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EDUCATION

Postdoctoral Fellow, UNC Chapel Hill	2004 - 2006
Doctorate in Developmental Psychology, UC Berkeley	2004
Bachelor of Arts in Psychology, San Diego State University, Summa cum Laude	1998

HONORS AND AWARDS

Charles Deering McCormick University Distinguished Professor Award Nomination	2019
Simon Award for Teaching Excellence in the School of Communication	2018
Jo Ann G. and Peter F. Dolle Endowed Chair	2014 -
Research Mentoring Award, American Speech-Language-Hearing Association	2012
Jane and Michael Hoffman Endowed Chair	2010 - 2014
University Research Council Awards, UNC Chapel Hill	2006 - 2010
Clinical Translation Science Award, NCCRR, NIH	2006 - 2009
Federal Loan Repayment Award, NIH	2007 - 2010
National Research Service Award, NIMH	2000 - 2003
UC Berkeley Institute for Human Development Graduate Research Grants	2001 - 2003
Advancement to Candidacy with Distinction	2002
Graduate Fellowship Award, UC Berkeley	1999 - 2000
Travel Awards, NIDCD	1997 - 2002

PROFESSIONAL POSITIONS

Jo Ann G. and Peter F. Dolle Chair in Learning Disabilities, Professor, Departments of Communication Sciences and Disorders and Psychiatry and Behavioral Sciences, Northwestern University	2019 -
Associate Chair, Department of Communication Sciences and Disorders	2019 -
Jo Ann G. and Peter F. Dolle Chair in Learning Disabilities, Associate Professor, Departments of Communication Sciences and Disorders and Psychiatry and Behavioral Sciences, Northwestern University	2014 - 2019
Co-director, Center for Training in Transdisciplinary Developmental Sciences, Institute for Innovations in Developmental Sciences	2017 -
Jane and Michael Hoffman Associate Professor, Departments of Communication Sciences and Disorders and Psychiatry and Behavioral Sciences, Northwestern University	2012 - 2014
Jane and Michael Hoffman Assistant Professor, Communication Sciences and Disorders, Northwestern University	2010 - 2012
Member, Northwestern University Interdepartmental Neuroscience Program	2012 -
Fellow, FPG Child Development Institute, UNC, Chapel Hill	2009 - 2010
Assistant Professor, Allied Health Sciences, UNC, Chapel Hill	2007 - 2010
Assistant Professor, Psychiatry, UNC, Chapel Hill	2006 - 2010

PROFESSIONAL ACTIVITIES

Grant Review Committees

Member, Child Psychopathology and Developmental Disabilities 2014 -
(CPDD) Study Section, National Institutes of Health
Centers for Collaborative Research in Fragile X, Working Group on *FMR1* 2018
premutation-related conditions
Panel Member, NIH Pediatric Initiative on Down Syndrome: The INCLUDE Project 2020

Ad Hoc Grant Reviewer

National Institute of Child Health and Human Development: Centers for Collaborative
Research in Fragile X (U01)
Autism Speaks
National Institute of Mental Health: Child Psychopathology and Developmental Disabilities
Study Section
National Institute of Mental Health: ARRA Autism RFA
National Institute of Mental Health: Consortium on Biomarker and Outcome Measures of
Social Impairment for Use in Clinical Trials in Autism Spectrum Disorder (U19)

Editorial Board

Journal of Speech Language and Hearing Research

Ad Hoc Journal Reviewer

American Journal of Medical Genetics
American Journal of Psychiatry
Autism: The International Journal of Research and Practice
Autism Research and Treatment
Biological Psychiatry
Brain
Brain and Language
Developmental Psychology
European Journal of Child & Adolescent Psychiatry
European Journal of Neurology
Human Genetics
JAMA Psychiatry
Journal of Autism and Developmental Disorders
Journal of Child Language
Journal of Child Psychology and Psychiatry
Journal of Neurodevelopmental Disorders
Journal of Speech Language and Hearing Research
PLOS
Psychiatric Genetics
Psychological Medicine

Ad Hoc Conference Reviewer

Annual conference for the American Speech-Language-Hearing
Association Boston University Conference on Language Development

Memberships

American Psychological Association
Society for Research in Child Development
Jean Piaget Society
International Society for Autism Research
Midwestern Autism Consortium
Chicago Fragile X Syndrome Research Group

Administration

Associate Chair, Communication Sciences and Disorders	2019 -
Chair, School of Communication Dean Search Committee	2019 -
Member, Provost's Advisory Council on Women Faculty Retention Work Group	2019 -
Director of Graduate Studies, Communication Sciences and Disorders	2018 - 2019
Member, Events Committee	2016 - 2018
Chair, Speech Language and Learning Faculty Search Committee	2016 - 2017
Chair, Associate Dean for Undergrad Programs and Advising Search Committee	2017 - 2018
Member, Confidential Ad Hoc Tenure Review Committee	2017
Board of Directors of the Communication Sciences and Disorders	2016 - 2018
Clinical Trials Research Group (dissolved in 2018)	
Co-director, Center for Training in Transdisciplinary Developmental Sciences, NU institute for Innovations in Developmental Sciences (DevSci)	2016 -
Member, Committee on Clinical Psychology Graduate Programs	2016 -
Member, CSD Speech Language and Learning Search Committee	2014 - 2015
Member, Leadership Council, Innovations in Developmental Sciences (DevSci)	2014 -
Co-Director, Northwestern DevSci Origins of Lifespan Learning, Well-Being, Health and Disease Cluster at The Graduate School	2014 -
Member, Clinical Psychology Search Committee	2014 -
Clinic Director, Search Committee, Communication Sciences and Disorders	2013 - 2014
Member, Medical Advisory Council, Easter Seals	2012 -
Member, Illinois Autism Task Force, IL Dept. of Human Services	2011 -
Child Language Faculty Search Committee	2011
Member, Undergraduate Research Grant Committee	2011
Organizer, Language and Cognition Fall Speaker Series on Autism	2011
Faculty Sponsor, Autism Speaks U. Northwestern Student Chapter	2010 -
PhD Committee, Communication Sciences and Disorders	2010 - 2016
Member, Frank Porter Graham Institute Management Team, UNC	2009 - 2010
PhD Committee, Div of Speech and Hearing Sciences, UNC	2007 - 2010
Research Committee, Div of Speech and Hearing Sciences, UNC	2007 - 2010

PEER REVIEWED PUBLICATIONS

*indicates student author

- Hogan, A.L.*, Winston, M.*, Barstein, J.*, & Losh, M. (under revision). Pupillary responses to social- emotional information in individuals with autism spectrum disorder and their parents.
- Malki, K., Losh, M., Grazia Tosto, M., McEwen, F., Tye, C., Verbelen, M., Green, J., Garg, S., Martin, G.E., Bruining, H., Vorstman, J.A., Liang, H., Underwood, L., Liang, Q., Frenandez-Reyes, D., Bryson, K., & Bolton, P. (under revision). Disentangling heterogeneity in autistic spectrum disorder.
- Nayar, K.*, Kang, X., Xing, J.*, Gordon, P.C., Wong, P.C., & Losh, M. (under revision). Deficits in language fluency and gaze-language coordination in ASD: A cross-cultural study of rapid automatized naming.
- Patel, S.*, Winston, M.*, Guilfoyle, J*., Nicol, T., & Martin, G.E., Kraus, N., & Losh, M. (under review). Neural processing of speech sounds in ASD and first-degree relatives.
- Winston, M.*, Nayar, K.*, Landau, E.*, Maltman, N.*, Sideris, J., Zhou, L., Sharp, K., Berry-Kravis, E., & Losh, M. (under review). A unique visual attention profile associated with the *FMR1* premutation.
- Nayar, K.*, Sealock, J., Maltman, N.*, Bush, L.*, Cook, E., Davis, L. & Losh, M. (2020). Elevated polygenic burden for ASD is associated with the broad autism phenotype in mothers of individuals with ASD. Biological Psychiatry.

- Patel, S.* , Nayar, K.* , Martin, G.E., Franich, K., Crawford, S.* , Diehl, J.J., & Losh, M. (2020). An acoustic characterization of prosodic differences in autism spectrum disorder and first-degree relatives. Journal of Autism and Developmental Disorders, 50(8), 3032-3045. PMID: PMC7374471
- Winston, M.* , Nayar, K.* , Hogan, A.L.* , Barstein, J.* , La Valle, C.* , Sharp, K., Berry-Kravis, E., & Losh, M. (2020). Physiological regulation and social-emotional processing in female carriers of the *FMR1* premutation. Physiology and Behavior, 214. PMID: PMC6992413
- Lee, M.* , Nayar, K.* , Maltman, N.* , Hamburger, D.* , Martin, G.E., Gordon, P.C., & Losh, M. (2020). Understanding social communication differences in autism spectrum disorder and first-degree relatives: A study of looking and speaking. Journal of Autism and Developmental Disorder, 50(6), 2128-2141. PMID: PMC7261276
- Martin, G.E., Barstein, J.* , Patel, S.* , Lee, M.* , Henry, L.* , & Losh, M. (2019). A Longitudinal analysis of communication repair skills across three genetically based neurodevelopmental disabilities. International Journal of Language and Communication Disorders, 55(1), 26-42. PMC Journal - In process
- Patel, S.* , Kim, J.* , Larson, C., & Losh, M. (2019). Mechanisms of voice control related to prosody in autism spectrum disorder and first-degree relatives. Autism Research, 12(8),1192-1210. PMID: PMC6771711
- Nayar, K.* , McKinney, W.* , Hogan, A.L.* , Martin, G.E., La Valle, C.* , Sharp, K., Berry-Kravis, E., Norton, E.S., Gordon, P.C., & Losh, M. (2019). Language processing skills linked to FMR1 variation: A study of gaze-language coordination during rapid automatized naming among women with the FMR1 premutation. PLoS One,14(7). PMID: PMC6660192.
- Zhang, J., Wang, G., He, W., Losh, M., Berry-Kravis, E., & Funk, W. (2019). Expression and characterization of human fragile X mental retardation protein isoforms and interacting proteins in human cells. Proteomics Insights, 10. PMID: PMC6399764
- Crowley, J.J., Szatkiewicz, J., Kähler, A.K., Giusti-Rodriguez, P., Ancalade, N., Booker, J.K., Carr, J.L., Crawford, G.E., Losh, M., Stockmeier, C.A., Taylor, A.K., Piven, J., & Sullivan, P.F. (2019). Common-variant associations with fragile X syndrome. Molecular Psychology, 24(3), 338-344. PMID: PMC6457435
- Martin, G.E., Bush, L.* , Klusek, J.* , Patel, S.* , & Losh, M. (2018). A multi-method analysis of pragmatic skills in children and adolescents with fragile X syndrome, autism spectrum disorder, and Down syndrome. Journal of Speech, Language, and Hearing Research, 61(12), 3023-3037. PMID: PMC6440309
- Nayar, K.* , Gordon, P.C., Martin, G.E., Hogan, A.L.* , La Valle, C.* , McKinney, W.* , Lee, M.* , Norton, E.S., & Losh, M. (2018). Links between looking and speaking in autism and first-degree relatives: Insights into the expression of genetic liability to autism. Molecular Autism, 9(51). PMID: PMC6180594
- Barstein, J.* , Martin, G., Lee, M.* , & Losh, M. (2018). A duck wearing boots?! Pragmatic language strategies for repairing communication breakdowns across genetically based neurodevelopmental disabilities. Journal of Speech, Language, and Hearing Research, 61(6), 1440-1454. PMID: PMC6195092.
- Lee, M.* , Bush, L.* , Martin, G.E., Barstein, J.* , Maltman, N.* , Klusek, J.* & Losh, M. (2017). A multi- method investigation of pragmatic development in Individuals with Down syndrome. American Journal on Intellectual and Developmental Disabilities, 122(4), 289-309. PMID: PMC5800500
- Lee, M.* , Martin, G.E., Hogan-Brown, A.* , Hano, D.* , Gordon, P.C., & Losh, M. (2017). What's the story? A computational analysis of narrative competence in autism. Autism: The International Journal of Research and Practice, 22(3), 335-344. PMID: PMC5599333
- Losh, M., Martin, G.E., Lee, M.* , Klusek, J.* , Sideris, J., Barron, S. & Wassink, T. (2017).

Developmental markers of genetic liability to autism in parents: A longitudinal, multigenerational study. Journal of Autism and Developmental Disorders, 47(3), 834-835. 1-12, PMID: PMC5352796

- Martin, G.E., Barstein, J.*, Hornickel, J.*, Matherly, S.*, Durante, G.*, & Losh, M. (2017). Signaling of noncomprehension in communication breakdowns in fragile X syndrome, Down syndrome, and autism spectrum disorder. Journal of Communication Disorders, 65, 22-34. PMID: PMC5340195
- Lee, M.*, Martin, G.E., Berry-Kravis, E., & Losh, M. (2016). A developmental, longitudinal investigation of autism phenotypic profiles in fragile X syndrome. Journal of Neurodevelopmental Disorders, 8(47), 1-10. PMID: PMC5203725
- Hall, D., Robertson, E., Shelton, A., Losh, M., Milá, M., Moreno, E., Gomez-Anson, B., Martínez- Cerdeño, V., Grigsby, J., Lozano, R., Hagerman, R., Santa María, L., Berry-Kravis, E., O'Keefe, J. (2016). Update on the clinical, radiographic, and pathological manifestations in FXTAS and FMR1 premutation carriers. The Cerebellum, 15(5), 578-86. PMID: 27287737
- Hall, D., Todorova-Koteva, K., Pandya, S., Bernard, B., Ouyang, B., Walsh, M., Pounardjian, T., Deburghraeve, C., Zhou, L., Losh, M., Leehey, M. and Berry-Kravis, E. (2016). Neurological and endocrine phenotypes of fragile X carrier women. Clinical Genetics, 89(1), 60-67. PMID: PMC4860881
- Smith M.J., Fleming, M.F., Wright, M.A., Losh, M., Humm, L. B., Olsen, D., & Bell, M.D. (2015). Brief Report: Vocational outcomes for young adults with autism spectrum disorders at six months after virtual reality job interview training. Journal of Autism and Developmental Disabilities, 1-6. PMID: PMC4772401
- Klusek, J.*, Roberts, J. & Losh, M. (2015). Cardiac autonomic regulation in autism and fragile X syndrome: A review. Psychological Bulletin, 141(1), 141-175. PMID: PMC4293203
- Losh, M., & Gordon, P.C. (2014). Quantifying narrative ability in autism: A computational linguistic analysis of narrative coherence. Journal of Autism and Developmental Disorders, 44(12), 3016 - 3025. PMID: PMC4224608
- Klusek, J.*, Martin, G.E., & Losh, M. (2014). A comparison of pragmatic language in boys with autism and fragile X syndrome. Journal of Speech, Language and Hearing Research, 57(5), 1692– 1707. PMID: PMC4177023
- Klusek, J.*, Martin, G., & Losh, M. (2014). Consistency between research and clinical diagnoses of autism among boys and girls with fragile X syndrome. Journal of Intellectual Disability Research, 58(10), 940– 952. PMID: PMC4207708
- Hogan-Brown, A.L.*, Hoedemaker, R.S.*, Gordon, P.C., & Losh, M. (2014). Eye-voice lead during rapid automatized naming: Evidence of reduced automaticity in individuals with autism spectrum disorder and their siblings. Journal of Neurodevelopmental Disorders, 6(1), 33. PMID: PMC4148681
- Wheeler, A.C., Bailey, D.B., Berry-Kravis, E., Greenberg, J., Losh, M., Mailick, M., ... & Hagerman, R. (2014). Associated features in females with an FMR1 premutation. Journal of Neurodevelopmental Disorders, 6(1), 30. PMID: PMC4121434
- Klusek, J.*, Losh, M., & Martin, G.E. (2014). Sex differences and within-family associations in the broad autism phenotype. Autism: The International Journal of Research and Practice, 18(2), 106-16. PMID: PMC3703490
- Klusek, J.*, Martin, G.E. & Losh, M. (2013). Physiological arousal in autism and fragile X syndrome: Group comparisons and links with pragmatic language. American Journal on Intellectual and Developmental

- Hogan-Brown, A.L.* , Losh, M., Martin, G.E., & Mueffelman, D*. (2013). An investigation of narrative ability in boys with autism and fragile X syndrome. American Journal on Intellectual and Developmental Disabilities, 118(2), 77-94. PMID: PMC3602926
- Martin, G.E., Losh, M., Estigarribia, B., Sideris, J., & Roberts, J. (2013). Longitudinal profiles of expressive vocabulary, syntax, and pragmatic language in boys with fragile X syndrome or Down syndrome. International Journal of Language & Communication Disorders, 48(4), 432-443. PMID: PMC3926422
- Zucker, N., Moskovich, A., Bulik, C., Merwin, R., Gaddis, K., Losh, M., Piven, J., Wagner, R., & LaBar, K. (2013). Perception of affect in biological motion cues in anorexia nervosa. International Journal of Eating Disorders, 46(1), 12-22. PMID: PMC3657604
- Losh, M., Martin, G.E., Klusek, J.* , & Hogan-Brown, A*. (2012). Pragmatic language in autism and fragile X syndrome: Genetic and clinical applications. Perspectives on language learning and education,19(2), 48-55. PMID: PMC3961489
- Losh, M., Martin, G.E., Klusek, J.* , Hogan-Brown, A.L.* , & Sideris, J. (2012). Social communication and theory of mind in boys with autism and fragile X syndrome. Frontiers in Developmental Psychology, 3, 1-12. PMID: PMC3422728
- Losh, M., Klusek, J.* , Martin, G.E., Sideris, J., Parlier, M.* , & Piven, J. (2012). Defining genetically meaningful language and personality traits in relatives of individuals with fragile X syndrome and relatives of individuals with autism. American Journal of Medical Genetics Part B: Neuropsychiatric Genetics, 159B(6), 660–668. PMID: PMC3740587
- Losh, M., Esserman, D., Anckarsäter, H. Sullivan, P. F. & Lichtenstein, P. (2012). Lower birth weight indicates higher risk of autistic traits in discordant twin pairs. Psychological Medicine, 42(5), 1091-1102. PMID: PMC3658607
- Losh, M., Esserman, D., & Piven, J. (2010). Rapid automatized naming as an index of genetic liability to autism. Journal of Neurodevelopmental Disorders, 2(2), 109-116. PMID: PMC2922764
- Couture, S.* Penn, D., Losh, M., Adolphs, R., Hurley, R., & Piven, J. (2010) Comparison of social cognition in schizophrenia and high-functioning autism: More convergence than divergence. Psychological Medicine, 40 (4) 569-579. PMID: PMC2827676
- Losh, M., Adolphs, R., Poe, M., Couture, S.* , Penn, D., Baranek, G., & Piven, J. (2009). Neuropsychological profile of autism and the broad autism phenotype. Archives of General Psychiatry 66, 518-526. PMID: PMC2699548
- Losh, M., Sullivan, P., Trembath, Y., & Piven, J. (2008). Current developments in the genetics of autism: from phenome to genome. Journal of Neuropathology and Experimental Neurology, 67, 829-837. PMID: PMC2649757
- Piven, J., Hurley, R.* , Losh, M., Parlier, M., & Reznick, S. (2008). Response to: Genichi Sugihara, Kenji J. Tsuchiya, Nori Takei, Letter to the editor: Broad autism phenotype from schizophrenia- spectrum disorders. Journal of Autism and Developmental Disorders, 38(10), 2000-2001.
- Konner, T.* , Barnes, T., Furberg, H., Losh, M., Bulik, C.M., & Sullivan, P.F. (2008). A searchable database of genetic evidence for psychiatric disorders. American Journal of Medical Genetics (Neuropsychiatric Genetics), 147B, 671-5. PMID: PMC2574546
- Losh, M., Childress, D., Lam, K., & Piven, J. (2008). Defining key features of the broad autism phenotype: A

comparison across parents of multiple- and single-incidence autism families. American Journal of Medical Genetics, Part B: Neuropsychiatric Genetics, 147B, 424-33. PMID: PMC2746421

- Zucker, N., & Losh, M. (2008). Repetitive behaviours in anorexia nervosa, autism, and obsessive compulsive personality disorder. Psychiatry, 7(4), 183-187.
- Zucker, N., Losh, M., Bulik, C., Pelphrey, K., & Piven, J. (2007). Anorexia nervosa and autism spectrum disorders: Guided investigation of social cognitive endophenotypes. Psychological Bulletin, 133, 976-1006.
- Hurley, R.S., Losh, M., Parlier, M., Reznick, J.S., & Piven, J. (2007). The Broad Autism Phenotype Questionnaire. Journal of Autism and Developmental Disorders, 37, 1679-1690.
- Losh, M. & Piven, J. (2007). Social-Cognition and the Broad Autism Phenotype: Identifying Genetically Meaningful Phenotypes. Journal of Child Psychology and Psychiatry, 48, 105-12.
- Wassink, T., Losh, M. Piven, J., Scheffield, V., Ashley, E., Westin, E., & Patil, S. (2007). Systematic Screening for Subtelomeric Anomalies in a Clinical Sample of Autism. Journal of Autism and Developmental Disorders, 37, 703-708.
- Losh, M. & Capps, L. (2006). Understanding of emotional experience in autism: Insights from the personal accounts of high-functioning children with autism. Developmental Psychology, 42 (5), 809-818.
- Wassink, T., Losh, M., Frantz, R., Vieland, V., Goedken, R., Piven, J., & Scheffield, V. (2005). A Case of Autism and Uniparental Disomy of Chromosome 1. Human Genetics, 117(2-3):200-6.
- Reilly, J., Losh, M., Bellugi, U., & Wulfeck, B. (2004). Frog, Where are you? Narratives from children with specific language impairment, early focal brain injury and Williams syndrome. In B. Wulfeck & J. Reilly, J., (Eds). Plasticity and development: Language in atypical children. Special issue, Brain and Language, 86(1), 1127-1189.
- Losh, M., & Capps, L. (2003). Narrative Ability in High-Functioning Children with Autism or Asperger's Syndrome. Journal of Autism and Developmental Disorders, 33(3), 239-251.
- Losh, M., Bellugi, U., Reilly, J., & Anderson, D. (2000). Narrative as a Social Engagement Tool: The Excessive Use of Evaluation in Narratives from Children with Williams Syndrome. Narrative Inquiry, 10(2), 1-26.
- Capps, L., Losh, M., & Thurber, C. (2000). "The frog ate a bug and made his mouth sad": Narrative competence in children with autism. Journal of Abnormal Child Psychology, 28 (2), 193-204.

OTHER PUBLICATIONS

- Lee, M.* & Losh, M. (2020). Understanding social communication differences in autism spectrum disorder and first-degree relatives. In Volkmar, F. (Ed) Encyclopedia of Autism Spectrum Disorders. Springer, New York, NY.
- Lee, M.* & Losh, M. (2017). Narrative language in ASD. In Volkmar, F. (Ed) Encyclopedia of Autism Spectrum Disorders. Springer, New York, NY.
- Martin, G.E., Lee, M*, & Losh, M. (2017). Intellectual disability. In L. Cummings (ed.), Research in Clinical Pragmatics, Series: Perspectives in Pragmatics, Philosophy & Psychology, Vol. 11, Cham, Switzerland: Springer-Verlag. ISBN: 978-3-319-47487-8 (hardcover); 978-3-319-47489-2 (eBook).
- Losh, M., Adolphs, R., & Piven, J. (2011). The broad autism phenotype. In D. Amaral, G. Dawson & D. Geschwind (Eds.), Autism Spectrum Disorders. Oxford University Press (pp. 457-476).

- Losh, M. (2010). Family ties: Studying the genetic basis of autism and related developmental disabilities. Early Developments: A publication of the Frank Porter Graham Child Development Institute.
- Losh, M. (2009). The lens of autism offers insights into language development. Research and Education Highlights, National Science Foundation.
- Losh, M. (2004). Narrative ability in autism: Strengths, weaknesses, and links to social understanding. California Speech-Language-Hearing Association Magazine.

MEDIA

- 2019: What the 'broad spectrum' can teach us about autism <https://www.spectrumnews.org/features/deep-dive/broad-spectrum-can-teach-us-autism/>
- 2017: Parents' traits predict autism features in children <https://spectrumnews.org/news/parents-traits-predict-autism-features-in-children/>
- 2017: Autism, fragile X follow different developmental paths <https://spectrumnews.org/news/autism-fragile-x-follow-different-developmental-paths/>
- 2016: Faculty-Researcher Gives Adults with Autism a Chance at Work
<http://www.communication.northwestern.edu/Node/122273>
- Autism Articulated: Meet Dr. Losh <http://www.autismarticulated.com/blog/2016/7/25/meet-dr-molly-losh>
- 2014: Invited Participant, Summit on Employing Adults on the Autism Spectrum: A Conference on Pioneering Small Business Models, Extraordinary Ventures, Inc., Chapel Hill, NC
www.extraordinaryventures.org/2014/02/autism-unemployment-crisis/
- Featured in Institute for Policy Research Year in Review 2013, Northwestern University
www.ipr.northwestern.edu/publications/docs/yir/2013YiR_IPR.pdf
- 2013: Project SEARCH Collaborates for Autism (PSCA) to Have Dreams, Northwestern University
<http://nyc4a.tumblr.com/post/66990017329/pictured-above-marice-left-a-psca-intern-and>
- Cohosted a Town Hall event with Speech Language and Learning Clinic and Chicagoland Autism Speaks featuring small businesses that employ individuals with autism
<https://www.autismspeaks.org/news/news-item/sixth-small-business-town-hall-held-chicago>
- Interviewed with the Iowa City Newspaper to discuss autism research for World Autism Day
www.dailyiowan.com/2013/04/02/Metro/32599.html
- Interviewed with Northwestern School of Communication Magazine on the Neurodevelopmental Disabilities lab and autism research
<https://www.communication.northwestern.edu/publications/DialogueFall2013.pdf>
- 2012: Northwestern University Research Annual Report, Northwestern University. Undergraduates Decoding Autism (15-17). Feature article about the Neurodevelopmental Disability Lab and the important role of undergraduates in the lab's research www.research.northwestern.edu/orpfc/publications/annual-report/AR2012.pdf
- Simons Foundation Autism Research Initiative features new study showing that fragile X carriers may show subtle signs of autism
<https://spectrumnews.org/news/cognition-and-behavior-fragile-x-carriers-show-autism-signs/>

Interview with the National Children's Study on Autism Awareness Month

<http://us2.forward-to-riend1.com/forward/show?u=3ab7224a0d7faa0ec5f3131c5&id=f8f1c6a65d>

Discussing recent study findings of low birth weight risk in autism (featured in Science Daily, Huffington Post, Chicago Tribune, Los Angeles Times, and other print and television media outlets)
<https://www.sciencedaily.com/releases/2012/01/120119143334.htm>

2011: Interview with the Associated Press (picked up by MSNBC, New York Times, USA Today and other media outlets) on novel vocational programs for individuals with autism
<http://usatoday30.usatoday.com/tech/health/story/2011-09-21/Startup-uses-autistic-adults-to-test-software/50496920/1>

PEER REVIEWED PUBLISHED CONFERENCE PROCEEDINGS

*indicates student author

Martin, G.E., Patel, S.P.* , Nayar, K.* , Zajac, D., & Losh, M. (November, 2020). Acoustic and Perceptual Prosodic Analyses in Boys with Autism with and without Fragile X Syndrome. Accepted for presentation at the American Speech-Language-Hearing Association, San Diego, CA. [convention canceled].

Guilfoyle, J.* , Landau, E.* , Xing, J.* , Winston, M.* , Nayar, K.* , Martin, G. E., Sharp, K., Zhou, L., Berry-Kravis, E., & Losh, M. (July, 2020). Patterns of Visual Attention and Narrative in Males and Females with Fragile X Syndrome. Presented virtually to the International Fragile X Conference, Orlando, FL.

Landau, E.* , Xing, J.* , Nayar, K.* , Stevens, C.* , Martin, G.E., Sharp, K., Zhou, L., Berry-Kravis, E., & Losh, M. (July, 2020). Narrative Ability in FMR1 Premutation Carriers. Presented virtually at the International Fragile X Conference, Orlando, FL.

Patel, S.P.* , Dillman, G.* , Martin, G.E. & Losh, M. (July, 2020). Computational Assessment of Verbal Entrainment in Individuals with Autism Spectrum Disorder and First-degree Relatives. Poster presented virtually at the International Fragile X Conference, Orlando, FL.

Winston, M.* , Nayar, K., Landau, E., Martin, G.E., Sharp, K., Zhou, L., Berry-Kravis, E., & Losh, M. (July, 2020). Social Attention Profiles Reflect Autism Symptoms in Fragile X Syndrome. Presented virtually at the International Fragile X Conference, Orlando, FL.

Stevens, C.* , Nayar, K.* , Landau, E.* , Pirog, S.* , Martin, G.E., & Losh, M. (May, 2020). The moral of the story is don't anger an entire hive of bees: Narrative in ASD and First-Degree Relatives. Poster presented virtually at the International Society for Autism Research Annual Meeting, Seattle, WA.

Nayar, K.* , Winston, M.* , Guilfoyle, J.* , Stevens, C.* , Shic, F., Norton, E., & Losh, M. (May, 2020). Identifying Neurocognitive Endophenotypes in ASD: A Multi-method, Family Study of Visual Perception and Attention. Poster presented virtually at the International Society for Autism Research Annual Meeting, Seattle, WA.

Winston, M.* , Nayar, K.* , Landau, E.* , Maltman, N.* , Lee, M.* , Hogan, A.L.* , & Losh, M (May, 2020). Social Attention Profiles Associated with ASD and the Broad Autism Phenotype. Poster presented virtually at the International Society for Autism Research Annual Meeting, Seattle, WA.

Crawford, S.* , Landau, E.* , Nayar, K.* , Stevens, C.* , Martin, G.E., Bush, L.* , & Losh, M. (March, 2020). A Multi-Method Analysis of Pragmatic Language in Siblings of Individuals with ASD. Poster accepted for presentation at the Meeting on Language in Autism, Durham, NC. [convention canceled].

Patel, S.P.* , Dillman, G.* , Winston, M.* , Martin, G.E., Nicol, T., Kraus, N., & Losh, M. (March, 2020). Verbal entrainment and correlated neural mechanisms in autism spectrum disorder. Accepted for presentation at the Meeting on Language in Autism, Durham, NC. [convention canceled].

- Xing, J.*, Nayar, K.*, Landau, E.*, Stevens, C.*, Kang, X., Martin, G.E., Wong, P., & Losh, M. (March, 2020). Narrative and Visual Attention in Autism Spectrum Disorder: A Cross-cultural Perspective. Poster accepted for presentation at the Meeting on Language in Autism, Durham, NC. [convention canceled].
- Winston, M.*, Nayar, K.*, Maltman, N.*, Zhou, L., Sharp, K., Berry-Kravis E., & Losh, M. (February, 2020). A Unique Visual Attention Profile Associated with the FMR1 Premutation. Presented at the Midwest Fragile X Research Exchange, Madison, WI.
- Losh, M. (October, 2019). Overlap of pragmatic language impairments in ASD and related neurodevelopmental disorders. Presented at the American Academy of Child and Adolescent Psychiatry's 66th Annual Meeting, Chicago, IL.
- Lau, J.C.Y., Kang, X., To, C.K.S., Losh, M., & Wong, P. (October, 2019). Impaired Neural Pitch Encoding Associated with Autism Spectrum Disorders in Cantonese-speaking Children. Poster presented at the Society for Neuroscience, Chicago, IL.
- Winston, M.*, Nayar, K.*, Maltman, N.*, Zhou, L., Sharp, K., Berry-Kravis, E. & Losh, M. (September, 2019). A Unique Visual Attention Profile Associated with the FMR1 Premutation. Presented at the Fourth International Conference on FMR1 premutation, Rotterdam, NL.
- Barstein, J.*, Patel, S.*, Nayar, K.*, Martin, G.E., Cascio, C., & Losh, M. (May, 2019). A Family Study of Sensory Processing in Autism Spectrum Disorder. Presented at the International Society for Autism Research Annual Meeting, Montreal, CA.
- Bush, L.*, Martin, G.E., Landau, E.*, & Losh M. (May, 2019). Parent-Child Interactions in School-Age Children with Autism Spectrum Disorder, Fragile X Syndrome, and Down Syndrome. Presented at the International Society for Autism Research Annual Meeting, Montreal, CA.
- Crawford, S.*, Nayar, K.*, Martin, G.E., & Losh M. (May, 2019). Pragmatic Language Abilities in Siblings of Individuals with ASD. Presented at the International Society for Autism Research Annual Meeting, Montreal, CA.
- Guilfoyle, J.*, Bush, L.*, Landau, E.*, Winston, M.*, Nayar, K.*, Martin, G.E., & Losh M. (May, 2019). Academic Profiles in Siblings of Individuals with ASD: An Endophenotype Approach. Presented at the International Society for Autism Research Annual Meeting, Montreal, CA.
- Landau, E.*, Nayar, K*, Stevens, C.*, Maltman, N.*, Winston, M., & Losh, M. (May, 2019). Social Attention and Language in Siblings of Individuals with Autism Spectrum Disorder. Presented at the International Society for Autism Research Annual Meeting, Montreal, CA.
- Maltman, N.*, Barstein, J.*, Martin, G.E., Dunbar, N., Patterson, E., & Losh, M. (May, 2019). Discourse Profiles of Mothers of Children with ASD and Female FMR1 Premutation Carriers. Presented at the International Society for Autism Research Annual Meeting, Montreal, CA.
- Nayar, K.*, Kang, X., Wong, P.C.M., & Losh M. (May, 2019). A Cross-Cultural Comparison of Gaze Differences During Narration in Autism. Presented at the International Society for Autism Research Annual Meeting, Montreal, CA.
- Nayar, K.*, Winston, M.*, Hogan, A.L.*, McKinney, W.*, Barstein, J*, La Valle, C., Sharp, K., Norton, E.S., Martin, G.E., Gordon, P.C., Berry-Kravis, E., & Losh, M., (May, 2019). Links Between Autism and the FMR1 Premutation: Insights from Studies of Gaze, Language, and Cognition in Carriers of the FMR1 Premutation. Presented at the International Society for Autism Research Annual Meeting, Montreal, CA.
- Patel, S.P.*, Landau, E.*, Rayburn, C., Martin, G.E., Dillman, G., Elahi, S., & Losh, M. (May, 2019).

Perceptual and Acoustic Measures of Prosody in Individuals with Autism Spectrum Disorder and First-Degree Relatives. Presented at the International Society for Autism Research Annual Meeting, Montreal, CA.

Winston, M.*, Patel, S.P.*, Nicol, T., Martin, G.E., Kraus, N., & Losh, M. (May, 2019). Neural Processing of Speech Sounds in Individuals with ASD and First Degree Relatives. Presented at the International Society for Autism Research Annual Meeting, Montreal, CA.

Losh, M. (February, 2019). FMR1-related Phenotypic Profiles Spanning Brain to Behavior. Presented at the Midwest Fragile X Research Exchange, Madison, WI.

Holubecki, A.*, Nayar, K.*, & Losh, M. (November, 2018). Defining the Neuropsychological Profile of Autism Spectrum Disorder and First Degree Relatives. Paper presented at the Aspects of Neuroscience Conference, Warsaw, Poland.

Lee, M.*, Martin, G.E., Goodkind, A., Bicknell, K., Maltman, N.*, Bush, L.*, & Losh, M. (July, 2018). A Multi-Method Approach to Characterizing Pragmatic Language Development in Individuals with FXS. Paper presented at the 16th International Fragile X Conference, Cincinnati, OH.

Patel, S.P.*, Bush, L.*, Martin, G.E., Landau, E., Crawford, S., & Losh, M. (July, 2018). Conversational Entrainment During Parent-Child Interactions in Fragile X Syndrome. Paper presented at the 16th International Fragile X Conference, Cincinnati, OH.

Winston, M.*, Martin, G.E., Bush, L.*, Klusek, J.*, Berry-Kravis, E., & Losh, M. (July, 2018). Autonomic regulation in girls with fragile X syndrome: Links with language abilities. Poster presented at the 16th International Fragile X Conference, Cincinnati, OH.

Holubecki, A.*, Nayar, K.* & Losh, M. (June, 2018). Defining the Neuropsychological Profile of Autism Spectrum Disorder and First Degree Relatives. Poster presented at the Undergraduate Research and Arts Exposition, NU.

Patel, S.*, Nayar, K.*, Franich, K.*, Crawford, S., Martin, G.E., & Losh, M. (May, 2018). Acoustic Analysis of Conversation in Families of Individuals with Autism Spectrum Disorder. Poster presented at the Individual Differences Workshop, NU.

Bush, L.*, Martin, G.E., & Losh, M. (May, 2018). Social Cognition in Autism and Fragile X Syndrome: A Unique Profile of Strengths and Weaknesses and its Influence on Pragmatic Language. Poster presented at the International Meeting for Autism Research, Rotterdam, NL.

Lee, M.*, Martin, G.E., Goodkind, A., Maltman, N.*, Bush, L.*, Bicknell, K., & Losh, M. (May, 2018). A Longitudinal, Multi-Method Analysis of Pragmatic Language in ASD and Related Neurodevelopmental Disorders. Poster presented at the International Meeting for Autism Research, Rotterdam, NL.

Losh, M., Bush, L.*, Nayar, K.*, Lee, M.*, Martin, G.E., Winston, M.*, Crawford, S., Sideris, J., Achorn, D., Lapham, S., Ferrie, J., & Figlio, D. (May, 2018). A unique cognitive profile of ASD evident in siblings, parents, and grandparents of individuals with ASD. Poster presented at the International Meeting for Autism Research, Rotterdam, NL.

Maltman, N.*, Nayar, K.*, Sasson, N., & Losh, M. (May, 2018). Atypical visual attention patterns to social and non-social stimuli in the broad autism phenotype. Poster presented at the International Meeting for Autism Research, Rotterdam, NL.

Nayar, K.*, Maltman, N.*, Patel, S.*, Bush, L.*, Crawford, S., Martin, G.E., & Losh, M. (May, 2018). An evaluation of measures of the broad autism phenotype: Identifying key instruments for use in biological studies. Poster presented at the International Meeting for Autism Research, Rotterdam, NL.

- Patel, S.P.* , Kim, J.H., Larson, C.R., & Losh, M. (May, 2018). Mechanisms of Voice Control in Autism Spectrum Disorder: A Family Study. Poster presented at the International Meeting for Autism Research, Rotterdam, NL.
- Winston, M. * , Nayar, K.* , Hogan, A.* , Bartsein, J.* , La Valle, C., Sharp, K., Berry-Kravis, E., & Losh, M., (April, 2018). Pupillary response to social-emotional faces in carriers of the FMR1 premutation: Gene-behavior links in emotion processing. Poster presented at the Wisconsin Symposium on Emotion. Madison, WI.
- Goodkind, A., Lee, M.* , Martin, G.E., Losh, M., & Bicknell, K. (January, 2018). Detecting language impairments in autism: A computational analysis of semi-structured conversations with vector semantics. Paper presented at Proceedings of the Society for Computation in Linguistics: Vol. 1, Article 3.
- Losh, M., Bush, L.* , Lee, M.* , Barstein, J.* , & Martin, G.E. (November, 2017). Longitudinal profiles of social communication in fragile X syndrome, Down syndrome, and autism spectrum disorder. Paper presented at 2017 IASSIDD 4th Asia-Pacific Regional Congress, Bangkok, Thailand.
- Martin, G.E., Bush, L.* , Klusek, J.* , & Losh, M. (November, 2017). A multi-method language sample analysis of pragmatic skills in children and adolescents with neurodevelopmental disabilities. Paper presented at the American Speech-Language-Hearing Association Convention, Los Angeles, CA.
- Losh, M., Lee, M.* , Martin, G.E., Nayar, K.* , Bush, L.* , Winston, M.* , Pounardjian, T., Awad, A., Sharp, K., McBrien, D., & Berry-Kravis, E. (September, 2017). A longitudinal, multigenerational study of childhood developmental profiles in the FMR1 premutation: Links with clinical phenotypes in carriers and autism symptoms in children with fragile X syndrome. Paper presented at the Third International Conference on FMR1 Premutation, Jerusalem, Israel.
- Losh, M., Martin, G. E., Nayar, K.* , Lee, M.* , Klusek, J.* , Sideris, J., Barron, S., & Wassink, T. (May, 2017). Developmental markers of genetic liability to autism in parents: A longitudinal, multigenerational study. Paper presented at the International Meeting for Autism Research, San Francisco, CA.
- Nayar, K.* , Bush, L.* , Lee, M.* , Martin, G. E., Crawford, S.* , Losh, M. (May, 2017). Identifying Endophenotypes in Autism Spectrum Disorder and Fragile X Syndrome: A Multi-method Approach. Poster presented at the International Meeting for Autism Research, San Francisco, CA.
- Patel, S.* , Nayar, K.* , Martin, G. E., Lee, M.* , Crawford, S.* , La Valle, C.* , Diehl, J. J., Losh, M. (May, 2017). Discourse Profiles in Autism Spectrum Disorder: A Family Study of Prosody. Poster presented at the International Meeting for Autism Research, San Francisco, CA.
- Klusek, J.* , Martin, G., & Losh, M. (November, 2016). Language & Communication in Fragile X Syndrome & the Fragile X Premutation. Paper presented at the American Speech-Language- Hearing Association, Philadelphia, PA.
- Losh, M., Martin, G., Lee, M.* , Barstein, J.* , & Bush, L.* . (August, 2016). A multi-method, cross- population comparison of complex social language in two genetically-based conditions with intellectual disability: Fragile X syndrome and down syndrome. Paper presented at the International Association for the Scientific Study of Intellectual and Developmental Disabilities (IASSIDD) World Congress, Melbourne, Australia.
- Barstein J.* , Martin G. M., Henry, L.* , Lee, M.* , & Losh, M. (July, 2016). A longitudinal study of communicative repair skills in children with fragile X syndrome: The role of autism symptomatology. Poster presented at the 15th International Fragile X Conference, San Antonio, TX.
- Bush, L.* , Lee, M.* , La Valle, C., & Losh, M. (July, 2016). The emerging FMR1 phenotype: Mood, executive function, social cognition and social communication in FMR1 premutation carriers. Poster presented at the 15th International Fragile X Conference, San Antonio, TX.

- Lee, M.*, Heckel, N. M.*, Bush, L. *, Martin, G. E., & Losh, M. (July, 2016). Profiles of social language in Individuals with fragile X syndrome and maternal FMR1 premutation carriers. Poster presented at the 15th International Fragile X Conference, San Antonio, TX.
- Martin, G. E., Bush, L. *, Klusek, J., & Losh, M. (July, 2016). A Multi-Method Approach to Characterizing Conversational Skills in Boys and Girls with Fragile X Syndrome with and without Autism Spectrum Disorder. Paper presented at the 15th International Fragile X Conference, San Antonio, TX.
- Nayar, K.*, Hogan-Brown, A.*, La Valle, C., McKinney, W.*, Gordon, P.C., Martin, G. E., Norton, E. S., & Losh, M. (July, 2016). Rapid automatized naming in premutation carriers and parents of individuals with autism spectrum disorder. Poster presented at the 15th International Fragile X Conference, San Antonio, TX.
- Lee, M. *, Bush, L. *, Martin, G. E., & Losh, M. (June, 2016). A multi-method investigation of pragmatic development in Down syndrome. Poster presented at the Symposium on Research In Child Language Disorders, Madison, WI.
- Barstein, J.*, Bedell, A., Dunbar, N., Keefer, L. , & Losh, M. (May, 2016). The presence of gastrointestinal symptoms in parents of individuals with autism spectrum disorder. Poster presented at the International Meeting for Autism Research, Baltimore, MD.
- Heckel, N. H.*, Barstein, J. *, Martin, G., & Losh, M. (May, 2016). “Okay, so Anyway”: The Influence of discourse markers on pragmatic language in the broad autism phenotype. Poster presented at the International Meeting for Autism Research, Baltimore, MD.
- Lee, M. *, Bush, L. *, Heckel, N.M.*, Taylor, A., Hogan-Brown, A. *, Martin, G. & Losh, M. (May, 2016). Profiles of Pragmatic Language in Individuals with ASD and Their Parents. Poster presented at the International Meeting for Autism Research, Baltimore, MD.
- Lee, M. *, Heckel, N.M. *, Hamburger, D., Gordon, P.C., Martin, G.E., & Losh, M. (May, 2016). Looking and Language in Autism Spectrum Disorder: A Family Study. Poster presented at the International Meeting for Autism Research, Baltimore, MD.
- Nayar, K.*, Hogan-Brown, A. *, La Valle, C., McKinney, W.*, Gordon, P.C., Martin, G.E., Norton, E.S., & Losh, M. (May, 2016). Rapid automatized naming as a marker of genetic liability to autism: An eye tracking study. Poster presented at the International Meeting for Autism Research, Baltimore, MD.
- Lee, M. *, Heckel, N.M. *, Nayar. K. *, Hogan-Brown, A. *, Gordon, P.C., Martin, G.E., & Losh, M. (March, 2016). Looking and Language in Autism Spectrum Disorder: A Comprehensive Investigation. Paper presented at the Gatlinburg Conference on Research and Theory in Intellectual Disabilities, San Diego, CA.
- Martin, G. E., Hornickel, J. *, McGrath, S., Barstein, J. *, Durante, G., & Losh, M. (November, 2015). Noncomprehension signaling following communication breakdown in children with fragile X syndrome, Down syndrome, and autism. Paper presented at the American Speech-Language- Hearing Association, Denver, CO.
- Losh, M., Lee, M. *, Klusek, J. *, Martin, G., & Berry-Kravis, E. (September, 2015). Executive functioning and social cognition among FMR1 premutation carriers: Links to autism endophenotypes. Paper presented at 2nd International Conference on FMR1 Premutation: Basic Mechanisms and Clinical Involvement, Barcelona, Spain.
- Funk, W., Zhang, J., Losh, M., & Berry-Kravis, E. (September, 2015). Quantification of fragile X metal retardation protein (FMRP) in Dried Blood Spot Samples: Validation of a Minimally Invasive Method to Screen for Fragile X in Community-Based Research. Paper presented at 2nd International

Conference on FMR1 Premutation: Basic Mechanisms and Clinical Involvement, Barcelona, Spain.

- Barstein*, J., Nayar*, K., Heckel*, N., Bush*, L., & Losh, M. (May, 2015). A Comparison of Clinical Versus Self-Report Measures: An Evaluation of the Broad Autism Phenotype in Parents of Individuals with Autism. Poster presented at the International Meeting for Autism Research, Salt Lake City, UT.
- Lee*, M., Heckel*, N., Stiehl, C., Gordon, P., & Losh, M. (May, 2015). An Examination of Narrative Abilities in Individuals with ASD and Their Family Members. Poster presented at the International Meeting for Autism Research, Salt Lake City, UT.
- Bishop, S., Lee*, M., Martin, G., Pickles, A. & Losh, M. (April, 2015). Comparison of directly observed autism symptoms in children with FXS and appropriately matched ASD controls. Paper presented at the Gatlinburg Conference, New Orleans, LA.
- Martin, G. E., Klusek, J., Sideris, J., & Losh, M. (November, 2014). Conversational discourse skills in children with fragile X syndrome: Sex differences and overlap with autism. Paper presented at the American Speech-Language-Hearing Association Annual Meeting, Orlando, FL.
- Barstein*, J., Martin, G. E., Lee, M.* , Henry, L.* , & Losh, M. (July, 2014). The role of autism symptomatology in communicative repair skill in boys with fragile X syndrome. Poster presented at the 2014 International Fragile X Conference, Orange County, CA.
- Hogan-Brown, A.L.* , Barstein, J.* , Shah, S.* , & Losh, M. (July, 2014). Pupil dilation as an index of autonomic arousal in women with the FMR1 premutation. Poster presented at the 2014 International Fragile X Conference, Orange County, CA.
- Klusek, J.* , Martin, G. E., & Losh, M. (July, 2014). Physiological arousal and social-communication skills in boys with fragile X syndrome and autism. Paper presented at the Arousal, Anxiety, and Attention in Fragile X Across the Lifespan Symposium (Chair: Jane Roberts. PhD), 2014 International Fragile X Conference, Orange County, CA.
- Lee, M.* , Martin, G. E., Rothermel, C., Zhou, L., Berry-Kravis, E. & Losh, M. (July, 2014). Characterizing Autism Spectrum Disorder in Fragile X Syndrome: A Longitudinal Perspective. Poster presented at the 2014 International Fragile X Conference, Orange County, CA.
- Maltman, N.* , Gordon, P.C., Berry-Kravis, E., Zhou, L., Pounardjian, T., & Losh, M (July, 2014). Social Language Use in FMR1 Premutation Carriers. Poster presented at the 2014 International Fragile X Conference, Orange County, CA.
- Stiehl, C., Martin, G. E., Klusek, J., Hogan-Brown A. L., Sideris, J., Losh, M. (July, 2014). Sex Differences in Pragmatic Language and Theory of Mind in Fragile X Syndrome. Poster presented at the 2014 International Fragile X Conference, Orange County, CA.
- Hogan-Brown, A.L.* , Barstein, J.* , Shah, S.* , & Losh, M. (May, 2014). Pupillary responses to emotional faces in individuals with autism spectrum disorder and their unaffected siblings. Poster presented at the 2014 International Meeting for Autism Research, Atlanta, GA.
- Lee, M.* , Hornickel, J., Thomas, B., Hamburger, D.* , Gordon, P.C. & Losh, M. (May, 2014). Personality and Perceptual Features of the Broad Autism Phenotype: Eye Gaze during Narration of "Frog, Where Are You?" Poster presented at the 2014 International Meeting for Autism Research, Atlanta, GA.
- Maltman, N.* , Hoedemaker, R.S.* , Gordon, P.C., & Losh, M. (May, 2014). Gaze Patterns in a Narrative Task with FMR1 Premutation Carriers and Autism Parents. Poster presented at the 2014 International Meeting for Autism Research, Atlanta, GA.
- Losh, M., Klusek, J.* , Lee, M.* , Hogan-Brown, A.* , & Martin, G. (May, 2014). Pragmatic language in autism

spectrum disorder, fragile X syndrome, and Down syndrome: Cross-population comparisons and genetic and social-cognitive correlates. Symposium on Atypical Communicative Profiles in Individuals with Neurodevelopmental Disorders (Chair: Leonard Abbeduto, PhD). Paper presented at the 44th Annual Meeting of The Jean Piaget Society, San Francisco, CA.

- Hogan-Brown, A.L.* , Losh, M., & Gordon, P. (February, 2014). Rapid automatized naming in individuals with autism and their siblings. Paper presented at the 2014 Illinois Speech-Language Hearing Association (ISHA) Annual Convention, Rosemont, IL.
- Lee, M.* , Hornickel, J., Thomas, B., Hamburger, D.* , Gordon, P.C. & Losh, M. (February, 2014). Looking and Language: Clinically Meaningful Links in Autism Spectrum Disorders. Poster presented at the 2014 Illinois Speech and Hearing Association Convention, Rosemont, IL.
- Berry-Kravis, E., Losh, M., Krause, S.E., (November, 2013). Katharine G. Butler Symposium in Child Language - Fragile X Syndrome (FXS): Genetics, Neurobiology, Treatment, & Language Profile. Paper presented at the 2013 American Speech-Language-Hearing Association, Chicago, IL.
- Losh, M., Hogan-Brown, A.* , Maltman, N.* , & Lee, M.* (June, 2013) Shared endophenotypes in FMR1 premutation carriers and relatives of individuals with autism. Paper presented at the 1st International Conference on the FMR1 Premutation: Basic Mechanisms and Clinical Involvement, Perugia, Italy.
- Hogan Brown, A.L.* & Losh, M. (May, 2013). Pragmatic language characteristics of adolescents with autism and their siblings. Poster presented at the 2013 International Meeting for Autism Research, San Sebastian, Spain.
- Hornickel, J.* , Losh, M., Martin, G. E., McGrath, S., Durante G. (May, 2013). Signaling of Non-Comprehension by Boys with Autism, with and without Fragile X Syndrome. Poster presented at the 2013 International Meeting for Autism Research, San Sebastian, Spain.
- Klusek, J.* , Losh, M., & Martin, G. E. (February, 2013). Physiological arousal in autism and fragile X syndrome. Poster presented at the Gatlinburg Conference on Research and Theory in Intellectual Developmental Disabilities, San Antonio, TX.
- Losh, M. (November, 2012) Narrative abilities in autism and the broad autism phenotype. Symposium: Narratives in High Functioning ASD: Significance and Best Practices (Chair: P. Rollins). Paper presented at the American Speech-Language-Hearing Association Convention, Atlanta, GA.
- Klusek, J.* , Losh, M., & Martin, G.E. (November, 2012). Pragmatic language in fragile X syndrome, autism, and Down syndrome. Paper presented at the American Speech-Language-Hearing Association Convention, Atlanta, GA.
- Zajac, D.J., Martin, G.E., Lamarche, E., & Losh, M. (November, 2012). Speech and intelligibility characteristics in fragile X and Down syndromes. Paper presented at the American Speech-Language-Hearing Association Convention, Atlanta, GA.
- Hogan-Brown, A.* , Thomas, B., Kravis, B.* , Lynn, K., Wassink, T., Martin, G., & Losh, M. (July, 2012) Visual perception of social scenes in women with the FMR1 premutation. Paper presented at the 2012 International Fragile X Conference, Miami, FL.
- Klusek, J.* , Losh, M., & Martin, G. (July, 2012). Agreement of clinical and research diagnoses of autism among boys and girls with fragile X syndrome. Paper presented at the 2012 International Fragile X Conference, Miami, FL.
- Martin, G.E., Losh, M., Estigarribia, B., & Sideris, J. (July, 2012). Language production over time in boys with fragile X syndrome with and without autism. Paper presented at the 2012 International Fragile X Conference, Miami, FL.

- McGrath, S., Martin, G.E., Losh, M., & Durante, G.* (July, 2012). Signaling noncomprehension of a spoken message in children with fragile X syndrome and autism. Poster presented at the 2012 International Fragile X Conference, Miami, FL.
- Losh, M., Esserman, D., Anckarsäter, H. Sullivan, P. F. & Lichtenstein, P. (May, 2012). Low birth weight as a risk factor for autism. Prenatal Programming and Toxicity III. Environmental Stressors in the Developmental Origins of Disease: Evidence and Mechanisms. Paris, France.
- Klusek, J.*, Losh, M., & Martin, G. (May, 2012). Gender differences in pragmatic language features associated with the broad autism phenotype among parents of children with autism. Poster presented at the 2012 International Meeting for Autism Research, Toronto, Canada.
- Hogan-Brown, A*., Lynn, K.M., Kravis, B.D.* , Thomas, B.B., & Losh, M. (May, 2012). An eye tracking study of rapid automatized naming ability in adult siblings of individuals with ASD. Poster presented at the 2012 International Meeting for Autism Research (IMFAR), Toronto, Ontario.
- Martin, G., Losh, M., Harris, A., Hopp, C.*, & Sideris, J. (November, 2011). Pragmatic Language in Boys and Girls with Fragile X Syndrome. Poster presented at the American Speech Language Hearing Association Annual Meeting, San Diego, CA.
- Harris, A., Losh, M., Dillon, E.* , Wilson, K.* , Sam, A.* , Honeycutt, B., Lamarche, E. & Martin, G. (May, 2011). The Role of Attachment and Narrative in Parental Coping with a Child's Diagnosis of Autism. Poster presented at the International Meeting for Autism Research, San Diego, CA.
- Hogan-Brown, A.* , Mueffelman, D.* , Martin, G. & Losh, M. (May, 2011). Narrative Abilities in Boys with Autism and Fragile X Syndrome. Poster presented at the International Meeting for Autism Research, San Diego, CA.
- Klusek, J.* , Losh, M., & Martin, G. (May, 2011). Expressive Language profiles of children with idiopathic autism and fragile X syndrome. Poster presented at the International Meeting for Autism Research, San Diego, CA.
- Losh, M. (October, 2010). Clinical and Neuropsychological Overlap of Autism and Fragile X Syndrome: Evidence for the role of FMR1 in Autism Symptomatology. Paper presented at IX International Congress Autism- Europe, Catania, Italy
- Harris, A., Losh, M., & Martin, G. (July, 2010). Diagnosing Autism in Fragile X Syndrome with the Revised ADOS Algorithms and Severity Metric. Poster presented at the International Fragile X Conference, Detroit, MI.
- Klusek, J.* & Losh, M. (July, 2010). Verbal fluency in relatives of individuals with fragile X and autism: Exploring gene-behavior relationships. Poster presented at the International Fragile X Conference, Detroit, MI.
- Losh, M., Martin, G., Klusek, J.* , Dillon, E.* , Hopp, C.* , Harris, A., Goff, G.* & Piven, J. (July, 2010). Personality, Language, and Neuropsychological Features in Relatives of Individuals with FXS and Relatives of Individuals with Autism. Paper presented at the International Fragile X Conference, Detroit, MI.
- Martin, G. Losh, M., Klusek, J.* , Harris, A., Hopp, C.* , & Sideris, J. (July, 2010). Social Language in Boys with Fragile X Syndrome and Boys with Autism. Paper presented at the International Fragile X Conference, Detroit, MI.
- Cardwell, R.L.* , Martin, G.E., & Losh, M. (May, 2010). Communicative repair skills in boys with autism and fragile X syndrome. Poster presented at the International Meeting for Autism Research, Philadelphia, PA.

- Dillon, E.F.*, Losh, M., Goff, G.*, & Sanders, E.J.* (May, 2010). Language discourse profiles in the Broad Autism Phenotype. Poster presented at the International Meeting for Autism Research, Philadelphia, PA.
- Harris, A., Losh, M. & Martin, G.E. (May, 2010). Diagnosing autism in fragile X syndrome with the revised ADOS algorithms and severity score. Poster presented at the International Meeting for Autism Research, Philadelphia, PA.
- Klusek, J.* & Losh, M. (May, 2010). The role of FMR1 in the language profile associated with the Broad Autism Phenotype. Poster presented at the International Meeting for Autism Research, Philadelphia, PA.
- Losh, M., Martin, G.E., & Klusek, J.* (May, 2010). Clinical and neuropsychological overlap in the Broad Autism Phenotype and the FMR1 premutation. Paper presented at the International Meeting for Autism Research, Philadelphia, PA.
- Martin, G.E., Losh, M., Klusek, J.*, & Harris, A. (May, 2010). Pragmatic language and social cognitive overlap in children with autism and fragile X syndrome. Paper presented at the International Meeting for Autism Research, Philadelphia, PA.
- Martin, G.E., Losh, M., Klusek, J.*, & Sideris, J. (November, 2010). Pragmatic language in boys with fragile X syndrome and autism. Paper presented at the American Speech-Language-Hearing Association Convention, Philadelphia, PA.
- Losh, M. (August, 2009). Symposium: A multi-disciplinary discussion of autism research: Clinical- behavioral, neuropsychological, and statistical insights into clinical applications (Chair: M. Losh). Paper symposium presented at the annual meeting of the American Psychological Association, Toronto, CA.
- Losh, M., & Gordon, P. (May, 2009). Linguistic markers of genetic liability to autism. Paper presented at the International Meeting for Autism Research, Chicago, IL.
- Losh, M. (May, 2008). Identifying genetically meaningful phenotypes in autism: a childhood profile of language and cognition in parents. Paper presented at the International Meeting for Autism Research, London, UK.
- Losh, M. (May, 2007). Gene-brain-behavior relationships in autism: Insights into the genetic and neurological underpinnings of social cognition. Paper presented at the Jean Piaget Society Annual Meeting, Amsterdam, Netherlands.
- Losh, M. (July, 2005). Language competence as a double edged sword? Links between narrative competence, emotional understanding, and psychological well-being in autism and typical development. Paper presented at the International Pragmatics Conference, Riva del Garda, Italy.
- Losh, M., & Piven, J. (April, 2005). Social-cognition and the Broad Autism Phenotype. Paper presented at the International Meeting for Autism Research, Boston, MA.
- Losh, M. (May, 2004) Language, emotion, and psychological well-being in autism and typical development. Paper presented at the annual meeting of the American Psychological Society, Chicago, Illinois.
- Losh, M. (April, 2003). Accounts of Emotional Experiences from High-Functioning Children with Autism or Asperger's Syndrome. Paper presented at the Biennial Meeting of the Society for Research in Child Development, Tampa, Florida.
- Wulfeck, B., Reilly, R., Weckerly, J., & Losh, M. (June, 2003). Neuroplasticity and development: The acquisition of morphosyntax in children with early focal lesions and children with SLI. Poster presented at the Symposium for Research in Child Language Disorders, Madison, Wisconsin.

- Losh, M. (July, 2002). "Tell me about a time": Accounts of emotional experiences from high-functioning children with autism. Poster presented at the Joint Meeting of the Symposium for Research in Child Language Disorders and International Congress for child Language Studies, Madison, Wisconsin.
- Losh, M. (April, 2001). Narratives from Children with Autism: Affective and Social-Cognitive Underpinnings. Symposium Title: Studies in Autism: A memorial symposium for Lisa Capps. Paper symposium presented at the 2001 Biennial Meeting of the Society for Research in Child Development, Minneapolis, Minnesota.
- Losh, M. (June, 2000). Affective and Social-Cognitive Underpinnings of Narrative: Insights from Autism. Paper presented at the Conference for Conceptual Structure, Discourse, and Language, Santa Barbara, CA.
- Losh, M., Capps, L., & Reilly, J. (July, 2000). Morphosyntactic and Pragmatic Abilities in Autism: An Analysis of Tag Question Production. Poster presented at the International Conference for Infancy Studies, Brighton, UK.
- Losh, M., & Capps, L. (July, 2000). Narrative Development in Young, Non-Retarded Children with Autism: Affective and Social-Cognitive Underpinnings. Poster presented at the International Conference for Infancy Studies, Brighton, UK.
- Sobel, D., Capps, L., Losh, M., & Gopnik, A. (July, 2000). Understanding the Development of Explanations in Young Children with Autism. Poster presented at the International Conference for Infancy Studies, Brighton, UK.
- Losh, M., Capps, L., Pengra, C., and Rozga, A. (June, 1999). Evaluative Functions of Narrative in Autism. Poster presented at the Annual Symposium for Research in Child Language Disorders, Madison, WI.
- Losh, M., Capps, L., and Pengra, C. (April, 1999). Narrative abilities across two discourse contexts in Asperger's Syndrome. Poster presented at the 1999 Biennial Meeting of the Society for Research in Child Development. Albuquerque, NM.
- Capps, L., Rasco, L., Losh, M., and Heerey, E. (April, 1999). The Development of Self Conscious Emotions in High Functioning Children and Adolescents with Autism and Asperger's Syndrome. Symposium Title: Social-Emotional and Language Abilities in Nonretarded Children with Autism: Etiologic and Interpersonal Implications. Paper symposium presented at the 1999 Biennial Meeting of the Society for Research in Child Development. Albuquerque, NM.
- Capps, L., Rasco, L., Losh, M., and Heerey, E. (August, 1999). Emotional understanding and empathic responsiveness among high-functioning children with autism. Paper presented at the Annual Meeting for the International Society for Research in Child and Adolescent Psychopathology. Barcelona, Spain.
- Reilly, J., Bellugi, U., Losh, M., & Klima, E. S. (May, 1999). Language in individuals with Williams syndrome - A crosslinguistic perspective. Paper presented at the Eighth International Congress for the Study of Child Language, San Sebastian, Basque Country, pp. 295-296.
- Losh, M., Capps, L., Goldenberg, V., and Sigman, M. (June, 1998). Narratives from individuals with autism: What story-telling reveals about linguistic and affective knowledge. Poster presented at the Annual Symposium for Research in Child Language Disorder, Madison, WI.
- Losh, M., Reilly, J.S., Bellugi, U., and Cassady, C. (May, 1997). The emergence of evaluation in the narrative discourse of children with Williams syndrome. Paper presented at the annual Symposium for Research in Child Language Disorders, Madison, WI.
- Losh, M., Reilly, J.S., Bellugi, U., and Klima, E. (April, 1997). Linguistically encoded affect is abnormally high

in children with Williams syndrome. Symposium presented at the annual meeting of The International Behavioral Neuroscience Society, San Diego, CA. International Behavioral Neuroscience Society Abstracts; 6:60, #P2-53.

Losh, M., Reilly, J.S., and Bates, E. (June, 1996). Language Development: Plasticity in Children with Early Focal Brain Injury. Poster presented at the annual meeting of the American Psychological Society, San Francisco, CA.

Losh, M., Reilly, J.S., and Stiles, J. (April, 1996). Morpho-Syntactic Development in Children with Early Focal Brain Injury. Poster presented at the Biennial International Conference on Infant Studies, Providence, RI.

Kehres, J., Losh, M., Reilly, J. S., and Courchesne, E. (April, 1995). Employing narratives as a means of measuring the linguistic and social abilities of autistic individuals. Poster presented at the biennial International Conference of the Society of Research in Child Development, Indianapolis, IN.

INVITED ADDRESSES AND COLLOQUIA

Losh M. (October, 2019). Social (Pragmatic) Communication Deficits in Pediatric Psychiatry Populations: Clarifying Issues for Clinical Practice. Discussant for American Academy of Child and Adolescent Psychiatry's 66th Annual Meeting, Chicago, IL.

Losh, M. (May, 2018). Unlocking the Basis of Autism Through Studies of Families and Links to the X Chromosome. The 13th Annual Pepper Lecture, School of Communication, Northwestern University.

Losh, M. (April, 2018). Studies of Autism and Fragile X Syndrome. Affiliated Faculty Honoree, Department of Linguistics. Northwestern University.

Losh, M. (October, 2017). Social Language in Fragile X: Clinical and biological insights from cross-population and family studies. Keynote speaker, The Fragile X Association of Southern California's conference: The Latest Trends in Fragile X Research. Carson, CA.

Losh, M. & Bush, L*. (September, 2017). Implementing the NIH Toolbox in Research Settings: Family Studies of Autism. Health Measures User Conference. Chicago, IL.

Nowiniski, C., Losh, M., Elkin-Frankston, S., & Carlozzi, N. (September, 2017). App-based Administration: Overview & User Experiences. HealthMeasures User Conference. Chicago, IL.

Losh, M. (February, 2017). A multi-method, cross-population comparison of social communication in autism spectrum disorder, fragile X syndrome, and Down syndrome. Social Communication Disorders Workshop. University College London, London, England.

Losh, M. (October, 2016). How Iowans are Playing a Key Role in Unlocking Gene-behavior Relationships in Autism and Related Neurodevelopmental Disabilities. Pediatrics Grand Rounds, University of Iowa, Iowa City, IA.

Losh, M. (October, 2016). Neuropsychological, and genetic perspectives on autism: Insights into deficits and strengths. National Pediatric Developmental Differences Forum. Chicago, IL.

Losh, M. (June, 2016). How to Implement the NIH Toolbox in Research Settings. HealthMeasures User Workshop. Rosemont, IL.

Losh, M. (April, 2016). An Overview of Premutation and Fragile X Syndrome Research at Northwestern. Greater Chicago Fragile X Research Event, Rush University Medical Center, Chicago, IL.

- Losh, M. (January, 2016). Autism and the broad autism phenotype: Insights into core deficits and genetic transmission. Midwest Autism Consortium. University of IL, Chicago, Chicago, IL.
- Losh, M. (January, 2016). Premutation and Fragile X Syndrome Research Overview. Chicago Fragile X Research Group. Rush University Medical Center, Chicago, IL.
- Losh, M. (December, 2015). Autism and the broad autism phenotype: Insights into core deficits and genetic transmission. Emerging Multidisciplinary Approaches to Mental Health and Disease Training Grant Winter Retreat, "Diverse Methodologies Towards a Convergent Goal: Treating Autism Spectrum Disorders," University of Chicago, Chicago, IL.
- Losh, M. (November, 2015). Autism and the broad autism phenotype: Insights into core deficits and genetic transmission. Opening ceremony of the Brain and Mind Institute, The Chinese University of Hong Kong.
- Losh, M. & Roberts, M. (July, 2015). Family-genetic perspectives on the causes and treatment of autism. Grand Rounds, Ann & Robert H. Lurie Children's Hospital of Chicago, Chicago, IL.
- Losh, M. (August, 2014). Autism: State of the science and implications for treatment and educational policy. Chicago Public Schools, Chicago, IL.
- Losh, M. (April, 2014). Social Language use and Related Features among Individuals with the FMR1 Premutation. Fragile X Clinic Open House, University of Iowa Children's Hospital. Iowa City, IA.
- Losh, M. (January, 2014). Deconstructing the Autism Phenotype through Family-Genetic and Cross-Population Studies. Mayor Paul Memorial Lecture, Waisman Center, University of Wisconsin- Madison.
- Losh, M. & Lee, M. (January, 2014). Narrative ability in autism. Foley Center for the Study of Lives. Northwestern University.
- Losh, M. (March, 2013). Endophenotypes as a guided study into the causes of autism. Grand Rounds, Department of Psychiatry and Behavioral Sciences, Northwestern University.
- Losh, M. (February, 2013). Identifying autism endophenotypes through cross-population studies. Department of Psychiatry Grand Rounds, University of Chicago, Illinois.
- Losh, M. (August, 2012). Endophenotypes: a guided inquiry into the causes of autism. Invited Lecture, Department of Speech and Hearing Sciences, University of Washington.
- Losh, M. (March, 2012). Identifying autism endophenotypes: Studies of language and social-cognition. Invited lecture, Simons Initiative on Autism and the Brain Autism Consortium, Department of Brain and Cognitive Sciences, Massachusetts Institute of Technology.
- Losh, M. (February, 2012). Developmental, neuropsychological, and genetic perspectives on autism. Invited Lecture, Illinois Speech-Language-Hearing Association, Rosemont, IL.
- Losh, M. & Martin, G.E. (September, 2011). Family studies of autism and fragile X syndrome. Colloquium presented at the semiannual meeting of the Chicago Fragile X Research Group, Northwestern University.
- Losh, M. (December, 2010). Autism and the Broad Autism Phenotype. Invited lecture, Neurobehavioral Center, Rush University Medical Center.
- Losh, M. (October, 2010). Developmental, longitudinal, and cross-population studies to identify autism endophenotypes. Invited lecture, 11th Annual CHGR Genetics Symposium, Vanderbilt University.

- Losh, M. (September, 2010). Family studies of autism: Identifying genetically meaningful phenotypes. Invited lecture, Midwest Autism Consortium Meeting, University of Illinois, Chicago.
- Losh, M. & Estigarribia, B. (April, 2009). Language Development in typical and atypical development. Invited lecture, Neurodevelopmental Disorders Research Center, UNC, Chapel Hill.
- Losh, M. (April, 2009). Genetics of complex psychiatric disorders. Invited lecture, Division of Speech and Hearing Sciences, UNC, Chapel Hill.
- Losh, M. (March, 2009). The broad autism phenotype: insights into autism genetics. Lecture presented to doctoral seminar on autism research, UNC, Chapel Hill.
- Losh, M. (January, 2009). Family-studies of language and social cognition in autism. Colloquium given to Purdue University.
- Losh, M. (November, 2008). Language as a marker of genetic liability to complex genetic disorders. Colloquium given to the Autism Research Forum, UNC, Chapel Hill.
- Losh, M. (September, 2008). Family-genetic studies of language and social cognition in autism and fragile X. Colloquium given to the Developmental Psychology Area, UNC, Chapel Hill.
- Losh, M. (February, 2008). Genetic and neuropsychological clues in autism. Colloquium given to the Division of Speech and Hearing Sciences, UNC, Chapel Hill.
- Losh, M. (February, 2007). A Family Genetic Study of Autism. Colloquium given to the Clinical Psychology Area, UNC, Chapel Hill.
- Losh, M. (January, 2007). A longitudinal study of language development and the broad autism phenotype. Colloquium given to the Neurodevelopmental Disorders Research Center, UNC, Chapel Hill.
- Losh, M. (March, 2005). Genetic and Neuropsychological Underpinnings of Autism: Insights from Studies of Language and Social-Cognition. Lisa Capps Memorial Lecture, UC Berkeley.
- Losh, M. (April, 2005). Language Development in Atypical Populations. Lecture presented to the Neurodevelopmental Disorders Research Center, University of North Carolina, Chapel Hill.
- Losh, M. (December, 2004). Social-cognition and language in atypical populations: Implications for Typical Development. Colloquium given to the Developmental Area of the Department of Psychology, University of North Carolina, Chapel Hill.
- Losh, M. (December, 2004). Autism and Williams Syndrome: Contrasting Neuropsychological Profiles in Two Genetically Based Disorders. Lecture given in the Department of Cognitive Neurosciences, Duke University.
- Losh, M. (November, 2003). Language and Cognition in Williams syndrome. Lecture given in the Department of Cognitive Neurosciences, Duke University.
- Losh, M. (June, 2003). Language and Social-Cognition in Autism and Typical Development. Colloquium given to the Department of Psychiatry, University of North Carolina, Chapel Hill.
- Losh, M. (May, 2003). Relationships between language and emotion: Insights from atypical development. Colloquium given to the Department of Psychiatry and Behavioral Sciences, Stanford University.
- Losh, M. (February, 2003). Associations between narrative and social-emotional functioning: Insights from atypical development. Colloquium given to the Division of Developmental Pediatrics and Learning, Pennsylvania State University College of Medicine, Hershey, Pennsylvania.

GRANTS

Current Research Support

- 1R03DC018644-01 (Losh, M.) \$149,022 4/1/20 – 3/31/22
National Institute on Deafness and Other Communication Disorders
Novel Computational Analysis of Prosody in ASD and the Broad Autism Phenotype
An important feature of the language impairments in ASD includes impairments in the rhythmic and intonational features of language used to convey intention and emotions, and that are essential for establishing connections with social partners. Subtle differences in these language features have been observed among clinically unaffected relatives as well, and might serve as subclinical markers of genetic risk to ASD. This project aims to provide clinically and biologically meaningful measures of such language differences, using state-of-the-art computational modeling of social language characteristics in ASD, to inform clinical assessment, treatment, and biological studies of ASD.
Role: Principal Investigator
- 2R01MH091131-06A1 (Losh, M.) \$3,754,280 9/23/19 – 7/31/24
National Institute of Mental Health
A Family-Genetic Study of Autism and Fragile X Syndrome
This project builds on three extremely rich existing phenotypic datasets from individuals with the *FMR1* premutation and their children with FXS, and parallel data collected from ASD families, to identify key pragmatic and prosodic, neural, and molecular-genetic markers in individuals with the premutation and FXS. This study will investigate whether there may be specific pragmatic/prosodic and neural signatures associated with ASD-risk in these individuals, which can be linked to the *FMR1* gene. This research takes an important step toward pinpointing different neurobiological and molecular-genetic factors associated with ASD-specific features, and for understanding gene-brain-behavior links to develop targeted interventions.
Role: Principal Investigator
- 1R21DC017210-01 (Norton, E.) \$232,646 7/20/18 – 6/30/20
National Institute on Deafness and Other Communication Disorders
Parent-toddler EEG neural synchrony as a window into social communication deficits in autism
Children with autism spectrum disorder (ASD) have significant difficulty with social communication, yet little is known about the underlying brain differences that may give rise to these difficulties. The proposed study uses EEG measures of mother-toddler dyads during natural interactions to determine the extent to which joint engagement and dyadic social communication behaviors are reflected in brain-to-brain synchrony, and to establish whether dyadic neural synchrony differs in dyads where the child has ASD or the parent has subtle autism-like features. Findings from this study could inform our understanding of underlying mechanisms of ASD and provide tools for improving early identification of ASD.
Role: Co-Investigator
- 5R01DC010191-08 (Losh, M.) \$3,134,310 9/20/16 – 8/31/21
National Institute on Deafness and Other Communication Disorders
A Family-Genetic Study of Language in Autism
This project investigates multigenerational developmental, behavioral, and neural markers of risk to Autism Spectrum Disorder (ASD), and molecular genetic correlates. This research takes an important step toward pinpointing different neurobiological and molecular-genetic factors associated with the social-communicative impairments in ASD in particular, and with ASD risk more generally, with key implications for better understanding of etiology and the development of targeted interventions.
Role: Principal Investigator
- 1R01DC014709-01 (Roberts, M.) \$3,597,826 8/1/15 - 7/31/21(NCE)
National Institute on Deafness and Other Communication Disorders
The Role of a Parent Phenotype in Parent-Mediated Language Interventions for Autism

The objective of the proposed study is to examine how BAP traits influence parent use of language intervention strategies and subsequent child language skills. The central hypothesis is that the parental BAP traits will be associated with: (a) differential use of language intervention strategies and (b) child language skills.

Role: Co-Investigator

Completed Research Support

1U24 OD023319-01 (Gershon, R. & Cella, D.) \$18,337,688 9/21/16 – 8/31/19

National Cancer Institute

ECHO PRO Research Resource: A Developmentally-based Measurement Science Framework for Assessing Environmental Exposure and Child Health

Negative environmental exposures can have a profoundly adverse effect upon the health of children. The overall objective of the ECHO consortium is to capture this adverse impact of early environmental exposures on children's health by bringing together several existing studies of the influence of the environment on prenatal, postnatal and early childhood health.

Role: Co-Investigator

1P30DC012035-01 (Larson, C.) \$3,089,660 5/1/13 - 4/30/19

National Institute on Deafness and Other Communication Disorders

Core Center for Integrated Research on Human Communication Disorders

The purpose of this Research Core Center is to promote advancements in the science and understanding of communication by fostering a collaborative environment among a diverse group of investigators. A key element of this proposal is a shared commitment across the participating PIs to data sharing and standardization of research methodologies across laboratories.

Role: Director, Core 1 (Human Subject Research Participation Core)

3R01MH091131-03S1 (Losh, M.) \$706,946 8/1/15-3/31/19

National Institute of Mental Health

A Family-Genetic Study of Autism and Fragile X Syndrome (revision supplement)

This project aims to identify specific biomarkers of risk to autism that may be associated with the *FMR1* gene that causes fragile X syndrome (FXS). In this revision application we propose to add a battery of novel computational linguistic and psycholinguistic measures which our preliminary data suggest tap core underlying abilities linked to variation in this gene and its protein, FMRP, and therefore may help us better understand the pathogenesis of autism, leading to evidence-based approaches to prevention or treatment.

Role: Principal Investigator

1R01MH091131-01A1 (Losh, M.) \$3,258,307 5/1/12-3/31/19

National Institute of Mental Health

A Family-Genetic Study of Autism and Fragile X Syndrome

This project aims to inform the role of the *FMR1* gene in autism symptomatology through the study of children with autism and fragile X syndrome, and their first-degree relatives who are at increased genetic liability. This project builds on our prior studies of autism and the broad autism phenotype (BAP), to examine the role of *FMR1*-related variation in key developmental, clinical, language, and social cognitive phenotypes shown to cosegregate with autism and the BAP.

Role: Principal Investigator

1R03MH107834-01A1 (Losh, M.) \$100,000 3/3/16 – 2/28/19

National Institute of Mental Health

Perception and Central Coherence in Autism: A Family Genetic Eye-tracking Study

This project proposes to investigate visual perceptual and attentional strategies in individuals with ASD and their biological parents. Characterizing behavioral and neuropsychological features associated with perceptual coherence, and aggregating in families of individuals with ASD, will provide important information that can guide research into the biological basis of ASD and the rational development of targeted treatments.

Role: Principal Investigator

2130846 (Wong, P.)	\$765,304	2/2/15-2/1/17
Health and Medical Research Fund, Hong Kong		
<u>Neural responses to pitch in Cantonese-speaking children with autism spectrum disorder.</u>		
This project utilizes the unique tonal characteristics of Chinese languages to address language deficits in autism spectrum disorders (ASD) within a cross-cultural context.		
Role: Co-Investigator		
(Losh, M.)	\$3,000	6/1/15 – 2/1/16
The Alumnae of Northwestern University		
<u>An Evaluation of Gastrointestinal Symptoms in Individuals with Autism Spectrum Disorder and their Parents.</u>		
This study investigates the causes of gastrointestinal problems documented in autism. Using a family- genetic design we examine the heritability of gastrointestinal symptoms in autism, and document how such symptoms relate to impairments in other behavioral and cognitive domains affected in this disorder. Findings help to illuminate the causes and course of autism symptomatology.		
Role: Principal Investigator		
1R01DC010191-01A1 (Losh, M.)	\$2,139,801	2/1/10-1/31/16
National Institute on Deafness and Other Communication Disorders		
<u>A Family-Genetic Study of Language in Autism</u>		
This project aims to identify specific linguistic markers of genetic liability to autism which may be used to illuminate the pathogenesis of autism and its component features.		
Role: Principal Investigator		
2 R01 HD038819-06A2 (Martin, G.)	\$2,409,568	5/1/09 - 4/30/13
National Institute of Child Health and Human Development		
<u>Pragmatic Skills of Young Males and Females with Fragile X Syndrome</u>		
This study compares the developmental trajectories of pragmatic skills, the use of language in social contexts, among girls and boys with fragile X syndrome, Down syndrome, and typical development and boys with autism spectrum disorder only to determine whether individual differences in conversational discourse and narrative skills relate to FXS specifically or to either intellectual disability or autism in general.		
Role: Principal Investigator of NU Subcontract		
Rush Translational Sciences Consortium (Hall, D.).	\$100,000	7/1/11- 6/30/13
<u>Neurological, Endocrine, and Molecular Phenotypes of Female FMR1 Premutation Carriers</u>		
This project is to investigate clinical and molecular characteristics of carriers and non-carriers in order to plan a larger multi-site R01 submission in 2013.		
Role: Consultant		
3R01HD038819-09S1 (Losh, M.)	\$125,116	7/1/10 - 6/30/11
National Institute of Child Health and Human Development		
<u>ARRA Administrative Supplement: Pragmatic Skills of Young Males and Females with Fragile X Syndrome</u>		
This administrative supplement provided resources for neuropsychological and behavioral assessment of women who are carriers of <i>FMR1</i> in its premutation state, and parents of children included in the associated R01 (2 R01 HD038819-06A2).		
Role: Principal Investigator		
National Science Foundation (Losh, M.)	\$276,000	9/15/08 – 9/14/11
<u>A multigenerational, longitudinal study of language development: Insights from autism</u>		
This study examined developmental language profiles that may index genetic liability to autism, among parents of individuals with autism, in order to illuminate gene-behavior relationships in autism and typical development.		
Role: Principal Investigator		
R03 MH079998-01 (Losh, M.)	\$100,000	4/1/08 - 3/31/11
National Institute of Mental Health		

An Investigation of Neuropsychological Endophenotypes in Autism and Fragile X

This study investigated neuropsychological features as candidate autism endophenotypes that may illuminate shared etiological pathways in autism and fragile X syndrome.

Role: Principal Investigator

1K12RR025746-01 (Losh, M.)

\$841,240

7/1/06 – 6/30/09

Clinical Translation Science Award

National Center for Research Resources, NIH

The objective of the University of North Carolina's Multidisciplinary Clinical Research Career Development Program is to offer training for junior faculty to support the development of multidisciplinary research careers.

Role: Scholar

University Research Council (Losh, M.)

\$5,000

12/1/08 – 11/30/10

A family-genetic study of language in autism

Funds were awarded to support a project examining genetically meaningful language features in families of autistic individuals

Role: Principal Investigator

Autism Speaks (Losh, M.)

\$105,497

9/1/06 – 6/30/09

Characterizing the Language Endophenotype in Autism: Longitudinal, Genetic, and Neuropsychological Correlates

This proposal attempts to tease apart the language endophenotype in autism through examination of the early language profiles of parents of individuals with autism, and direct comparison of language and related cognitive abilities across individuals with autism and their parents.

Role: Principal Investigator

University Research Council (Losh, M.)

\$5,000

12/1/06 – 11/30/08

Characterizing the Language Endophenotype in Autism: Longitudinal, Genetic, and Neuropsychological Correlates

Funds were awarded for a family-genetic study of autism with the overarching aim of defining the autism language endophenotype (i.e., traits reflecting genetic liability for disease measurable in both affected and unaffected individuals) for use in molecular genetic studies of autism.

Role: Principal Investigator

5 T32 MH019111-15 (Gilmore, J.)

1/1/04 – 6/30/06

Clinical Neuroscience and Pharmacology

The purpose of the training program is to attract physicians to careers in clinical, basic, and translational neuroscience research, and to provide effective training that will enable fellows to become productive, independent investigators who will contribute to the future advance of knowledge in psychiatry.

Role: Postdoctoral Fellow

1 F31 MH1255101 (Losh, M.)

6/1/00 – 7/31/03

National Institute of Mental Health

Language and Social Cognition in Developmental Psychopathology.

This project examined the role of language and social cognitive impairment in autism and specific language impairment.

Role: Graduate Student PI