

CURRICULUM VITAE
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Current Position: *Professor, Psychology and Applied Behavioral Science*
Senior Scientist, Life Span Institute
Director, University of Kansas Center for Autism Research and Training (K-CART)
Interim Associate Director, Life Span Institute
University of Kansas, Lawrence, KS

Education: Ph.D. Child Clinical Psychology
University of North Carolina – Chapel Hill (2007)

B.A. Psychology/English, Summa cum Laude
Emory University (1999)

Other Academic Appointments:

2017-Present: Adjunct Faculty, Department of Pediatrics, University of Kansas Medical Center

2015-Present: Participating Faculty, Child Language Doctoral Program, University of Kansas

2015-2017: Director of Clinical/Translational Research, University of Kansas Center for Autism Research and Training (K-CART)

2011-2015: Assistant Professor of Psychiatry and Pediatrics, University of Texas Southwestern Medical Center (Current adjunct appointment)

2014-2015: Head of Clinical Research, Center for Autism and Developmental Disabilities, UT Southwestern Medical Center

2013-2015: Adjunct Assistant Professor of Behavioral and Brain Sciences, University of Texas at Dallas

2009-2011: Assistant Professor of Psychiatry, University of Illinois at Chicago Medical Center

2007-2009: Postdoctoral Research Fellow, Cognitive Neuroscience, University of Illinois at Chicago Medical Center

2007-2009: Postdoctoral Clinical Fellow, Pediatric Neuropsychology, University of Illinois at Chicago Medical Center

2006-2007: Clinical Psychology Intern, Psychiatry, University of North Carolina at Chapel Hill

2005-2006: National Alliance for Autism Research Predoctoral Fellow, Clinical Psychology, University of North Carolina at Chapel Hill

2003-2004: Instructor, Psychology, University of North Carolina at Chapel Hill

2001-2004: Graduate Research Assistant, Clinical Psychology/Division TEACCH
University of North Carolina at Chapel Hill

Board Certification:

Kansas Behavioral Sciences Regulatory Board, Licensed Psychologist

Honors, Fellowships and Awards:

2020- Member, NIH Study Section: Child Psychopathology and Developmental Disabilities (CPDD)
2018- Associate Member, American College of Neuropsychopharmacology (ACNP)
2017: NIH/NINDS Imaging Biomarkers in Clinical Trials Working Group Member
2016: Selected as the KU/KUMC nominee for the Brain Behavioral Research Foundation Fay/Frank Seed Grant Program
2015: American College of Neuropsychopharmacology (ACNP) Selected Voice Poster Presentation
2014: International Society for Autism Research (INSAR) Young Investigator Award
2013: American College of Neuropsychopharmacology (ACNP) Data Blitz Invited Presentation
2011: American College of Neuropsychopharmacology (ACNP) Data Blitz Invited Presentation
2010-2015: NIMH K23 Career Development Award
2009: Autism Speaks Postdoctoral Training Award
2009: Society for Neural Control of Movement (NCM) Travel Award
2007: NIH T32 Postdoctoral Training Fellowship Award
2007: International Meeting for Autism Research (IMFAR) Best Dissertation Award
2007: International Meeting for Autism Research (IMFAR) Travel Award
2005: National Alliance for Autism Research (NAAR; now Autism Speaks) Predoctoral Fellowship Award
2004: Smith Graduate Research Award (University of North Carolina)
2003: Graduate Student Research Opportunity Award (University of North Carolina)
1998: Phi Beta Kappa

BIBLIOGRAPHY:

Peer Reviewed Manuscripts:

* - ISI value represents 5-year impact factor at time of publication

¹denotes senior author

²denotes corresponding author

³denotes mentor or co-mentor to first author

1. McKinney WS, Bartolotti J, Khemani P, Wang JY, Hagerman RJ, **Mosconi MW**^{1,2,3}. (in press). Cerebellar-cortical function and connectivity during sensorimotor behavior in aging FMR1 gene premutation carriers. NeuroImage: Clinical. *ISI=4.83*
2. Bartolotti J, Sweeney JA, **Mosconi MW**^{1,2,3}. (in press). Functional brain abnormalities associated with comorbid anxiety in autism spectrum disorder. Development and Psychopathology. *ISI=3.39 (3 year)*

3. Talebizadeh Z, Shah A, and “AutGO Working Group”. (in press). The AutGO Initiative: A Conceptual Framework for Developing Genetics-Outcomes Research Hypotheses. Autism Research.
ISI=4.48
4. Satterstrom FK, Kosmicki JA, Wang J...**Mosconi MW**...Walters RK. (2020). Large-scale exome sequencing study implicate both developmental and functional changes in the neurobiology of autism. Cell doi: 10.1016/j.cell.2019.12.036.
ISI=36.43
5. Bojanek EK, Wang Z, White SP, **Mosconi MW**^{1,2,3}. (2019). Postural control processes during standing and step initiation in autism spectrum disorder. Journal of Neurodevelopmental Disorders, 2(1):1. doi: 10.1186/s11689-019-9305-x.
ISI=4.00
6. Schmitt LM, Bojanek EK, White SP, Ragozzino ME, Cook EH, **Mosconi MW**^{1,2,3}. (2019). Familiality of behavioral flexibility and response inhibition deficits in autism spectrum disorder (ASD). Molecular Autism 10:47. doi: 10.1186/s13229-019-0296-y.
ISI=6.28
7. Bojanek EK, **Mosconi MW**³, Guter S, Betancur C, Macmillan C, Cook EH. (in press). Clinical and neurocognitive issues associated with Bosch-Boonstra-Schaaf optic atrophy syndrome: A case study. American Journal of Medical Genetics, Part A.
ISI=2.33
8. De Stefano LA, Schmitt LM, White SP, **Mosconi MW**, Sweeney JA, Ethridge LE. (2019). Developmental effects on auditory neural oscillatory synchronization abnormalities in autism spectrum disorder. Frontiers in Integrative Neuroscience, 13(34). doi: 10.3389/fnint.2019.00034.
ISI=2.81 (2018 only, 5 year score not yet available)
9. McKinney WS, Wang Z, Kelly S, Khemani P, Lui S, White SP, **Mosconi MW**^{1,2,3}. (2019). Precision sensorimotor control in aging *FMRI* gene premutation carriers. Frontiers in Integrative Neuroscience, 13(56). doi: 10.3389/fnint.2019.00056
ISI=2.81 (2018 only, 5 year score not yet available)
10. Unruh KE, Marin LE, Magnon G, Vaillancourt DE, Sweeney JA, **Mosconi MW**^{1,2,3}. (2019). Cortical and subcortical alterations associated with precision visuomotor behavior in individuals with autism spectrum disorder. Journal of Neurophysiology. 122(4):1330-1341. doi: 10.1152/jn.00286.2019.
ISI=2.58 (2018 only)
11. Neely KA, Mohanty S, Schmitt LM, Wang Z, Sweeney JA., **Mosconi MW**^{1,2}. (2019). Motor memory deficits contribute to motor impairments in autism spectrum disorder. Journal of Autism and Developmental Disorders, 49: 2675-2684. doi:10.1007/s10803-016-2806-5
ISI=4.36

12. Park HS, Wang Z, McKinney WS, Khemani P, Lui S, Christou E, **Mosconi MW**^{1,2,3}. (2019). Functional motor control deficits in older FMR1 premutation carriers. Experimental Brain Research. 10.1007/s00221-019-05566-3. *ISI=2.10*
13. Wang Z, Wang Y, Sweeney JA, Gong Q, Lui S, **Mosconi MW**^{1,2,3}. (2019). Resting-state brain network dysfunctions associated with visuomotor impairment in autism spectrum disorder. Frontiers in Integrative Neuroscience. doi: 10.3389/fnint.2019.00017 *ISI=3.23 (this is cite score; first impact factor coming in 2019)*
14. Aaron E, Montgomery A, Ren X, Guter SJ, Anderson GM, Carneiro A, Jacob S, **Mosconi MW**, Pandey GN, Cook EH, Veenstra-VanderWeele J. (2019). Whole blood serotonin levels and platelet 5-HT2A binding in autism spectrum disorder. Journal of Autism and Developmental Disorders. *ISI=4.37*
15. Wang Z, Khemani P, Schmitt LM, Lui S, **Mosconi MW**^{1,2,3}. (2019). Static and dynamic postural control deficits in aging Fragile X mental retardation 1 (FMR1) gene premutation carriers. Journal of Neurodevelopmental Disorders 11(1):2. doi: 10.1186/s11689-018-9261-x *ISI=4.13*
16. Sahin M, Jones SR, Sweeney JA, Berry-Kravis E, Connors BW, Ewen JB, Hartman AL, Levin AR, Potter WZ, Mamounas LA, and the Biomarker Workshop Faculty¹. (2019). Discovering translational biomarkers in neurodevelopmental disorders. Nature Reviews Drug Discovery. **¹Invited member of Workshop Faculty** *ISI=50.17*
17. Ethridge L, Berry-Kravis E, Thaliath A, Isenstein, E, Durkin A, Nelson C, Baczewski L, Powell C, White S, **Mosconi MW**, . . . Sweeney, J. (2018). 21. Auditory EEG Phenotypes in Single Gene Disorders: Insight into Heterogeneity in Idiopathic Autism. Biological Psychiatry. 83(9, Supplement), S8-S9. doi:https://doi.org/10.1016/j.biopsych.2018.02.038 *ISI=10.58*
18. Shou G, **Mosconi MW**, Ethridge LE, Sweeney JA, Ding L. (2018). Resting state Gamma-band EEG abnormalities in autism. Conf Proc IEEE Eng Med Biol Soc1915-1918. doi: 10.1109/EMBC.2018.8512718.
19. Montgomery AK, Shuffrey LC, Guter SJ, Anderson GA, Jacob S, **Mosconi MW**, Sweeney JA, Turner JB, Sutcliffe JS, Cook EH, Veenstra-VanderWeele. (2018). Maternal serotonin levels are associated with cognitive ability and core symptoms in autism spectrum disorder. Journal of the American Academy of Child and Adolescent Psychiatry. 57(11): 867-875. doi: 10.1016/j.jaac.2018.06.025 *ISI=7.86*

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20. Schmitt LM, White SP, Cook EH, Sweeney JA, **Mosconi MW**^{1,2,3}. Cognitive mechanisms of inhibitory control deficits in autism spectrum disorder (ASD). (2017). Journal of Child Psychology and Psychiatry. 59(5):586-595. doi: 10.1111/jcpp.12837
ISI=6.68
 21. Ethridge LE, White SP, **Mosconi MW**, Wang J, Pedapati EV, Erickson CA, Byerly MJ, Sweeney JA. (2017). Neural synchronization deficits linked to cortical hyperexcitability and auditory hypersensitivity in Fragile X Syndrome. Molecular Autism. 8(22): doi: 10.1186/s13229-017-0140-1
ISI=6.08
 22. Shou G, **Mosconi MW**, Wang J, Ethridge L, Sweeney JA, Ding L. (2017). Electrophysiological signatures of atypical intrinsic brain connectivity networks in autism. Journal of Neural Engineering. 14(4):046010. doi: 10.1088/1741-2552/aa6b6b
ISI=3.49
 23. Wang J, Ethridge LE, **Mosconi MW**, White SP, Binder DK, Pedapati EV, Erickson CA, Byerly MJ, Sweeney JA. (2017). A resting EEG study of neocortical hyperexcitability and altered functional connectivity in fragile X syndrome. Journal of Neurodevelopmental Disorders. 9:11. doi: 10.1186/s11689-017-9191-z
ISI=3.85
 24. Wang Z, Kwon MH, Mohanty S, Schmitt LM, White SP, Christou EA, **Mosconi MW**^{1,2,3}. (2017). Increased force variability is associated with altered modulation of motoneuron pool activity in autism spectrum disorder (ASD). International Journal of Molecular Sciences. 18:698. doi:10.3390/ijms18040698
ISI=3.26
 25. Schmitt LM, Ankeny LD, Sweeney JA, **Mosconi MW**^{1,2,3}. (2017). Inhibitory control processes and the strategies that support them during hand and eye movements. Frontiers in Psychology: Cognition.
ISI=2.46 (2016; 5 year ISI is not yet available)
 26. Wang Z, Hallac R, Conroy KC, White SP, Kane AA, Collinsworth AL, Sweeney JA, **Mosconi MW**^{1,2,3}. (2017). Postural orientation and equilibrium processes associated with increased postural sway in autism spectrum disorder (ASD). Journal of Neurodevelopmental Disorders. 8:43.
ISI=3.85
 27. D'Cruz A-M, **Mosconi MW**³, Ragozzino ME, Cook EH, Sweeney JA. (2016). Alterations in the functional neural circuitry supporting flexible choice behavior in autism spectrum disorder. Translational Psychiatry, 6(10):e916. doi: 10.1038/tp.2016.161.
ISI=5.62
 28. Ethridge L, White SP, **Mosconi MW**, Wang J, Byerly MJ, Sweeney JA. (2016). Reduced habituation of auditory evoked potentials indicated cortical hyperexcitability in Fragile X Syndrome. Translational Psychiatry, 6:e787.
ISI=5.62

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29. **Mosconi MW**, Lejuez CW. (2016). Making the brain matter in assessing and treating adolescent substance use – a commentary on Conrod and Nikolaou. Journal of Child Psychology and Psychiatry, 57(3): 395-397.
ISI=6.68
30. Ouyang M, Cheng H, Mishra V, Gong G, **Mosconi MW**, Sweeney JA, Peng Y, Huang H. (2016). Atypical age-dependent effects of autism on white matter microstructure in children 2-7 years. Human Brain Mapping, 37(2): 819-832.
ISI=6.21
31. **Mosconi MW**^{1,2}, Wang Z, Tsai PT, Sweeney JA. (2015). The role of cerebellar circuitry alterations in the pathophysiology of autism spectrum disorders. Frontiers in Neuroscience: Systems Biology, 9:296.
ISI=3.70
32. **Mosconi MW**^{1,2} & Sweeney JA. (2015). Sensorimotor dysfunctions as primary features of autism spectrum disorders. Science China: Life Sciences, 55(1), 1-8.
ISI=2.03
33. Bishop JR, Najjar F, Rubin LH, Guter SJ, Owley T, **Mosconi MW**, Cook EH. (2015). Escitalopram pharmacogenetics: CYP2C19 relationships with dosing and clinical outcomes in Autism Spectrum Disorder. Pharmacogenetics and Genomics.
ISI=3.56
34. Najjar F, Owley T, **Mosconi MW**, Jacob S, Hur K, Guter S, Sweeney J, Gibbons, R, Cook Jr E, Bishop, J: (2015). Pharmacogenetic study of serotonin transporter and 5HT2A genotypes in autism. Journal of Child and Adolescent Psychopharmacology, 25(6): 467-474.
ISI=3.38
35. Wang Z, Magnon GC, White SP, Greene RK, Vaillancourt DE, **Mosconi MW**^{1,2,3}. (2015). Individuals with autism spectrum disorder show abnormalities during initial and subsequent phases of precision gripping. Journal of Neurophysiology, 113(7): 1989-2001.
ISI=3.45
36. **Mosconi MW**^{1,2}, Mohanty S, Greene R, Cook EH, Vaillancourt DE, Sweeney JA. (2015). Feedforward and feedback motor control abnormalities implicate cerebellar dysfunctions in autism spectrum disorder. Journal of Neuroscience, 35(5), 2015-2025.
ISI=7.65
37. Miller HL, Ragozzino ME, Cook EH, Sweeney JA, **Mosconi MW**^{1,2,3}. (2015). Cognitive set shifting deficits and their relationship to repetitive behaviors in autism spectrum disorder. Journal of Autism and Developmental Disorders, 45(3): 805-815.
ISI=4.36

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38. Schmitt LM, Cook EH, Sweeney JA, **Mosconi MW**^{1,2,3}. (2014). Saccadic eye movement abnormalities in autism spectrum disorder indicate dysfunctions in both cerebellum and brainstem. Molecular Autism, 5(1):47.
ISI=6.08
39. Wang J, Barstein J, Ethridge L, **Mosconi MW**, Takarae Y, Sweeney JA. (2013). Resting state EEG abnormalities in autism spectrum disorders. Journal of Neurodevelopmental Disorders, 5(1):24.
ISI=3.85
40. **Mosconi MW**², Luna B, Kay-Stacey M, Nowinski CV, Rubin LH, Scudder C, Minshew N, Sweeney JA. (2013). Saccade adaptation abnormalities implicate dysfunction of cerebellar-dependent learning mechanisms in autism spectrum disorders (ASD). PLOS One, 8(5), e63709.
ISI=4.02
41. D’Cruz AM, Ragozzino ME, **Mosconi MW**³, Cook EH, & Sweeney JA. (2013). Reduced behavioral flexibility in autism spectrum disorders is related to insistence on sameness. Neuropsychology, 27(2), 152-160.
ISI=4.13
42. Davis LK, Maltman N, **Mosconi MW**, Macmillan C, Schmitt L, Francis SM, Jacob S, Sweeney JA, & Cook EH. (2012). Rare inherited *A2BPI* deletion in a proband with autism and developmental hemiparesis. American Journal of Medical Genetics, 158A(7), 1654-1661.
ISI=2.33
43. #**Mosconi MW** & Sweeney JA. (2012). Cerebellar dysfunctions underlying core cognitive and sensorimotor deficits in autism spectrum disorder. Cerebellum, 11(3), 777-807.
- Part of consensus paper “Pathological role of the cerebellum in autism” that was the most downloaded paper from Cerebellum during 2012.
ISI=2.90
44. Maltbie E, Bhatt K, Paniagua B, Smith RG, Graves MM, **Mosconi MW**,... Styner MA. (2012). Asymmetric bias in user guided segmentations of brain structures. NeuroImage, 59, 1315-1323.
ISI=6.96
45. D’Cruz AM, **Mosconi MW**³, Ragozzino ME, Pavuluri M, & Sweeney JA. (2011). Human reversal learning under conditions of certain versus uncertain outcomes. NeuroImage, 56, 315-322.
ISI=6.96
46. **Mosconi MW**, Kay M, D’Cruz AM, Guter S, Kapur K, Macmillan C, Stanford LD, & Sweeney JA. (2010). Neurobehavioral abnormalities in first-degree relatives of individuals with autism. JAMA Psychiatry, 67, 830-840.
ISI=14.40

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47. D'Cruz AM, **Mosconi MW**³, Steele S, Rubin L, Khine T, & Sweeney JA. (2009). Lateralized asymmetries in implicit learning of visuospatial pattern sequencing in individuals with autism. Biological Psychiatry, 66, 393-397.
ISI=10.35
 48. **Mosconi MW**, Kay M, Seidenfeld A, Guter S, Stanford L, & Sweeney JA. (2009). Impaired cognitive control is associated with higher-order repetitive behaviors in autism spectrum disorders. Psychological Medicine, 39, 1555-1566.
ISI=6.49
 49. **Mosconi MW**, Hazlett HC, Poe M, Gerig G, Gimpel RS, & Piven J. (2009). A longitudinal study of amygdala volume and joint attention in 2-4 year old children with autism. JAMA Psychiatry, 66, 509-516.
ISI=14.40
 50. **Mosconi MW**, Mesibov G, Reznick SJ, & Piven J. (2009). The Social Orienting Continuum and Response Scale (SOC-RS): a quantitative measure for preschool-aged children. Journal of Autism and Developmental Disorders, 39, 242-250.
ISI=4.36
 51. **Mosconi MW**, Nelson L, & Hooper SR. (2008). Confirmatory factor analysis of the NEPSY for younger and older school-aged children. Psychological Reports, 102, 861-866.
ISI=0.44
 52. Chung K, Reavis SB, **Mosconi MW**, Drewry J, Matthews JT, & Tasse M. (2007). The development of a peer-mediated social skills training for high-functioning children with autism. Research in Developmental Disabilities, 28, 423-436.
ISI=2.87
 53. **Mosconi MW**, Zwaigenbaum L, & Piven J. (2006). Structural MRI in autism: findings and future directions. Clinical Neuroscience Research, 6, 135-144.
ISI=1.42
 54. **Mosconi MW**, Mack PB, McCarthy G, & Pelphrey KA. (2005). Taking an "Intentional Stance" on eye-gaze shifts: A functional neuroimaging study of social perception in children. NeuroImage, 27, 247-252.
ISI=6.96

Book Chapters:

1. **Mosconi MW**, Takarae Y, & Sweeney JA. (2011). Motor impairments and dyspraxia in autism. In DG. Amaral, G Dawson, & DH Geschwind, (Eds.). *Autism Spectrum Disorders*. Oxford University Press, Inc.: New York, NY.
2. **Mosconi MW**, Merkler E, & Mesibov G. (2004). Social skills in autism. In G Mesibov & E Schopler (Eds.) *TEACCH approach to working with students with autism spectrum disorders*. Kluwer Academic Publishers: Dordrecht, Netherlands.

Published Manuals:

1. **Mosconi MW**, Fletcher-Watson S, & McConachie H. Handbook for the Social Orienting Continuum and Response Scale (SOC-RS) assessment of preschool-aged children with autism: <http://research.ncl.ac.uk/cargo-ne/SOCRShandbook12EX.pdf>

Other Published Materials

1. **Mosconi MW**, Ragozzino ME. (2018). New tool may speed up drugs to ease need for sameness in autism. *Spectrum Viewpoint (Invited commentary)*.
<https://spectrumnews.org/opinion/viewpoint/new-tool-may-speed-drugs-ease-need-sameness-autism/>

Peer-reviewed Academic Presentations:

1. Cosgrove KT, **Mosconi MW**, Breslin FJ, Paulus MP, Morris AS, & Aupperle RL. (2020, September 9-12). Subjective neurodevelopmental risk is more robustly associated with cortical structure than objective measures of executive function in the ABCD Study sample [Poster presentation]. Flux Virtual Congress.
2. Bartolotti J, Huscher M, **Mosconi MW***. Functional brain abnormalities associated with comorbid anxiety in Autism Spectrum Disorder. International Society for Autism Research (INSAR) Annual Meeting (May, 2020). Seattle, WA.
* **Primary mentor for first author on this study**
3. Bojanek EK, Schmitt LM, White SP, Sweeney JA, **Mosconi MW***. Manual motor deficits in individuals with autism spectrum disorder and their unaffected biological parents. International Society for Autism Research (INSAR) Annual Meeting (May, 2020). Seattle, WA.
* **Primary mentor for first author on this study**
4. Campbell MH, Unruh KE, Bojanek EK, **Mosconi MW***. Reduced lateralization of precision motor behavior in individuals with autism spectrum disorder. International Society for Autism Research (INSAR) Annual Meeting (May, 2020). Seattle, WA.
* **Primary mentor for first author on this study**
5. Kelly SE, Bojanek EK, Schmitt LM, White SP, Sweeney JA, **Mosconi, MW***. Saccadic eye movement abnormalities in ASD and first-degree family members. International Society for Autism Research (INSAR) Annual Meeting (May, 2020). Seattle, WA.
* **Primary mentor for first author on this study**
6. McKinney WS, Unruh KE, **Mosconi MW***. Lateralization of precision motor behavior and physiology in ASD. International Society for Autism Research (INSAR) Annual Meeting (May, 2020). Seattle, WA.
* **Primary mentor for first author on this study**
7. Unruh, KE Bridwell S, Schmitt LM, Vaillancourt DE, Sweeney JA, **Mosconi MW**. Deficits in feedback and feedforward processes are distinct in individuals with autism spectrum disorder. International Society for Autism Research (INSAR) Annual Meeting (May, 2020). Seattle, WA.

8. Bojanek EK, Kelly SE, Schmitt LM, White SP, Sweeney JA, **Mosconi MW***. Manual motor deficits in individuals with autism spectrum disorder and their unaffected biological parents. Kansas Center for Autism Research and Training (K-CART) Autism Across the Lifespan Conference (April, 2020). Overland Park, KS.
*** Primary mentor for first author on this study**
9. Campbell MH, Unruh KE, Bojanek EK, **Mosconi MW***. Reduced lateralization of precision motor behavior in individuals with autism spectrum disorder. Kansas Center for Autism Research and Training (K-CART) Autism Across the Lifespan Conference (April, 2020). Overland Park, KS.
*** Primary mentor for first author on this study**
10. Huscher M, Bartolotti J, **Mosconi MW***. Neural correlates of anxiety in autism spectrum disorder. Kansas Center for Autism Research and Training (K-CART) Autism Across the Lifespan Conference (April, 2020). Overland Park, KS.
*** Primary mentor for first author on this study**
11. Kelly SE, Bojanek EK, Schmitt LM, White, SP, Sweeney JA, **Mosconi MW***. Saccadic Eye Movement Abnormalities in ASD and First-Degree Family Members. Kansas Center for Autism Research and Training (K-CART) Autism Across the Lifespan Conference (April, 2020). Overland Park, KS.
*** Primary mentor for first author on this study**
12. McKinney WS, Bartolotti J, Unruh KE, **Mosconi MW***. Lateralization of task-dependent corticocerebellar connectivity during sensorimotor action in ASD. Kansas Center for Autism Research and Training (K-CART) Autism Across the Lifespan Conference (April, 2020). Overland Park, KS.
*** Primary mentor for first author on this study**
13. Shafer RL, Wang Z, **Mosconi MW***. Individuals with ASD do not modulate multimodal sensory feedback during precision motor control. Kansas Center for Autism Research and Training (K-CART) Autism Across the Lifespan Conference (April, 2020). Overland Park, KS.
*** Primary mentor for first author on this study**
14. Unruh, KE, Schmitt, LM, Vaillancourt, DE, Sweeney, JA, **Mosconi, MW***. Distinct deficits in feedback and feedforward processes in individuals with autism spectrum disorder. Kansas Center for Autism Research and Training (K-CART) Autism Across the Lifespan Conference (April, 2020). Overland Park, KS.
15. Huscher M, Bartolotti J, **Mosconi MW***. Neural Correlates of Anxiety in Autism Spectrum Disorder. Undergraduate Research Day at the Capitol (March, 2020). Topeka, KS.
*** Primary mentor for first author on this study**
16. Cosgrove KT, **Mosconi MW**, Breslin FJ, Paulus MP, Morris AS, Aupperle RL. Neurodevelopmental risk and structural MRI metrics in the ABCD study. Society for Research on Adolescence Biennial Meeting (March, 2020). San Diego, CA.

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17. McKinney WS, Bartolotti J, Khemani P, **Mosconi MW***. Neurophysiological processes of sensorimotor control in aging FMR1 gene premutation carriers. Midwest Fragile X Research Exchange (February, 2020). Madison, WI.
*** Primary mentor for first author on this study**
 18. Shafer RL, Wang Z, **Mosconi MW***. The contribution of multisensory processing to deficits in motor variability and regularity in autism spectrum disorder. Frontiers Research Day (February, 2020). Overland Park, Kansas.
*** Primary mentor for first author on this study**
 19. Shafer RL, Wang Z, **Mosconi MW***. Influence of Vision and Proprioception on Motor Control in ASD. Life Span Institute Collaboratory (January, 2020). Lawrence, KS.
*** Primary mentor for first author on this study**
 20. **Mosconi MW**, Schmitt LM, Bojanek EK, Kelly SE, White SP, Sweeney JA. Familiality of sensorimotor alterations in autism spectrum disorder. American College of Neuropsychopharmacology (ACNP), (December, 2019). Orlando, FL.
 21. Wang Z, Chen J, In E, McKinney W, Li Z, **Mosconi MW***. Differential utilization of visual and proprioceptive information for postural control stability in individuals with autism spectrum disorder (ASD). The Society for Neuroscience International Meeting (October, 2019). Chicago IL.
*** Primary mentor for first author on this study**
 22. Kelly SE, Schmitt LM, Sweeney JA, **Mosconi MW.*** Neurocognitive processes associated with reduced inhibitory control of prepotent eye movements in autism spectrum disorder. The Society for Neuroscience International Meeting (October, 2019). Chicago IL.
*** Primary mentor for first author on this study**
 23. Bridwell S, Gabrielli G, Bartolotti J, **Mosconi MW.*** Sensorimotor issues and core clinical symptoms in autism spectrum disorder (ASD). The Society for Neuroscience International Meeting (October, 2019). Chicago, IL.
*** Primary mentor for all three co-authors on this study**
 24. Bojanek E, Schmitt LM, Sweeney JA, **Mosconi MW.*** Sensorimotor deficits in individuals with autism spectrum disorder and their unaffected biological parents. International Society for Autism Research (May, 2019). Montreal, CANADA.
*** Primary mentor for first author on this study**
 25. Kelly SE, Schmitt LM, Sweeney JA, **Mosconi MW.*** Inhibitory control of prepotent eye movements in autism spectrum disorder. International Society for Autism Research (May, 2019). Montreal, CANADA.
*** Primary mentor for first author on this study**
 26. Unruh K, Martin L, Magnon G, Vaillancourt DE, Sweeney JA, **Mosconi MW***. Functional brain mechanisms of sensorimotor control in individuals with autism spectrum disorder. International Society for Autism Research (May, 2019). Montreal, CANADA.

* **Primary mentor for first author on this study**

27. Bartolotti J, Cook EH, **Mosconi MW***. The impacts of SSRI medication and comorbid anxiety on brain function in ASD. International Society for Autism Research (May, 2019). Montreal, CANADA.

* **Primary mentor for first author on this study**

28. McKinney WS, Unruh K, Wang Z, **Mosconi MW***. Precision sensorimotor control and neurophysiology in aging FMR1 premutation carriers. International Society for Autism Research (May, 2019). Montreal, CANADA.

* **Primary mentor for first author on this study**

29. Park SH, Wang Z, McKinney W, Christou EA, **Mosconi MW**. Functional motor control deficits in Fragile X Mental Retardation 1 gene premutation carriers. Annual meeting for the American College of Sports Medicine (ACSM), (May, 2019). Orlando, FL.

30. Wang Z, Khemani, P, Schmitt, LM, Lui S. **Mosconi, MW***. Static and dynamic postural control deficits in aging fragile X mental retardation 1 (FMR1) gene premutation carriers. In Shaffer, R. (Chair), Hessler, D. (Discussant), Novel Approach for the Development of Translational Biomarkers and Treatment Outcomes in Neurodevelopmental Disorders: Case Examples in Fragile X Syndrome and Related Disorders. Symposium conducted at the 52nd Annual Gatlinburg Conference, (April, 2019). San Antonio, Texas.

31. McKinney WS, Wang Z, Park SH, Christou EA, **Mosconi MW***. Precision sensorimotor control in aging *FMR1* premutation carriers. Midwest Fragile X Syndrome Research Exchange, (February, 2019). Madison, WI.

* **Primary mentor for first author on this study**

32. Shou G, **Mosconi MW**, Ethridge LE, Sweeney JA, Ding L. (2018). Resting-state Gamma-band EEG abnormalities in autism. Conference Proceedings of the IEEE Engineering in Medicine and Biology Society. 1915-1918. doi: 10.1109/EMBC.2018.8512718.

33. Maye CE, Swindler S, McKinney W, **Mosconi MW***. Sleep issues and psychological mechanisms in individuals with ASD and ADHD. Annual meeting for the Association of Behavioral and Cognitive Therapies, (November, 2018). Washington, DC.

* **Primary mentor for first author on this study**

34. Maye CE, Kelly SE, Schmitt LM, Sweeney, JA, **Mosconi MW***. Interactions of inhibitory control and attentional system alterations in individuals with autism spectrum disorder. National Conference in Clinical Child and Adolescent Psychology, (October, 2018). Kansas City, MO.

* **Primary mentor for first author on this study**

35. Bojanek E, Wang Z, **Mosconi MW***. Postural control during static and dynamic activities in autism spectrum disorder. National Conference in Clinical Child and Adolescent Psychology, (October, 2018). Kansas City, MO.

*** Primary mentor for first author on this study**

36. Kelly SE, Schmitt LM, Sweeney JA, **Mosconi MW***. Inhibitory control of prepotent eye movements in autism spectrum disorder. National Conference in Clinical Child and Adolescent Psychology, (October, 2018). Kansas City, MO.
*** Primary mentor for first author on this study**
37. McKinney WS, Unruh K, Wang Z, Schmitt LM, Bushong M, **Mosconi MW***. Neurophysiological processes of precision motor control in aging Fragile X premutation carriers. National Conference in Clinical Child and Adolescent Psychology, (October, 2018). Kansas City, MO.
*** Primary mentor for first author on this study**
38. Unruh K, Schmitt LM, Wang Z, **Mosconi MW***. Functional brain mechanisms of reduced precision motor control in autism. Neuroscience 2018, The Society of Neuroscience International Meeting, (2018, November). San Diego, CA.
*** Primary mentor for first author on this study**
39. Shou G, **Mosconi MW**, Ethridge LE, Sweeney JA. Detection of functional connectivity dynamics in intrinsic connectivity networks from resting-state EEG. International Conference of the IEEE Engineering in Medicine and Biology Society, (2018, July). Honolulu, HI.
40. Unruh K, Schmitt LM, Wang Z, **Mosconi MW***. Cortical-cerebellar system dysfunctions and their relationship to force variability in autism. FLUX Satellite Conference (2018, May). Chapel Hill, NC.
*** Primary mentor for first author on this study**
41. Maye CE, Kelly S, Schmitt LM, Sweeney JA, **Mosconi MW***. Interactions of inhibitory control and attentional system alterations in individuals with autism spectrum disorder. Kansas Center for Autism Research and Training (K-CART) Across the Life Span Conference, (2018, April). Overland Park, KS.
*** Primary mentor for first author on this study**
42. Kelly SE, Schmitt LM, Sweeney JA, **Mosconi MW***. Inhibitory control of prepotent eye movements in autism spectrum disorder. Kansas Center for Autism Research and Training (K-CART) Across the Life Span Conference, (2018, April). Overland Park, KS.
*** Primary mentor for first author on this study**
43. McKinney WS, Unruh KE, Wang Z, Schmitt LM, Bushong M, **Mosconi MW***. Neurophysiological processes of precision motor control in aging Fragile X premutation carriers. K-CART Autism Across the Life Span Conference. (2018, April) Overland Park, KS.
*** Primary mentor for first author on this study**
44. Bojanek EK, Zheng W, **Mosconi MW***. Postural control processes during static and dynamic activities in autism spectrum disorder. K-CART Autism Across the Life Span Conference. (2018, April). Overland Park, KS.

*** Primary mentor for first author on this study**

45. Wang Z, Wang Y, Sweeney JA, Lui S, **Mosconi MW***. Resting-state network dysfunctions associated with visuomotor behavior in autism spectrum disorder (ASD): a pilot study. K-CART Autism Across the Life Span Conference (2018, April). Overland Park, KS.

*** Primary mentor for first author on this study**

46. Ethridge L, Berry-Kravis E, Thaliath A, Isenstein E, Durkin A, Nelson C, Baczewski L, Powell C, White S, **Mosconi MW**, Pedapati E, Erickson C, Sweeney JA. Auditory EEG Phenotypes in single-gene disorders: Insight into Heterogeneity in Idiopathic Autism. Society of Biological Psychiatry, (2018, May). New York, NY.

47. Wang Z, Khemani P, Schmitt L, **Mosconi MW***. Postural control deficits in aging Fragile X mental retardation 1 (FMR1) gene premutation carriers. Society for Neuroscience (SfN), (2017, November). Washington DC.

*** Primary mentor for first author on this study**

48. Bojanek E, Schmitt LM, White SP, Sweeney JA, **Mosconi MW***. Behavioral response inhibition deficits in children with autism spectrum disorder and their parents. International Meeting for Autism Research (IMFAR), (2017, May). San Francisco, CA.

*** Primary mentor for first author on this study**

49. Schmitt LM, Ragozzino ME, Cook EH, Sweeney JA, **Mosconi MW***. The impairment and dysmaturation of inhibitory control processes and the strategies that support them in ASD. International Meeting for Autism Research (IMFAR), (2017, May). San Francisco, CA.

*** Primary mentor for first author on this study**

50. Ethridge LE, White SP, **Mosconi MW**, Wang J, Erickson CA, Byerly MJ, Sweeney JA. Neural synchronization deficits linked to cortical hyper-excitability and auditory sensitivity in Fragile X Syndrome. Gordon Research Conference on Fragile X and Autism-Related Disorders, (2016, December). West Dover, VT.

51. **Mosconi MW**, Schmitt LM, White SP, Sweeney JA. Brain system abnormalities associated with reduced control of sustained and repetitive motor behaviors. National Conference in Clinical Child and Adolescent Psychology (NCCCAP), (2016, September). Lawrence, KS.

52. Wang Z, Hallac R, Conroy KC, White SP, Kane AA, Collinsworth AL, **Mosconi MW***. Postural orientation and equilibrium are manifested in autism spectrum disorder (ASD). National Conference in Clinical Child and Adolescent Psychology (NCCCAP), (2016, September). Lawrence, KS.

*** Primary mentor for first author on this study**

53. Schmitt LM, White SP, Sweeney JA, **Mosconi MW***. Sensorimotor Abnormalities in Individuals with Autism Spectrum Disorder and Their Biological Parents. National

Conference in Clinical Child and Adolescent Psychology, (2016, September).
Lawrence, KS.

*** Primary mentor for first author on this study**

54. DeStefano L, Wang J, White SP, **Mosconi MW**, Sweeney JA, Ethridge LE. Auditory neural oscillatory synchronization abnormalities across the gamma frequency range in autism spectrum disorder. Society for Psychophysiological Research, (2016, November). Minneapolis, MN.
55. Ethridge LE, White SP, **Mosconi MW**, Wang J, Erickson CA, Byerly MJ, Sweeney JA. Neural synchronization deficits linked to cortical hyper-excitability and auditory sensitivity in Fragile X Syndrome. Society for Psychophysiological Research, (2016, November). Minneapolis, MN.
56. De Stefano L, Wang J, White SP, **Mosconi MW**, Sweeney JA, Ethridge LE. (2016). Auditory neural oscillatory synchronization abnormalities across the gamma frequency range in autism spectrum disorder. Society for Psychophysiology Research (2016, September). Minneapolis, MN.
57. Kwon M, Mohanty S, Conroy KC, **Mosconi MW***. Increased force variability in autism reflects reduced modulation of motor neuron pool beta oscillations. International Meeting for Autism Research (IMFAR), (2016, May). Baltimore, MD.
*** Primary mentor for first author on this study**
58. Wang Z, Hallac R, Conroy KC, White SP, Kane AA, Collinsworth AL, **Mosconi MW***. Postural control mechanisms underlying reduced stability in autism spectrum disorder (ASD). International Meeting for Autism Research (IMFAR), (2016, May). Baltimore, MD.
*** Primary mentor for first author on this study**
59. Schmitt LM, White SP, Conroy K, Sweeney JA, **Mosconi MW***. Sensorimotor abnormalities in biological mothers and fathers of individuals with ASD. International Meeting for Autism Research (IMFAR), (2016, May). Baltimore, MD.
*** Primary mentor for first author on this study**
60. **Mosconi MW**, Schmitt LM, White SP, Sweeney JA. Brain system abnormalities associated with reduced control of sustained and repetitive motor behaviors in autism. International Meeting for Autism Research (IMFAR), (2016, May). Baltimore, MD.
61. **Mosconi MW**, Schmitt LM, White SP, Conroy K, Sweeney JA. Familiarity of sensorimotor alterations in autism spectrum disorder. American College of Neuropsychopharmacology (ACNP), (2015, December). Hollywood, FL.
62. Ethridge LE, White SP, **Mosconi MW**, Wang J, Byerly MJ, Sweeney JA. Sensory processing abnormalities, ASD features, and modulation of auditory evoked potentials in Fragile X Syndrome. International Meeting for Autism Research (IMFAR), (2015, May). Salt Lake City, UT.

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63. Wang Z, Hallac R, Conroy KA, Greene RK, White SP, Sweeney JA, **Mosconi MW***. Sensory feedback mechanisms underlying postural control abnormalities in individuals with autism spectrum disorder (ASD). International Meeting for Autism Research (IMFAR), (2015, May). Salt Lake City, UT.
*** Primary mentor for first author on this study**
64. Mohanty S, Neely KA, Schmitt LM, Wang Z, Vaillancourt DE, Sweeney JA, **Mosconi MW***. Precision grip control with and without visual feedback in autism spectrum disorder. International Meeting for Autism Research (IMFAR), (2015, May). Salt Lake City, UT.
*** Primary mentor for first author on this study**
65. **Mosconi MW**, Vaillancourt DE, Sweeney JA. Cerebellar alterations underlying visuomotor deficits in autism. International Meeting for Autism Research (IMFAR), (2015, May). Salt Lake City, UT.
66. Schmitt LM, White SP, Conroy K, Sweeney JA, **Mosconi MW***. Eye movement abnormalities in individuals with autism and their unaffected biological parents. International Meeting for Autism Research (IMFAR), (2015, May). Salt Lake City, UT.
*** Primary mentor for first author on this study**
67. **Mosconi MW**, Vaillancourt DE, Sweeney JA. Cortico-cerebellar dysfunctions associated with visuomotor abnormalities in autism spectrum disorder vary according to the quality of visual feedback. American College of Neuropsychopharmacology (ACNP), (2014, December). Phoenix, AZ.
68. **Mosconi MW**, Vaillancourt DE, Coombes SA, Sweeney JA. Cortical-cerebellar abnormalities underlying visuomotor control deficits in autism spectrum disorder. Society of Neuroscience (SfN); (2014, November). Washington, DC.
69. Wang Z, Magnon GC, Greene RK, Sweeney JA, **Mosconi MW***. Predictive and reactive precision grip force control in individuals with autism spectrum disorder. Society of Neuroscience (SfN); (2014, November). Washington, DC.
*** Primary mentor for first author on this study**
70. Schmitt LM, **Mosconi MW***, Ragozzino ME, Cook EH, Sweeney JA. Neurocognitive strategies supporting behavioral response inhibition in autism spectrum disorder. International Meeting for Autism Research (IMFAR), (2014, May). Atlanta, GA.
*** Primary mentor for first author on this study**
71. Ouyang M, Cheng H, Gong G, **Mosconi MW**, Sweeney JA, Peng Y, Huang H. Abnormal WM microstructural trajectories of autistic children from 2 to 7 years of age. The International Society for Magnetic Resonance in Medicine (ISMRM), (2014, May). Milan, ITALY.
72. **Mosconi MW**, Mohanty S, Schmitt L, Greene R, Vaillancourt DE, Sweeney JA. Feedforward and feedback control abnormalities during precision grasping implicate

cerebellar dysfunction in autism spectrum disorder. American College of Neuropsychopharmacology (ACNP), (2013, December). Hollywood, FL.

- Abstract selected for Data Blitz session for innovative research AND audio presentation

73. **Mosconi MW**, Vaillancourt DE, Mohanty S, Schmitt L, Greene RK, Sweeney JA. Sensorimotor abnormalities and their relationship to core social-communication features in autism spectrum disorder (ASD). Society for Neuroscience (SfN), (2013, November). San Diego, CA.
74. Schmitt LM, **Mosconi MW***, Sweeney JA. Eye movement abnormalities in autism spectrum disorder implicate sensorimotor and cognitive control brain systems. Society for Neuroscience (SfN), (2013, November), San Diego, CA.
- Abstract selected for inclusion in SFN's 2013 "Hot Topics" book
*** Primary mentor for first author on this study**
75. Mohanty S, Vaillancourt DE, Coombes SA, Schmitt LM, Sweeney JA, **Mosconi MW***. Atypical brain functions underlying sensorimotor impairments in autism spectrum disorder. Society for Neuroscience (SfN), (2013, November), San Diego, CA.
*** Primary mentor for first author on this study**
76. Miller HL, **Mosconi MW**, Ragozzino ME, Cook EH, Sweeney JA. Selective set-shifting impairments relate to repetitive behaviors in ASD. Texas Autism Research Conference (TARRC), (2013, July). San Marcos, TX.
77. Greene RK, **Mosconi MW***, Ragozzino ME, Schmitt L, Cook EH, Sweeney JA. Inhibitory control deficits in Autism Spectrum Disorders (ASD). Texas Autism Research Conference (TARRC), (2013, July). San Marcos, TX.
*** Primary mentor for first author on this study**
78. Schmitt LM, **Mosconi MW***, Cook EH, Sweeney JA. Decreased control of eye movement accuracy in individuals with autism spectrum disorder. Texas Autism Research Conference (TARRC), (2013, July), San Marcos, TX.
*** Primary mentor for first author on this study**
79. **Mosconi MW**, Ragozzino ME, Schmitt LM, Cook EH, & Sweeney JA. Neurocognitive deficits underlying insistence on sameness in autism spectrum disorders. International Meeting for Autism Research (IMFAR), (2013, May). San Sebastian, SPAIN.
80. **Mosconi MW**, Ragozzino ME, Schmitt L, Cook EH, & Sweeney JA. Inhibitory control deficits in Autism Spectrum Disorders (ASD). American College of Neuropsychopharmacology (ACNP), (2012, December). Hollywood, FL.
81. **Mosconi MW**. Sensory and motor control in individuals with autism spectrum disorder (ASD). Texas Autism Research Conference, (2012, July). Austin, TX.

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82. **Mosconi MW**, Mohanty S, Schmitt L, Cook EH, Vaillancourt DE, & Sweeney JA. Manual motor control impairments in individuals with autism. Society of Biological Psychiatry, (2012, May). Philadelphia, PA.
 83. Barstein J, **Mosconi MW***...Sweeney JA. Saccade adaptation impairments in autism. Society for Biological Psychiatry, (2012, May). Philadelphia, PA.
* **Primary mentor for first author on this study**
 84. **Mosconi MW**. Visuomotor impairment and underlying cortico-cerebellar dysfunctions in individuals with autism. International Meeting for Autism Research (IMFAR), (2012, May). Toronto, CN.
 85. **Mosconi MW**, Mohanty S, Schmitt L, Cook EH, Vaillancourt DE, & Sweeney JA. Reduced sensorimotor control reflects motor but not sensory abnormalities in autism spectrum disorders. Roche-Nature Translational Neuroscience Symposium, (2012, April). Lucerne, Switzerland.
 86. **Mosconi MW**, Mohanty S, Schmitt L, Cook EH, Vaillancourt DE, & Sweeney JA. Motor and sensorimotor functioning in individuals with autism. American College of Neuropsychopharmacology (ACNP), (2011, December). Honolulu, HI.
 87. **Mosconi MW**, Coombes SA, D’Cruz AM, Schmitt L, Shrestha S, Vaillancourt DE, & Sweeney JA. Atypical premotor, parietal, and cerebellar functioning underlies sensorimotor impairment in autism. International Meeting for Autism Research (IMFAR), (2011, May). San Diego, CA.
 88. D’Cruz AM, **Mosconi MW**, Schmitt L, Shrestha S, Cook EH, Ragozzino ME, & Sweeney JA. Behavioral flexibility impairments in autism spectrum disorders are related to symptoms of insistence on sameness. International Meeting for Autism Research (IMFAR), (2011, May). San Diego, CA.
 89. Schmitt L, **Mosconi MW**, Ragozzino ME, Cook EH, & Sweeney JA. Atypical maturation of manual motor and oculomotor response inhibition in autism. International Meeting for Autism Research (IMFAR), (2011, May). San Diego, CA.
 90. Schmitt L, **Mosconi MW**, Reilly J, D’Cruz AM, Cook EH, & Sweeney JA. Response inhibition deficits in manual and oculomotor systems in autism spectrum disorders (ASD). Midwestern Psychological Association (MPA), (2011, March). Chicago, IL.
 91. **Mosconi MW**, Coombes SA, Ankeny L, D’Cruz AM, Zhang Z, Schmitt L, Khine T, Vaillancourt DE, & Sweeney JA. Atypical brain function underlying sensorimotor alterations in autism. American College of Neuropsychopharmacology (ACNP), (2010, December). Miami, FL.
 92. D’Cruz AM, **Mosconi MW**, Ragozzino ME, Pavuluri M, & Sweeney JA. Human reversal learning under conditions of certain versus uncertain outcomes. Society for Neuroscience, (2010, October). San Diego, CA.

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93. **Mosconi MW**, Ankeny LD, Ragozzino ME, & Sweeney JA. Response inhibition in manual and oculomotor systems in ASD. International Meeting for Autism Research (IMFAR), (2010, May). Philadelphia, PA.
 94. D’Cruz AM, **Mosconi MW**, Ragozzino ME, Ankeny LD, & Sweeney JA. Functional neuroimaging of cognitive flexibility in autism. International Meeting for Autism Research (IMFAR), (2010, May). Philadelphia, PA.
 95. **Mosconi MW**, Kay M, D’Cruz AM, Ankeny L, Guter S, Stanford LD, & Sweeney JA. Eye movement abnormalities in first-degree relatives of individuals with autism. American College of Neuropsychopharmacology, (2009, December). Hollywood, FL.
 96. **Mosconi MW**, Kay M, D’Cruz AM, Ankeny L, Guter S, Stanford LD, & Sweeney JA. Eye movement abnormalities in parents and siblings of individuals with autism. Society for Neuroscience, (2009, October). Chicago, IL.
 97. Ankeny L, **Mosconi MW**, & Sweeney JA. Response inhibition in manual and oculomotor systems. Society for Neuroscience, (2009, October). Chicago, IL.
 98. **Mosconi MW**, D’Cruz AM, Ankeny L, Kay M, Stanford LD, & Sweeney JA. Pro- and anti- saccade abnormalities in first-degree relatives of individuals with autism. International Meeting for Autism Research (IMFAR), (2009, May). Chicago, IL.
 99. D’Cruz AM, **Mosconi MW**, Ankeny L, Kay M, Guter S, Stanford LD, & Sweeney JA. Pursuit eye movement abnormalities in first-degree relatives of individuals with autism. International Meeting for Autism Research (IMFAR), (2009, May). Chicago, IL.
 100. **Mosconi MW**, Sweeney JA, Kapur K, D’Cruz AM, Ankeny L, Kay M, & Stanford LD. Procedural learning abnormalities in first-degree relatives of individuals with autism. International Meeting for Autism Research (IMFAR), (2009, May). Chicago, IL.
 101. Stanford LD, **Mosconi MW**, D’Cruz AM, Ankeny L, Kay M, & Sweeney JA. Neuropsychological functioning in first-degree relatives of individuals with autism. International Meeting for Autism Research (IMFAR), (2009, May). Chicago, IL.
 102. **Mosconi MW**, D’Cruz AM, Ankeny L, Kay M, Guter S, Stanford LD, & Sweeney JA. Eye movement abnormalities in first-degree relatives of individuals with autism. Neural Control of Movement (NCM), (2009, June), Honolulu, HI.
 103. **Mosconi MW**, Kay M, D’Cruz AM, Seidenfeld A, Guter S, Stanford LD, & Sweeney, JA. Frontostriatal functions examined with oculomotor tasks are associated with restricted, repetitive behaviors in autism. International Meeting for Autism Research (IMFAR), (2008, May). London, England.
 104. D’Cruz AM, **Mosconi MW**, Nowinski CV, Kay M, Seidenfeld A, Rubin LH, Scudder C, Luna B, Minshew NJ, & Sweeney JA. Saccadic adaptation in autism. International Meeting for Autism Research (IMFAR), (2008, May). London, England.

105. **Mosconi MW**, Cody-Hazlett H, Mesibov G, Poe M, & Piven J. Social orienting and amygdala development in the first years of life in autism. International Meeting for Autism Research (IMFAR), (2007, May). Seattle, WA.
106. Styner M, Smith RG, Graves MM, **Mosconi MW**, Peterson S, White S, Blocher J, El-Sayed M, Hazlett HC. Asymmetric Bias in User Guided Segmentations of Brain Structures. SPIE Medical Imaging Conference. (2007, February). San Diego, CA.
107. **Mosconi M**, Poe M, & Piven J. A longitudinal study of the relationship between amygdala volume and social-emotional behavior in preschoolers with autism. 22nd Annual Radiology Research Symposium at the University of North Carolina-Chapel Hill, (2006, May). Chapel Hill, NC.
108. Wassink TH, Cody H, **Mosconi MW**, Epping E, & Piven J. Cortical and amygdala overgrowth in autism associated with 5-HTTLPR. Neuropsychopharmacology, (2005, December). Hollywood, FL.
109. Carter EJ, **Mosconi MW**, & Pelphrey KA. Neural basis of biological motion perception in children with and without autism. Society for Neuroscience 35th Annual Meeting. (2005, November). Washington, D.C.
110. **Mosconi M**, Hazlett HC, Joshi S, Peterson S, & Piven J. Amygdala and hippocampus enlargement in young children with autism. International Meeting for Autism Research (IMFAR), (2005, April). Boston, MA.
111. **Mosconi M**, Pelphrey KA, Cody-Hazlett H, Reznick SJ, & Piven J. Face processing and social perception in typically developing preschoolers. Society for Research of Child Development, (2005, April). Atlanta, GA.
112. **Mosconi M** & Mesibov G. Advanced theory of mind processing in typically developing children. American Psychological Association, (2004, July). Honolulu, HI.
113. Chung K, Reavis SB, **Mosconi M**, Drewry J, Matthews JT, & Tasse M. The development of a peer-mediated social skills training for high-functioning children with autism. Applied Behavior Analysis, (2004, May). Boston, MA.
114. **Mosconi M**, Chung K, Reavis SB, Drewry J, Matthews JT, & Tasse M. Peer-mediated social skills training for children with high-functioning autism. International Meeting for Autism Research, (2004, May). Sacramento, CA.

Invited Talks:

1. Psychological and brain mechanisms of repetitive behaviors in autism spectrum disorder (ASD). Children's Mercy Hospital Scholars Series, Department of Pediatrics. Kansas City, MO (December, 2019).

2. Sensorimotor developmental alterations and their neural underpinnings in autism spectrum disorder (ASD). Center for Autism Research (CAR) Speaker Series at the Children's Hospital of Philadelphia (CHOP). Philadelphia, PA (November, 2019).
3. Sensorimotor and cerebellar decline associated with Fragile X-Tremor Ataxia Syndrome (FXTAS). National Fragile X Association Kansas City Chapter Annual Conference. Overland Park, KS (October, 2019).
4. Visuomotor behavior and brain function in aging *fMRI* premutation carriers. 4th Annual Conference on FMR1 Premutation: Mechanisms, Clinical Involvement and Therapy. Rotterdam, Netherlands (September, 2019).
5. Precision sensorimotor control and cerebellar alterations in ASD. International Society for Autism Research (INSAR). Montreal, Canada (May, 2019).
6. The many autisms. Science Happy Hour at Museum at Prairiefire. Kansas City, KS (April, 2019).
7. Neural mechanisms of sensorimotor dysmaturation in autisms. International Society for Autism Research (INSAR). Rotterdam, Netherlands (May, 2018).
8. Neurodevelopmental processes of sensorimotor dysmaturation and degeneration. Cincinnati Children's Medical Center. Cincinnati, Ohio (April, 2018).
9. Brain mechanisms of sensorimotor dysfunctions in autism. K-CART Autism Across the Life Span Conference. Overland Park, KS (April, 2018).
10. Sensorimotor and cognitive intermediate phenotypes of autism. University of Kansas Neuroscience Department Lecture Series. Lawrence, Kansas (May, 2017).
11. Biotypes of autism spectrum disorder. University of Kansas Cognitive and Brain Sciences Seminar. Lawrence, Kansas (April, 2017).
12. Understanding autism: stories of politics, fads and the brain. University of Kansas Nu Rho Psi Honor's Society Keynote. Lawrence, Kansas (November, 2016)
13. Motor and sensory disturbances and their brain bases in autism spectrum disorder. University of Kansas Child Language Program Professional Seminar Series. Lawrence, Kansas (October, 2016)
14. What we think we think about thinking in Phelan-McDermid Syndrome. First Annual Phelan-McDermid Syndrome National Meeting (McPosium). Orlando, FL (2016, July).
15. Characterizing the development of fundamental sensorimotor abilities and underlying brain systems in autism spectrum disorder. Department of Psychiatry Grand Rounds - Vanderbilt University. Nashville, TN (2016, April).

16. Moving towards more effective treatments for autism spectrum disorders. Annual Retreat for the University of Kansas Medical Center Department of Pediatrics. Kansas City, KS (2015, November).
17. Understanding the neurobiology of autism spectrum disorders through clinical research. Beyond the Diagnosis: Autism Across the Life Span. Kansas City, KS (2015, October).
18. Clinical and translational approaches for understanding Phelan-McDermid Syndrome. Texas-Louisiana Phelan-McDermid Syndrome Conference. Houston, TX (2015, June).
19. Advancing care through research: How studies of brain and motor development in autism may lead to earlier diagnosis and more effective treatments. Friends of the Center for Autism and Developmental Disabilities Inaugural Keynote Lecture. Dallas, TX (2015, March).
20. Translational approaches for identifying neural mechanisms in autism related disorders. University of Texas Southwestern Clinical Research Engagement Workgroup (CREW) Lunch Series. Dallas, TX (2015, January).
21. Cerebellar and sensorimotor development in autism. University of Minnesota Center for Cognitive Science (CCS) Colloquium Series. Minneapolis, MN (2014, September).
22. Profiles of sensorimotor impairments in autism spectrum disorder. University of Minnesota Center for Neurobehavioral Development (CNBD) Colloquium Series. Minneapolis, MN (2014, September).
23. Neuroscience and early detection of autism spectrum disorder. Psychiatry Continuing Education Program: Brain Stories, the Science Behind Prevention, Early Detection, and Effective Intervention for Mental Illness. Department of Psychiatry, University of Texas Southwestern. Dallas, TX (2014, October).
24. Sensorimotor and cerebellar abnormalities in Phelan-McDermid Syndrome. The 14th Annual Phelan-McDermid Syndrome Foundation Conference. Orlando, FL (2014, July).
25. Examining the effects of premutations and full mutations of the FMR1 gene on behavior and brain function. The Center for Autism and Developmental Disabilities (CADD) Annual Fragile X Day. UT Southwestern and Children's Medical Center, Dallas, TX (2014, January).
26. Fragile Sensorimotor disturbances and their neural underpinnings in autism. Grand Rounds, Department of Applied Physiology and Kinesiology. University of Florida. Gainesville, FL (2013, November).
27. Insights into pathophysiological mechanisms associated with autism spectrum disorder (ASD). Academic Grand Rounds, UT Southwestern Department of Psychiatry. Dallas, TX (2013, June).

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28. Many faces of autism spectrum disorder (ASD). Psychiatry Grand Rounds, University of Texas Southwestern. Dallas, TX (2013, January).
 29. Movement abnormalities in autism and related neurodevelopmental disorders. Callier Center Seminars in Speech, Language and Hearing, University of Texas Dallas. Dallas, TX (2012, October).
 30. Autism spectrum disorder. National Alliance for Mental Illness (NAMI) Dallas “Ask the Doctor” monthly meeting. Dallas, TX (2012, July).
 31. Neurocognitive and sensorimotor abnormalities in autism spectrum disorders. Clinical Psychology Didactic Series, University of Texas Southwestern. Dallas, TX (2012, March)
 32. Motor control impairment and underlying cerebellar dysmaturation in autism spectrum disorders. Center for Brain Health Frontiers Lunch Series, University of Texas Dallas. Dallas, TX (2012, February).
 33. Cognitive and motor abnormalities in autism spectrum disorders. Department of Psychiatry Faculty Retreat, University of Texas Southwestern. Dallas, TX (2011, September).
 34. Sensorimotor phenotypes associated with autism spectrum disorder. New Faculty Research Forum, University of Texas Southwestern. Dallas, TX (2011, September).
 35. Cognitive and sensorimotor brain dysfunctions associated with autism. Behavioral Neurosciences Seminar, University of Illinois at Chicago. Chicago, IL (2010, November).
 36. How does research on autism affect my family? Chicagoland Autism Connection. Chicago, IL (2010, November).
 37. Sensorimotor phenotypes and pathophysiological mechanisms in autism spectrum disorder. Grand Rounds, Advocate Christ Medical Center. Chicago, IL (2010, October).
 38. Functional neuroimaging of cognitive flexibility in autism. Department of Psychiatry Research Extravaganza, University of Illinois at Chicago. Chicago, IL (2010, September).
 39. Eye movement abnormalities in first-degree relatives of individuals with autism. Department of Psychiatry Research Extravaganza, University of Illinois at Chicago. Chicago, IL (2010, September).
 40. Impairment at the interface of cognitive and emotion processing in autism spectrum disorders. Department of Psychiatry Research Extravaganza, University of Illinois at Chicago. Chicago, IL (2010, September).

41. Eye movement abnormalities in individuals with autism and their unaffected family members. Psychiatry Grand Rounds, Peking University. Peking, CHINA (2010, April).
42. Diagnosis and evaluation of autism spectrum disorders. Chinese Academy of Sciences meeting on the epidemiology, assessment, neurobiology and genetics of autism. Beijing, CHINA (2010, March).
43. Lateralized response timing deficits in autism. Autism2009, AWARES International Conference. (2009, November).
44. Neurobiologic alterations associated with social deficits, repetitive behaviors, and motor dysfunction in autism spectrum disorder. Psychiatry Grand Rounds at Illinois Masonic Advocate Hospital. Chicago, IL (2009, December).
45. Oculomotor phenotypes in probands with autism and their first-degree relatives. Behavioral Neurosciences Seminar, University of Illinois at Chicago. Chicago, IL (2008, December).

Academic Courses:

Graduate and Residency Courses:

- Biological Bases of Behavior – Clinical Child Psychology Doctoral Program (Spring, 2017)
- Clinical Child Psychology Practicum – Clinical Child Psychology Program (CCPP) Doctoral Program (Fall, 2016)
- Assessing Autism Spectrum Disorder (ASD) – Clinical Child Psychology Program (CCPP) Graduate Seminar (Spring, 2016; Fall, 2017)
- Clinical Psychology Doctoral Program lecture on Advanced Psychopathology – Autism Spectrum Disorder (2014)
- Psychiatry PGY Brain Sciences – Neurodevelopmental Disorders lecture (2013-Present)
- Psychiatry PGY Journal Club (2012-Present)
- Clinical Neuropsychology Didactic Series – Neuroanatomy (2009-2011)
- Psychology Doctoral Program lecture on Clinical Psychopharmacology – Childhood Disorders (2010)
- Psychiatry PGY Neuropsychiatric Assessment – Autism Spectrum Disorders (2009-2010)
- Clinical Neuropsychology Didactic Series Applied Neuropsychology Review – Assessment of Childhood Disorders (2009-2011)
- Functional MRI Methods and Analysis Seminar Series (2007-2009)

Undergraduate Course Instructor:

- Defining the autisms – Psychology and Applied Behavioral Sciences undergraduate course (Fall, 2018)
- Behavioral Disorders (2003-2004)
- Undergraduate lecture for course on Psychiatric Disorders – Autism (2004-2005)

Mentorship/Student Training: * - *Primary mentor*

Postdoctoral Fellows:

- Robin Shafer, PhD in Neuroscience (2019-Present)*
- James Bartolotti, PhD in Communication Sciences and Linguistics (2018-Present)*

Kathryn Unruh, PhD in Neuroscience (2017-Present)*
 Lauren Schmitt, PhD in Clinical Psychology (2016-2017)*
 Minhyuk Kwon, PhD in Applied Physiology and Kinesiology (2015-2016)*
 Zheng Wang, PhD in Kinesiology (2013-Present)*
 Suman Mohanty, PhD in Bioengineering (2013-2015)*
 Haylie Miller, PhD in Cognitive Psychology (2012-2014)*
 Michele Ocen, PhD in Counseling Psychology (2014-2015)
 Lauren Ethridge, PhD in Neuroscience (2012-2014)
 Jun Wang, PhD in Neuroscience (2011-2012)

Graduate Students/Dissertation and Master's Thesis Committees:

Mayumi Hagiwara, *Special Education Doctoral Program*, (2018-Present) - Qualifying Exam and Dissertation Committees

Heather Fielding, *Child Language Program*, (2018-Present) - Qualifying Exam and Dissertation Committees

*Shannon Kelly, *Clinical Child Psychology* (2017-Present) - Graduate Advisor

*Walker McKinney, *Clinical Child Psychology* (2017-Present) - Graduate Advisor

Anthony Ciccone, *Department of Health, Sport and Exercise Science* (2017-Present) – Qualifying Exam and Dissertation Committees

Andrew Frazier, *Clinical Child Psychology* (2018) – Dissertation Committee Member

Cathy Hambleton, *Department of Health, Sport and Exercise Science* (2017-Present) – Qualifying Exam and Dissertation Committees

*Erin Bojanek, *Clinical Child Psychology* (2016-Present) - Graduate Advisor

Received 2019 Outstanding Thesis Project Award from the College of Liberal Arts & Sciences Committee on Graduate Studies

Arwen Marker, *Clinical Child Psychology* (2016) – Master's Thesis Committee Member

Lauren Schmitt, *Clinical Psychology* (2012-2016)* - Dissertation Advisor

Minhui Ouyang, *Bioengineering* (2014-2015) - Dissertation Committee Member

Suman Mohanty, *Bioengineering* (2008-2011)* - Dissertation Advisor

Anna-Maria D'Cruz, *Clinical Psychology* (2008-2011) - Dissertation Committee Member

Kirsteen Luutgu, *Bioengineering* (2009-2010) - Dissertation Committee Member

Undergraduate mentoring

Roxanna Hamidpour (Fall, 2018-Present)

Caroline St. Peter (Fall, 2018-Present)

Qiyang Ye (Fall, 2018-Present)

Gina Gabrielli (Summer, 2017; Summer, 2018)

Bernadette Chinn (Fall-Spring, 2017)

Madisen Huscher (Fall, 2016-Present)

Jenna Dowe (Spring, 2016-Spring, 2017)

Other Mentoring Activities:

Clinical Research Mentor: Daniel Araujo, *Mechanisms of Disease and Translational Science Immersion in Clinical Research* (2014)

Clinical Research Mentor: Marissa Co, *Mechanisms of Disease and Translational Science Immersion in Clinical Research* (2014)

Volunteer Mentor for International Society for Autism Research (INSAR) Early Career Development Preconference Workshop (2014)

Clinical Supervisor for **five** Pediatric Clinical Neuropsychology externs (2008-2009)

Co-Mentor for **two** Undergraduate Honors Theses in Psychology (2005-2006)
 Research Mentor for **four** Psychology undergraduate research projects (2003-2006)

Grant Panel Reviewer:

NIH Childhood Psychopathology and Developmental Disorders (CPDD): Member (June, 2020-June, 2024)
 Autism Science Foundation: ad hoc reviewer (February, 2020)
 NIH Developmental Brain Disorders study section: ad hoc (January, 2020)
 NIH Sensory and Motor Neuroscience, Cognition and Perception Fellowship study section (ZRG1 F02B-D): ad hoc (June, 2019)
 Frontiers Pilot Award Program (November, 2017; 2018; March, 2020)
 NIH Childhood Psychopathology and Developmental Disorders (CPDD) Special Emphasis Panel Y03: ad hoc (October, 2018)
 NIH Childhood Psychopathology and Developmental Disorders (CPDD): ad hoc (February, 2018)
 Brain Research Foundation, KU Internal Reviewer (2017)
 NIH Director's Early Independence Award (DP5) Special Review Panel (2015)
 Independent Scientific Merit Review Panel for the Governor's Council for Medical Research and Treatment of Autism, New Jersey Autism Centers of Excellence (2013-2015)
 Autism Speaks, Meixner Postdoctoral Fellowship in Translational Research (2014-2015)
 Autism Speaks, Basic and Clinical Science Awards (2009)

Scientific Panel Reviewer:

Member, International Society for Autism Research Awards Committee (2016-Present)
 Chair, *Repetitive Behaviors and Interests* section of the International Meeting for Autism Research (IMFAR) Program Committee (2015-Present)
 Texas Autism Research Conference Scientific Review Team (2012-2013)
 International Meeting for Autism Research (IMFAR) Abstract Reviewer (2008-Present)

Editorial Board Member

Associate Editor, Journal of Neurodevelopmental Disorders; Intellectual and Developmental Disorders Research Center (IDDRC) Annual Special Section
Review Editor, Frontiers in Psychiatry
Review Editor, Frontiers in Psychiatry – Neuroimaging and Stimulation
Review Editor, Journal of Autism and Developmental Disorders (JADD)
Review Editor, Research in Autism Spectrum Disorders (RASD)

Ad hoc journal reviewer for:

American Journal of Psychiatry	Cerebral Cortex
Archives of General Psychiatry (JAMA Psychiatry)	Child Development
Autism	Child Neuropsychology
Autism Research	Developmental Science
Behavioral Brain Research	European Journal of Neuroscience
Behavioral Sciences	Infancy
Biological Psychiatry	Journal of Abnormal Psychology
Brain	Journal of the American Academy of Child and Adolescent Psychiatry (JAACAP)
Brain Research Bulletin	

Journal of Autism and Developmental Disorders (JADD)	Molecular Autism
Journal of Child Psychology and Psychiatry (JCPP)	Movement Disorders
Journal of Cognitive Development	NeuroImage
Journal of Cognitive Neuroscience	NeuroImage: Clinical
Journal of Motor Behavior	Quarterly Journal of Experimental Research in Autism Spectrum Disorders
Journal of Neurodevelopmental Disorders	PLoS One
Journal of Neuroscience	Psychology
Motor Control	Science China: Life Sciences
	Strabismus

Professional Memberships:

American College of Neuropsychopharmacology (ACNP; Associate Member)

International Society for Autism Research (INSAR)

Society for Neuroscience (SfN)

Professional Service:

- 2020 Reviewer, General Research Fund, University of Kansas
- 2019 External Promotion Review – University of California, Davis Department of Psychiatry and Behavioral Sciences
- 2019 External Promotion Review – University of California, Davis Center for Mind & Brain
- 2018- Co-Founder, Co-Director, Neuro-developmental/degenerative disorders (NDD) Postdoctoral Research Program
- 2019 Reviewer, Clinical Child Psychology Program Nyre Student Support Award
- 2018-2019 Member, Marketing Committee of Applied Behavioral Sciences Department
- 2018 Invited member, Thompson Center Autism Research Summit
- 2018 External Promotion and Tenure Review – University of Georgia
- 2018 Member, Internal Advisory Board for Hoglund Brain Imaging Center (HBIC)
- 2017 Clinical Child Psychology Program Practicum Instructor Search Committee – University of Kansas
- 2017 External Promotion and Tenure Reviewer – University of Texas Southwestern Medical Center
- 2016-2017 Merit Review Committee, Department of Applied Behavioral Sciences, University of Kansas
- 2016-2017 Merit Review Committee, Department of Psychology, University of Kansas
- 2016 External Promotion and Tenure Review – American University
- 2016 Awards Committee Member – International Society for Autism Research
- 2016- Chair, Autism Science Working Group at the University of Kansas
- 2016- Co-Director, Co-Founder, Movement Science and Motor Control Research Consortium at the University of Kansas
- 2015- Director and Co-Founder, Neurodevelopmental Disorder Seminar Series at the University of Kansas
- 2015 Clinical Child Psychology Program Admissions Committee
- 2015 Chair, Neurodevelopmental Disorders Division of the Neurosciences Task Force for the Kansas City Life Sciences Institute
- 2015- Member, Executive Board of the Kansas Center for Autism Research and Training (K-CART)

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- 2015 Co-Chair, Annual Phelan-McDermid Syndrome Meeting
- 2014- National Fragile X Association Clinical Trials Committee
- 2014, 2015 Mentor, International Meeting for Autism Research (IMFAR) Trainee Program
- 2014- Autism awareness outreach program for high school students in Dallas-Ft. Worth
- 2013- Co-Director, Center for Autism and Developmental Disabilities Postdoctoral Fellowship in Neurodevelopmental Disorders Research
- 2012- Co-Director, UT Southwestern Psychiatry Resident Training Brain Sciences Learning Curriculum Committee
- 2012- Member, UT Southwestern Clinical Psychology Research Training Committee
- 2012- Faculty Moderator, Psychiatry PGY Journal Club
- 2011-2012: Children's Medical Center Child Outpatient/Autism Postdoctoral Fellowship Selection Committee
- 2011-2013: UT Southwestern Autism Center Psychologist and Faculty Recruitment Committees
- 2011-2013: UT Southwestern Autism Center Postdoctoral Selection Committee

RESEARCH FUNDING

Ongoing Research Support:

R21 MH11861701A1 Hetrick (PI) 07/01/19-06/30/21

Cerebellar conditioning in autism spectrum disorder

Cerebellar plasticity is critical to rapid learning processes including eye-blink conditioning. Cerebellar pathology implicates reduced ability to adapt to learning opportunities in individuals with ASD. This R21 will examine eye-blink conditioning in ASD and, using structural and functional MRI, determine cerebellar network characteristics associated with eye-blink conditioning in children with ASD.

Role: Consultant

TDC: \$275,000

R01 MH112734 Mosconi (PI) 07/01/17-05/31/22

Motor abnormalities and functional brain mechanisms in autism spectrum disorder

This five-year R01 study will identify the distinct neural processes underlying rapid, repetitive sensorimotor abnormalities and deficits in controlling continuous motor output. Novel functional magnetic resonance imaging (fMRI) and motor physiology tests will be conducted to examine cerebellar-cortical and striatal-cortical brain function and their relation to sensorimotor abnormalities in ASD from late childhood to adulthood.

Role: PI

TDC: \$1,824,781

U54 HD090216 Colombo (PI) 07/01/15-06/30/20

Kansas Intellectual and Developmental Disabilities Research Center (KIDDRC)

The Kansas Intellectual and Developmental Disabilities Research Center (KIDDRC), now in its 44th year, provides Core support for generating effective biobehavioral interventions aimed at the causes, prevention, and treatment of intellectual and developmental disabilities and related secondary conditions, and in delineating basic knowledge of the underlying biology of typical and atypical development.

Role: Phenotyping coordinator

TDC: \$1,456,363

KU Research GO Award Mosconi (PI) 05/01/19-04/30/20
Sensorimotor and physiological markers of Fragile X-associated tremor/ataxia syndrome (FXTAS)

This award supports pilot data collection on FMR1 premutation carriers with FXTAS, premutation carriers without FXTAS, and healthy controls during tests of sensorimotor control and physiology. The goal of this study is to establish key methods for clarifying dimensional sensorimotor and physiological markers of degeneration in FXTAS.

Role: PI

TDC: \$13,596

University of Kansas General Research Fund Mosconi (PI) 07/01/19-06/30/20
Biological markers of insistence on sameness in autism

This one-year pilot project aims to characterize neurophysiological processes associated with reduced behavioral response inhibition and clinical insistence on sameness behaviors in children with autism spectrum disorder (ASD). New EEG and behavioral tests of response inhibition will be studied.

Role: PI

TDC: \$13,571

K01 MH107774 Miller (PI) 05/01/17-04/30/22
Visuomotor integration and attention in autism spectrum disorder (ASD)

The goal of this K01 resubmission is to examine differences between children with ASD and typically developing children in key aspects of visuomotor integration using an innovative paradigm that allows precise quantification of unrestricted head, eye, and body movement during controlled tasks in a semi-naturalistic environment

Role: Co-Mentor

K23 MH112936 Pedapati (PI) 02/01/17-01/31/22
Transcranial magnetic stimulation and neocortical excitability in Fragile X Syndrome

The central hypothesis of this K23 Career Development Award posits that variations in motor cortical excitability, including measures of sensorimotor habituation, can be reliably quantified in individuals with Fragile X Syndrome and may serve as a translational biomarker to predict prognostic features and guide novel treatment strategies in patients. The candidate proposes to adapt fundamental transcranial magnetic stimulation measurement techniques to the FXS population to measure excitability in the primary motor cortex.

Role: Contributor

PCORI Methods Development Project Talebizadeh (PI)
Bringing Data about Genetic Susceptibility Factors to Outcomes Researchers through Engaging Stakeholders: the BRIDGE Project

The BRIDGE project will provide protocols, examples, and tools to demonstrate how genetic information may be incorporated into PCOR studies. For the purpose of illustrating a practical workflow of the BRIDGE project, we identified 3 conditions prioritized by PCORI [autism, cardiovascular disease, and cancer] around which multidisciplinary expert panels will be formed. Our *main objective* is to develop an infrastructure to support active communication between patients, health care providers,

genetic and outcomes researchers that will enable incorporating existing genetic data in outcomes-related research questions.

Role: Consultant

TL1 Shafer (PI) 06/01/19-05/30/21

Sensorimotor integration and physiology in ASD

The purpose of this TL1 Career Development Program Award (KUMC Frontiers CTSA) is to develop the candidate's expertise in systems neuroscience approaches for understanding sensory, motor and brain mechanisms of common sensorimotor issues in autism spectrum disorder (ASD). The candidate proposes studies of sensorimotor control that will differential contributions of visual and proprioceptive processes and brain systems on sensorimotor precision in patients.

Role: Mentor

Pending Research Support/Awards:

NIH/NIGMS Yi (PI) Submitted Feb, 2020

Center on Behavioral and Psychosocial Health

Role: Core Director

NIH/NICHHD K01 Unruh (PI) Submitted Feb, 2020

Psychological and brain mechanisms of restricted, repetitive behaviors in autism

The purpose of this K01 Career Development Award is for the candidate to develop expertise in systems neuroscience approaches for understanding the complex cognitive, affective and neural processes that underlie restricted and repetitive behaviors in autism spectrum disorder (ASD). The candidate proposes behavioral and fMRI studies of cognitive control, sensorimotor behavior, and reward processing in adolescents with ASD.

Role: Mentor

NIH/NIA R01 AG066699 Mosconi (PI) Submitted June, 2019

(30th percentile)

Sensorimotor and cortical-cerebellar markers of Fragile X-associated tremor/ataxia syndrome (FXTAS)

This five-year, multi-site R01 proposal aims to identify new biobehavioral markers of core symptom traits of FXTAS using novel tests of sensorimotor physiology, cortical-cerebellar anatomy, and cortical-cerebellar function. Studying aging, asymptomatic premutation carriers and individuals with FXTAS, we will determine the power of our sensorimotor and cortical-cerebellar markers for reliably identifying FXTAS patients and tracking disease risk and progression.

Role: PI

TDC: \$2,395,023

NIH/NIA R21 AG065621 Wang (PI) Submitted Oct, 2019

Neuromotor and structural brain mechanisms in aging individuals with autism spectrum disorder (ASD)

This project evaluates sensorimotor declines and anatomical basal-ganglia nuclei changes in aging individuals with ASD. These studies will provide foundational knowledge of the pathophysiological mechanisms of aging in ASD.

Role: Consultant

TDC: \$275,000

NIH/NIMH R01-A1 Shogren/Mosconi (Co-PIs) Submitted July, 2019
(17th percentile)

An intervention to improve transition outcomes in ASD: Understanding clinical and neurocognitive factors that impact outcomes

A five year randomized control clinical trial (RCT) is proposed in this R01. The focus of the RCT is to investigate the impact of the Self-Determined Learning Model of Instruction (SDLMI) on neurocognitive development and functional outcomes in adolescents/young adults with ASD transitioning out of secondary education.

Role: Co-PI

TDC: \$2,280,125

NIH/NICHHD F31 Hawks (PI) Submitted June, 2019
(6th percentile)

Error-based learning and cerebellar development in young children with autism

The purpose of this F31 is to examine error-based sensorimotor learning in relation to clinical issues in 18-48 month olds with autism spectrum disorder (ASD). Cerebellar morphometry and development also will be studied in infants later diagnosed with ASD. The doctoral trainee proposing this award currently is a student at Washington University in St. Louis, and Dr. John Constantino will serve as her primary mentor. I was asked to contribute expertise in sensorimotor and cerebellar development in ASD.

Role: Contributor

NIH/NIMH F31 Cosgrove (PI) Submitted Dec, 2019

The Role of Social and Neural Connectedness in Predicting Neurodevelopmental Functioning in Adolescence

(5th percentile)

The purpose of this F31 is to examine brain connectivity in relation to psychopathology and symptoms of ASD across adolescent development.

Role: Co-Mentor

Grants Submitted in past three years (unfunded):

Autism Speaks Adult Transition Research Award 11888

Shogren (CoPIs)

Submitted May, 2019

Efficacy of the self-determined learning model of instruction in ASD

This three-year study aims to examine change in self-determination and executive processing following 12 weeks of therapy using the self-determined learning model of instruction (SDLMI) with adolescents with ASD. A randomized clinical trial (RCT) with a no-treatment control group is planned.

Role: Co-Investigator

TDC: \$749,899

Department of Defense AR180100P1 Wang/Mosconi (Co-PIs)

Sensorimotor and neurocognitive issues in aging adults with autism spectrum disorder (ASD)

This multi-site, three year research award will investigate neurodegenerative processes affecting the striatum in ASD, as well as behavioral and clinical correlates of this atrophy.

Role: Co-PI
TDC: \$499,875

Autism Science Foundation Postdoctoral Fellowship
Bartolotti (PI) 06/01/19-05/30/20

The impacts of SSRI medication and comorbid anxiety on brain function in ASD
The purpose of this fellowship award is to advance the candidate's training in ASD, physiology of anxiety in ASD, and medication strategies for mitigating the effects of anxiety on brain function in ASD. Analysis of existing and new clinical and functional MRI (fMRI) data of individuals with ASD, individuals with ASD and comorbid anxiety, and healthy controls are proposed.

Role: Mentor

TL1 Bartolotti (PI) 06/01/19-05/30/21

Brain mechanisms of anxiety and repetitive behavior in autism spectrum disorder (ASD)
The purpose of this TL1 Career Development Program Award (KUMC Frontiers CTSA) is to develop expertise in the development and physiology of anxiety in individuals with ASD. Analysis of existing and new clinical and functional MRI (fMRI) data of individuals with ASD, individuals with ASD and comorbid anxiety, and healthy controls are proposed. A highly structured training plan to develop the PI's (candidate's) expertise in anxiety, ASD, and neurophysiological development of ASD is proposed.

Role: Mentor

Kansas City Area Life Sciences Institute Patton Trust Research Grants
Talebizadeh/Mosconi (Co-PI)

Children's Mercy/University of Kansas Autism/NDD Translational Research:
Leveraging inter-institutional clinical and genetic resources

This is a one year proposal to examine the relationships between mRNA and sensorimotor brain dysfunctions in ASD.

Role: PI
TDC: \$49,998

T32 HD098391 Mosconi (PI)

Translational methods and data science approaches for understanding autism spectrum disorders

This postdoctoral T32 training award will provide a structured training program for postdoctoral researchers aiming to develop independent research careers conducting translational studies of autism spectrum and related neurodevelopmental disorders.

Role: PI
TDC: \$1,528,822

R21 NICHD Butler/Mosconi (Co-PI)

Genomic and phenotyping characterization of the 15q11.2 deletion (Burnside-Butler Syndrome)

This is a two-year award aimed at characterizing phenotypic profiles of individuals with microdeletions of the Burnside-Butler cytogenetic region (BP1-BP2) of 15q11.2. Deletions of this region are considered the most common cytogenetic abnormality associated with autism spectrum disorder (ASD).

Role: PI

U01 NINDS

Kolevzon (PD); Gustafson (site PI)

Neurophysiological and clinical outcome assessments in Phelan-McDermid Syndrome

This multi-site five-year study aims to validate EEG/ERP biomarkers and clinical outcomes assessments discovered as part of our rare disease consortium so that they may be rapidly translated to future clinical trials of patients with Phelan-McDermid Syndrome. Patients will be tested at 5 sites and followed longitudinally for one year. Our site will be responsible for analyses of one of the primary ERP measures (auditory ERP) and one of the primary clinical outcome assessments (the Communication Complexity Scale, developed by Co-Investigator Dr. Nancy Brady).

Role: Co-Investigator

Brain Research Fund

Mosconi (PI)

Early dysmaturation of sensorimotor and brain network connectivity in autism

This two-year proposal aimed to characterize sensorimotor alterations in newly diagnosed toddlers with ASD and determine brain mechanisms associated with these issues.

Role: PI

NSF Graduate Research Fellowship Program

Bojanek (PI)

Neurophysiological Processes Associated with Development of Motion Perception in School-Aged Children.

This NSF graduate research fellowship program aims to characterize age related differences in visual motion processing and its neural substrates.

Role: Mentor

NSF Graduate Research Fellowship Program

Kelly (PI)

Adolescent development of inhibitory control and associated neurophysiological processes

This NSF Graduate Research Fellowship proposes to characterize age-related changes in inhibitory control and related neurophysiological processes throughout adolescence utilizing electroencephalography/event-related potential recording during a manual stop signal task.

Role: Mentor

NSF Graduate Research Fellowship Program

McKinney (PI)

Behavioral response inhibition development and clinical correlates across childhood

This Graduate Research Fellowship Program funding proposal will study the development of cognitive processes, such as interference control and strategic delaying, which support behavioral response inhibition. It will help clarify the rate at which these cognitive skills develop during childhood and their relationship to clinical behaviors that emerge during this key developmental period. The ultimate goal of this study is to inform models of behavioral and neurodevelopmental processes associated with disorders of childhood.

Role: Mentor

Completed Research Support:

TL1 TR002368

Unruh (PI)

09/07/17-06/30/19

Systems neuroscience approaches to studying sensorimotor behavior in autism

The purpose of this TL1 Career Development Program Award (KUMC Frontiers CTSA) is to develop expertise in systems neuroscience approaches for understanding the complex neural processes and network connectivity that underlie mechanisms of restricted and repetitive behaviors in autism spectrum disorder (ASD). The candidate proposes studies of sensorimotor control that will assess the neural network responsiveness (functional magnetic resonance imaging) and dynamic cortical interactions (electroencephalography) that may contribute to increased variability observed during feedback-guided motor behavior in ASD.

Role: Mentor

Kansas Center for Autism Research and Training Research Investment Council Strategic Initiative Grant (Mosconi) 08/18/15-08/17/18

This three year award was provided to the PI to support salary and research costs associated with starting the Neurodevelopmental Disorders Research Lab at the University of Kansas. Allowable costs include PI salary, research related expenses (e.g., equipment, MRI costs), travel, and postdoctoral and student assistant salaries.

Role: PI

TDC: \$750,000

Frontiers Pilot Research Award Butler (PI) 06/01/17-12/31/18
Clinical and Genomic Characterization of the 15q11.2 BP1-BP2 Microdeletion Syndrome

This one-year pilot award will support phenotyping and genetic characterization of children with 15q11.2 BP1-BP2 microdeletions. Similar phenotyping and genetic characterization will be performed on the parents of these probands who are not clinically affected, but for whom the 15q11.2 microdeletion is detected.

Role: Co-Investigator

TDC: \$20,000

U54 NS092090 Sahin (PD) 01/01/14-08/31/19
Rare Diseases Clinical Research Network: Developmental Synaptopathies Consortium

The aim of this five year project is to clinically characterize three rare genetic syndromes associated with autism spectrum disorder (ASD), including Phelan-McDermid Syndrome, PTEN mutation and Tuberous Sclerosis. The study's long-term goal is to identify biomarkers that can be used to develop and validate new therapies for these rare disorders and possibly ASD more broadly.

Role: Served as Co-Investigator prior to leaving UT Southwestern in 2015

Phelan-McDermid Syndrome Foundation Mosconi (PI) 01/01/16-12/31/17
(NCE)

Auditory and visual evoked potentials in Phelan-McDermid Syndrome

The goal of this award is to characterize sensory evoked neurophysiological alterations in individuals with Phelan-McDermid Syndrome (PMS).

Role: PI

Novartis PI-Initiated Award Mosconi (PI) 06/30/15-07/01/17
(NCE)

Neurophysiological biomarkers associated with Phelan-McDermid Syndrome

This PI-initiated award aims to identify clinical biomarkers associated with Phelan-McDermid Syndrome (PMS) – a rare genetic condition caused by loss-of-function deletions/mutations of the SHANK3 gene on chromosome 22q13. Novel and translational EEG and motor physiology studies are planned to identify neurophysiological mechanisms associated with PMS that can be used as endpoints in future clinical trials.

Role: Served as PI prior to transferring institutions in 2015

Frontiers Trailblazer Award Mosconi (PI) 09/01/17-06/30/18
Sensory and motor physiology in autism spectrum disorder

This one-year award supported EEG studies of cortical physiology during sensorimotor processing in individual with autism spectrum disorder (ASD). It is supported by an NIH Clinical and Translational Science Award grant (UL1 TR002366) awarded to the University of Kansas Medical Center.

Role: PI

Phelan-McDermid Syndrome Foundation Powell/Mosconi (Co-PI) 08/01/15-07/31/17
Natural History Characterization of Individuals with Phelan-McDermid Syndrome

The goal of this award is to track the natural history of individuals with Phelan-McDermid Syndrome (PMS) including analyses of intellectual, language, sensory, motor, psychiatric and physical development over a two-year period.

Role: Consultant (Served as Site PI prior to transferring institutions)

Once Upon A Time Foundation Mosconi (PI) 09/01/13-08/31/15
Motor Control and Cerebellar Mechanisms in Fragile X-Associated Tremor/Ataxia Syndrome

These translational studies aim to characterize motor control abnormalities and their neural underpinnings in patients with Fragile X-associated tremor/ataxia syndrome using behavioral, neurophysiological and neuroimaging techniques.

Role: PI

K23 MH092696-01 (NIH/NIMH) Mosconi (PI) 09/01/10-12/31/15
Motor Control and Cerebellar Maturation in Autism

The goal of this training award is to compare the development of motor control and underlying cerebellar function in individuals with autism and typically developing individuals.

Role: PI

U54 HD082008 (NIH/NICHD) Huber/Sweeney (PI's) 09/01/14-08/31/19
Mechanisms of Neocortical and Sensory Hyperexcitability in Fragile X Syndrome

This study is a 5 year, multilevel, integrated approach to determine the pathophysiology of sensory neocortical dysfunction and directly link this to sensory processing deficits in FXS mouse models and patients. Candidate therapeutics to correct sensory processing deficits will be tested in mice and patients.

Role: Co-Investigator

Autism Speaks Versalovic (PI) 12/01/14-11/30/17
Establishing Multi-omic Signatures and Mechanisms Associated with GI Morbidity and Behavior in ASD

This multi-center collaborative effort aims to identify stool-based biomarkers of gastrointestinal (GI) symptoms in children with ASD. Studies are designed to characterize behavioral, GI and multi-omic (microbiome and metabolome) signatures in ASD and generate distinct phenotypic subtypes based on GI-behavior linkages.

Role: Co-Investigator

TDC: \$276,116

AR100276 (Dept of the Army) Sweeney (PI) 09/01/11-08/31/14

Family Studies of Neurocognitive and Sensorimotor Heterogeneity in Autism

This study will examine neurocognitive and sensorimotor impairments in individuals with autism and their unaffected biological parents.

Role: Co-Investigator

P50 HD055751-01 (NICHD/NIMH) Cook (PI) 09/01/07-07/31/13

Autism Center of Excellence: Translational Studies of Insistence on Sameness in Autism

The aim of this project is to examine the roles of serotonin and cognitive flexibility in animal models, and to extend that to clinical trials of individuals with autism with clinical, cognitive and functional neuroimaging outcomes.

Role: Co-Investigator

Grant #4853 (Autism Speaks) Mosconi (PI) 03/01/09-02/28/11

Functional MRI Studies of Cerebellar Integrity in Autism

The goal of this postdoctoral fellowship was to compare manual motor dynamics in individuals with autism and healthy controls, and to identify functional brain system abnormalities associated with motor impairments in this disorder.

Role: PI

T32MH67631 (NIH/NIMH) Rasenick (PI) 07/01/07-03/16/09

Training in the Neuroscience of Mental Health

The goal of this fellowship award was to gain training in cognitive neuroscience and its application to studies of autism.

Role: Postdoctoral Fellow

Predocotoral Fellowship [NAAR (now Autism Speaks)]; Piven (PI) 08/01/05-07/30/07

Social Perception in Young Children with Autism

The goal of this project was to examine the relationship between social orienting behaviors and amygdala growth in children with autism ages 2-4 years.

Role: Predocotoral Fellow