety disorder. *American Journal of Psychiatry* 163, 1091-1097.
23. Guyer AE, **Nelson EE**, Perez-Edgar K, Hardin MG, Roberson-Nay R, Monk CS, Bjork J, Henderson HA, Pine DS, Fox NA, Ernst M (2006). Striatal functional alteration in adolescents characterized by early childhood behavioral inhibition. *Journal of Neuroscience* 26, 6399-6405.
24. McClure EB, Adler A, Monk CS, Cameron, J, Smith S, **Nelson EE**, Leibenluft E, Ernst M, Pine DS (2007). fMRI and behavioral predictors of treatment outcome in pediatric anxiety disorders. *Psychopharmacology*, 191, 97-105.
25. Eshel N, **Nelson EE**, Blair JT, Pine DS, Ernst M (2007). Neural substrates of choice selection in adults and adolescents: development of the ventral prefrontal and anterior cingulate cortices. *Neuropsychologia* 45, 1270-1279.
26. McClure EB, Monk CS, **Nelson EE**, Parrish JM, Adler A, Blair RJR, Fromm S, Charney DS, Leibenluft E, Ernst M, Pine DS (2007). Abnormal attention modulation of fear circuit function in pediatric GAD. *Arch General Psychiatry* 64, 97-106.
27. Leibenluft E, Rich BA, Vinton DT, **Nelson EE**, Fromm SJ, Berghorst LH, Joshi P, Robb A, Schachar RJ, Dickstein DP, McClure EB, Pine DS (2007). Neural circuitry engaged during unsuccessful motor inhibition in pediatric bipolar disorder. *American Journal of Psychiatry* 164, 52-60.
28. Blair KS, Smith BW, Mitchell DG, Morton J, Vythilingam M, Pessoa L, Fridberg D, Zemetkin A, Sturman D, **Nelson EE**, Drevets WC, Pine DS, Martin A, Blair RJR (2007). Modulation of emotion by

cognition and cognition by emotion. *Neuroimage*, 35, 430-440.

29. Dickstein DP, **Nelson EE**, McClure EB, Grimley ME, Knopf L, Brotman MA, Rich BA, Pine DS, Leibenluft E. (2007). Cognitive flexibility in phenotypes of pediatric bipolar disorder. *Journal of the American Association of Child and Adolescent Psychiatry*, 46, 341-355.
30. Ernst M, Maheu FS, Schroth E, Hardin J, Golan LG, Cameron J, Allen R, Holzer S, **Nelson E**, Pine DS, Merke DP (2007). Amygdala function in adolescents with congenital adrenal hyperplasia. *Neuropsychologia*, 45, 2104-2113.
31. McClure EB, Parrish JM, **Nelson EE**, Easter J, Thorne JF, Rilling JK, Ernst M, Pine DS (2007). Responses to conflict and cooperation in adolescents with anxiety and mood disorders. *Journal of Abnormal Child Psychology*, 35, 567-57.
32. Perez-Edgar K, Roberson-Nay R, Hardin MG, Poeth K, Guyer AE, **Nelson EE**, McClure EB, Henderson HA, Fox NA, Pine DS, Ernst M (2007). Attention alters neural responses to evocative faces in behaviorally inhibited adolescents. *Neuroimage*, 35, 1538-1546.
33. **Nelson EE**, Vinton DT, Berghorst L, Towbin KE, Hommer RE, Dickstein DP, Rich BA, Brotman MA, Pine DS, Leibenluft E. (2008). Brain systems underlying response flexibility in healthy and bipolar adolescents: an event-related fMRI study. *Bipolar Disorders*, 9, 810-819.
34. Lau J.Y, Lissek S, **Nelson EE**, Lee Y, Roberson-Nay R, Poeth K, Jenness J, Ernst, M, Grillon C, Pine DS (2008). Fear conditioning in adolescents with anxiety disorders: results from a novel experimental paradigm. *Journal of the American Association of Child and Adolescent Psychiatry*, 47, 97-102.
35. Guyer AE, Monk CS, McClure-Tone EB, **Nelson EE**, Roberson-Nay R, Adler AD, Fromm S, Leibenluft E, Pine DS, Ernst M (2008). A developmental examination of amygdala response to facial expressions. *Journal of Cognitive Neuroscience*, 20, 1565-1582.
36. Guyer AE, Lau JYF, McClure-Tone EB, Parrish J, Shiffrin ND, Blair RJR, Leibenluft E, Fox NA, Ernst M, Pine DS, **Nelson EE** (2008). Amygdala and ventrolateral prefrontal cortex function during anticipated peer evaluation in pediatric social anxiety. *Archives of General Psychiatry*, 65, 1303-1312.
37. Lau JYF, Goldman D, Buzas B, Fromm SJ, Guyer AE, Hodgkinson C, Monk CS, **Nelson EE**, Shen P-H, Pine DS, Ernst M (2009). Amygdala function and 5HTT gene variants in adolescent anxiety and major depressive disorder. *Biological Psychiatry*, 65, 349-355.
38. Nawa, NE, **Nelson EE**, Pine DS, Ernst M (2009). Do you make a difference? Social context in a betting task. *Social Cognitive and Affective Neuroscience*, 3, 367-376.
39. Vythillingham M, **Nelson EE**, Scaramozza M, Waldek T, Hazlett G, Southwick SM, Pine DS, Drevets W, Charney DS, Ernst M (2009). Reward Circuitry in resilience to severe trauma: an fMRI investigation of resilient special forces soldiers. *Psychiatry Research: Neuroimaging*, 172, 75-77.
40. Beesdo K., Lau J., McClure-Tone E.B., Guyer A.E., Monk C.S., **Nelson E.E.**, Fromm S.J., Goldwin M.A., Wittchen H-U., Leibenluft E., Ernst M., Pine D.S. (2009). Common and distinct amygdala-function perturbations in depressed versus anxious adolescents. *Archives of General Psychiatry*, 66, 275-285.
41. Pine DS, Helfinstein SM, Bar-Haim Y, **Nelson E**, Fox NA (2009). Challenges in developing novel

treatments for childhood disorders: lessons from anxiety. *Neuropsychopharmacology*, 34, 213-238.

42. **Nelson E.E.**, Winslow J.T. (2009). Nonhuman primates: model animals for developmental psychopathology. *Neuropsychopharmacology*, 34, 90-105.
43. Barrett CE, Noble P, Hanson E, Pine DS, Winslow JT, **Nelson EE**. (2009). Early adverse rearing experiences alter sleep-wake cycles and basal cortisol secretion in juvenile rhesus monkeys. *Psychoneuroendocrinology*, 34, 1029-1040.
44. Guyer AE, McClure-Tone, EB, Shiffrin ND, Pine DS, **Nelson EE** (2009). Probing the neural correlates of anticipated peer evaluation in adolescence. *Child Development*, 80, 1005-1015.
45. Bar-Haim Y, Fox NA, Benson B, Guyer AE, **Nelson EE**, Perez-Edgar K, Henderson HA, Pine DS, Ernst M (2009). Neural correlates of reward processing in adolescents with a history of shyness and inhibited temperament. *Psychological Science*, 20, 1009-1018.
46. **Nelson EE**, Herman K, Barrett CE, Noble P, Chisholm K, Delaney D, Fox NA, Ernst M, Winslow JT, Pine DS (2009). Early adverse rearing enhances responding to both aversive and rewarding stimuli in juvenile rhesus monkeys. *Biological Psychiatry*, 66, 702-704.
47. Lindstrom, K., Guyer, A.E., Mogg, K., Bradley, B.P., Fox, N.A., Ernst, M., **Nelson, E.E.**, Leibenluft, E., Britton, J.C., Monk, C.S., Pine, D.S., Bar-Haim, Y. (2009) Normative data on development of neutral and behavioral mechanisms underlying attention orienting toward social-emotional stimuli: an exploratory study. *Brain Research*, 1292, 61-70.
48. Lau, J.Y.F., Goldman, D., Buzas, B., Hodgkinson, C., Leibenluft, E., **Nelson, E.**, Sankin, L., Pine, D.S., Ernst, M. (2010). BDNF gene polymorphism (Val66Met) predicts amygdala and anterior hippocampus responses to emotional faces in anxious and depressed adolescents. *Neuroimage*, 53, 952-961.
49. Vasa, R.A., Pine, D.S., Nelson, T.E., Spinelli, S., **Nelson, E.E.**, Maheu, F.S., Ernst, M., Bruckm M., Mostofsky, S.H. (2011). Enhanced right amygdala activity in adolescents during encoding of positively-valenced pictures. *Developmental Cognitive Neuroscience*, 1, 88-99.
50. McClure-Tone, E.B., Nawa, N.E., **Nelson, E.E.**, Detloff, A.M., Fromm, S., Pine, D.S., Ernst, E. (2011). Preliminary findings: Neural responses to feedback regarding betrayal and cooperation in adolescent anxiety disorders. *Developmental NeuroPsychology* 36, 453-472.
51. Machado, C.J., **Nelson, E.E.** (2011). Eyetracking with nonhuman primates is now more accessible than ever before. *American Journal of Primatology*, 73, 562-569.
52. **Nelson, E.E.**, Guyer, A.E. (2011). The development of the ventral prefrontal cortex and social flexibility. *Developmental Cognitive Neuroscience*, 1, 233-245.
53. Lau, J.Y.F., Britton, J.C., **Nelson, E.E.**, Angold, A., Ernst, M., Goldwin, M., Grillon, C., Leibenluft, E., Lissek, S., Norcross, M., Shiffrin, Pine, D.S. (2011). Distinct neural signatures of threat learning in adolescents and adults. *Proceedings of the National Academy of Science*, 108, 4500-4505.
54. Egger, H.L., Pine, D.S., **Nelson, E.**, Leibenluft, E., Ernst, M., Towbin, K.E., Angold, A. (2011). NIMH child emotional faces picture set (NIMH\_ChEFS): A new set of children's facial emotion stimuli. *The International Journal of Methods in Psychiatric Research*, 20, 145-156.

55. Zhang, B. and **Nelson, E.E.** (2011). Effects of adverse rearing experience on organization of brain and behavior in nonhuman primates. *International Journal of Child and Adolescent Health*, 4, 1-10.
56. Lau, J.Y.F., Guyer, A.E., McClure, E.M., Jenness, J., Parrish, J.M., Ernst, M., Leibenluft, E., Pine, D.S., **Nelson, E. E.** (2012). Amygdala responses to social rejection in anxious adolescents. *International Journal of Behavioral Development*, 36, 36-44.
57. Guyer, A.E., Choate, V.R, Detloff, A., Benson, B., **Nelson, E.E.**, Perez-Edgar, K., Fox, N.A., Pine, D.S., Ernst, M. (2012). Striatal functional alteration during incentive anticipations in pediatric anxiety disorders. *American Journal of Psychiatry*, 169, 205-212.
58. Guyer, A.E., Choate, V.R., Pine, D.S., **Nelson, E.E.** (2012). Neural circuitry underlying affective response to peer feedback in adolescence. *Social Cognitive and Affective Neuroscience*, 7, 81-92.
59. Silk, J., Stroud, L.R., Dahl, R.E., Siegle, G.J., Lee, K.H., **Nelson, E.E.** (2012). Peer acceptance and rejection through the eyes of youth: pupillary eyetracking and ecological data from the chatroom-interact task. *Social Cognitive and Affective Neuroscience*, 7, 93-105.
60. Zhang, B., Noble, P.L., Winslow, J.T. Pine, D.S., **Nelson, E.E.** (2012). Amygdala volume predicts patterns of eye fixation in rhesus monkeys. *Behavioral Brain Research*, 229, 433-437.
61. Kim, P., Jenkins, S.E., Connolly, M.E., Deveney, C.M., Fromm, S.J., Brotman, M. A., **Nelson, E.E.**, Pine, D.S., Leibenluft, E. (2012). Neural correlates of cognitive flexibility in children at risk for bipolar disorder during cognitive flexibility. *Psychiatry Research - Neuroimaging* 46, 21-30.
62. Zhang, B., Suarez-Jimenez, B., Hathaway, A., Waters, C., Vaughan, K., Noble, P.L., Fox, N.A., Suomi, S.J., Pine, D.S., **Nelson, E.E.** (2012). Developmental changes of rhesus monkeys in response to separation from the mother. *Developmental Psychobiology*, 54, 798-807.
63. Shechner, T., Jarcho, J.M., Britton, J.C., Leibenluft, E., Pine, D.S., **Nelson, E.E.** (2012). Attention bias of anxious children during extended exposure of emotional face pairs: An eye-tracking study. *Depression and Anxiety*, 30, 14-21.
64. Suarez-Jimenez, B., Hathaway, A., Waters, C., Vaughan, K., Suomi, S.J., Noble, P.L., Pine, D.S., Fox, N.A., **Nelson, E.E.** (2013). Effect of maternal dominance rank on offspring temperament in infant Rhesus Monkeys (*macaca mulatta*). *American Journal of Primatology*, 75, 65-73.
65. Tanofsky-Kraff, M., Engel, S, Yanovski, J.A., Pine, D.S., **Nelson, E.E.** (2013). Pediatric disinhibited eating: towards a research domain criteria framework. *International Journal of Eating Disorders*, 46, 451-455.
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late-adolescent reward-circuitry response to peer interaction. *Development and Psychopathology*, 26, 229-243.

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70. Perez-Edgar, K., Hardee, J., Guyer, A.E., Benson, B., **Nelson, E.**, Gorodetsky, E., Goldman, D., Fox, N.A., Pine, D.S., Ernst, M. (2014) DRD4 and striatal modulation of the link between childhood behavioral inhibition and adolescent anxiety. *Social Cognitive and Affective Neuroscience*, 9, 445-453.
71. Tan, P.Z., Lee, K.H., Dahl, R.D., **Nelson, E.E.**, Stroud, L. S., Siegle, G. J., Morgan, J.K., Silk, J.S. (2014). Associations between maternal negative affect and adolescents' response to peer evaluation. *Development and Cognitive Neuroscience*, 8, 28-39.
72. Shreetha, S.S., **Nelson, E.E.**, Liow, J-S., Yoo, C., Gladding, R., Ioline, H., Noble, P., Kruger, J., Zhang, B., Suomi, S., Morse, C., Svenningsson, P., Pike, V., Winslow, J.T., Leibenluft, E., Pine, D.S., Innis, R. (2014). Fluoxetine administered to juvenile monkeys upregulates the serotonin transporter and alters behavior into early adulthood. *American Journal of Psychiatry*, 171, 323-331.
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77. Guyer, A.E., Jarcho, J.M., Perez-Edgar, K., Degnan, K., Pine, D.S., Fox, N.A., **Nelson, E.E.** (2015). Temperament and parenting styles in early childhood differentially influence neural response to peer evaluation in adolescence. *Journal of Abnormal Child Psychology*, 43, 863-874.
78. Spielberg, J.M., Jarcho, J.M., Dahl, R.E., Pine, D.S., **Nelson, E.E.** (2015). Anticipation of peer evaluation in anxious and non-anxious adolescents: divergent patterns of neural activation and maturation. *Social Cognitive and Affective Neuroscience*, 10, 1084-1091.
79. Jarcho, J.M., Romer, A.L., Shechner, T.S., Galvan, A., Guyer, A.E., Leibenluft, E., Pine, D.S., **Nelson, E.E.** (2015). Forgetting the best when predicting the worst: Preliminary observations on neural circuit function in adolescent social anxiety. *Developmental Cognitive Neuroscience*, 13, 21-31.
80. Vanucci, A., **Nelson, E.E.**, Bongiorno, D.M., Pine, D.S., Yanovski, J.A. Tanofsky-Kraff, M. (2015). Behavioral and neuro-developmental precursors to binge-type eating disorders. *Psychological*

*Medicine*, 45, 2921-2936.

81. Muller, S.C., Shechner, T., Rosen, D., **Nelson, E.E.**, Pine, D.S., Ernst, M. (2015). Incidental threat during visual working memory in adolescent anxiety: An emotional memory-guided saccade task. *Depression and Anxiety*, 32, 289-295.
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83. **Nelson, E.E.**, Jarcho, J.M., Guyer A.E. (2016). Social re-orientation and development: an expanded and updated view. *Developmental Cognitive Neuroscience*, 17, 118-127.
84. Jarcho, J.M., Davis, M. M., Shechner, T., Degnan, K.A., Henderson, H.A., Fox, N.A., Pine, D.S., **Nelson, E.E.** (2016). Early childhood social reticence, peer victimization and brain function in preadolescent youths during distinct forms of peer evaluation. *Psychological Science*, 27, 821-835.
85. Guyer, A.E., Silk, J.S. **Nelson, E.E.** (2016). The neurobiology of the emotional adolescent: from the inside out. *Neuroscience and Biobehavioral Reviews*, 70, 74-85.
86. Beer, J. B., Smith, A., Jarcho, J.M., Chen. G., Reynolds, R., Pine, D.S., **Nelson, E.**  
**E.** (2016). Anxiously elaborating the social percept: anxiety and age differences in functional connectivity of the fusiform face area in a peer evaluation paradigm. *Australian Journal of Psychiatry*, 68, 154-165.
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89. Michalska, K., Pine, D., Leibenluft, E., Brotman, M., **Nelson, E.**, Averbeck, B., Roberson-Nay, R., Hettrema, J., Moroney, E., Machlin, L. (2017). Anxiety symptoms and children's eye gaze during fear learning. *Journal of Child Psychology and Psychiatry* 58, 1276-1286.
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91. Morningstar, **Nelson, E.E.** M.A., Dirks, M., (2018). Maturation of vocal emotion recognition: insights from the developmental and neuroimaging literature *Neuroscience and Biobehavioral Reviews*, 90, 221-230.
92. Smith, A.R., **Nelson, E.E.**, Rappaport, B., Pine, D.S., Leibenluft, E., Jarcho, J.M. I like them will they like me? Evidence for the role of the IFG during mismatched social judgments in anxious adolescents (2018). *Journal of Child and Adolescent Psychopharmacology*, 28, 646-654.
93. Morningstar, M., Venticinque, J., **Nelson, E.E.** (2019). Differences between adult and adolescent listeners' ratings of valence and arousal in emotional prosody. *Cognition and Emotion*, 33, 1497-1504. PMID: 30585125

94. Morningstar, M., Dirks, M.A., Rappaport, B. I., Pine, D.S., **Nelson, E.E.** (2017). Associations between anxious and depressive symptoms and the recognition of vocal socio-emotional expressions in youth. *Journal of Clinical Child and Adolescent Psychology*, 48, 491-500. PMID 28820619.
95. Krishnamurthy, R., Wang, J., Cervantes, B., McAllister, A., **Nelson, E.**, Karampinos, D., Jones, J.Y., Hu, H.H. (2019). Recent advances in pediatric brain, spine, and neuromuscular MRI techniques. *Pediatric Neurology*, 96, 7-23.
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97. Jarcho, J.M., Grossman, H.Y., Guyer, A.E., Quarmley, M., Smith, A.R., Fox, N.A., Leibenluft, E., Pine, D.S., **Nelson, E.E.** (2019). Connecting Childhood Social Retention to Adolescent Social Anxiety Through the Brain and Peer Experience. *Journal of Abnormal Child Psychology*, 47, 1153-1164.
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101. Morningstar, M., Mattson, W.I., Venticinque, J., Singer, Jr., S., Selvaraj, B., Hu, H.H., & **Nelson, E.E.** (2019). Age-related differences in neural activation and functional connectivity during vocal emotion processing in adolescence. *Cognitive, Affective, & Behavioral Neuroscience*, 19, 1418-1432. PMID: 31515750
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- Berenbaum, S.A., Beltz, A., Bakker, J., Eliot, L., Vilain, e., Wallace, G.L., **Nelson, E.E.**, Garofolo, R. (2020) Consensus parameter: Research methodologies to evaluate neurodevelopmental effects of pubertal suppression in transgender youth. *Transgender Health*, 5, 246-257. DOI: 10.1089/tsgh.2020.0006. PMID: 33376803
106. Morningstar, M., Hung, A., Grannis, C., French, R.A., Mattson, W.I., Ostendorf, A.P., Gedela, S., Englot, D.J., **Nelson, E.E.** (2020). Blunted neural response to emotional faces in the fusiform and superior temporal gyrus may be marker of emotion recognition deficits in youth with epilepsy. *Epilepsy and Behavior*, 112, 1-9. DOI:10.1016/j.yebeh.2020.107432 PMID: 32919203
  107. Morningstar, M, Mattson, W, Singer, S, Venticinque, J., **Nelson E.E.** (2020). Children and adolescent's neural response to faces and voices: Age-related changes in common regions of activation. *Social Neuroscience*, 15, 613-629. DOI: 10.1080/174709.2020.1832572 PMID: 33017278
  108. Morningstar, M., French, R.C., Matson, W.I., Englot, D., **Nelson, E.E.** (2021) Social Brain networks: Resting-state and task-based connectivity in youth with and without epilepsy. *Neuropsychologia*, 157, 107882. DOI: 10.1016/j.neuropsychologia.2021.107882 PMID: 33964273
  109. Hung, A., Morningstar, M., Mattson, W.I., Saygin, Z., **Nelson, E.E.** (2021). Atypical age-related changes in the mentalizing network in children with intractable focal epilepsy. *Epilepsy Research*, June 2021. DOI: 10.1016/j.epelpsyres.2021.106701 PMID: 34182239
  110. Strang, J.F., Chen, D., Nelson, E.E., Leibowitz, S.F., Nahata, L., Anthony, L.G., Song, A.S., Grannis, C., Vilain, E., Sadikova, E., Freeman, A., Pugliese, C., Khawaja, A., Maisashvili, T., Mancilla, M., Kenworthy, L. (2021). Transgender Youth Executive Function Related to Neurodiversity, Anxiety, and Long-Duration Puberty Suppression. *Child Psychiatry and Human Development*. DOI: 10.1007/s10578-21 01195-6 PMID: 34146208
  111. Grannis, C., Leibowitz, S. Ghan, S., Nahata, L., Strang, J.S., Chen, D., Morningstar, M., Mattson, W.I., **Nelson, E. E.** (2021). Testosterone Treatment, Internalizing Symptoms, and Body Image Dissatisfaction in Transgender Boys. *Psychoneuroendocrinology*, 132, 105358. DOI: 10.1016/j.psyneuen.2021.105358 PMID: 34333318
  112. Morningstar, M., Grannis, C., Mattson, W.I., **Nelson, E.E.** (2022). Functional patterns of neural activation during vocal emotion recognition in youth with and without refractory epilepsy. *NeuroImage Clinical* 34, 102966 DOI: <https://doi.org/10.1016/j.nicl.2022.102966> PMID: 35182929
  113. Morningstar, M., Mattson, W.I., **Nelson, E.E.** (2022). Longitudinal change in neural response to vocal emotion in adolescence. *Social Cognitive and Affective Neuroscience*, in press March 2022 PMID: 35323933
  114. Fu, X., Da Silva, A., Hung, A., Bush, T., Mattson, W.I., Taylor, H.G., **Nelson, E.E.** (2022). Development of the mentalizing network Structures and Theory of Mind performance in extremely preterm Youth. *Social Cognitive and Affective Neuroscience* in press March 2022 PMID: 35428893
  115. Grannis, C., Hung, A., French, R. C., Mattson, W. I., Fu, X., Hoskinson, K. R., Gerry Taylor, H., & **Nelson, E. E.** (2022). Multimodal Classification of Extremely Preterm and Term Adolescents Using the Fusiform Gyrus: A Machine Learning Approach. *NeuroImage: Clinical*, 103078. <https://doi.org/https://doi.org/10.1016/j.nicl.2022.103078> PMID: 35687994
  116. Strang, J.S., Wallace, G., Michaelson, J.J., Anthony, L., Call, D., Chen, D., Clawson, A, Blythe, C.,

D'Angelo, L., Fish, J.N., Grannis, C., Nahata, L. **Nelson, E.E.** Pelphry, et al. The Gender Self-Report: A multidimensional Gender Characterization Tool for Gender Diverse and Cisgender Youth and Adults. *American Psychologist*, in press November 2022

117. Taylor, H.G., Hoskinson, K.R., Vratsidis, D., Minish, NM, Busch, T., Horn, T., Mattson, W.I., Nelson, E.E. (2022). Quality of social relationships with parents and peers in adolescents born extremely preterm. *Journal of Developmental and Behavioral Pediatrics* in press December 2022
118. Strang, J.S., McClellan, L., Li, S., Jack, A.E., Wallace, G.L., McQuade, G.A., Kenworthy, L., Anthony, L.G., Lai, M-C., Pelphry, K.A., Nelson, E.E., Thalberg, A.E., Phan, J.M., Sadikova, E., Fishbach, A.L., Thomas, J., Vaidya, C. (2022). The Autism Spectrum among Transgender Youth: Default Mode Functional connectivity. *Cerebral Cortex*, in press, January 2023
119. Morningstar, M., Thomas, P., Mattson, W.I., Nahata, L., Leibowitz, S.F., Chen, D., Strang, J.S., **Nelson, E.E.** (2022) Exogenous testosterone administration is associated with differential neural response to unfamiliar peer's and own mother's voice in transgender adolescents. Special edition of *Developmental Cognitive Neuroscience*, in press, Jan 2023. <https://doi.org/10.1016/j.dcn.2022.101194>

#### Papers currently under review

- Olsavsky, A.L., Grannis, C., Chelvakumar, G., Indyk, J., Leibowitz, S., Mattson, W., Nelson, E., Stanek, C., Nahata, L. (2022). Gender-affirming medical intervention and social support: Impact on transgender youth mental health. *Journal of Adolescent Health*, Revise and Resubmit October 2022
- Molloy, F., Yu, E., Mattson, W.I., Taylor, G.H., **Nelson, E.E.**, Saygin, Z. (2022). Characterizing the effect of premature birth on adolescent brain network organization. Revise and resubmit January 2023
- Stroud, L.R., Morningstar, M., Vergara-Lopez, C., Bublitz, M., Lee, S.Y., Sanes, J.N., Dahl, R.E., Silk, J.S., **Nelson, E.E.**, Dickstein, D.P. (2022). Neural activation to peer acceptance and rejection in relation to concurrent and prospective depression risk in adolescent girls. *Biological Psychiatry* October 2022

#### Manuscripts in preparation

- Fu, X. Morningstar, M., Crowell, S., Mattson, W.I., Feng, X., **Nelson, E.E.** (2021) Enhanced vigilance for sad faces in preschool children of depressed mothers: an eyetracking study.
- Grannis, C., Leibowitz, S. Ghan, S., Nahata, L., Strang, J.S., Chen, D., Morningstar, M., Mattson, W.I., **Nelson, E. E.** (2021). Testosterone but not estradiol treatment reduces anxiety and depression symptoms in transgender adolescents.
- Fu, X. Morningstar, M., Crowell, S., Perlman, S., Mattson, Feng **Nelson** (2022). Diminished BOLD response to own mothers linguistic stimuli in temporal lobe of preschool children of depressed mothers.

Crowell, S., Fu, X. Morningstar, M., Mattson, W.I., Feng, X., **Nelson, E.E.** (2022). Attenuated neural response to adult voices in four-year olds of depressed mothers detected with functional near infrared spectroscopy.

Morningstar, M., Hughes, C., French, R.F., Mattson, W.I., **Nelson, E.E.** Intrinsic connectivity among attention and sensory networks increases with age when switching from rest to task states among healthy adolescents.

## BOOK CHAPTERS

1. Panksepp J, Yates G, Ikemoto S, **Nelson E** (1991). Simple ethological models of depression: social-isolation induced "despair" in chicks and mice. *Advances in Pharmacological Sciences*. Birkhauser Verlag Basel, pp161-181.
2. Zhang, B. and **Nelson, E.E.** (2012). Effects of adverse rearing experience on organization of brain and behavior in nonhuman primates. In *Monkeys: Biology, Behavior and Disorders*. Nova Publishers. F. Columbus (ed).
3. **Nelson, E.E.** (2012). The neurobiological foundations of Empathy and its Development in the Context of Our Evolutionary Heritage. In *Evolution, Early Experience and Human Development: From Research to Practice and Policy*. New York: Oxford University Press. Narvaez, D., Panksepp, J., Schore, A., & Gleason, T. (Eds.)
4. **Nelson, E.E.** (2014). As Time Goes By, A Touch is More Than Just a Touch. In *Ancestral Landscapes in Human Evolution: Culture, Landscapes and Social Wellbeing* (pp 38-41) New York: Oxford University Press.
5. **Nelson, E.E.**, Morningstar, M.A., Mattson, W.I. (2018) Emotions as Regulators of Motivated Behavior. *Oxford Handbook on Emotion*. Oxford University Press, New York. Beauchaine T.P. & Crowell S.E. (Eds). DOI: 10.1093/oxfordhb/9780190689285.013.2
6. Morningstar, M.M., Matson, W.I., **Nelson, E.E.** Affective disorders in development. *Oxford Handbook of Developmental Cognitive Neuroscience*. Oxford University Press, New York. Cohen Kadosh, K Ed.

## LECTURES/PRESENTATIONS

### *Social Emotion and the Adolescent Brain*

The Macarthur Network on Juvenile Justice  
Atlanta, GA February 2005

### *Neurobiology of Social Emotions in Adolescents*

Brown University Department of Psychiatry and Human Behavior  
Providence, RI May 2006

### *Comparative Studies of Social Development in Human and Nonhuman Primates*

National Institute of Mental Health, Division of Translational Research  
Bethesda, MD June 2008

### *The Neurobiology of Social cognition: Development and Psychopathology*

Department of Psychiatry, University of Vermont

Grand Rounds  
Burlington , VT                      March, 2012

*Sensitive Periods and Trajectories in Adolescent Development*  
Center for Children, Relationships, and Culture  
University of Maryland  
College Park, MD                      September 2012

*What Develops in Social Development?*  
American Psychological Society Annual Meeting  
Featured Speaker  
Chicago, IL                                      May 2012

*The Social Brain in Typically Developing and Anxious Adolescents*  
Calleva Workshop on Adolescents  
Oxford University, Department of Psychology  
Oxford, England                      October 2012

*The Use of Deception in Pediatric Anxiety Research*  
Grand Rounds  
National Institute of Mental Health  
Bethesda, MD                              April 2013

*Neuroplasticity and Social Development*  
Symposium Organizer and Moderator  
Jean Piaget Society  
Toronto, CA                                      June 2014

*Neurobiological Profiles of Socially Anxious Adolescents as they Anticipate and Receive Judgements from Their Peers*  
Social and Affective Neuroscience,  
Invited Anchor Symposium    June 2015

*Developmental Trajectories of Social Cognition in Adolescents*  
American Academy of Child and Adolescent Psychiatry  
Invited Speaker  
San Antonio, TX                              October 2015

*Can Social Anxiety be Explained by Differences in Motivated Learning Across Development?*  
Calleva Workshop on Endophenotypes of Social Anxiety Disorder  
Invited Speaker  
Leiden, The Netherlands              December 2015

*The Neurobiology of Social Development*  
Symposium  
Abigail Wexner Research Institute  
Columbus OH                              December 2015

*Development of the Emotional Brain in a Social Context*

Developmental and Affective Neuroscience Symposium  
Invited Discussant  
Pittsburgh, PA                      October 2017

*The Neurobiology of Social Development*  
Invited Presentation at the Neurosciences Symposium  
Bowling Green State University  
Bowling Green, OH              March 2017

*MRI Workshop: A Cloud Level Introduction to MRI and Potential Research Utility in Biobehavioral Health*  
Half-Day Workshop  
Center for Biobehavioral Health  
Abigail Wexner Research Institute  
Columbus Oh                      March 2017

*Utility of Neuroimaging Approaches in Pediatric Brain Trauma Research*  
Global Symposium on Trauma Research Methods  
Invited Oral Presentation  
Columbus, OH                      June 2018

*The Growing Brain in the Company of Others*  
Postbaccalaureate Research Presentation Series  
Center for Biobehavioral Health  
Abigail Wexner Research Institute  
Columbus OH                      December 2018

*The Neurobiology of Social Development in Clinical Populations*  
Invited presentation at the cognitive sciences lecture series  
Department of Psychology  
Ohio State University  
Columbus OH                      November 2019

*Neuroimaging Applications for Assessing Cognitive and Emotional Development*  
Neurodevelopmental Research Affinity Group Meeting  
Abigail Wexner Research Institute  
Columbus OH                      March 2020

Adolescence: A Time for Change  
Department of Pediatrics, Grand Rounds  
University of Toledo, College of Medicine  
Toledo, OH                      April 2021

Application of Neuroimaging Research in Pediatric Neurology: Studies in Epilepsy  
NCH Department of Neurology Grand Rounds  
September 29, 2022

## **CONFERENCES AND SYMPOSIA**

### **NATIONAL/INTERNATIONAL DISTINGUISHED ACTIVITIES**

1. Society for Neuroscience, poster co-author: "Social-isolation induced despair in chicks and mice: simple animal models of reactive depression" October, 1990, St. Louis, MO
2. Society for Neuroscience, poster presenter: "Melatonin modulation of separation distress, social play and affect" November 1991, New Orleans, LA
3. Society for Neuroscience, poster co-author: "Effects of amantadine on play and other social emotional processes" October 1992, Anaheim, CA
4. Society for Neuroscience, poster co-author: "Modulation of opiate tolerance on social behaviours by MK-801" November 1993, Washington, DC
5. Society for Neuroscience, 1994, poster presenter: "Social behavior in the young vasopressin deficient Brattleboro rat" November 1994, Miami Beach, FL
6. Society for Neuroscience, symposium presenter: "Central oxytocin antagonism blocks preweanling rat pups acquisition of preference for maternally associated odor" November 1995, San Diego, CA
7. The Integrative Neurobiology of Affiliation, a conference presented by NYAS, poster presenter: "Oxytocin-induced paw sucking in infant rats" March, 1996, New York, NY
8. Society for Neuroscience, poster presenter: "Oxytocin is elevated in plasma of 10-day-old rats following gastric distension" November 1996, Washington, DC
9. Society for Developmental Psychobiology, poster presenter: "Oxytocin is elevated in plasma of 10-day-old rats following gastric distension" November 1996, Washington DC
10. Society for Neuroscience, poster presenter: "Individual differences in innate snake fear in laboratory reared rhesus monkeys" November 2000, New Orleans, LA
11. International Society for Human Brain Mapping, poster presenter: "Motherly love: an fmri study of mothers viewing pictures of their infants" June 2001, Brighton, UK
12. Society for Psychophysiological Research, poster co-author: "Alteration of EEG activity and the acoustic startle response during breastfeeding" October, 2001. Montreal, Que.
13. Society for Psychophysiological Research, poster co-author: "Neural circuitry in positive emotion: Maternal love and well-being" October 2002, Washington DC
14. Society for Biological Psychiatry, poster presenter: "Risky business: event-related fMRI of decision, anticipation and attainment in a reward task" October 2003, San Francisco, CA
15. Society for Biological Psychiatry, symposium co-author: "Anxiety and reward circuitry" October 2003, San Francisco, CA
16. Society for Biological Psychiatry, poster co-author: "Decision-making and responses to reinforcements from a neurodevelopmental and psychopathology perspective" May 2004, New York, NY
17. Society for Biological Psychiatry, poster co-author: "Losing or not losing: are anxious children different from healthy children?" May 2004, New York, NY
18. Society for Biological Psychiatry, poster co-author: "Symptom-relevant cognitive measures in development: a foundation for linking neurophysiology to psychiatric disorders" May 2004, New York, NY
19. Cognitive Neuroscience Society, poster co-author: "Behavioral and neurophysiological correlates of attention bias to threat in adolescents: the effects of trait anxiety" April 2005,

New York, NY

20. Cognitive Neuroscience Society, poster co-author: "Attention-related brain activation to emotional facial expressions in adolescents at low and high risk for psychopathology: a parametric functional MRI study" April 2005, New York, NY
21. Society for Biological Psychiatry, Poster co-author: "A novel method for studying responses to social conflict in youth with mood and anxiety disorders" May, 2005, Atlanta, GA
22. Society for Biological Psychiatry, Poster co-author: "Developmental differences in attention-related amygdala response to emotional facial expressions" May, 2005, Atlanta, GA
23. Society for Biological Psychiatry, Poster co-author: "Resilient special forces soldiers have enhanced activation of reward related circuits" May, 2005, Atlanta, GA
24. National Institute of Mental Health annual research retreat, poster co-author: "Neural sensitivity to reward anticipation in adolescents characterized by early childhood behavioral inhibition" September 2005, Gettysburg, PA
25. European College of Neuropsychopharmacology, poster co-author: "Attention modulates neural activation to emotional facial expressions in adolescents with anxiety disorders"
26. American College of Neuropsychopharmacology, poster co-author: "Response flexibility in bipolar disorder: a developmental perspective" December 2005, Waikola, HI
27. ANGST – the amygdala and anxiety interest group at the National Institute of Mental Health. Oral presentation: "Effects of fluoxetine on adolescent peer reared monkeys: the TRAMP study" January, 2006, Bethesda, MD
28. Organization for Human Brain Mapping, poster presenter: "You like me! Adolescent brain response to acceptance and rejection from peers" June, 2006, Florence, Italy
29. Invited Symposium, Department of Psychiatry and Human Behavior: presenter "The neurobiology of social emotions in adolescents" June 2006, Providence, RI
30. Scientific Retreat of the intramural program National Institute of Mental Health, poster, co-author: "Striatal functional alteration in adolescents characterized by early childhood behavioral inhibition" September 2006, Gettysburg, PA
31. Society for Neuroscience, poster presenter: "Adverse rearing increases fear potentiated startle in rhesus monkeys and fluoxetine ameliorates this effect." October 2006, Atlanta, GA
32. Society for Research in Child Development, symposium co-author: "Neural responses to peer interactions and social rejection in anxious adolescents" March 2007, Boston, MA
33. Center for Children, Relationships, and Culture, invited colloquium: "Sensitive periods and trajectories in social development" April, 2007, College Park, MD
34. Society for Biological Psychiatry, poster-co-author: "Developmental moderation of the 5HTT-LPR genotypic effects on amygdala function during processing of fearful faces": May 2007, San Diego, CA
35. American Society of Primatologists, poster co-author: "Effect of rearing on aspartame consumption in male rhesus monkeys (*Macaca mulatta*)" June, 2007, Wake Forest, NC
36. Organization for Human Brain Mapping, poster presenter: "Classical fear conditioning in adults and adolescents: does the ability to detect safety develop?" June, 2007, Chicago IL
37. Society for Psychophysiological Research, symposium co-author: "Responses to social conflict in youth with mood and anxiety disorders" October 2007, Savannah, GA
38. Society for Research on Adolescents, symposium presenter: "The treachery of your company: amygdala hyperactivation in anxious adolescents while engaging in computerized social interactions" March 2008, Chicago, IL
39. Society for Research on Adolescents, symposium presenter: "Teenage social emotions under the microscope and in the magnet: a neuroimaging approach to adolescent peer

- interaction" March 2008, Chicago, IL
40. Society for Biological Psychiatry, poster co-author: "Developmental differences in neural correlates of human fear conditioning and extinction" May, 2008, Washington, DC
  41. American Society of Primatologists, poster co-author: "Early adverse rearing experiences alter sleep-wake patterns and basal cortisol levels in juvenile rhesus monkeys (*Macaca mulatta*)" June, 2008, Palm Beach, FL
  42. Division of Developmental Translational Research, Invited oral presentation: "Comparative Studies of Social Development in Human and Nonhuman Primates" June 2008, Bethesda, MD
  43. Social and Affective Neuroscience Society, poster co-author: "Sex-related developmental differences in neural response to anticipated peer evaluation" June 2008, Boston, MA
  44. Social and Affective Neuroscience Society, poster presenter: "Neural response to receipt of peer feedback in adolescence" June 2008, Boston, MA
  45. Society for Research in Child Development, symposium presenter: "The treachery of your company: amygdala hyperactivation in anxious adolescents while engaging in computerized social interactions" April, 2009, Denver, CO
  46. Society for Research in Child Development, symposium co-author: "Using imaging genetics to study linkages among early temperament, adolescent reward processing, and monoamine oxidase A" April, 2009, Denver, CO
  47. Society for Research in Child Development, symposium co-author: "Neural responses to anticipated peer evaluation in adolescent development" April, 2009, Denver, CO
  48. Society for Research in Child Development, symposium co-author: "Neural functional alterations during reward processing in adolescents with anxiety" April, 2009, Denver, CO
  49. American Society of Primatologists, poster co-author: "Early rearing history and the temporal dynamics of social buffering in rhesus macaques" September 2009, San Diego, CA
  50. Society for Psychophysiological Research, symposium co-author: "Reward systems in adolescence and anxiety" Pctpber, 2009, Berlin, Germany
  51. Society for Research on Adolescence, symposium presenter: "The neural correlates of peer social interaction in behaviorally inhibited adolescents" March, 2010, Philadelphia, PA
  52. Anxiety and Depression Association of America, poster co-author: "The effects of fluoxetine on juvenile monkeys following adverse early rearing experiences" March, 2010, Baltimore, MD
  53. Anxiety and Depression Association of America, poster co-author: "Neural correlates of anticipated social evaluation in adolescence: insights from behavioral inhibition and social anxiety" March, 2010, Baltimore, MD
  54. Organization for Human Brain Mapping, poster presenter: "Effects of juvenile fluoxetine treatment on brain development in mother and peer reared monkeys" June, 2010, Barcelona, Spain
  55. American Society of Primatologists, poster co-author: "How variant rearing patterns and fluoxetine affects stress and fear response behaviors in adolescent rhesus macaques (*Macaca mulatta*)" June, 2010, Louisville, KY
  56. American Society of Primatologists, poster co-author: "RH5-HTTLPR and peer rearing compromise social buffering of arousal and fear in juvenile rhesus macaques (*Macaca mulatta*)" June, 2010, Louisville, KY
  57. American Academy of Child and Adolescent Psychiatry, symposium co-author: "Neural underpinnings of feared social situations: insights from adolescent social anxiety and behavioral inhibitions" October, 2010, New York, NY
  58. Society for Research on Child Development, symposium co-author: "Neural response to



- potential peer evaluation in adolescents with early-life behavioral inhibition: links to social anxiety disorder”, April, 2011, Montreal, CA
59. Society for Research on Child Development, symposium co-author: “Emotional and neural reactions to an fMRI peer evaluation paradigm in adolescents with and without early behavioral inhibition”, April, 2011, Montreal, CA
  60. Society for Research on Child Development, symposium presenter: “Threat bias in young adult monkeys is modulated by fluoxetine treatment during early adolescence”, April, 2011, Montreal, CA
  61. National Institutes of Health Research Festival, poster co-author: “Early-life stress and chronic fluoxetine treatment alter structural development of the anterior cingulate cortex in juvenile rhesus monkeys (*Macaca mulatta*)” May, 2011, Bethesda, MD
  62. National Institutes of Health Research Festival, poster co-author: “Effect of mothers’ dominance rank on offspring temperament in infant Rhesus Monkeys (*Macaca mulatta*)” May, 2011, Bethesda, MD
  63. National Institutes of Health Research Festival, poster co-author: “Effect of maternal dominance rank on social behavior of juvenile rhesus macaques (*Macaca mulatta*)” May, 2011, Bethesda, MD
  64. Society for Biological Psychiatry, poster co-author: “Unique neural correlates of contingency-based reward in anxious adolescents” May, 2011, San Francisco, CA
  65. American Society of Primatologists, poster co-author: “Effect of mothers’ dominance rank on offspring temperament in infant Rhesus Monkeys (*Macaca mulatta*)” September 2011, Austin, TX
  66. Society for Social Neuroscience, poster co-author: “Social dominance behavior and threat orienting in young adult monkeys is modulated by fluoxetine during early adolescence” November, 2011, Washington, DC
  67. Society for Neuroscience, poster co-author: “Structural development of limbic structures in adolescent monkeys: effects of early adverse rearing and fluoxetine treatment” November, 2011, Washington, DC
  68. Society for Neuroscience, poster co-author: “Social status and threat orienting behavior in young adult monkeys is modulated by fluoxetine during early adolescence” November, 2011, Washington, DC
  69. Society for Neuroscience, poster co-author: “PET imaging of serotonergic system in monkeys: effects of maternal separation, and chronic fluoxetine treatment during development” November, 2011, Washington, DC
  70. American College of Neuropsychopharmacology, poster co-author: “Neural response to peer evaluation in adolescents at risk for social anxiety disorder due to childhood behavioral inhibition” December, 2011, Waikola Beach, HI
  71. University of Vermont Department of Psychiatry, Grand Rounds: “Neurobiology of social cognition: development and psychopathology” March, 2012, Burlington, VT
  72. Society for Research on Adolescence, symposium co-author: “The rewarding nature of peer acceptance in the adolescent brain” March, 2012, Vancouver, BC
  73. Anxiety and Depression Association of America, symposium co-author: “Neural response to social and non-social rewards in adolescents with childhood behavioral inhibition” April, 2012, Arlington, VA
  74. Anxiety and Depression Association of America, poster co-author: “Socially-driven cognitive biases in anxiety” April, 2012, Arlington, VA
  75. Association for Psychological Science, invited oral presentation: “What develops in social development?” May, 2012, Chicago, IL

76. Society for Biological Psychiatry, symposium co-author: "Drd4 moderates the relation between behavioral inhibition and the neural correlates of reward processing " May, 2012, Philadelphia, PA
77. Society for Biological Psychiatry, poster co-author: "An fmri study of response to peer rejection and acceptance in depressed adolescents " May, 2012, Philadelphia, PA
78. Society for Biological Psychiatry, poster co-author: "Socially-driven cognitive biases in expectations and recall of peer rejection in anxiety " May, 2012, Philadelphia, PA
79. Summer Institute on Social Developmental Neuroscience, poster co-author: "Development and anxiety differentially influence neural response to peer evaluation" June, 2012, College Park, MD
80. Functional Neuroreceptor Mapping in the Living Brain, symposium co-author: "Fluoxetine administered to pre-pubertal monkeys persistently upregulates the serotonin transporter into adulthood" August 2012, Baltimore, MD
81. The American Academy of Child and Adolescent Psychiatry, poster co-author: "What do shy adolescents look for in peers? Behavioral and neural clues assessed during a peer evaluation neuroimaging task" October, 2012, San Francisco, CA
82. Calleva Symposium and Workshop on Adolescence, invited oral symposium: "The social brain in typically developing and anxious adolescents" October, 2012, Oxford, UK
83. American College of Neuropsychopharmacology, symposium co-author: "Neural response to social threat: disease specificity in adolescents with generalized anxiety disorder, social phobia, and at risk populations" December 2012, Hollywood, FL
84. National Institute of Mental Health meeting on effects of intranasal oxytocin, symposium presenter: "Oxytocin and vasopressin alter patterns of attention to emotional faces in healthy adults" February 2013, Bethesda, MD
85. NIH Clinical Center Grand Rounds, oral presentation: "The use of deception in studies of pediatric anxiety" March, 2012, Bethesda, MD
86. Society for Research in Child Development, symposium co-author: "Parenting style in childhood and neural response to peer evaluation in adolescence" April, 2013, Seattle, WA
87. Society for Research in Child Development, symposium co-author: "Linking maternal negative affect with youth's neural responses to peer acceptance" April, 2013, Seattle, WA
88. Society for Research in Child Development, symposium co-author: "Hyperactivation in amygdala and VLPFC in healthy and anxious adolescents contemplating peer evaluation" April, 2013, Seattle, WA
89. Society for Research in Child Development, symposium co-author: "Pubertal influences on neural response to peer rejection in adolescents" April, 2013, Seattle, WA
90. Society for Research in Child Development, poster co-author: "Memory for social evaluation: behavioral inhibition, social anxiety and age-related differences" April, 2013, Seattle, WA
91. Society of Biological Psychiatry, poster co-author: "The role of development in the neural response to social threat in patients with anxiety disorders" May, 2013, San Francisco, CA
92. Society of Biological Psychiatry, poster co-author: "Impaired default mode network during the processing of negative cues in youths at parental risk for anxiety disorders" May, 2013, San Francisco, CA
93. International Society for Cerebral Blood Flow and Metabolism, symposium co-author: "Fluoxetine administered to pre-pubertal monkeys persistently upregulates the serotonin transporter into adulthood" May, 2013, Shanghai, China
94. NIH Research Festival, poster co-author: "Patterns of attention to visual depictions of social and non-social threat in healthy and anxious adolescents and adults" June, 2013, Bethesda,

MD

95. Eating Disorders Research Society, symposium co-author: "Attentional biases toward palatable foods in children with and without loss of control eating" October, 2014, Bethesda, MD
96. The Obesity Society, symposium co-author: "Brain activation in stress-sensitive regions is associated with actual food intake in the laboratory in overweight girls" November, 2013, Atlanta, GA
97. Society for Research on Adolescence, symposium co-author: "Peer reputation influences neural engagement during anticipated social evaluation in adolescents" March, 2014, Austin, TX
98. Anxiety and Depression Association of America, symposium co-author: "Dysregulated neural response to social feedback in ten year olds with early childhood social reticence" March, 2014, Chicago, IL
99. Anxiety and Depression Association of America, symposium co-author: ". Anticipating peer evaluation in adolescence: anxiety-related divergence in maturation of motivation-related neural circuits" March, 2014, Chicago, IL
100. Flux Congress, International Society for Integrative Developmental Cognitive Neuroscience, poster co-author: "Childhood social reticence predicts differential brain response during peer interactions" September 2014, Los Angeles, CA
101. NIH Annual Research Festival, poster co-author: "Developmental differences in eye gaze during the social evaluation of others: implications for social anxiety disorder" September, 2014, Bethesda, MD
102. Eating Disorders Research Society, symposium co-author: "Brain activation and actual food intake in the laboratory in overweight girls with and without loss of control eating (LOC)" October, 2014, San Diego, CA
103. Association for Behavioral and Cognitive Therapies, poster co-author: "Anticipating evaluation from unpredictable peers is associated with differential brain response in socially anxious adolescents" November, 2014, Philadelphia, PA
104. Society for Neuroscience, symposium co-author: "Differences in inhibitory control in adolescents with and without loss of control eating (LOC) – suggest a role of dlPFC in motor inhibition and peer interaction" November, 2014, Washington, DC
105. American College of Neuropsychopharmacology, poster co-author: "Dysregulated neural response to unpredictable social evaluation in bullied adolescents: a potential mechanism that promotes risk for social anxiety disorder" December, 2014, Phoenix, AZ
106. Society for Research on Child Development, symposium co-author: "Depressed adolescents pupillary response to peer acceptance and rejection: the role of rumination" March, 2015, Philadelphia, PA
107. Society for Research on Child Development, symposium co-author: "Childhood social reticence predicts dysregulated brain function during anticipated social evaluation in adolescence" March, 2015, Philadelphia, PA
108. Society for Research on Child Development, symposium co-author: "Dysregulated neural response to social evaluation in bullied adolescents" March, 2015, Philadelphia, PA
109. Society for Research on Child Development, poster co-author: "Developmental differences in eye gaze during the social evaluation of others: Implications for social anxiety disorder" March, 2015, Philadelphia, PA
110. Social and Affective Neuroscience, invited anchor symposium: "Neurobiological profiles of socially anxious adolescents as they anticipate and receive judgments from their peers", April, 2015, Boston, MA

111. Society of Biological Psychiatry, symposium co-author: "Dysregulated neural response to unpredictable peer feedback in adolescents with social anxiety disorder" May, 2015, Toronto, ON
112. Jean Piaget Society, symposium organizer and moderator: "Predicting the worst and forgetting the best: unique neural circuits promote social anxiety in adolescents" June, 2015, Toronto, ON
113. Jean Piaget Society, symposium co-author: "Neuroplasticity and Social Development" June, 2015, Toronto, ON
114. American Academy of Child and Adolescent Psychiatry, invited discussant and moderator: "Developmental Trajectories of Social Cognition in Adolescents" October, 2015, San Antonio, TX
115. American Academy of Child and Adolescent Psychiatry, symposium co-author: "Dysregulated neural response to unpredictable negative social feedback in adolescents with social anxiety disorder" October, 2015, San Antonio, TX
116. Endophenotypes of Social Anxiety Disorder, invited oral symposium: "can social anxiety be explained by differences in motivated learning across development?" December, 2015, Leiden, the Netherlands
117. Anxiety and Depression Association of America, poster co-author: "Socially anxious youth show heightened neural activation during unpredictable negative feedback" March, 2016, Philadelphia, PA
118. Society for Research on Adolescence, poster co-author: "Altered neural networks for salience processing during unpredictable social evaluation in pediatric social anxiety disorder" March, 2016, Baltimore, MD
119. Social and Affective Neuroscience Society, poster co-author: "Developmental differences in the perception of non-verbal cues: An fMRI study" April, 2016, New York, NY
120. Society for Research in Child Development, poster co-author: "Subclinical impairments in social competence differentially predict brain activation and anxiety symptoms in healthy youths" April, 2017, Austin, TX
121. Society for Research in Child Development, symposium co-author: "Dysregulated neural response during the anticipation and receipt of peer evaluation in adolescents with social anxiety disorder" April, 2017, Austin, TX
122. Society for Research in Child Development, symposium co-author: "Dysregulated neural response during the anticipation and receipt of peer evaluation in adolescents with social anxiety disorder" April, 2017, Austin, TX
123. Flux Congress, International Society for Integrative Developmental Cognitive Neuroscience, poster co-author: "Neural correlates of peer victimization in youth at highest risk for social anxiety confer resilience for development of social anxiety symptoms 2-years later" September, 2017, Portland, OR
124. Flux Congress, International Society for Integrative Developmental Cognitive Neuroscience, poster co-author: "The effect of temporal lobe epilepsy on emotion recognition in children" September, 2017, Portland, OR
125. American Academy of Child and Adolescent Psychiatry, poster co-author: "The effect of social awareness on anticipated social interactions in anxious and non-anxious youth: a neuroimaging study" October, 2017, Washington, DC
126. Developmental Affective Neuroscience Symposium, invited discussant: "Development of the Brain in a Social Context" October, 2017, Pittsburgh, PA
127. The Research Institute at Nationwide Children's Hospital annual research retreat, poster co-author: "The effect of temporal lobe epilepsy on emotion recognition in children"

November, 2017, Columbus OH

128. The Research Institute at Nationwide Children's Hospital annual research retreat, poster co-author: "The effect of VNS on seizure frequency and behavioral outcomes in children with epilepsy" November 2017, Columbus OH
129. American Epilepsy Society, poster co-author: "The effect of VNS on seizure frequency and behavioral outcomes in children with epilepsy", December, 2017, Washington, DC
130. American College of Neuropsychopharmacology, poster co-author: Social anxiety severity and age influence neural responses to social feedback. December 2017, Palm Springs, CA
131. Social Affective Neuroscience, poster co-author: "Ecologically Valid Neural and Behavioral Predictors of the Continuation of Social Anxiety Symptoms In Youths" June 2018, Brooklyn, NY
132. Social Affective Neuroscience, poster co-author: "Age-related differences in neural activation during the recognition of vocal emotional prosody by youth", June 2018, Brooklyn, NY
133. 2018 Global Symposium on Trauma Research Methods, oral symposium: "Utility of Neuroimaging Approaches in Pediatric Brain Trauma Research" June 2018, Columbus Ohio
134. The Obesity Society poster co-author: "Attentional Bias to Food cues and Energy Intake in Adolescent Girls with Overweight and Obesity", November 2018, Nashville TN
135. Society for Social Neuroscience oral presentation co-author: "Age-related changes in vocal emotional processing at both the behavioral and neural levels" San Diego CA, October 2018.
136. Society for Neuroscience poster co-author: "Disruption to development of neural activation during facial and vocal emotion recognition in temporal lobe epilepsy", October 2018, San Deigo CA
137. The Research Institute at Nationwide Children's Hospital annual research retreat, poster co-author: "Age related changes in social dynamics among temporal lobe epilepsy participants and healthy controls" November 2019, Columbus OH
138. The Research Institute at Nationwide Children's Hospital annual research retreat, poster co-author: "Age related changes in brain structure in epilepsy and controls" November 2018, Columbus OH
139. The Research Institute at Nationwide Children's Hospital annual research retreat, poster co-author: "Effects of epilepsy on white matter organization in adolescence" November 2018, Columbus OH
140. The Research Institute at Nationwide Children's Hospital annual research retreat, poster co-author: "Comparison of default mode network in youth with and without temporal lobe epilepsy" November 2018, Columbus OH
141. The Research Institute at Nationwide Children's Hospital annual research retreat, poster co-author: "Developmental changes in neural activation during facial and vocal emotion recognition are disrupted in temporal lobe epilepsy" November 2018, Columbus OH
142. American Epilepsy Society poster presenter: "Disruption to development of neural activation during facial and vocal emotion recognition in temporal lobe epilepsy", November 2018, New Orleans LA
143. Society for Research in Child Development poster co-author: "Youth's Neural Response to Emotional Faces and Voices: Age-Related Changes in Common Areas of Activation. March 2019, Baltimore MD
144. Social and Affective Neuroscience poster co-author: "Differential electrocortical representation of salient others' vocal outputs in temporal lobe" May 2019, Miami FL
145. Social and Affective Neuroscience poster co-author: "Neural activation underlying executive dysfunction in young children with prenatal marijuana exposure and unexposed controls" May 2019, Miami, FL

146. Wisconsin Symposium on Emotion poster co-author: “Volumetric increases in amygdala and hippocampus are associated with poor social functioning in children with epilepsy” April 2019, Madison Wisconsin
147. Flux congress poster co-author: “Effect of age and gonadal hormone administration on risk-taking and impulsivity in gender dysphoric youth” September 2020, New York NY
148. Flux congress poster co-author: “The role of gonadal hormone administration on social anxiety and amygdala response to threat faces in transgender youth” September 2020, New York NY
149. Flux congress poster co-author: “Gonadal hormone administration alters neural response to both unfamiliar peers and own mother’s voice in adolescents” September 2020, New York NY
150. International Society for Developmental Psychobiology symposium co-author “Substance use during pregnancy: impact on behavioral and neurocognitive development of offspring from infancy to adulthood” October 2019, Chicago IL
151. International Society for Developmental Psychobiology poster co-author “effects of gender affirming hormone treatment on white matter organization in gender dysphoric youth” October 2019, Chicago IL
152. American Association of Child and Adolescent Psychiatry poster co-author: “Internalizing disorders in pediatric epilepsy: rates, disease factors and radiologic biomarkers” October 2019, Chicago IL
153. Developmental Affective Neuroscience Society poster co-author: “Neural correlates of associative learning in adolescents: the impact of very preterm birth” November 2019, Pittsburgh PA
154. Developmental Affective Neuroscience Society poster co-author: “Gonadal hormone administration alters neural response to both unfamiliar peers and own mother’s voice in adolescents” November 2019, Pittsburgh PA
155. Nationwide Children’s Hospital Grand Rounds poster co-author: “The role of gonadal hormone administration on social anxiety and amygdala response to threat faces in transgender youth” October 2019, Columbus OH
156. Society for Research in Adolescence poster co-author: “Social competence and its correlates in extremely preterm adolescents” March 2020 San Diego CA - CANCELLED
157. Society for Affective Neuroscience poster co-author: “Differential electrocortical representation of peers’ and babies’ vocal outputs in the temporal lobe” May 2020, Santa Barbara CA – CANCELLED
158. Society for Affective Neuroscience poster co-author: “Neural activity underlying executive function in young children with prenatal marijuana exposure and unexposed controls” May 2020, Santa Barbara CA - CANCELLED
159. BioMag 2020 poster co-author “Attention bias to faces and activation during bottom-up attention capture vs. top-down attention deployment assessed by magnetoencephalography (MEG) among adolescent girls with overweight or obesity” September 2020, Birmingham AL
160. International Society for Developmental Psychobiology poster co-author “Using fNIRS to study the Role of Neural Responses to Mothers’ Voices in Intergenerational Transmission of Depression” October 2020 – virtual poster presentation
161. Abigail Wexner Research Institute Research Retreat poster co-author. Brain response to vocal emotions distinguishes youth with and without epilepsy. Virtual Conference November 2020
162. Abigail Wexner Research Institute Research Retreat poster co-author. Sub-cortical volumes in transgender adolescents receiving gender affirming testosterone treatment. Virtual Conference November 2020
163. Abigail Wexner Research Institute Research Retreat poster co-author. Young children of

- mothers with a history of depression show attention bias toward sad faces. Virtual Conference November 2020
164. Society for Research in Child Development poster co-Author. Cognitive and quality of social relationships in extremely preterm adolescents. Virtual Conference April 2021
  165. International Neuropsychology Society paper co-Author. White matter volume increases throughout the mentalizing network across development. February, 2021 virtual presentation
  166. International Neuropsychology Society poster co-Author. Responses to stress correlate with cortical thickness in healthy adolescents. February, 2021 virtual presentation
  167. International Conference on Eating Disorders oral presentation co-Author. Neural correlates of threat bias in relation to test meal intake among adolescent girls with overweight/obesity. June 2021. Virtual conference.
  168. International Society for Developmental Psychobiology poster co-author: The influence of maternal depression on fnirs neural responses to mothers' voice in young children. November 2021, Chicago, IL
  169. International Society for Developmental Psychobiology poster co-author: Young children of mothers with a history of depression display attention bias toward sad faces. November 2021, Chicago, IL
  170. International Society for Developmental Psychobiology poster co-author: A multimodal machine learning model of fusiform structure and function in youth born extremely preterm. November 2021, Chicago, IL
  171. Society for Neuroscience Poster co-author: Effects of Myelin Oligodendrocyte Glycoprotein Antibody-associated demyelinating disease on regional white matter volume and cognitive function in children. November 2021, Chicago, IL
  172. Society for Neuroscience Poster co-author: Effects of Testosterone and Estradiol administration to transgender adolescents on resting state connectivity of the reward network. November 2021, Chicago, IL
  173. Society for Neuroscience Poster co-author: Development of language-related white matter fiber tracts and their relationships with single word reading ability among healthy children and adolescents. November, 2021, Chicago, IL
  174. Ohio State University Center for Cognitive and Behavioral Neuroimaging symposium poster co-author. Characterizing the effect of premature birth on adolescent brain network organization
  175. Ohio State University Center for Cognitive and Behavioral Neuroimaging symposium poster co-author. Variations in white matter connectivity with and across functional brain networks in pediatric traumatic brain injury.
  176. Ohio State University Center for Cognitive and Behavioral Neuroimaging symposium poster co-author. Injury severity predicts social competency and degradation of white matter fiber tracts associated with social cognition in children with traumatic brain injury
  177. International Neuropsychological Society Poster co-Author: Injury severity predicts social competency and degradation of white matter fiber tracts associated with social cognition in children with traumatic brain injury. February, New Orleans, LA.
  178. International Neuropsychological Society Oral Presentation co-Author: Variations in white matter connectivity with and across functional brain networks in pediatric traumatic brain injury. February, New Orleans, LA.
  179. National Council on Family Relations Poster co-author. The impact of gender affirming hormones and social support on transgender youths' mental health: the role of family and friends. National Council on Family Relations Annual Conference, Minneapolis, MN, United States. <https://www.ncfr.org/ncfr-2022>
  180. OSU-NRI Neuroimaging Research Symposium poster co-author: Characterization of lesions among different pediatric acquired demyelination syndromes using automated lesion detection toolbox. Columbus OH, October 2022

181. OSU-NRI Neuroimaging Research Symposium poster co-author: Disrupted neural organization in youth with intractable focal epilepsy. Columbus OH, October 2022\* award winner
182. OSU-NRI Neuroimaging Research Symposium poster co-author: Social brain connectivity relates to social and adaptive outcomes following pediatric traumatic brain injury Columbus OH, October 2022
183. American College of Neuropsychopharmacology. Mini panel presenter. Effects of testosterone administration on reward responsiveness, and brain response to caregivers voice in transmasculine adolescents. Phoenix, AZ, December 2022
184. International Society of Neuropsychology poster co-author: Exploring the impact of stria terminalis connectivity at varying levels of family income on depressive symptoms throughout development. San Diego, CA, February 2023
185. International Society of Neuropsychology poster co-author: Neurocognitive profile of pediatric acquired demyelinating syndrome with and without myelin oligodendrocyte glycoprotein antibody disease (MOGAD). San Diego, CA, February 2023
186. International Society of Neuropsychology poster co-author: White matter correlates of coping with social stress in adolescence, and their links to mental health. San Diego, CA, February 2023
187. International Society of Neuropsychology poster co-author: Social brain connectivity relates to social and adaptive outcomes following pediatric traumatic brain injury. San Diego, CA, February 2023
188. Society for Pediatric Psychology poster co-author: In their own words: reported experiences of transgender and gender diverse youth and their parents regarding pubertal suppression treatment. Chicago, IL, March 2023
189. Society for Research in Child Development. Flash talk co-author: Reduced amygdala habituation to anticipated social rejection in youth with major depressive disorder. Salt Lake City UT, April 2023
190. Society for Research in Child Development poster co-author: Examining the quality of transgender and cisgender adolescent relationships with parents and peers. Salt Lake City UT, April 2023
191. Society for Research in Child Development poster co-author: Children with familial risk for depression show differential neural responses to mothers' and strangers' voices. Salt Lake City UT, April 2023
192. Psychiatric Research Society. Mini panel presenter. Effects of gonadal hormone administration on internalizing symptoms, body image and amygdala-mpfc connectivity in transgender adolescents. UT, March 2023

## **EDITORIALS AND REVIEW ACTIVITIES**

**Editorial Board Member**                      Developmental Cognitive Neuroscience                      2013 -

### **Study Sections**

Nationwide Children's Hospital Intramural Funding Program                      2017-

Neurodevelopmental Research Affinity Group Seed Application Program                      2019 –



## Ad Hoc Journal Reviewer

Archives of General Psychiatry; Behavioural Brain Research; Behavioral Neuroscience; Biological Psychiatry; Cerebral Cortex; Child Development; Clinical Psychological Science; Cognitive, Affective, and Behavioral Neuroscience;; Development and Psychopathology; Developmental Cognitive Neuroscience; Developmental Neuropsychology; Developmental Psychobiology; Frontiers in Behavioral Neuroscience; Frontiers in Human Neuroscience; Frontiers in Psychology; Hormones & Behavior; Journal of Affective Disorders; Journal of Adolescence; Journal of Adolescent Health; Journal of the American Academy of Child and Adolescent Psychiatry; Journal of Child Psychiatry and Psychology; Journal of Cognitive Neuroscience; Journal of Neuroscience; Journal of Psychopharmacology; Neuroimage; Neuroscience & Biobehavioral Reviews; Pediatrics; Psychiatry Research – Neuroimaging; Psychoneuroendocrinology; Psychopharmacology; Social Cognitive & Affective Neuroscience; Trends in Cognitive Science; PLOS One; Psychotherapy and Psychosomatics Scientific Reports; Zoological Research

## TEACHING

### EDUCATION LEADERSHIP ROLES

Lecturer Postdoctoral Research Training Fellowship Course	2016 –
Faculty Member Postdoctoral Fellowship Training Program	2017 –
co-Instructor, The Writing Group, postbaccalaureate training course <i>Neuroimaging in Clinical Research</i> . Annual lecture for	2017-2019
Research Measurement in Nursing Course (PhD program OSU)	2018 –
 <i>Neuroimaging Tools and Applications</i>	
Organizer of a course for investigators and staff of CBH	2019-2020
 <i>Neuroimaging in Child and Adolescent Psychiatry</i>	
Neuroimaging for Child and Adolescent Psychiatry Residents	2022

### TEACHING OUTSIDE OF CURRENT INSTITUTION

Graduate Teaching Assistant <i>Introductory Psychology</i> Bowling Green State University, Bowling Green, OH	1990-1991
Graduate Teaching Assistant <i>Biological and Experimental Psychology</i> Bowling Green State University, Bowling Green, OH	1992-1994
Co-Instructor, <i>Research Ethics</i> Center for the Integrative Study of Animal Behavior Indiana University Bloomington, IN	1996
Co-Instructor, <i>Biology of Affiliative Behavior</i> Department of Psychology Indiana University, Bloomington IN	1997
Instructor, Analyzing Functional MRI Data with SPM99 Mood and Anxiety Disorders Program	

## **DIRECT STUDENT SUPERVISION**

### **Summer Students**

Neir Eshel, NIMH IRP, Bethesda MD	2004-2007
Carey Heller, NIMH IRP, Bethesda MD	2004-2005
Lauren Cohen, NIMH IRP, Bethesda MD	2011
Sean Winslow, NIMH IRP, Bethesda MD	2011-2013
Pierce Newman, NIMH IRP, Bethesda MD	2012
Diana Bongiorno, USUHS, Bethesda MD	2014
Kaitlin Eing, Radiology, NCH, Columbus OH	2018
Indira Guha, Neuroscience, OSU, Columbus OH	2019-2020
Daria Kupperberg, Neuroscience, OSU, CBUS OH	2019-2020
Avery Anderson, Nursing PhD, OSU	2021
Daniel Eilert, Neuroscience OWU	2022

### **Undergraduate Students**

Amanda Smith (Heather Hoffman) Psychology, Knox College, Galesburg, IL	1998
Brett Rusch (Richard Davidson) Psychology, U. Wisconsin, Madison WI	2000

### **Postbaccalaureate Trainees**

Andrea Hoberman, NIMH IRP	2001-2003
Lee Ann Montgomery, NIMH IRP	2001-2003
Allison Merikangas, NIMH IRP	2001-2003
Suzanne Munson, NIMH IRP	2002-2004
Aaron Rakow, NIMH IRP	2003-2005
Carrie Masten, NIMH IRP	2003-2005
Sandra Jazbec, NIMH IRP	2003-2005
Abbie Adler, NIMH IRP	2003-2005
Jessica Parrish, NIMH IRP	2005-2006
Michele Goldwin, NIMH IRP	2007-2009
Catherine Barrett, NIMH IRP	2007-2009
Jessica Jenness NIMH IRP	2007-2009
Nina Shriffrin, NIMH IRP	2005-2006
Deborah Delaney, NIMH IRP	2008-2009
Kimberly Chisolm, NIMH IRP	2009-2010
Victoria Choate, NIMH IRP	2009-2011
Uy Le, NIMH IRP	2009
Michael McLaughlin, NIMH IRP	2009-2010
Emily Johnson, NIMH IRP	2010

Kristin Szuhany, NIMH IRP	2010-2012
Jeremy Kruger, NIMH IRP	2010-2012
Amanda Hathaway, NIMH IRP	2010-2011
Benjamin Suarez-Jimenez, NIMH IRP	2011-2012
Andrea Romer, NIMH IRP	2012-2014
Stuart Wong, NIMH IRP	2012-2014
Laurie Russel, NIMH IRP	2013-2015
Dana Rosen, NIMH IRP	2013-2015
Brent Rappaport, NIMH IRP	2014-2016
Joseph Venticinque, NCH AWRI	2017-2018
Stanley Singer, NCH AWRI	2017-2018
Connor Grannis, NCH AWRI	2018-
Andy Hung, NCH AWRI	2018-2021
Roberto French, NCH AWRI	2018-2022
Peyton Thomas, NCH AWRI	2020-2022
Scout Crowell, NCH AWRI	2020- 2022
Katie Billetdeaux NCH AWRI	2022-
Alexander Douma NCH AWRI	2022 -

## Graduate Students

Michael Hardin (Nathan Fox) Human Development, University of Maryland	2004-2007
Kara Lindstrom (Daniel Pine) NIH-Karolinska Graduate Program	2006-2009
Khalisa Herman (Nathan Fox) Human Development University of Maryland	2007-2010
Norberto Nawa ATR Cognitive Information Science Research Program Kyoto Japan	2008
Stal Saurav Shrestha (Robert Innis) NIH-Karolinska Graduate Program	2011-2013
Anna Vannucci (Tanovsky-Kraff) Medical and Clinical Psychology Uniformed Services of the Health Sciences	2013-2015
Kevin Hilbert Humbolt University Berlin Germany	2015

Michele Morningstar (Melanie Dirks)  
McGill University, Montreal CA 2015-2016

Joanne Beer  
Western Psychiatric Institute  
University of Pittsburgh, Pittsburgh PA 2016

Monika Stojek (Tanovsky-Kraff)  
Medical and Clinical Psychology  
Uniformed Services of the Health Sciences 2016-2018

### **PhD Defense Committees**

Khalisa Herman (Nathan Fox)  
Department of Human Development  
University of Maryland 2010

Cheryl Garn (Erin Tone)  
Department of Psychology  
Georgia State University 2013

Meltem Kiyar (Sven Mueller)  
Department of Psychology  
University of Ghent, Belgium 2023

### **Postdoctoral Fellows**

Christopher Monk, NIMH IRP 2001-2005  
Erin McClure-Tone, NIMH IRP 2001-2005  
Amanda Guyer, NIMH IRP 2003-2007  
Jennifer Lau, NIMH IRP 2005-2008  
Roxanne Roberson-Nay, NIMH IRP 2006-2009  
Francoise Maheu, NIMH IRP 2006-2007  
Sven Mueller, NIMH IRP 2006-2010  
Bo Zhang, NIMH IRP 2011-2012  
Jennifer Britton, NIMH IRP 2008-2012  
Tomer Shechner NIMH IRP 2010-2013  
Johanna Jarcho, NIMH IRP 2010-2015  
Kalina Michalska, NIMH IRP 2012-2016  
Andrea Gold, NIMH IRP 2012-2016  
Lauren White, NIMH IRP 2013-2016  
Jeffrey Spielberg, U.C. Berkeley 2015  
Thomas Olino, Western Psych 2010-2011  
Ashley Smith, NIMH IRP 2015-2017  
Michele Morningstar, NCH AWRI 2017-2020  
Xiaoxue Fu, NCH AWRI 2018-2020

## **PROFESSIONAL MEMBERSHIPS AND ACTIVITIES**

Fellow	MacArthur Network on Early Experience And Brain Development	2006-2007
Member	Society for Neuroscience	1989 –
Member	Flux Congress, Society for Integrative Developmental Neuroscience	2009 –
Member	International Society for Developmental Psychobiology	2016 –
Member	Chronic Brain Injury Group, Ohio State University	2021 -

I have reviewed the curriculum vitae for completeness and accuracy and agree with its content.

Signature \_\_\_\_\_

Date \_\_\_\_\_