CURRICULUM VITAE
MATTHEW S. GOODWIN, Ph.D.

EDUCATION

Postdoc	2010	Media Lab, Massachusetts Institute of Technology, Cambridge, MA
Ph.D.	2008	Behavioral Science, Dept. of Psychology, University of Rhode Island, Kingston, RI
M.A.	2005	Experimental Psychology, Dept. of Psychology, University of Rhode Island, Kingston, RI
B.A.	1998	Psychology, Dept. of Psychology, Wheaton College, Norton, MA
Pre-Bachelor	1994	Psychology & Philosophy, St. Clare's, Oxford, UK

CURRENT ACADEMIC APPOINTMENTS

2024 -	Member, Bouvé Research Committee, Bouvé College of Health Sciences, Northeastern
2023	Chair, Bouvé Research Committee, Bouvé College of Health Sciences, Northeastern University, Boston, MA
2023 -	Associate Chair, Dept. of Health Sciences, Bouvé College of Health Sciences, Northeastern University, Boston, MA
2023 -	Interdisciplinary Professor (with tenure), Dept. of Health Sciences, Bouvé College of Health Sciences (75%), College of Computer & Information Science (25%), Northeastern University, Boston, MA
2021-	Core Member/Faculty Leadership Committee, Institute for Experiential AI, Northeastern University, Boston, MA
2020-	Core Faculty, Institute for Experiential Robotics, Northeastern University, Boston, MA

PREVIOUS ACADEMIC APPOINTMENTS

2020-2022	Research Development Lead, Roux Institute, Northeastern University, Boston, MA
2018-2020	Associate Chair, Dept. of Health Sciences, Bouvé College of Health Sciences, Northeastern University, Boston, MA
2018-2020	Visiting Associate Professor, Dept. of Biomedical Informatics, Harvard Medical School, Boston, MA
2011-2017	Visiting Associate Professor, Media Lab, Massachusetts Institute of Technology, Cambridge, MA
2017-2023	Interdisciplinary Associate Professor (with tenure), Dept. of Health Sciences, Bouvé College of Health Sciences (75%), College of Computer & Information Science (25%), Northeastern University, Boston, MA
2011-2017	Interdisciplinary Assistant Professor (tenure track), Dept. of Health Sciences, Bouvé College of Health Sciences (75%), College of Computer & Information Science (25%), Northeastern University, Boston, MA
2008-2011	Director of Clinical Research, Media Lab, Massachusetts Institute of Technology, Cambridge, MA

2008-2018 Adjunct Assistant Professor, Dept. of Psychiatry & Human Behavior, Brown University, Providence, RI

1999-2007 Research Associate, Dept. of Psychology, Brown University, Providence, RI

OTHER PROFESSIONAL EXPERIENCE

2005-2011 Associate Director of Research, The Groden Center, Inc., Providence, RI

1997-1998 Clinical Intern, Mind/Body Medical Institute, Harvard Medical School, Boston, MA

HONORS AND DISTINCTIONS

2024 B.F. Skinner Lecturer Keynote, Association for Behavior Analysis International

2021 Matilda White Riley Early-Stage Investigator, National Institutes of Health

2016 Simons Investigator, Simons Foundation for Autism Initiative

2015 Aspen Ideas Scholar, Aspen Institute

2015 Career Contribution Award, Princeton Autism Lecture Series

2014 Hariri Award for Transformative Computational Science, Hariri Institute for Computing and Computational Science & Engineering

2010 NIH Loan Repayment Award, Extramural, Pediatric Research (Renewed 2011, 2012)

2009 Nancy Lurie Marks Family Foundation Investigator

2009 Best Paper Award, 11th International Conference on Ubiquitous Computing (Ubicomp)

2008 Peter Merenda Prize in Statistics and Research Methodology, Dept. of Psychology, University of Rhode Island

2007 Dissertation Award, Society of Multivariate Experimental Psychology

1998 Wheaton Scholar/Psi Chi, Wheaton College, Norton, MA

SCHOLARSHIP AND RESEARCH

Publications

h-index: 47; i10-index: 98; Citations: 7,927

[source: scholar.google.com, 09/03/2026]

Refereed Original Articles (*author is a student or advisee)

1. *Kalkanli, B, *Singh, A, *Potter, M, *Watanabe, Y, Stratis, G, Imbiriba, T, **Goodwin, MS**, Erdogmus, D (submitted). DMLE-ML: Dependency-aware maximum likelihood estimation for multi-label active learning. Pattern Recognition Letters.
2. * Barry, CL, Purdue, SK, Nourani, M, Forlines, C, **Goodwin, MS**, Tory, M (submitted). Needs and barriers of healthcare teams to implement real-time AI & predictive analytics in cardiothoracic ICU: A contextual inquiry. Frontiers.

3. *Yamane, N, Lansberry, H, McCullough, A, Mishra, V, Liu, S, **Goodwin, MS** (submitted). Nonlinear dynamics of parent-child cardiac coupling during play in autism: A multimodal investigation of sociobehavioral correlates. Journal of Autism and Developmental Disorders.

4. *Gao, G, **Goodwin, MS**, Corderob, JF, Rosario-Pabóna, Z, Meekerc, JD, Alshawabkeha, AN, Kaelia, DR (submitted). Linking prenatal environmental exposures with autism screening outcomes using machine learning. Journal of Public Health.

5. *Potter, M, Everett, M, Erdogmus, D, Imbiriba, **Goodwin, MS** (submitted). Hierarchical temporal point process modeling of aggressive behavior onset in psychiatric inpatient youth with autism using branching factor estimation. BMC Medical Research Methodology.

6. *Hester, J, **Goodwin, MS**, & Intille, S (submitted). Longitudinal, technology-based data collection on college campuses: A mapping review. Assessment.

7. Scheithauer, M, McMahon, M, Sinha, C, Lee, E, Bottini, S, **Goodwin, MS**, Scahill, L, Call, N (revise & resubmit). Thematic analysis of the impact of externalizing behaviors exhibited by autistic individuals. Journal of Autism and Developmental Disorders.

8. *Yamane, N, Mishra, V, **Goodwin, MS** (revise & resubmit). Toward music-based stress management: contemporary biosensing systems for affective regulation. BMC Digital Health.

9. *MBaye, A, Perea, JA, Tralie, CJ, **Goodwin, MS** (in press). Automated quantification of stereotypical motor movements in autism using persistent homology. Nature Scientific Reports.

10. *Potter, M, Everett, M, Singh, A, *Stratis, G, *Watanabe, Y, *Demirkaya, A, Erdogmus, D, Imbiriba, T, **Goodwin, MS** (2026). Temporal point process modeling of aggressive behavior onset in psychiatric inpatient youths with autism. Nature Scientific Reports. https://doi.org/10.1038/s41598-026-46996-8

11. Wechsler, D, Mandy, W, Lai, M, Boyd, B, **Goodwin, MS**, Divan, G, Carter Len, V (2025). Advancing healthcare equity for autistic people: mental health as a key priority. The Lancet, 405(10491), 1723-1726.

12. Dunn, J, Mishra, V, Hasan Shandhi, M, Jeong, H, Yamane, N, Watanabe, Y, Chen, B **Goodwin, MS** (2025). Building an open-source community to enhance autonomic nervous system signal analysis: DBDP-Autonomic. Frontiers in Digital Health, https://doi.org/10.3389/fdgth.2024.1467424.

13. Kaur, I, Kamel, R, Sultanik, E, Tan, J, Mazefsky, CA, Brookman-Frazee, L, McPartland, JC, **Goodwin**, **MS**, Pennington, J, Beidas, RS, Mandell, DS, *Nuske, HS (2024). Supporting emotion regulation in children on the autism spectrum: Co-developing a digital mental health application for school-based settings with community partners. Journal of Pediatric Psychology, jsae078, https://doi.org/10.1093/jpepsy/jsae078.

14. Reisinger, DL, **Goodwin, MS**, Horn, PS, Schmitt, LM, Coffman, MC, Shaffer, RC (2024). Examining the feasibility and utility of heart rate variability on intervention outcomes targeting emotion regulation in autism: a brief report. Scientific Reports, 14, 15409.

15. *Kleckner, IR, Wormwood, JB, Jones, RM Culakova, E, Feldman Barrett, L, Lord, C, Quigley, KS, **Goodwin, MS** (2023). Adaptive thresholding increases sensitivity to detect changes in the rate of skin conductance responses to psychologically arousing stimuli in both laboratory and ambulatory settings. International Journal of Psychophysiology, 15(196).

16. *Imbiriba, T, Demirkaya, A, Singh, A, Erdogmus, D, **Goodwin, MS** (2023). Wearable biosensing to predict imminent aggressive behaviors in psychiatric inpatient youths with autism. JAMA Network Open, 6(12):e2348898.

17. Grasser, LR, Erjo, T, **Goodwin, MS**, Naim, R, German, RE, White, J, Cullins, L, Tseng, W, Stoddard, J, Brotman, MA. (2023). Can peripheral psychophysiological markers predict response to exposure-based cognitive behavioral therapy in youth with severely impairing irritability? A study protocol. BMC Psychiatry, 23(926).

18. *Nuske, H, Young, A, Khan, F, Palermo, E, Ajanaku, B, Pellecchia, M, Vivanti, G, Mazefsky, C, Brookman-Frazee, L, McPartland, J, **Goodwin, MS**, Mandell, D (2023). Systematic review: Emotion dysregulation and challenging behavior interventions for children and adolescents on the autism spectrum with graded key evidence-based strategy recommendations. European Child & Adolescent Psychology. https://doi.org/10.1007/s00787-023-02298-2

19. Zervogianni, V, Fletcher-Watson, S, Herrera, G, **Goodwin, MS**, Triquell, E, Perez-Fuster, P, Brosnan, M, & Grynszpan, O (2023). A user-based information rating scale to evaluate the design of digital technology-based supports for autism. Universal Access in the Information Society. https://doi.org/10.1007/s10209-023-00995-y

20. Palermo, E, Young, AV, Deswert, S, Brown, A, Goldberg, M, Sultanik, E, Tan, J, Mazefsky, CA, Brookman-Frazee, L, McPartland, JC, **Goodwin, MS**, Pennington, J, Marcus, S, Beidas, RS, Mandell, DS, & Nuske, HJ* (2023). A digital mental health app incorporating wearable biosensing for teachers of children on the autism spectrum to support emotion regulation: Protocol for a pilot randomized controlled trial. JMIR Research Protocols. Jun;12:345852.

21. Shaffer, R, Schmitt, L, Reisinger, D, Coffman, M, Horn, P, **Goodwin, MS**, Mazefsky, C, Randall, S, Erickson, C (2023). Regulating Together: Emotion dysregulation group treatment for ASD youth and their caregivers. Journal of Autism and Developmental Disorders, 53(5), 1942-1962.

22. Northrup, J, **Goodwin, MS**, Peura, C, Chen, Q, *Taylor, B, Siegel, M, Mazefsky, C (2022). Mapping the time course of emotion dysregulation, self-injurious behavior, and aggression in psychiatrically hospitalized autistic youth: A naturalistic study. Autism Research, 15(10), 1855-1867. INSAR Early Career Investigator Award Paper.

23. *Nuske, H, **Goodwin, MS**, Kushleyeva, Y, Forsyth, D, Pennington, J, Masino, A, Finkel, E, Bhattacharya, A, Tan, J, Tai, H, Atkinson-Diaz, Z, Bonafide, C, Herrington, J (2022). Evaluating commercially available wireless cardiovascular monitors for measuring and transmitting real-time physiological responses in children with autism. Autism Research, 15(1), 117-130.

24. Susam, B, Riek, T, *Akcakaya, M, Xu, X, de Sa, V, *Nezamfar, H, Diaz, D, Craig, K, **Goodwin, MS**, Huang, JS (2022). Automated pain assessment in children using electrodermal activity and video data fusion via machine learning. IEEE Transactions on Biomedical Engineering, 69(1), 422-431.

25. Naim, R, **Goodwin, MS**, Dombek, K, Revzina, O, Agorsor, C, Lee, K, Zapp, C, Freitag, G, Haller, S, Cardinale, E, Jangraw, D, Brotman, MA (2021). Cardiovascular reactivity as a measure of irritability in a transdiagnostic sample of youth: Preliminary associations. International Journal of Methods in Psychiatric Research, 30(4), 1-13:e1890.

26. Harlow, L, Aiken, L, Blankson, A, Boodoo, G, Brick, L, Collins, L, Cumming, G, Fava, J, **Goodwin, MS**, Hoeppner, B, Mackinnon, D, Molenaar, P, Rodgers, J, Rossi, J, Scott, A, Steiger, J, West, S (2021). A tribute to the mind, methodology, and memories of Wayne Velicer. Behavior Research Methods, 56(3), 377-389.

27. Kaliukhovich, D, Manyakov, N, Bangerter, A, Ness, S, Skalkin, A, Boice, M, **Goodwin, MS**, Dawson, G, Hendren, R, Leventhal, B, Shic, F, Pandina, G (2021). Visual preference for biological motion in children and adults with autism spectrum disorder: an eye-tracking study. Journal of Autism and Developmental Disorders, 51(7), 2369-2380.

28. *Kleckner, I, Feldman, M, **Goodwin, MS**, Quigley, K (2021). Framework for benchmarking mobile devices in psychophysiological research. Behavior Research Methods, 53(2),518-535.

29. Kaliukhovich, D, Manyakov, N, Bangerter, A, Ness, S, Skalkin, A, **Goodwin, MS**, Dawson, G, Hendren, R, Leventhal, B, Hudac, C, Bradshaw, J, Shic, F, Pandina, G (2020). Social attention to activities in children and adults with autism spectrum disorder: effects of context and age. Molecular Autism, 11(1), 1-14.

30. Bangerter, A, Chatterjee, M, Manfredonia, J, Manyakov, N, Ness, S, Boice, M, Skalkin, A, **Goodwin, MS**, Dawson, G, Hendren, R, Leventhal, B, Shic, F, Pandina, G (2020). Automated recognition of spontaneous facial expression in individuals with autism spectrum disorder: parsing response variability. Molecular Autism, 11(1), 1-15.

31. Vernetti, A, Shic, F, Boccanfuso, L, Macari, S, Kane-Grade, F, Powell, K, Fontenelle, S, DiNicola, L, Milgramm, A, Hilton, E, Heymann, P, **Goodwin, MS**, Chawarska, K (2020). Atypical emotional electrodermal activity in toddlers with autism spectrum disorder. Autism Research, 13(9), 1476-1488.

32. Zervogianni, V, Fletcher-Watson, S, Herrera, G, **Goodwin, MS**, Pérez-Fuster, P, Brosnan, M, Grynszpan, O (2020). A framework of evidence-based practice for digital support, co-developed with and for the autism community. Autism, 24(6), 1411-1422.

33. Amoss, R, Leong, T, Evans, A, Ousley, O, Herrington, J, Lecavalier, L, **Goodwin, MS**, Hofman, S, Scahill, L (2020). A pilot study of cardiovascular reactivity in children with autism spectrum disorder. Seminars in Pediatric Neurology, 34, 1-8.

34. Bangerter, A, Ness, S, Lewin, D, Aman, M, Esbensen, A, **Goodwin, MS**, Dawson, G, Hendren, R, Leventhal, B, Shic, F, Ople, M, Ho, K, Pandina, G (2020). Clinical validation of the Autism Behavior Inventory – caregiver-rated assessment of core and associated symptoms of autism spectrum disorder. Journal of Autism and Developmental Disorders, 50(6), 2090-2101.

35. Northrup, J, **Goodwin, MS**, Montrenes, J, Vezzoli, J, Golt, J, Peura, C, Siegel, M, Mazefsky, C (2020). Observed emotional reactivity in response to frustration tasks in psychiatrically hospitalized youth with autism spectrum disorder. Autism, 24(4), 968-982.

36. Bangerter, A, Chatterjee, M, Manyakov, N, Ness, S, Lewin, D, Skalkin, A, Boice, M, **Goodwin, MS**, Dawson, G, Hendren, R, Leventhal, B, Shic, F, Esbensen, A, Pandina, G (2020). Relationship between sleep and behavior in autism spectrum disorder: exploring the impact of sleep variability. Frontiers in Neuroscience, 14, 1-13.

37. Frazier, T & **Goodwin, MS** (2019). Developing more clinically useful biomarkers in autism spectrum disorder. Developmental Medicine and Child Neurology, 62(2), 153-153.

38. **Goodwin, MS**, Mazefsky, C, Ioannidis, S, Erdogmus, D, Siegel, M (2019). Predicting aggression to others in youth with autism using a wearable biosensor. Autism Research, 12(8), 1286-1296. NIH Matilda White Riley Early-Stage Investigator Paper Award.

39. Logan, D, Breazeal, C, **Goodwin, MS**, Jeong, S, O'Connell, B, Smith-Freedman, D, Weinstock, P (2019). Social robots for hospitalized children. Pediatrics, 144(1), 1-11.

40. Hawley, K, Huang, J, **Goodwin, MS**, Diaz, D, *Palumbo, R, de Sa, V, Birnie, K, Chambers, C, Craig K (2019). Youth and parent appraisals of participation in a study of spontaneous and instigated pediatric clinical pain. Ethics & Behavior, 29(4), 259-273.

41. Bangerter, A, Manyakov, N, Lewin, D, Boice, M, Skalkin, A, Jagannatha, S, Chatterjee, M, Dawson, G, **Goodwin, MS**, Hendren, R, Leventhal, B, Shic, F, Ness, S, Pandina, G (2019). Caregiver daily reporting of symptoms in autism spectrum disorder: observational study using web and mobile apps. JMIR Mental Health, 6(3), e11365.

42. *Heathers, J, Gilchrist, K, Hegarty-Craver, M, Grego, S, **Goodwin, MS** (2019). An analysis of stereotypical motor movements and cardiovascular coupling in individuals on the autism spectrum. Biological Psychology, 142, 90-99.

43. Ness, S, Bangerter, A, Manyakov, N, Lewin, D, Boice, M, Skalkin, A, Jagannatha, S, Chatterjee, M, Dawson, G, **Goodwin, MS**, Hendren, R, Leventhal, B, Shic, F, Frazier, J, Janvier, Y, King, B, Miller, J, Smith, C, Tobe, R, Pandina, G (2019). An observational study with the Janssen Autism Knowledge Engine (JAKE®) in individuals with autism spectrum disorder. Frontiers in Neuroscience, 13, 111.

44. Manfredonia, J, Bangerter, A, Manyakov, N, Ness, S, Lewin, D, Skalkin, A, **Goodwin, MS**, Dawson, G, Hendren, R, Leventhal, B, Shic, F, Pandina, G (2019). Automatic recognition of posed facial expression of emotion in individuals with autism spectrum disorder. Journal of Autism and Developmental Disorders, 49(1), 279-293.

45. Manyakov, N, Bangerter, A, Chatterjee, M, Mason, L, Ness, S, Lewin, D, Skalkin, A, Boice, M, **Goodwin, MS**, Dawson, D, Hendren, R, Leventhal, B, Shic, F, Pandina, G (2018). Visual exploration in autism spectrum disorder: Exploring age differences and dynamic features using recurrence quantification analysis. Autism Research, 11(11), 1554-1566.

46. Baucom, B, Baucom, K, Hogan, J, Crenshaw, A, Bourne, S, Crowell, S, Georgiou, P, **Goodwin, MS** (2018). Cardiovascular reactivity to marital conflict in laboratory and naturalistic setting. Family Process. 57(3), 662-678.

47. *Heathers J, Fayn K, Silvia P, Tiliopoulos N, **Goodwin, MS** (2018). The voluntary control of piloerection. PeerJ - Brain and Cognition Section, 6, e5292.

48. Kelsey, M, *Akcakaya, M, *Kleckner, IR, *Palumbo, RV, Barrett, LF, Quigley, K, **Goodwin, MS** (2018). Applications of sparse recovery and dictionary learning to enhance analysis of electrodermal activity data. Biomedical Signal Processing and Control, 40, 58-70.

49. *Kleckner, I, Jones, R, *Wilder-Smith, O, Wormwood, J, *Akcakaya, M, Quigley, K, Lord, C, **Goodwin, MS** (2018). Simple, transparent and flexible automated quality assessment procedures for ambulatory electrodermal activity. IEEE Transactions on Biomedical Engineering, 65(7),1460-1467.

50. *Chin, I, **Goodwin, MS**, Vosoughi, S, Roy, D, Naigles, L (2017). Dense home-based recordings reveal typical and atypical development of tense-aspect in a child with delayed language development. Journal of Child Language, 45(1), 1-34.

51. Bangerter A, Ness, S, Aman, M, Esbensen, A, **Goodwin, MS**, Dawson, G, Hendren, R, Leventhal, B, Khan, A, Opler, M, Harris, A, Pandina, G. (2017). Autism Behavior Inventory: A novel tool for assessing core and associated symptoms of autism spectrum disorder. Journal of Child and Adolescent Psychopharmacology, 27(9), 814-822.

52. Prince, E, Kim, E, Wall, C, Gisin, E, **Goodwin, MS**, Schoen Simmons, E, Chawarska, K, Shic, F (2017). The relationship between autism symptoms and arousal level in toddlers with ASD, as measured by electrodermal activity. Autism Research, 21(4), 504-508.

53. Großekathöfer, U, Manyakov, N, Mihajlović, V, Pandina, G, Skalkin, A, Ness, S, Bangerter, A, **Goodwin, MS** (2017). Automated detection of stereotypical motor movements in autism spectrum disorder using recurrence quantification analysis. Frontiers in Neuroinformatics, 11,9.

54. *Palumbo, R, Marraccini, M, Weyandt, L, *Wilder-Smith, O, McGee, H, **Goodwin, MS** (2017). Interpersonal autonomic physiology: A systematic review of the literature. Personality and Social Psychology Review, 21, 99-141.

55. Ness, S, Manyakov, N, Bangerter, A, Lewin, D, Jagannatha, S, Boice, M, Skalkin, A, Dawson, G, Janvier, Y, **Goodwin, MS**, Hendren, R, Leventhal, B, Shic, F, Cioccia, W, Pandina, G (2017). JAKE™ multimodal data capture system: Insights from an observational study of autism spectrum disorder. Frontiers in Neuroscience, 11, 517.

56. Lydon, S, Healy, O, Reed, P, Hughes, B, **Goodwin, MS** (2016). A systematic review of physiological reactivity to stimuli in autism. Developmental Neurorehabilitation, 19(6), 335-355.

57. Bone, D, Bishop, S, Black, M, **Goodwin, MS**, Lord, C, Narayanan, S (2016). Use of machine learning to improve autism screening and diagnostic instruments: Effectiveness, efficiency, and multi-instrument fusion. Journal of Child Psychology and Psychiatry, 57(8), 927-937.

58. Shic, F & **Goodwin, MS** (2015). Introduction to technologies in the daily lives of individuals with autism. Journal of Autism and Developmental Disorders, 45(12), 3773-6.

59. Shic, F, Smith, D, Horsburgh, B, Hollander, E, Rehg, J, **Goodwin, MS** (2015). Catalysts for change: The role of small business funders in the creation and dissemination of innovation. Journal of Autism and Developmental Disorders, 45(12), 3900-3904.

60. Sikka, K, *Ahmed, A, Diaz, D, **Goodwin, MS**, Craig, K, Bartlett, M, Huang, J (2015). Automated assessment of children's post-operative pain using computer vision. Pediatrics, 136(1), e124-e131.

61. Bone, D, **Goodwin, MS**, Black, M, Lee, C, Audhkhasi, K, Narayanan, S (2015). Applying machine learning to facilitate autism diagnostics: Pitfalls and promises. Journal of Autism and Developmental Disorders, 45(5), 1121-36.

62. Rehg, J, Rozga, A, Abowd, G, **Goodwin, MS** (2014). Behavioral imaging and autism. IEEE Pervasive Computing, 13(2), 84-87.

63. Woodard, C, **Goodwin, MS**, Zelazo, P, *Aube, D, Scrimgeour, M, Ostholthoff, T, Brickley, M (2012). A comparison of autonomic, behavioral, and parent-report measures of sensory sensitivity in young children with autism. Research in Autism Spectrum Disorders, 6(3), 1234-1246.

64. Chen, G, Yoder, K, Ganzel, B, **Goodwin, MS**, Belmonte, M (2012). Harnessing repetitive behaviours to engage attention and learning in a novel therapy for autism: An exploratory analysis. Frontiers in Educational Psychology, 3, 1-16.

65. Albinali, F, **Goodwin, MS**, Intille, S (2012). Detecting stereotypical motor movements in the classroom using accelerometry and pattern recognition algorithms. Pervasive and Mobile Computing, 8(1), 103-114.

66. Oberleitner, R, Reischl, U, Lacy, T, **Goodwin, MS**, Spitalnick, J (2011). Emerging use of behavior imaging for autism and beyond. Future Visions on Biomedicine and Bioinformatics, 1, 93-104.

67. **Goodwin, MS**, Intille, S, Albinali, F, Velicer, W (2011). Automated detection of stereotypical motor movements. Journal of Autism and Developmental Disorders, 41(6), 770-782.

68. Bolte, S, Golan, O, **Goodwin, MS**, Zwaigenbaum, L (2010). What can innovative technologies do for autism spectrum disorders? Autism, 14(3), 155-159.

69. Fletcher, R, Dobson, K, **Goodwin, MS**, Eydgahi, H, *Wilder-Smith, O, Fernholz, D, Kuboyama, Y, Hedman, EB, Poh, M, Picard, R (2010). iCalm: Wearable sensor and network architecture for wirelessly communicating and logging autonomic activity. IEEE Transactions on Information Technology in Biomedicine, 14(2), 215-223.

70. Stroud, L, Paster, R, **Goodwin, MS**, Shenassa, E, Buka, S, Niaura, R, Rosenblith, J, Lipsitt, L (2009). Maternal smoking during pregnancy and neonatal behavior: A large-scale community study. Pediatrics, 123(5), 842-848.

71. Aloia, M, **Goodwin, MS**, Velicer, W, Arnedt, J, Zimmerman, M, Skrekas, J, Harris, S, Millman, R (2008). Time series analysis of treatment adherence patterns in individuals with obstructive sleep apnea. Annals of Behavioral Medicine, 36(1), 44-53.

72. **Goodwin, MS** (2008). Enhancing and accelerating the pace of autism research and treatment: The promise of developing innovative technology. Focus on Autism and Other Developmental Disabilities, 23(2), 125-128.

73. Höppner B, **Goodwin, MS**, Velicer, W, Mooney, M, Hatsukami, DK (2008). Detecting longitudinal patterns of daily smoking following drastic cigarette reduction. Addictive Behavior, 33(5), 623-639.

74. **Goodwin, MS**, Velicer, W, Intille, S (2008). Telemetric monitoring in the behavior sciences. Behavioral Research Methods, 40(1), 328-341.

75. Picard, R & **Goodwin, MS** (2008). Developing innovative technology for future personalized autism research and treatment. Autism Advocate, 50(1), 32-39.

76. Höppner B, **Goodwin, MS**, Velicer, W (2008). An applied example of pooled time series analysis: Cardiovascular reactivity to stressors in children with autism. Multivariate Behavioral Research, 42(4), 707-727.

77. **Goodwin, MS**, Groden, J, Velicer, W, Diller, A (2007). Brief report: Validating the stress survey schedule for persons with autism and other developmental disabilities. Focus on Autism and Other Developmental Disabilities, 22(3), 183-189.

78. Woodard, C, Groden, J, **Goodwin, MS**, Bodfish, J (2007). A placebo double-blind study of dextromethorphan for problematic behaviors in children with autism. Autism, 11(1), 29-41.

79. **Goodwin, MS**, Groden, J, Velicer, W, Lipsitt, L, Baron, M, Hofmann, S, Groden, G (2006). Cardiovascular arousal in individuals with autism. Focus on Autism and Other Developmental Disabilities, 21(2), 100-123.

80. Groden, J, **Goodwin, MS**, Lipsitt, L, Hofmann, S, Baron, M, Groden, G, Velicer, W, Plummer, B (2005). Assessing cardiovascular responses to stressors in individuals with autism spectrum disorders. Focus on Autism and Other Developmental Disorders, 20(4), 244-252.

81. Woodard, C, Groden, J, **Goodwin, MS**, Shanower, C, Bianco, A (2005). The treatment of the behavioral sequelae of autism with dextromethorphan: A case report. Journal of Autism and Developmental Disorders, 35(4), 515-518.

82. Friend, K, **Goodwin, MS**, Lipsitt, LP (2004). Alcohol use and sudden infant death syndrome. Developmental Review, 24(3), 235-251.

Refereed Scientific Conference Papers

83. *Barry, C, Weppler, J, *Watanabe, Y, Wallisch, A, Borkin, M, **Goodwin, MS,** Tory, M (shared senior authors) (submitted). TRACE: Visualizing parent-child physiological concordance. IEE Viz 2026.

84. *Watanabe, Y, *Yamane, N, Sathyanarayana, A, Mishra, V, **Goodwin, MS** (in press). A context-aware framework for optimal filter parameter selection: Enhancing PRV estimation in wearable wrist PPG signals. Proceedings of the ACM on Interactive, Mobile, Wearable, and Ubiquitous Technologies (IMWUT).

85. *Amraee, S, *Singh, A, Scheithauer, M, McCullough, A, **Goodwin, MS**, Ostadabbas, S. (in press). Toward automated behavior understanding in autism: A zero-shot vision-language model approach. In Proceedings of the IEEE/CVF Conference on Computer Vision and Pattern Recognition Workshop (CVPRW), June 2026.

86. *Watanabe, Y, *Yamane, N, Sathyanarayana, A, Mishra, V, **Goodwin, MS** (2025). Beyond motion artifacts: Optimizing PPG preprocessing for accurate pulse rate variability estimation. Companion of the 2025 ACM International Joint Conference on Pervasive and Ubiquitous Computing, 1176-1182.

87. Murali, P, *Yamane, N, Hernandez, J, Marsella, S, **Goodwin, MS**, Bickmore, T (2024). Feeling-the-beat: Enhancing empathy and engagement during public speaking through heart rate sharing. ACII 2024.

88. *Yamane, N, Mishra, V, & **Goodwin, MS** (2023). HeartView: An extensible, open-source, web-based signal quality assessment pipeline for ambulatory cardiovascular data. Pervasive Health 2023.

89. Zhu, S, Wan, M, Hatamimajourmerd, E, Jain, K, Zlota, S, Kamath, C, Rowan, CV, Grace, EC, **Goodwin, MS**, Hayes, MJ, Schwartz-Mette, RA, Zimmerman, E, *Ostadabbas, S (2023). A video-based end-to-end pipeline for non-nutritive sucking action recognition and segmentation in young infants. MICCAI 2023 Proceedings of the 26th International Conference on Medical Image Computing and Computer-Assisted Intervention.

90. *Kimani, E, Bickmore, T, Picard, R, **Goodwin, MS**, Jimison, H, (2022). Real-time public speaking anxiety prediction model for oral Presentations. ICMI ’22 Proceedings of the International Conference on Multimodal Interaction, p. 30-35, doi.org/10.1145/3536220.3563686.

91. *Imbiriba, T, *Cumpanasoiu, D, *Heathers, J, Ioannidis, S, Erdogmus, D, **Goodwin, MS** (2020). Biosensor prediction of aggression in youth with autism using kernel-based methods. In Proceedings of the 13th ACM International Conference on PErvasive Technologies Related to Assistive Environments (PETRA),1-6.

92. Susam, B, *Akcakaya, M, *Nezamfar, H, Diaz, D, Xu, X, de Sa, V, Craig, K, Huang, J, **Goodwin, MS** (2018). Automated pain assessment using electrodermal activity data and machine learning. In Proceedings of 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), 372-375.

93. Ozdenizci, O, *Cumpanasoiu, C, Mazefsky, C, Siegel, M, Erdogmus, D, Ioannidis, I, **Goodwin, MS** (2018). Time-series prediction of proximal aggression onset in minimally-verbal youth with autism spectrum disorder using physiological biosignals. In Proceedings of 40th Annual International Conference of the IEEE Engineering in Medicine and Biology Society (EMBC), 5745-5748.

94. **Goodwin, MS**, Ozdenizci, O, Tian, P, *Cumpanasoiu, C, Guo, A, Stedman, A, Peura, C, Mazefsky, C, Siegel, M, Erdogmus, D, Ioannidis, I (2018). Predicting imminent aggression onset in minimally-verbal youth with autism spectrum disorder using preceding physiological signals. In Proceedings of the 12th EAI International Conference on Pervasive Computing Technologies for Healthcare, 201-207.

95. Kelsey, M, *Palumbo, R, *Urbaneja, A, *Akcakaya, M, Huang, J, *Kleckner, I, Feldman Barrett, L, Quigley, K, Sejdic, E, **Goodwin, MS** (2017). Artifact detection in electrodermal activity using sparse recovery. In Proceedings of SPIE Commercial Scientific Sensing and Imaging, 10211, 92-101.

96. *Ahmed, A & **Goodwin, MS** (2017). Automated detection of facial expressions during computer-assisted instruction in individuals on the autism spectrum. In Proceedings of CHI Conference on Human Factors in Computing Systems, 6050-6055.

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98. Jeong, S, Logan, D, **Goodwin, MS**, Graca, S, O'Connell, B, Goodenough, H, Anderson, L, Stenquist, N, Fitzpatrick, K, Zisook, M, Plummer, L, Breazeal, C, Weinstock, P (2015). A social robot to mitigate stress, anxiety, and pain in hospital pediatric care. In Proceedings of the 10th ACM/IEEE International Conference on Human-Robot Interaction, 103-104.

99. **Goodwin, MS**, Haghighi, M, Tang, Q, *Akcakaya, M, Erdogmus, D, Intille, S (2014). Moving towards a real-time system for automatically recognizing stereotypical motor movements in individuals on the autism spectrum using wireless accelerometry. In Proceedings of the ACM International Joint Conference on Pervasive and Ubiquitous Computing, 861-872.

100. Ciptadi, A, **Goodwin, MS**, Rehg, J (2014). Movement pattern histogram for action recognition and retrieval. In Proceedings of the European Conference on Computer Vision, 695-710.

101. Chaspari, T, **Goodwin, MS**, *Wilder-Smith, O, Gulsrud, A, Mucchetti, C, Kasari, C, Narayanan, S (2014). A non-homogeneous poisson process model of skin conductance responses integrated with observed regulatory behaviors for autism intervention. In Proceedings of the IEEE International Conference on Acoustics, Speech and Signal Processing, 1611-1615.

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103. Vosoughi, S, **Goodwin, MS**, Washabaugh, B, Roy, D (2012). Speechome recorder for the study of child language development and disorders. In Proceedings of the ACM International Conference on Multimodal Interaction, 193-200.

104. Sano, A, Hernandez, J, Deprey, J, *Eckhardt, M, Picard, R, **Goodwin, MS** (2012). Multimodal annotation tool for challenging behaviors in people with autism spectrum disorders. In Proceedings of the 14th ACM International Conference on Ubiquitous Computing.

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108. Hoque, M, Lane, J, El-Kaliouby, R, **Goodwin, MS**, Picard, R (2009). Exploring speech therapy games with children on the autism spectrum. In Proceedings of the Annual Conference of the International Speech Communication Association.

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112. El-Kaliouby, R & **Goodwin, MS** (2008). iSET: interactive social-emotional toolkit for autism spectrum disorder. In Proceedings of the 7th International Conference on Interaction Design and Children, 77-80.

Refereed Scientific Conference Workshop Papers

113. * Naito, Y, Bickmore, T, Mishra, V, **Goodwin, MS** (2026). Supporting couples' social well-being in daily life: A needs assessment and co-design with co-located couples. In Companion of the 2026 ACM International Joint Conference on Pervasice and Ubiquitous Computing (Ubicomp Companion '26), Oct 11-15, Shanghai, China. ACM, New York, NY, USA, 7 pages.

114. Mishra, V and **Goodwin, MS** (2025). Practical insights to improve the validity of wearable physiological signal analysis. Proceedings of the IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI'25), Atlanta, GA, USA.

115. **Goodwin, MS,** and Mishra, V (2025). Towards context-aware and reproducible analysis of ambulatory autonomic nervous system signals. Proceedings of the IEEE-EMBS International Conference on Biomedical and Health Informatics (BHI'25), Atlanta, GA, USA.

116. *Amraee, S, Blanco-Mallo, E, Erdogmus, D, McCullough, A, **Goodwin, MS**, Ostadabbas, S (2025). Advancing multi-person tracking for autism behavior analysis: challenges, opportunities, and future directions in clinical settings. 2025 IEEE/CVF Winter Conference on Applications of Computer Vision Workshops (WACVW), Tucson, AZ, USA, 2025, pp. 73-82.

117. *Amraee, S, Galoaa, B, **Goodwin, MS**, Hatamimajourmerd, E., *Ostadabbas, S (2024). Multiple toddler tracking in indoor videos. Proceedings of the IEEE/CVF Winter Conference on Applications of Computer Vision (WACV), Waikoloa, Hawaii, 11-20.

118. Xu, X, Craig, K, Damaris, D, **Goodwin, MS**, *Akcakaya, M, Susam, B, Huang, J, de Sa, V (2018). Automated pain detection in facial videos of children using human-assisted transfer learning. In Proceedings of International Workshop on Artificial Intelligence in Health, 162-180.

119. Xu, X, Susam, B, *Nezamfar, H, Craig, K, Diaz, D, Huang, J, **Goodwin, MS**, *Akcakaya, M, de Sa, V (2018). Towards automated pain detection in children using facial and electrodermal activity. In Proceedings of International Workshop on Artificial Intelligence in Health, 181-189.

120. Jeong, S, Logan, D, **Goodwin, MS**, Graca, S, O'Connell, B, Anderson, L, Goodenough, H, Stenquist, N, Fitzpatrick, K, *Ahmed, A, Smith-Freedman, D, Jamieson, K, Breazeal, C, Weinstock, P (2015). Challenges conducting child-robot interaction research in a pediatric inpatient care context. The First Workshop on Evaluating Child-Robot Interaction held in conjunction with the 7th International Conference on Social Robotics.

121. Hedman, E, *Wilder-Smith, O, **Goodwin, MS**, Poh, M, Fletcher, R, Picard, RW (2009). iCalm: Measuring electrodermal activity in almost any setting. In Proceedings of the IEEE International Conference on Affective Computing & Intelligent Interaction, 1-2.

122. Madsen, M, El-Kaliouby, R, *Eckhardt, M, **Goodwin, MS**, Hoque, M, Picard, R (2009). Interactive social emotional toolkit (iSET). In Proceedings of the IEEE International Conference on Affective Computing & Intelligent Interaction, 1-2.

123. Hedman, E, *Eckhardt, M, Poh, M, **Goodwin, MS**, Miller, L, Green, B, Schoen, S, Nielsen, D, Picard, R (2009). Heart rate variability and electrodermal activity in children with atypical sensory processing: Exploratory pattern analysis. International Journal of Human-Computer Studies.

124. *Lee, C, Morris, R, **Goodwin, MS**, Picard, R (2008). Lessons Learned from a pilot study quantifying face contact and skin conductance in teens with asperger syndrome. Extended Abstracts on Human Factors in Computing Systems, 3147-3152.

Refereed Published Abstracts

125. **Goodwin, MS**, Mathewson, K, Desteno, D (2019). Ambulatory cardiorespiratory reactivity to environmental stressors in severely affected youth with autism spectrum disorder. Psychophysiology, 56, S20-S20.

126. **Goodwin, MS**, *Kleckner, I, *Akcakaya, M, Wormwood, J, Jones, R, Feldman Barrett, L, Quigley, K (2019). Developing novel analytics to overcome challenges with ambulatory recordings of electrodermal activity. Psychophysiology, 56, S20-S20.

127. *Cumpanasoiu, C, Mazefsky, C, Stedman, A, Peura, C, Tian, P, Guo, Y, Ioannidis, S, Erdogmus, D, Siegel, M, **Goodwin, MS** (2017). Physiological biomarkers for prediction of imminent aggression in minimally verbal children with autism spectrum disorder. Journal of the American Academy of Child & Adolescent Psychiatry, 56, S256-257.

128. Ness, S, Manyakov, N, Bangerter, A, Lewin, D, Jagannatha, S, Boice, M, Skalkin, A, Dawson, G, **Goodwin, MS**, Hendren, R, Leventhal, B, Shic, F, Cioccia, W, Pandina, G (2017). The Janssen Autism Knowledge Engine (Jake™): A set of tools and technologies to assess potential biomarkers for autism spectrum disorders. Journal of the American Academy of Child & Adolescent Psychiatry, 55, S110.

129. Pandina, G, Manyakov, N, Bangerter, A, Lewin, D, Jagannatha, S, Boice, B, Skalkin, A, Dawson, G, **Goodwin, MS**, Hendren, R, Leventhal, B, Shic, F, Ness, S. (2017). Prospective, observational cohort study of JAKE®, an autism knowledge engine: correlation of behavior ratings with eye tracking. Journal of the American Academy of Child & Adolescent Psychiatry, 56(10), S263 - S264.

130. Jagannatha, S, Sargsyan, D, Manyakov, N, Skalkin, A, Bangerter, A, Ness, S, Lewin, D, Dawson, D, Shic, F, **Goodwin, MS**, Hendren, R, Leventhal, B, Pandina, G (2017). Building predictive models for autism spectrum disorder based on biosensor data. Journal of the American Academy of Child & Adolescent Psychiatry, 56, S213.

131. Pandina, G, Manyakov, N, Bangerter, A, Lewin, D, Jagannatha, A, Boice, M, Skalkin, A, Dawson, G, **Goodwin, MS**, Hendren, R, Leventhal, B, Shic, F, Ness, S (2017). Prospective, observational cohort study of JAKE, an autism knowledge engine, European Neuropsychopharmacology, 27, S1118.

132. Bangerter, A, Ness, S, Lewin, D, Aman, M, Esbensen, A, **Goodwin, MS**, Dawson, G, Hendren, R, Leventhal, B, Opler, M, Ho, K, Pandina, G (2017). Autism Behavior Inventory – A novel tool for assessment of changes in core and associated symptoms of autism spectrum disorder. Biological Psychiatry, 81(10), S73-S74.

133. Ness, S, Manyakov, N, Bangerter, A, Lewin, D, Jagannatha, S, Boice, M, Skalkin, A, Dawson, G, **Goodwin, MS**, Hendren, R, Leventhal, B, Shic, F, Cioccia, W, Pandina, G (2016). The Janssen Autism Knowledge Engine: Results from a clinical validation study of a set of tools and technologies to assess potential biomarkers for autism spectrum disorder. Neuropsychopharmacology, 41, S475-S475.

134. **Goodwin, MS** (2016). Emerging technologies for multimodal assessment of autism spectrum disorder in laboratory and naturalistic settings: utility for biobehavioral phenotyping. Journal of the American Academy of Child & Adolescent Psychiatry, 10(55), S333 - S334.

135. **Goodwin, MS** (2016). Laboratory and home-based assessment of electrodermal activity in individuals with autism spectrum disorders. Journal of the American Academy of Child & Adolescent Psychiatry, 10(55), S301-S302.

136. Ness, S, Fai Ho, K, Aman, MG, Esbensen, A, **Goodwin, MS**, Dawson, G, Hendren, R, Leventhal, B, Opler, M, Pandina, G (2016). The Autism Behavior Inventory: A novel tool for assessing change in core and associated symptoms of autism spectrum disorder. Journal of the American Academy of Child & Adolescent Psychiatry, 55, S109.

137. Ness, S, Manyakov, N, Bangerter, A, Lewin, D, Jagannatha, S, Boice, M, Skalkin, A, Dawson, G, **Goodwin, MS**, Hendren, R, Leventhal, B, Shic, F, Cioccia, W, Pandina, G (2016). The Janssen Autism Knowledge Engine (JAKE): A set of tools and technologies to assess potential biomarkers for autism spectrum disorders. Journal of the American Academy of Child & Adolescent Psychiatry, 10(55), S110.

138. Bickmore, T, **Goodwin, MS**, Jimison, H, Pavel, M, Zhou, S, Zhang, Z, *Wilder-Smith, O, Zisook, M (2015). Training researchers in behavioral technology and personal health informatics. Annals of Behavioral Medicine, 49, S52.

139. Huang, J, Craig, K, Diaz, D, Sikka, K, *Ahmed, A, Terrones, A, Littlewort, J, **Goodwin, MS**, Bartlett, M (2014). Automated facial expression analysis can detect clinical pain in youth in the post-operative setting. Journal of Pain, 15(4) S3.

140. DiCorcia, J, **Goodwin, MS**, Hedman, E, Snidman, N (2012). A comparison of two measurement technologies to collect electrodermal activity in infants. Psychophysiology, 49, S107-S107.

141. Velicer, W, *Babbin, S, Aloia, M, **Goodwin, MS** (2012). Identifying longitudinal patterns of adherence to treatment for sleep apnea. International Journal of Behavioral Medicine, 19, S222-S223.

142. *Palumbo, R, *Liu, S, **Goodwin, MS**, Velicer, W, Molenaar, P (2012). An idiographic approach to interpersonal physiological research. International Journal of Behavioral Medicine, 19, S222.

143. **Goodwin, MS**, *McGhee, H, *Palumbo, R (2012). Researching autism spectrum disorders: A case study in the necessity of conducting idiographic analyses. Annals of Behavioral Medicine, 43, S58-S58.

144. Velicer, W, Hoeppner, B, **Goodwin, MS**, Mooney, M, Hatsukami, D (2006). Longitudinal patterns of smoking for participants in a nicotine harm reduction intervention. In Proceedings of the International Journal of Behavioral Medicine, 13(S1).

145. Höppner, B, **Goodwin, MS**, Velicer, W, Mooney, M, Hatsukami, D (2006). Identifying longitudinal patterns of daily smoking in a nicotine harm reduction intervention. Annals of Behavioral Medicine, 31(S149).

146. Aloia, M, **Goodwin, MS**, Velicer, W, Arnedt, J, Zimmerman, M, Skrekas, J, Harris, S, Millman, R (2006). Individual differences in patterns of adherence to PAP in obstructive sleep apnea. American Academy of Sleep Medicine, A200-A200.

Scientific Books

Author

147. Kientz, J, Hayes, G, **Goodwin, MS**, Gelsomini, M, Abowd, G (2020). Interactive Technologies and Autism, Second Edition. Synthesis Lectures on Assistive, Rehabilitative, and Health-Preserving Technologies. Morgan & Claypool.

148. Kientz, J, **Goodwin, MS**, Hayes, G, Abowd, G (2013). Interactive Technologies for Autism. Synthesis Lectures on Assistive, Rehabilitative, and Health-Preserving Technologies. Morgan & Claypool.

Editor

149. Boser, K, **Goodwin, MS**, Wayland, S (Eds.) (2013). Technology Tools for Students with Autism: Innovations that Enhance Independence and Learning. Brookes.

Scientific Book Chapters

150. Miller, L, **Goodwin, MS**, *Sullivan, J (2015). The role of sensory processing challenges in autism spectrum disorders. In S. Edelson (Ed.) Bernard Rimland's Infantile Autism: The book that changed autism. (pp. 149-155) Jessica Kingsley, London.

151. Levine, T, Conradt, E, **Goodwin, MS**, & Sheinkopf, S, Lester, B (2014). Psychophysiologic arousal to social stress in autism spectrum disorders. In VB Patel, VR Preedy, & C Martin (Eds.) Comprehensive Guide to Autism. Vol. 3. (pp. 1177-1193). Springer.

152. **Goodwin, MS** (2012). Passive telemetric monitoring: Novel methods for real-world behavioral assessment. In M. Mehl & T. Conner (Eds.) Handbook of Research Methods for Studying Daily Life. (pp. 251-266). Guilford.

153. Cohen, I, Yoo, H, **Goodwin, MS**, Moskowitz (2011). Assessing challenging behaviors in autism spectrum disorders: Prevalence, rating scales, and autonomic indicators. In J. Matson & P. Sturmey (Eds.) International Handbook of Autism and Pervasive Developmental Disorders. (pp. 247-270). Springer.

154. Velicer, W, Höppner, B, **Goodwin, MS** (2010). Time series studies. In NJ Salkind, (Ed), Encyclopedia of Research Design. Thousand Oaks, CA: Sage Publications.

155. Walls, T, Hoppner, B, **Goodwin, MS** (2007). Statistical issues in intensive longitudinal data analysis. In A. Stone, S. Shiffman, A. Atienza, L. Nebelling (Eds.) The Science of Real-time Data Capture. (pp. 338-360). New York: Oxford University Press.

156. Baron, M, Lipsitt, L, **Goodwin, MS** (2006). Scientific foundations for research and practice. In Baron, Groden, Groden, & Lipsitt (Eds.) Stress and Coping in Autism. (pp. 53-92). New York: Oxford University Press.

Conference Presentations (listing only since joining Northeastern in Fall 2011)
Goodwin, MS. Developing Innovative Technologies to Enhance Research and Practice in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Presentation given 50+ times, exemplary venues include:

- Invited. NINDS Nonprofit Forum, Bethesda, MD, Sep 8, 2016.
- Plenary. National Autistic Society Conference on Autism & Technology, London, UK, Feb 2, 2016.
- Keynote. Autech 2015, Manchester, UK, Oct 1, 2015.
- Keynote. 48th Annual Gatlinburg Conference, New Orleans, LA, Apr 1-3, 2015.
- Keynote. 21st Annual Princeton Lecture Series, Princeton, NJ, Mar 20, 2015.
- Invited. NSF Workshop on Computationally Intensive Modeling of Social Interaction, Tucson, AZ, Nov 6-7, 2014.
- Keynote. 2nd Annual Innovative Technology for Autism Spectrum Disorders (ITASD), Intsitut Pasteur, Paris, France, Oct 3-4, 2014.
- Plenary. Cognitive Development Society, Memphis, TN, Oct 17, 2013.

International

1. **Goodwin, MS** (2026). Automating Detection and Characterization of Motor Stereotypies in Autism. Oral Presentation in the panel on "Transdiagnostic Enigma: New Perspectives on Complex Repetitive Movement," International Meeting for Autism Research. Prague, Czech Republic, Apr 22 – 25.

2. *Nuske, H, Kamel, R, Dunphy, M, Mazefsky, C, Brookman-Frazee, L, McPartland, J, **Goodwin, MS**, Beidas, R, Marcus, S, Mandell, D (2026). Using Wearable Biosensing to Support Emotion Regulation in School Settings in Students with and without Profound Autism. Poster Presentation at the International Meeting for Autism Research. Prague, Czech Republic, Apr 22 – 25.

3. **Goodwin, MS** (2025). Autism in the Wild: Creating Technologies to Support More Effective Interventions in Real-World Environments. Invited Address at the 15th First Place Global Symposium, Phoenix, AZ, Oct 14-16.

4. Robinaugh, DJ, de Ron, J, Fan, H, **Goodwin, MS**, Satpute, A, Sivak, M, & Borsboom, D (2025, May). Computational Models and Extended Reality: A Novel Approach to Investigating the System of Causal Mechanisms Underlying Mental Disorders. In Hamm, S. (Chair), From Theory to Application: Formal Computational Modeling in Clinical Psychology. Oral Presentation at the annual meeting of the Association for Psychological Science, Washington, D.C.

5. *Wallisch, A, Boyd, B, Goodwin, MS, Davis, A (2025). Exploring Interpersonal Physiological Synchrony during Mealtime Among Young Autistic Children. Poster Presentation at the International Society for Autism Research, Seattle, WA, Apr 30-May 3.

6. *Yamane, N, Lansberry, H, **Goodwin, MS** (2025). An Exploratory Study of Cardiac Synchrony and Joint Engagement in Parent-Child Dyads of Autistic and Neurotypical Children. Poster Presentation at the International Society for Autism Research, Seattle, WA, Apr 30-May 3.

7. **Goodwin, MS** (2025). Developing Innovative Technology to Enhance Research and Practice in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Invited Address at the Roundtable on the Occasion of World Autism Awareness Day 20250, United Nations, New York, NY, Apr 23.

8. **Goodwin, MS** (2025). Developing Innovative Technology to Enhance Research and Practice in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Invited Address at the AutismTech Conference, Hamad Bin Khalifa University, Doha, Qatar, Apr 14-16.

9. **Goodwin, MS** (2025). Developing Innovative Technology to Enhance Research and Practice in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Invited Address at the Department of Psychology, Paris Lodron Universitat Salzburg, Salzburg, Austria, Apr 1.

10. **Goodwin, MS** (2025). Wearable Biosensing to Predict Imminent Aggressive Behavior in Psychiatric Inpatient Youths with Autism. Invited Address at the Centre for Brain and Cognitive Development, Birkbeck, University of London, London, England, Jan 22.

11. **Goodwin, MS** (2025). Wearable Biosensing to Predict Imminent Aggressive Behavior in Psychiatric Inpatient Youths with Autism. Invited Address at King's College London, London, England, Jan 20.

12. **Goodwin, MS** (2024). Wearable Biosensing to Predict Imminent Aggressive Behavior in Psychiatric Inpatient Youths with Autism. Oral Presentation at the International Society for Computational Biology 32nd Conference on Intelligent Systems for Molecular Biology, Montreal, CAN, Jul 12-16.

13. **Goodwin, MS** (2024). Predicting Aggressive Behavior in Individuals with Autism Using Wearable Biosensors and Machine Learning Classifiers. Invited B.F. Skinner Lecturer Keynote. Association for Behavior Analysis International (ABAI), Philadelphia, PA, May 25-27.

14. Zervogianni, V, Brosnan, M, Grynszpan, O, Fletcher-Watson, S, **Goodwin, MS**, Pérez-Fuster, P, Herrera, G (2024). Assessing Evidence-Based Practice and User-Centered Design for Technology-Based Supports for Autistic Users. Poster Presentation at the International Society for Autism Research, Melbourne, May 15-18.

15. Kaur, I, Kamel, R, Sultanik, E, Tan, J, Mazefsky, CA, Brookman-Frazee, L, McPartland, J, **Goodwin, MS**, Pennington, JW, Marcus, S, Beidas, RS, Mandell, DS, Nuske, HJ (2024). User-Centered Co-Development of a Digital Mental Health Application for Teachers Incorporating Wearable Biosensing to Support Emotion Regulation in Students on the Autism Spectrum. Poster Presentation at the International Society for Autism Research, Melbourne, May 15-18.

16. Korobko, M, Usdan, H, Kahn, A, Kamel, R, Young, A, Palermo, E, Finkel, E, de Paiva, S, Sultanik, E, **Goodwin, MS**, McPartland, J, Mazefsky, CA, Brookman-Frazee, L, Herrington, JD, Mandell, DS, Nuske, HJ (2024). An Emotion Regulation Learning Opportunity: Increase in Heart Rate before Episodes of Challenging Behavior in Preschool and School-Age Children on the Autism Spectrum across Lab and School Settings. Poster Presentation at the International Society for Autism Research, Melbourne, May 15-18.

17. **Goodwin, MS** (2023). Predicting Aggressive Behavior in Individuals with Autism Using Wearable Biosensors and Machine Learning Classifiers. Invited Main Stage Keynote at the American Psychological Association, Washington, D.C., Aug 3-5.

18. *Yamane, N, Mishra, V, & **Goodwin, MS** (2023). HeartView: An Open-Source, Web-Based Signal Quality Assessment Pipeline for Ambulatory Cardiovascular Data. Poster Presentation at the International Society for Autism Research, Stockholm, May 3-7.

19. *Kimani, E, **Goodwin, MS**, Jimison, H, Picard, R, Bickmore, T (2022). Real-time Public Speaking Anxiety Prediction Model for Oral Presentations. Poster Presentation at the ACM International Conference on Multimodal Interaction, Bangalore, India, Nov 7-11.

20. *Nuske, H, Young, A, Khan, F, Palermo, E, Ajanaku, B, Pellecchia, M, Vivanti, G, Mazefsky, C, Brookman-Frazee, L, McPartland, J, **Goodwin, MS**, Mandell, D (2022). Systematic Review: Emotion Dysregulation and Challenging Behavior Interventions for Children and Adolescents with Autism with Graded Key Evidence-Based Strategy Recommendations. Oral Presentation at the International Society for Autism Research, Austin, TX, May 11-14.

21. **Goodwin, MS** (2022). The Promises of Wearable Bio-Sensing Technology for Youth with Autism. Keynote Address at the Symposium on Innovative Solutions for Improving Quality of Life for Individuals with Autism, Calgary University, Virtual, May 5-6.

22. **Goodwin, MS** (2022). Predicting Challenging Behavior in Individuals with Autism using Wearable Biosensors and Machine Learning Classifiers. Keynote Address at the 15th Annual Autism Update Conference, Stanford University, Virtual, Mar 19.

23. Northrup, J, **Goodwin, MS**, Chen, Q, Peura, C, Siegel, M, Mazefsky, C (2021). Mapping the Time Course of Emotion Dysregulation and Challenging Behaviors in Psychiatrically Hospitalized Youth with Autism Spectrum Disorder. Oral Presentation panel on Diagnostic, Behavioral, Sensory, and Intellectual Screening and Assessment at the International Society for Autism Research, Virtual, May 3-7.

24. *Cumpanasoiu, D, Northrup, J, Peura, C, Vezzoli, J, Montrenes, J, Golt, J, Lopez-Pintado, S, Quigley, K, Siegel, M, Mazefsky, C, **Goodwin, MS** (2021). Assessing Affect and Physiological Responses in a Psychiatric Inpatient Sample of Individuals with Autism Spectrum Disorder. Poster Presentation at the International Society for Autism Research, Virtual, May 3-7.

25. *Taylor, B, Peura, C, *Cumpanasoiu, D, Pedersen, K, Makefsky, C, **Goodwin, MS**, Siegel, M (2021). Desensitizing Hospitalized Children with Autism to a Wearable Biosensor Device. Poster Presentation at the International Society for Autism Research, Virtual, May 3-7.

26. **Goodwin, MS** (2021). Predicting Challenging Behavior in Individuals with Autism using Wearable Biosensors and Machine Learning Classifiers. Invited Address at the 14th NIH Matilda White Riley Behavioral and Social Sciences Honors, Virtual, May 5.

27. **Goodwin, MS**, Mathewson, K, *Heathers, J, DeSteno, D (2020). Cardiorespiratory Reactivity to Environmental Stressors in Severely Affected Youth with Autism Spectrum Disorder. Poster Presentation at the Gatlinburg Conference, San Diego, CA, Conference, International.

28. **Goodwin, MS**, *Imbiriba, T, *Cumpanasoiu, C, *Heathers, J, et al (2020). Improving Biosensor Prediction of Aggression in Youth with Autism Using Support Vector Machines. Poster presented at the International Society for Autism Research, Seattle, WA, May 6-9.

29. Vernetti, A, Shic, F, Macari, S, **Goodwin, MS**, Chawarska, K (2020). Fear-Induced Arousal in Toddlers with Autism Spectrum Disorder Depends on the Social Nature of the Situation. Poster Presentation at the International Society for Autism Research, Seattle, WA, May 6-9.

30. *Nuske, H, Pennington, JW, **Goodwin, MS**, Sultanik, E, Mandell, D (2020). A m-Health Platform for Teachers of Children with Autism to Support Emotion Regulation. Poster Presentation at the International Society for Autism Research, Seattle, WA, May 6-9.

31. **Goodwin, MS**, *Kleckner, I, *Akcakaya, M, Worwood, J, Jones, R, Feldman Barrett, L, Quigley, K (2019). Developing Novel Analytics to Overcome Challenges with Ambulatory Recordings of Electrodermal Activity. Oral Presentation at the Society for Psychophysiological Research, Washington, D.C., Sep 25-29.

32. Vernetti, A, Powell, N, Ramsey, C, Villarreal, K, Kane-Grade, F, Neiderman, H, Joseph, K, Gershman, C, Nutor, C, Yhang, E, Fontenelle, S, Powell, K, Tsang, T, Shic, F, **Goodwin, MS**, Macari, S, Chawarska, K (2019). Atypical Physiological Responses to Emotion-Eliciting Challenges in Preschoolers with ASD. Poster Presentation at the International Society for Autism Research (INSAR) 2019 Annual Meeting, Montreal, Canada, May 1-4.

33. **Goodwin, MS**, *Heathers, J, Hegarty Craver, M, Gilchrist, K, Grego, S (2019). Automated Detection and Characterization of Stereotypical Motor Movements and Their Relation to Cardiovascular Arousal. Oral Presentation in panel session Innovative Uses of Technology for Autism Screening, Outcome Monitoring, and Treatment, International Society for Autism Research (INSAR) 2019 Annual Meeting, Montreal, Canada, May 1-4.

34. Zervogianni, V, Fletcher-Watson, S, Herrera, G, **Goodwin, MS**, Pérez-Fuster, P, Brosnan, M, Grynszpan, O (2019). How to Select Technologies for Autistic Users: A Co-Developed Evidence-Based Framework. Poster Presentation at the International Society for Autism Research (INSAR) 2019 Annual Meeting, Montreal, Canada, May 1-4.

35. Zervogianni, V, Fletcher-Watson, S, Herrera, G, **Goodwin, MS**, Pérez-Fuster, P, Triquell, E, Brosnan, M, Grynszpan, O (2019). Systematic Review of Evidence-Based Practice and User-Centered Design for Technology-Based Interventions for the Autistic Community. Poster Presentation at the International Society for Autism Research (INSAR) 2019 Annual Meeting, Montreal, Canada, May 1-4.

36. Northrup, J, Golt, J, Montrenes, J, Vezzoli, J, *Cumpanasoiu, D, Peura, C, *Taylor, B, **Goodwin, MS**, Siegel, M, Mazefsky, C (2019). Topography and Correlates of Emotional Response in Psychiatrically Hospitalized Children and Adolescents with ASD. Poster Presentation at the International Society for Autism Research (INSAR) 2019 Annual Meeting, Montreal, Canada, May 1-4.

37. *Cumpanasoiu, D, *Heathers, J, Northrup, J, Montrenes, J, Vezzoli, J, Peura, C, *Taylor, B, Siegel, M, Mazefsky, C, **Goodwin, MS** (2019). Feasibility of Measuring Physiological Reactivity in More Severely Affected Youth with Autism in a Psychiatric Inpatient Setting. Poster Presentation at the International Society for Autism Research (INSAR) 2019 Annual Meeting, Montreal, Canada, May 1-4.

38. **Goodwin, MS** (2018). Advances in Affective Computing: Integrating Behavioral and Physiological Measures into Psychotherapy Research. Invited Master Methodology Address at the 34th Annual Meeting of the International Society for Traumatic Stress Studies, Washington, D.C., Nov 8-10.

39. *Saunders Wilder, O, *Sullivan, J, Johnson, K, *Palumbo, R, *Cumpanasiou, C, Picard, R, **Goodwin, MS** (2018). Dyadic Physiological Interdependence and Social Reciprocity in ASD. Poster Presentation at the International Society for Autism Research (INSAR) 2018 Annual Meeting, Rotterdam, Netherlands, May 9-12.

40. **Goodwin, MS**, *Cumpanasoiu, C, Stedman, A, Peura, C, Ozdenizci, O, Tian, P, Guo, Y, Ioannidis, I, Erdogmus, D, Mazefsky, C, Siegel, M (2018). Predicting Aggression in Minimally-Verbal Youth with Autism Spectrum Disorder. Poster Presentation at the International Society for Autism Research (INSAR) 2018 Annual Meeting, Rotterdam, Netherlands, May 9-12.

41. Boccanfuso, L, Shic, F, Macari, S, DiNicola, L, Milgramm, A, Hilton, E, Kane-Grade, FE Heymann, P, **Goodwin, MS**, Vernetti, A, Chawarska, K (2018). Decreased Fear Response in Toddlers with ASD Is Linked with Attenuated Changes in Physiological Arousal. Oral Presentation in the panel session "How Does It Feel? Emotional Lives of Toddlers with ASD" at the International Society for Autism Research (INSAR) 2018 Annual Meeting, Rotterdam, Netherlands, May 9-12.

42. Tralie, C, **Goodwin, MS**, Sapiro, G (2018). Automated Detection of Stereotypical Motor Movements in Children with Autism Spectrum Disorder Using Geometric Feature Fusion. Poster Presentation at the International Society for Autism Research (INSAR) 2018 Annual Meeting, Rotterdam, Netherlands, May 9-12.

43. Bangerter, A, Manyakov, N, Lewin, D, Jagannatha, Boice, M, Skalkin, A, Cioccia, W, Dawson, G, **Goodwin, MS**, Hendren, R, Leventhal, B, Shic, F, Pandina, G, Ness, S (2017). Novel Approaches to Parent-Reporting of Behaviors in Autism Spectrum Disorder. Poster Presentation at the International Meeting for Autism Research, San Francisco, CA, May 10-13.

44. Pandina, G, Ness, S, Bangerter, A, Manyakov, N, Lewin, D, Jagannatha, S, Boice, M, Skalkin, A, Cioccia, W, Dawson, G, **Goodwin, MS**, Hendren, R, Leventhal, B, Shic, F (2017). Eye-Tracking Features as Diagnostic Markers of Autism Spectrum Disorder, Symptom Severity, and Change over Time. Poster Presentation at the International Meeting for Autism Research, San Francisco, CA, May 10-13.

45. Manyakov, N, Pandina, G, Ness, S, Bangerter, A, Lewin, D, Jagannatha, S, Boice, M, Skalkin, A, Cioccia, W, **Goodwin, MS**, Hendren, R, Leventhal, B, Shic, F, Dawson, G (2017). Identifying EEG Biomarkers as Potential Change Indicators in Autism Spectrum Disorder Clinical Studies. Poster Presentation at the International Meeting for Autism Research, San Francisco, CA, May 10-13.

46. **Goodwin, MS**, Ness, S, Bangerter, A, Manyakov, N, Lewin, D, Jagannatha, S, Boice, M, Skalkin, A, Cioccia, W, Dawson, G, Hendren, R, Leventhal, B, Shic, F, Pandina, G (2017). Cardiovascular Indices as Outcome Measures in Autism Spectrum Disorder Clinical Trials. Poster Presentation at the International Meeting for Autism Research, San Francisco, CA, May 10-13.

47. **Goodwin, MS** (2017). Wearable Sensor-Based Physiological and Physical Activity Biomarkers for Use in Laboratory and Naturalistic Environments to Assess Arousal and Repetitive Motor Movements in Individuals with Autism Spectrum Disorder. Oral Presentation in panel session on Developing Clinically Practicable Biomarkers for Autism Spectrum Disorder at the International Meeting for Autism Research, San Francisco, CA, May 10-13.

48. Baker, J, Fenning, R, Baucom, B, **Goodwin, MS** (2016). Physiological Reactivity and Individual Differences in Autism Spectrum Disorder. Oral Presentation at the Annual Convention of the American Psychological Association, Denver, CO, Aug 4-7.

49. **Goodwin, MS** & Boyd, R (2016). The Theory and Practice of Machine Learning in Psychology: The What, Why, and How of a Powerful Statistical Technique. Workshop Presentation at the Annual Convention of the Association for Psychological Science, Chicago, IL, May 26-29.

50. Hawley K, Diaz D, Craig K, **Goodwin, MS**, Bartlett M, Huang J (2016). Acceptability to children and their parents of participating in an investigation of ongoing and instigated pain during post-operative recovery. Poster Presentation at the Annual Convention of the Association for Psychological Science, May 26 -29.

51. *Soja, N, **Goodwin, MS**, Naigles, L (2016). Neologisms and How They May Help: A Case Study of a Girl with Autism Spectrum Disorder. Poster Presentation at the International Conference on Infant Studies, New Orleans, May 25-26.

52. Jones, R, Carberry, C, Hamo, A, Hrishikesh, R, Gupta, U, Albin, A, Pawar, R, *Kleckner, I, *Wilder-Smith, O, Clements, M, Lord, C, **Goodwin, MS** (2016). Improving Autism Outcome Measures: An Integrated Home and Clinic Protocol with Novel Technologies. Poster Presentation at the International Meeting for Autism Research, Baltimore, MD, May 11-14.

53. *Wilder-Smith, O & **Goodwin, MS** (2016). Quantitative Assessment of Socio-Affective Dynamics in Autism Using Interpersonal Physiology. Oral Presentation at the International Meeting for Autism Research, Baltimore, MD, May 11-14.

54. **Goodwin, MS** & *McGee, H (2016). Typology of Temporal Patterns: Identifying Subgroups of Individuals with ASD. Poster Presentation at the International Meeting for Autism Research, Baltimore, MD, May 11-14.

55. Riobo, I, *Wilder-Smith, O, *Sullivan, J, Kim, C, Liu, Y, Abowd, G, Rehg, J, **Goodwin, MS** (2016). InHOME: A Multimodal Bio-Behavioral Data Capture System for Autism Research. Poster Presentation at the International Meeting for Autism Research, Baltimore, MD, May 11-14.

56. *Soja, N, Naigles, L, **Goodwin, MS** (2016). Neologisms: A Case Study. Poster Presentation at the International Meeting for Autism Research, Baltimore, MD, May 11-14.

57. **Goodwin, MS** (2016). A Sampling of Innovative Technologies to Enhance Research and Better Support Individuals on the Autism Spectrum. Invited Address at University College of London, Centre for Research in Autism and Education, London, UK, Feb 1.

58. **Goodwin, MS** (2015). Information Technologies Applied to the Diagnosis of and Quality of Life for People with ASD. Invited Address at the Neuvas Tecnologias y Trastornos del Espectro Autists (TEA) conference, Barcelona, Spain, Jul 6-7.

59. **Goodwin, MS** (2015). Automated Detection of Stereotypical Motor Movements in Individuals with Autism Spectrum Disorder Using Wireless 3-Axis Accelerometers and Computerized Pattern Recognition Algorithms. Oral Presentation at the Annual International Meeting for Autism Research, Salt Lake City, UT, May 13-16.

60. *Wilder-Smith, O & **Goodwin, MS** (2015). Web-Based Toolkit for Multimodal Data Analysis in ASD Research. Poster Presentation at the Annual International Meeting for Autism Research, Salt Lake City, UT, May 13-16.

61. Bone, D, **Goodwin, MS**, Black, M, Lee, C, Audhkhasi, K, Narayanan, S (2015). Machine Learning and Autism Diagnostics: Promises and Potential Pitfalls. Poster Presentation at the Annual International Meeting for Autism Research, Salt Lake City, UT, May 13-16.

62. **Goodwin, MS** (2014). Naturalistic Assessment of Physiological and Motor Responses in Sensory Related Disorders: A Computational Behavioral Science Approach. Plenary Address at the Annual International Sensory Processing Disorder Foundation Symposium, Tempe, AZ, Nov 6-7.

63. **Goodwin, MS** (2014). Technology Tools for Students with Autism: Book Precis. Plenary Address at the Annual Innovative Technology for Autism Spectrum Disorders (ITASD), Paris, France, Oct 3-4.

64. **Goodwin, MS** (2014). Innovative Technologies for Autism: A Survey of the Literature. Oral Presentation at the Annual Convention of the Association for Behavior Analysis International (ABAI), Chicago, IL, May 23-27.

65. **Goodwin, MS** (2013). Wireless Physiological & Physical Activity Sensing to Enhance & Accelerate Research & Practice in Individuals with Autism. Invited Address at the International Symposium on Computational Behavioral Science, Japan, Sep 26-28.

66. *Eckhardt, M, **Goodwin, MS**, Picard, RW (2013). Storyscape: A Social Illustrated Primer. Poster Presentation at the Annual International Meeting for Autism Research, San Sebastian, Spain, May 2-4.

67. *Chin, I, Vosoughi, S, **Goodwin, MS**, Roy, D, Naigles, L (2013). Dense Data Collection Through the Speechome Recorder Better Reveals Developmental Trajectories. Poster Presentation at the Annual International Meeting for Autism Research, San Sebastian, Spain, May 2-4.

68. Hernandez, J, Sano, A, Zisook, M, Deprey, J, **Goodwin, MS**, Picard, R (2013). Analysis and Visualization of Longitudinal Physiological Data of Children with ASD. Poster Presentation at the Annual International Meeting for Autism Research, San Sebastian, Spain, May 2-4.

69. Velicer, W, *Babbin, S, Aloia, M, **Goodwin, MS** (2012). Identifying Longitudinal Patterns of Adherence to Treatment for Sleep Apnea. Oral Presentation at the International Congress of Behavioral Medicine, Budapest, Aug 29-September 1.

70. *Chin, I, Rubin, D, Tovar, A, Vosoughi, S, Cheng, M, Potrzeba, E, **Goodwin, MS**, Roy, D, Naigles, L (2012). Dense Recording of Naturalistic Interactions Reveal Both Typical and Atypical Speech in One Child with ASD. Poster Presentation at the Annual International Meeting for Autism Research, Toronto, CA, May 17-19.

71. *Eckhardt, M, **Goodwin, MS**, Picard, R (2012). Influencing Gaze Behavior and Expression Recognition. Poster Presentation at the Annual International Meeting for Autism Research, Toronto, CA, May 17-19.

72. Hernandez, J, Sano, A, **Goodwin, MS**, Picard, R (2012). AMA, a Tool for Annotation, Monitoring, and Analysis of Behavioral Activity. Poster Presentation at the Annual International Meeting for Autism Research, Toronto, CA, May 17-19.

73. *Aube, D, **Goodwin, MS**, & Velicer, W (2012). Cardiovascular Arousal in Individuals with Autism: An Idiographic Analysis. Poster Presentation at the Annual Association for Behavior Analysis International, Seattle, WA, May 25-29.

74. *Liu, S, Molenaar, PCM, Rovine, M, **Goodwin, MS** (2011). Modeling the Dynamics in Physiological Arousal Between Children with Sensory Processing Disorder and Therapists During Psychotherapy. Invited Address at the International Meeting of the Psychometric Society, Hong Kong, Jul 19-22.

75. *Lee, JC, **Goodwin, MS**, Picard, RW (2011). Externalization and Interpretation of Autonomic Arousal in Teenagers Diagnosed with Autism in a Relaxation Experiment. Poster Presentation at the Annual International Meeting for Autism Research, San Diego, CA, May 12-14.

76. **Goodwin, MS**, Albinali, F, *Aube, D, Intille, S (2011). Comparing Stereotypical Motor Movement Pattern Recognition Performance Using Mobile Phone Annotations from Experts and Non-Experts. Poster Presentation at the Annual International Meeting for Autism Research, San Diego, CA, May 12-14.

National

77. **Goodwin, MS** (2026). Autism in the Wild: Creating Technologies to Support More Effective Interventions in Real-World Environments. Invited Address at the Profound Autism Summit, Boston, MA, Apr 16-17.
78. **Goodwin, MS** (2026). Automating Detection and Characterization of Motor Stereotypies in Autism. Invited Address at the Advances in Understanding Neurodevelopmental Conditions in Infancy and Early Childhood Yale Social and Affective Neuroscience of Autism Conference, New Haven, CT, Apr 8.

79. **Goodwin, MS** (2025). Wearable Biosensing to Predict Imminent Aggressive Behavior in Psychiatric Inpatient Youths with Autism. Invited Address at the Distinguished Public Lecture Series, University of Texas San Antonio, San Antonio, TX, Dec 8th.

80. **Goodwin, MS** (2025). Wearable Biosensing to Predict Imminent Aggressive Behavior in Psychiatric Inpatient Youths with Autism. Invited Address at the 10th Annual Groden Network Symposium, Providence, RI, Jun 11.

81. **Goodwin, MS** (2024). Wearable Biosensing to Predict Imminent Aggressive Behavior in Psychiatric Inpatient Youths with Autism. Grand Rounds at Nationwide Children's Hospital, Columbus, OH, Oct 29.

82. **Goodwin, MS** (2024). Interactive Technologies in Autism & The Potential for Wearable Biosensing to Predict Problem Behavior. Keynote Address at the 42nd Annual Autism Conference, Autism New Jersey, Atlantic City, NJ, Oct 24.

83. **Goodwin, MS** (2024). Wearable Biosensing to Predict Imminent Aggressive Behavior in Psychiatric Inpatient Youths with Autism. Invited Address at the 19th Annual Thompson Center Autism Conference, Columbia, MO, Sep 13.

84. **Goodwin, MS** (2024). Wearable Biosensing to Predict Imminent Aggressive Behavior in Psychiatric Inpatient Youths with Autism. Invited Address at the Digital Biomarker Summit USA, Regeneron, Tarrytown, NY, May 14.

85. **Goodwin, MS** (2022). Predicting Challenging Behavior in Individuals with Autism using Wearable Biosensors and Machine Learning Classifiers. Invited Address at the Munroe-Meyer Institute Grand Rounds, Omaha, NE, Mar 31.

86. **Goodwin, MS** (2021). Developing Innovative Technology to Enhance Research and Practice in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Keynote Address at the New Jersey Autism Center for Excellence annual conference, Virtual, May 26.

87. **Goodwin, MS** (2021). Predicting Challenging Behavior in Individuals with Autism using Wearable Biosensors and Machine Learning Classifiers. Invited Address at the Neurodevelopmental Disorders Research Consortium IDDRC Innovative Phenotyping Seminar, Virtual, May 20.

88. **Goodwin, MS** (2020). Biosensor Prediction of Aggression in Youth with Autism. Invited Address at the Students with Additional Needs in Remote Learning Environments Unconference, Virtual Conference, May 20.

89. **Goodwin, MS** (2019). Developing Innovative Technology to Enhance Research and Practice in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Invited Address at the Idaho Autism Summit, Boise, ID, Nov 2.

90. **Goodwin, MS** (2019). The Promises of Innovative Technology for Youth with Autism. Invited Address at 23rd annual Health Group Summit, Los Angeles, CA, Oct 25-26.

91. **Goodwin, MS** (2019). The Promises of Wearable Bio-Sensing Technology for Youth with Autism. Grand Rounds at Seattle Children's Hospital, Seattle, WA, March 1.

92. *Wilder-Smith, O, *Sullivan, J, *Palumbo, R, **Goodwin, MS** (2018). Quantitative Assessment of Socio-Affective Dynamics in Autistic Children Using Interpersonal Physiology. Oral Presentation in Physiological Synchrony and Interpersonal Processes: How Shared Physiology Shapes Interactions Symposium at the Annual Society for Personality and Social Psychology Meeting, Atlanta, GA, March 1-3.

93. **Goodwin, MS** (2017). Automated Detection of Stereotypical Motor Movements in Individuals with Autism Spectrum Disorder Using Wireless 3-Axis Accelerometers and Computerized Pattern Recognition Algorithms. Invited Address at the NIMH Biometrics & Beyond Workshop, Bethesda, MD, March 27-28.

94. Ness, S, Fai Ho, K, Aman, M, Esbensen, A, **Goodwin, MS**, Dawson, G, Hendren, R, Leventhal, B, Opler, M, Pandina, G (2016). The Autism Behavior Inventory: A Novel Tool for Assessing Change in Core and Associated Symptoms of Autism Spectrum Disorder. Poster Presentation at the American Academy of Child & Adolescent Psychiatry Annual Meeting, New York, NY, Oct 24-29.

95. Ness, S, Manyakov, N, Bangerter, A, Lewin, D, Jagannatha, S, Boice, M, Skalkin, A, Dawson, G, **Goodwin, MS**, Hendren, R, Leventhal, B, Shic, F, Cioccia, W, Pandina, G (2016). The Janssen Autism Knowledge Engine (JAKE): A Set of Tools and Technologies to Assess Potential Biomarkers for Autism Spectrum Disorders. Poster Presentation at the American Academy of Child & Adolescent Psychiatry Annual Meeting, New York, NY, Oct 24-29.

96. **Goodwin, MS**, *Kleckner, I, Jones, R, Lord, C. (2016). Laboratory and Home-Based Assessment of Electrodermal Activity in Individuals with Autism Spectrum Disorders. Oral Presentation at the American Academy of Child & Adolescent Psychiatry Annual Meeting, New York, NY, Oct 24-29.

97. **Goodwin, MS** (2016). Emerging Technologies for Multimodal Assessment of Autism Spectrum Disorder in Laboratory and Naturalistic Settings: Utility for Biobehavioral Phenotyping. Oral Presentation at the American Academy of Child & Adolescent Psychiatry Annual Meeting, New York, NY, Oct 24-29.

98. **Goodwin, MS**, *Palumbo, R, *Moghadamfalahi, M, Sikka, K, Diaz, D, Bartlett, M, Craig, K, & Huang, J (2016). Electrodermal Activity Correlates with Self-Reported Acute Pain Scores in Youth Following Surgery. Oral Presentation at the Annual Pediatric Academic Society Convention, Baltimore, MD, Apr 30-May 3.

99. *Wilder-Smith, O, *Palumbo, R, *Sullivan, J, **Goodwin, MS** (2016). Quantitative Assessment of Interpersonal Autonomic Synchrony Using Dynamical Systems Models. Oral Presentation at the Society for Affective Science Annual Convention, Chicago, IL, Mar 17-19.

100. Baucom, B, Baucom, K, Hogan, J, Crenshaw, A, Bourne, S, Moore, L, Crowell, S, Georgiou, P, **Goodwin, MS** (2015). Resting High-Frequency Heart Rate Variability Predicts Behavioral Roles in Demand/Withdraw Behavior. Oral Presentation at the Annual Convention of the Association for Psychological Science, New York, NY, May 21-24.

101. Craig K, Bartlett M, **Goodwin, MS** (Palumbo R), Huang, J (2015). Improving Assessment of Clinical Pain Using Technology. Oral Presentation at the American Pain Society Annual Convention, Palm Springs, CA, May 13-16.

102. Bickmore, T, **Goodwin, MS**, Jimison, H, Pavel, M, Zhou, S, Zhang, Z, *Wilder-Smith, O, Zisook, M (2015). Training Researchers in Behavioral Technology and Personal Health Informatics. Oral Presentation at the Annual Meeting of the Society of Behavioral Medicine, San Antonio, TX, Apr 22-25.

103. Baucom, B, Baucom, K, Hogan, J, Crenshaw, A, Bourne, S, Moore, L, Crowell, S, Georgiou, P, **Goodwin, MS** (2014). Comparability of cardiovascular reactivity to marital conflict in laboratory and naturalistic settings. Oral Presentation at the Annual Convention of the Association for Behavioral and Cognitive Therapies, Philadelphia, PA, Nov 20-23.

104. **Goodwin, MS** (2014). Understanding Affect and Supporting Behavior Regulation in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Invited Address at the Inaugural Conference of the Society for Affective Science, Washington, D.C., Apr 24-26.

105. Rehg, J, Sclaroff, S, Dey, A, Picard, R, **Goodwin, MS**, Forsyth, D, Narayanan, S (2013). Computational Behavioral Science: Modeling, Analysis, and Visualization of Social and Communicative Behavior. Invited Address at NSF Expeditions in Computing PI Meeting, Washington D.C., May 14-16.

106. *Chin, I, S, Potrzeba, E, **Goodwin, MS**, Naigles, L (2013). Verb Use in a Child Previously Diagnosed with ASD: Dense Recordings Reveal Typical and Atypical Development. Poster Presentation at Society for Research in Child Development 2013 Biennial Meeting, Seattle, WA, Apr 18-20.

107. **Goodwin, MS** (2013). Assistive Technology and Individuals with Autism Spectrum Disorder. Invited Address at the Autism Speaks Autism Investment Conference, New York, NY, Feb 21.

108. **Goodwin, MS** (2013). Developing Wireless Physical Activity & Physiological Sensors to Enhance and Accelerate Science and Practice in Individuals with ASD. Invited Address at Simons Foundation Online Phenotype Workshop, New York, NY, Feb 14.

109. **Goodwin, MS**, *McGhee, H, & *Palumbo, R (2012). Understanding Autism Spectrum Disorders: A Case Study in the Necessity of Conducting Idiographic Analyses. Oral Presentation at the Annual Meeting of the Society of Behavioral Medicine, New Orleans, LA, Apr 11-14.

110. DiCorcia, J, **Goodwin, MS**, Snidman, N (2012). A Comparison of Two Measurement Technologies to Collect Electrodermal Activity in Infants. Oral Presentation at the Society for Research in Child Development Themed Meeting: Developmental Methodology, Tampa, FL, Feb 9-11.

111. *Liu, S, Molenaar, P, Rovine, M, **Goodwin, MS** (2012). Time-Frequency Analysis for Modeling Physiological Dynamics in Dyadic Interactions. Oral Presentation at the Society for Research in Child Development Themed Meeting: Developmental Methodology, Tampa, FL, Feb 9-11.

112. **Goodwin, MS** (2011). Understanding Autism Spectrum Disorders: A Case Study in the Necessity of Conducting Idiographic Analyses. Oral Presentation at the Annual Meeting of the Society for Prevention Research, Washington, D.C., May 29- Jun 1.

113. **Goodwin, MS** (2011). Wireless Sensing of Physiological & Physical Activity in Individuals with Autism Spectrum Disorder. Invited Address at the Association for the Advancement of Artificial Intelligence Spring Symposia on Computational Physiology, Stanford University, Palo Alto, CA, Mar 21-23.

Regional/Local

114. **Goodwin, MS** (2026). Automating Detection and Characterization of Motor Stereotypies in Autism. Invited Address at the Advances in Understanding Neurodevelopmental Conditions in Infancy and Early Childhood Yale Social and Affective Neuroscience of Autism Conference, New Haven, CT, Apr 8.

115. **Goodwin, MS** (2026). Automating Detection and Characterization of Motor Stereotypies in Autism. Invited Address. Boston Action Club, Northeastern University, Boston, MA, Mar 17.

116. **Goodwin, MS** (2024). Wearable Biosensing to Predict Imminent Aggressive Behavior in Psychiatric Inpatient Youths with Autism. Invited Address. Expeditions in Experiential AI Seminar. The Institute for Experiential AI, Northeastern University, Mar 13.

117. **Goodwin, MS** (2021). Predicting Challenging Behavior in Individuals with Autism using Wearable Biosensors and Machine Learning Classifiers. Grand Rounds at Munroe Myer Institute, University of Nebraska Medical Center, Mar 31.

118. **Goodwin, MS** (2021). Predicting Challenging Behavior in Individuals with Autism using Wearable Biosensors and Machine Learning Classifiers. Keynote at the Riverview School, Cape Cod, Jul 29.

119. **Goodwin, MS** (2021). Predicting Challenging Behavior in Minimally-Verbal Youth with Autism Using Wearable Biosensor Data and Machine Learning Classifiers. Invited Address at Translational Research Day 2021, Tufts Clinical and Translational Science Institute, Tufts University, April 27.

120. **Goodwin, MS** (2018). Research and Clinical Utility of Wearable Biosensors in Neurodevelopmental Disorders. Invited Address at the Advances in Individualized Medicine for Neurodevelopmental Disorders Symposium, Joseph B. Martin Conference Center, Harvard Medical School, Oct 22.

121. **Goodwin, MS** (2017). Use of Technology to Support those with Autism Spectrum Disorder: A Computational Behavioral Science Approach. Invited Address at the University of Massachusetts, Lowell, MA, Nov 6.

122. **Goodwin, MS** (2017). Developing Innovative Technologies to Enhance Research and Practice in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Invited Address at the Yale Child Study Center, New Haven, CT, May 5.

123. **Goodwin, MS** (2017). Developing Innovative Technologies to Enhance Research and Practice in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Invited Address at the 7th Annual Sanford Rare Disease Symposium, Sanford Center, Sioux Falls, SD, Feb 24.

124. **Goodwin, MS** (2017). Developing Innovative Technologies to Enhance Research and Practice in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Invited Address at Pennsylvania State University, Department of Human Development and Family Studies, State College, PA, Sep 6.

125. **Goodwin, MS** (2017). Understanding and Assessing Anxiety in Autism. Invited Address at the Asperger's Association of New England Webinar, May 16.

126. **Goodwin, MS** (2017). Understanding and Assessing Anxiety in Autism. Invited Address at the Asperger's Association of New England Daniel W. Rosen Connections Conference, Bentley University, Waltham, MA, Dec 2.

127. **Goodwin, MS** (2017). New Technologies for Identifying and Understanding More Impactful Interventions for those on the Autism Spectrum. Invited Address at Families at the Forefront of Technology, Aspen, CO, May 2-3.

128. **Goodwin, MS** (2016). Developing Innovative Technology to Enhance Research and Practice in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Keynote Address in the John D. Wiley Seminar Series at the University of Wisconsin-Madison, Waisman Center, Madison, WI, February 16.

129. **Goodwin, MS** (2016). Developing Innovative Technologies to Enhance Research and Practice in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Keynote Address in the Kennedy Center Lectures on Development and Developmental Disabilities at the Vanderbilt Kennedy Center, Nashville, TN, Nov 7.

130. Ciptadi, A, Northrup, M, Abowd, G, Rehg, J, **Goodwin, MS** (2014). Automatic Retrieval of Videos of Stereotyped and Repetitive Behavior. Poster Presentation at the NSF Expeditions in Computing Meeting, Georgia Institute of Technology, Atlanta, GA, Nov 10-11.

131. *Wilder-Smith, O, & **Goodwin, MS** (2014). Exploring the Promise of Computational Supported Diagnostic & Clinical Assessment of Autism Spectrum Disorder. Poster Presentation at the NSF Expeditions in Computing Meeting, Georgia Institute of Technology, Atlanta, GA, Nov 10-11.

132. Bargal, S, **Goodwin, MS**, Sclaroff, S (2014). A Study of Spatial Exploration Patterns of Children. Poster Presentation at the NSF Expeditions in Computing Meeting, Georgia Institute of Technology, Atlanta, GA, Nov 10-11.

133. Bone, D, **Goodwin, MS**, Black, M, Lee, C, Audhkhasi, K, Narayanan, S (2014). Applying Machine Learning to Facilitate Autism Diagnostics: Pitfalls and Promises. Poster Presentation at the NSF Expeditions in Computing Meeting, Georgia Institute of Technology, Atlanta, GA, Nov10-11.

134. **Goodwin, MS** (2014). Moving Towards a Real-Time System for Automatically Recognizing Stereotypical Motor Movements in Individuals on the Autism Spectrum Using Wireless Accelerometery. Invited Address at the NSF Expeditions in Computing Meeting, Georgia Institute of Technology, Atlanta, GA, Nov 10-11.

135. Bargal, SA, **Goodwin, MS**, Sclaroff, S (2014). A Study of Spatial Exploration Patterns of Children. Poster Presentation at the Boston University Scholars Day, Boston, MA, Apr 15. Hariri Award for Transformative Computational Science.

136. **Goodwin, MS** (2014). Understanding Affect and Supporting Behavior Regulation in Individuals on the Autism Spectrum: A Computational Behavioral Science Approach. Invited Address at the Northeastern University Conference New Vistas in Emotion and Technology, Boston, MA, Jan 31.

137. **Goodwin, MS** (2013). Measurement and Analysis of Stereotypical Movements in Individuals with Autism. Invited Address at the Northeastern University Boston Action Club Speaker Series, Boston, MA.

138. **Goodwin, MS** (2013). Innovative Technology for Recording Behavior in Natural Settings. Invited Address at Simons Foundation 2nd Annual Variations in Individuals Project Meeting, Orlando, FL, Jul 19-21.

139. **Goodwin, MS** (2012). Innovative Technologies for the Study of Autism Spectrum Disorders: Research and Applications. Invited Address at the University of Massachusetts Department of Computer Science, Amherst, MA, Nov 2.

140. **Goodwin, MS** (2012). Innovative Technologies for the Study of Autism Spectrum Disorders: Research and Applications. Invited Address at the University of Connecticut Department of Psychology, Storrs, CT, Oct 5.

141. **Goodwin, MS**, Kumar, S, & Shetty, V (2012). Principles of mHealth Design–III: Methods–Optimizing Multimodal Mobile Assessment. Invited Address at the 2012 mHealth Summer Training Institute, Northeastern, Boston, Jul 29-Aug 3.

142. **Goodwin, MS** (2012). Innovative Technologies for Measuring, Communicating, and Understanding Physiological Features of Anxiety. Invited Address at the Asperger's Association of New England-Sponsored Current Research: Implications for the Asperger Community, Boston, MA, Mar 16.

143. **Goodwin, MS** (2011). Technology Platforms to Assist Persons with Autism Spectrum Disorders. Invited Address at the Annual Autism Consortium Meeting, Boston, MA, Oct 25.

144. **Goodwin, MS** (2011). Innovative Technologies for Quantifying Behavioral Phenotypes in Individuals with Autism. Invited Address at the Simons Foundation Biomarkers Workshop, Stonybrook, NY, Jul 23-24.

145. **Goodwin, MS** (2011). Emerging Technologies for Measuring and Tracking Biological and Interpersonal Dynamics. Invited Address at the Annual International Trauma Conference, Boston, MA, May 18-21.

146. **Goodwin, MS** (2011). Understanding the Role of Stress and Anxiety in Social Competence. Invited Address at the Youthcare/MGH Annual Conference, Boston, MA, Apr 9.

147. **Goodwin, MS** (2010). School Design for Children & Youth with ASD: The Role Innovative Technology Can Play. Oral Presentation at Build Boston 2010, Boston, Nov 17-19.

Conference/Symposium Organizer

148. **Goodwin, MS** (2026). Scientific Program Committee, High-Support Needs Area Co-Chair, International Meeting for Autism Research. Prague, Czech Republic, Apr 22 – 25.

149. **Goodwin, MS** (2025). Scientific Program Committee, High-Support Needs Area Co-Chair, International Meeting for Autism Research. Seattle, WA, Apr 30 – May 3.

150. **Goodwin, MS** (2025). Scientific Program Committee, 12th International Conference on Affective Computing & Intelligent Interaction (ACII 2025). Canberra, Australia, Oct 8-11.

151. **Goodwin, MS** (2024). Scientific Program Committee, 12th International Conference on Affective Computing & Intelligent Interaction (ACII 2025). Glasgow, Scotland, Sep 16-18.

152. **Goodwin, MS** (2024). Scientific Program Committee, High-Support Needs Area Co-Chair, International Meeting for Autism Research. Melbourne, Australia, May 15-18.

153. **Goodwin, MS** (2023). Scientific Program Committee, 11th International Conference on Affective Computing & Intelligent Interaction (ACII 2023). Cambridge, MA, Sep 10-13.

154. **Goodwin, MS** (2023). Symposium Organizer, Innovative Technology for Autism Demonstration Session at the International Meeting for Autism Research. Stockholm, Sweden, May 11-14.

155. **Goodwin, MS** (2022). Scientific Program Committee, 10th International Conference on Affective Computing & Intelligent Interaction (ACII 2022). Nara, Japan, Oct 18-21.

156. **Goodwin, MS** (2022). Symposium Organizer, Innovative Technology for Autism Demonstration Session at the International Meeting for Autism Research. Austin, TX, May 11-14.

157. **Goodwin, MS** & Shic, F (2016, 2017, 2020, 2021). Symposium Organizer, Innovative Technology for Autism Demonstration Session at the International Meeting for Autism Research.

158. **Goodwin, MS** (2011, 2012, 2013, 2014, 2015). Symposium Organizer, Innovative Technology for Autism Demonstration Session at the International Meeting for Autism Research.

159. **Goodwin, MS** (2013). Symposium Organizer, Emerging Technologies for Behavioral Assessment in Natural Environments, Society for Ambulatory Assessment Annual Conference, Amsterdam.

160. Naryanan, S, Rehg, J, **Goodwin, MS**, Abowd, G, Rozga, A (2012). Co-Organizer, NSF Expeditions Open Workshop on Computational Methods for Quantifying Social and Communicative Behavior in Autism. USC, Virterbi School of Engineering, Sep 28.

161. Rehg, J, Abowd, G, **Goodwin, MS** (2012). Co-Organizer, NSF Expeditions Summer School. Center for Discovery, NY, Jun 5-8.

162. Jekel, D, McLeod, S, **Goodwin, MS**, et al. (2012). Co-Organizer, Asperger's Association of New England-Sponsored Current Research: Implications for the Asperger Community, Boston, Mar16.

163. Rehg, J, Abowd, G, **Goodwin, MS** (2011). Co-organizer, NSF Expeditions Open Workshop on Technology and Autism Research: Towards a Computational Science of Behavior. MIT Media Lab, Sep 27.

164. Colamarino, S, Wallace, S, **Goodwin, MS**, Boser, K (2011). Core 77/Autism Speaks-Sponsored Autism Connects International Student Design Competition.

GRANT FUNDING

External Grants Under Review

1. "Automated Physical Activity Measurement During Physical Therapy Sessions in Autistic Children Using Computer Vision Methods." NIH RO3. Amraee PI, **Goodwin Co-PI**. Dec 2026 – Nov 2028. 0.26 Cal mo. $320,000.

2. "SCH: Promoting Intensive Longitudinal Data Collection using AI-Driven Gamification." NSF. Intille, PI, **Goodwin Co-PI**. Apr 2026 – Mar 2030. 0.40 Cal mo. $1,198,068.

3. "Advancing Social Media Measurement to Predict Adolescent Mental Health." NIMH RO1. **Goodwin Co-I.** Dec 2025 – Nov 2029. 1 Cal mo. $1,663, 497.

Active External Grants

4. "Innovative Medicine and Precision Approaches to Clinical Trials (IMPACT)." Aligning Research to Impact Autism (ARIA). Klin, PI, **Goodwin Co-PI**. Feb 2026 – Dec 2031. 3 Sum mo. $17,250,000.

5. "Collaborative Research: Active Garments for Behavioral Interventions with Minimally Verbal Individuals Who Engage in Self-Injurious Behaviors." Dorsey, PI, **Goodwin Co-PI**. Sep 2025 – Aug 2028. 0.4 Sum mo. $516,998.

6. "Children on the Autism Spectrum and Social Connection (AS-Connection): Psychophysiological synchrony, socioemotional communication and a sense of belonging." Emil Aaltonen Foundation. Helminen PI, **Goodwin Co-I**. Jan 2025 – Jan 2028. In-kind. £200,000.

7. "SCH: Enhancing Automated Prediction of Challenging Behavior in Individuals with Autism Using Biosensor Data and Machine Learning." NIH (NLM/NCI). **Goodwin PI**. Jun 2022 – May 2026. 1.25 Sum mo. $1,197,494.

8. "Evaluating Additive Effects of Including Canines in Regulating Together: A Group Treatment to Address Emotional Dysregulation in Youth with Autism Spectrum Disorder." NICHD. Shaffer PI, **Goodwin Subcontract PI**. Jul 2022 – Jun 2027. 1 Sum mo. $521,303.

Active Consulting on External Grants

9. "Regulating Together: Randomized Controlled Trial Examining Predictors, Facilitators, and Barriers to Treatment Success in Emotion Dysregulation and ASD." Department of Defense, Autism Research Program, Clinical Trials Award. Shaffer PI, Cincinnati Children's Hospital. Jul 2022 – Jun 2027.

Completed External Funded Grants

10. "Humanities and the Digital Future of Health and Healthcare: A Curriculum." National Endowment for the Humanities. Altschuler PI, **Goodwin Co-PI**. Sep 2022 – Aug 2025. 0.15 cal mo. $149,673.

11. "Physiological Mechanisms of Action Relating to Immediate and Long-Term Therapeutic Horseback Riding Intervention Effects in a Psychiatric Population of Youth with Autism Spectrum Disorder**."** NICHD RO1. Gabriels PI, Children's Hospital Colorado. **Goodwin Subcontract** PI. Dec 2019 – Nov 2024. 0.60 cal mon Y1-4, 3.60 cal Y5 mo. Northeastern subcontract: $209,814. Total over study $2,420,960.

12. "Early Acute Illness Detection in Persons with Dementia." National Institute of Aging. Saczynski PI, **Goodwin Co-I**. Jun 2022 – May 2023. 1 Sum mo. $249,396.

13. "Collaborating with the Autism Community to Develop Novel AAC/SGD Access Methods for Individuals with Little or No Functional Speech." Tufts CTSI S-GATS. **Goodwin Co-I**. May 2023 – April 2024. .09 Sum mo. $50,000.

14. "Transforming Research: Understanding Sensory Experiences in ASD, Stakeholders Working Together – TRUST." Patient-Centered Outcomes Research Institute. Lawlor PI, **Goodwin Co-I**. Feb 2020 – Aug 2022.

15. “Predicting Situational Onset of Aggression in Minimally Verbal Youth with Autism Using Biosensor Data & Machine Learning Algorithms.” Department of Defense, Autism Research Program, Idea Development Award. **Goodwin PI**. Sep 2018 – Aug 2022. 1.4 aca mo. Total over study period: $460,733.

16. “Error Detection Tools: A Platform for Free Multi-functional Meta-scientific Error Detection at Scale.” John E. Fetzer Foundation. **Goodwin, PI**. Jan 2020 – Aug 2020. $18,425.

17. “Systematizing Confidence in Open Research and Evidence (SCORE).” Defense Advanced Research Projects Agency. **Goodwin Subcontract Co-PI**. Fidler PI, University of Melbourne. Mar 2019 – Sep 2020. 0.8 aca mo. Total NU direct: $85,900.

18. “The Autism Inpatient Collection: Phase 3: Shifting the Paradigm for Understanding and Treating Aggression in Autism.” Simons Foundation for Autism Research Initiative/Nancy Lurie Marks Family Foundation. **Goodwin Subcontract PI**. Siegel PI, Maine Medical Center. Dec 2018 – Sep 2021. 1.4 aca mo. Total NU direct over study period: $506,233. Total over study period: $3,050,000.

19. “Developing Novel Analytics for Ambulatory Electrodermal Activity Data.” Simons Foundation for Autism Research Initiative. **Goodwin PI**. Dec 2017 – Nov 2018. 0.65 sum mo. Total over study period: $62,593.

20. “Development and Evaluation of a Simulated Prototype to Dynamically Adjust Ambient Environments to Promote Affective Regulation in Individuals with Autism Spectrum Disorder.” ACL National Institute on Disability, Independent Living, and Rehabilitation Research, SBIR Phase I. **Goodwin Subcontract PI**, Spacefactory PI. Jul 2017- Dec 2018. 1 ca. mo. NU direct: $20,973. Total over study period: $100,000.

21. “I-Corps: Visualizing Physiological Synchrony.” National Science Foundation. **Goodwin PI**. Jul 2017-Dec 2017. Total over study period: $50,000.

22. "Developing and Implementing a Framework for Evidence-Based Practice for Technology Relevant for Autism." FIRAH, Foundation Orange, UEFA Foundation for children (project #: APa2016_026). Grynszpan PI, Université Pierre et Marie Curie, M. Brosnan PI, University of Bath, **Goodwin Co-PI**, Northeastern University, Fletcher-Watson Co-PI, University of Edinburgh, Hererra Co-PI, University of Valencia. May 2017 – Apr 2019. Total over study period: $120,000.

23. “A Study to Preliminarily Assess the Janssen Autism Knowledge Engine in Children and Adults with Autism Spectrum Disorder.” Janssen Pharmaceuticals Research & Development. **Goodwin PI**. Jan 2015 – Dec 2016. 1 aca mo. Annual NU direct: $78,147. Total NU direct over study period: $120,737.

24. “Examining Interpersonal Biobehavioral Synchrony as a Measure of Social Reciprocity and Emotion Regulation in Parent-Child Dyads with and without Autism using an Interactive Smart Toy Platform.” Foundation for Autism Research MIT Simons for the Center of the Social Brain. **Goodwin PI**. Picard Co-PI, Massachusetts Institute of Technology. Jan 2015 - Dec 2016. 1 cal mo. Annual NU direct: $117,547. Total over study period: $179,664.

25. “Robotic Huggable Project.” Boston Children’s Hospital. **Goodwin Subcontract PI**. Weinstock PI, Boston Children’s Hospital. June 2014 – June 2017. 1.33 cal mo. Annual NU direct: $65,000. Total over study period: $129,747.

26. “Project MENTIS: Rapid Pilot Research Deployment and Evaluation.” Janssen Pharmaceuticals Research & Development. **Goodwin PI**. Nov 2013 – Oct 2014. 1 aca mo. Annual NU direct: $288,745. Total NU direct over study period: $294, 910. Total over study period: $314,647.

27. “Development of a New Technology for Assessing Pediatric Pain (NTAP).” NINR, R01. **Goodwin Subcontract PI**. Huang PI, University of California San Diego. Sep 2013 – Aug 2017. 1 cal mo. Annual NU direct: $61,489. Total NU direct over study period: $187,235. Total over study period: $3,246,414.

28. “Minimally Verbal Children with ASD: From Basic Mechanisms to Innovative Interventions.” NIDCD, P50 Autism Center of Excellence (5P50DC013027-04). **Goodwin Subcontract PI**. Tager-Flusberg PI, Boston University. Sep 2013 – Aug 2017. 1.2 aca, .48 sum mo. Annual NU direct: $96,193. Total NU direct over study period: $424,719. Total over study period: $10,000,000.

29. “Development of a Home-Based System for Biobehavioral Recording of Individuals with Autism.” Simons Foundation. **Goodwin PI**. Jul 2013 – Jun 2016. 2 sum mo. Annual NU direct: $428,754. Total NU direct over study period: $1,008,065. Total over study period: $1,085,829.

30. NIH Loan Repayment Renewal, Extramural, Pediatric Research. 2012.

31. NIH Loan Repayment Renewal, Extramural, Pediatric Research. 2011.

32. “Career Development Award.” Nancy Lurie Marks Family Foundation. **Goodwin PI**. Sep 2010 – Aug 2012. Total over study period: $200,000.

33. “Multi-modal Computational Behavior Analysis.” NSF, Expeditions (1029585). **Goodwin Subcontract PI**, **Associate Project Director**. Rehg PI, Georgia Institute of Technology. Sep 2010 – Aug 2015. 2 sum mo. Annual NU direct: $44,985. Total NU direct over study period: $174,715. Total over study period $9,999,246.

34. “Innovative Assessments of Top-down Processing in Persons with Autism Across a Range of Functioning Levels.” Simons Foundation. **Goodwin Co-I**. Sinha PI, Massachusetts Institute of Technology. Sep 2010 – Aug 2011. Total over study period: $50,000.

35. “Development of a Wireless, Wearable Sensor for Measuring Autonomic Nervous System Functioning in Primates.” Jane Botsford Johnson Foundation. **Goodwin PI**. Jul 2010 – Aug 2011. Total over study period: $85,000.

36. “ASD and Design: Defining the Future of Autism Spectrum Disorder Related Design and its Relationship to Advanced Technology.” NEA. (11-4200-7005). **Goodwin PI**. Jul 2010 – Jun 2011. Total over study period: $25,000.

37. NIH Loan Repayment, Extramural, Pediatric Research. 2010.

38. “Wearable Wireless Toolkit for Measurement and Communication of Autonomic Nervous System Activity in Autism.” Nancy Lurie Marks Family Foundation. **Goodwin Co-PI**. Picard PI, Massachusetts Institute of Technology. Sep 2009 – Aug 2011. Total over study period: $750,000.

39. “Collaborative Research Supplement and Infrastructure and Research Equipment for Advancement of Science to Language Development and Outcome in Children with Autism.” NIDCD (3RO1DC007428-04S1). **Goodwin Co-I**. Naigels PI, University of Connecticut. Aug 2009 – Jul 2011. Total over study period: $100,000.

40. “Computerized Interventions to Promote Verbal Expressions in Individuals with Autism Spectrum Disorders.” Nancy Lurie Marks Family Foundation. **Goodwin Co-PI**. Picard PI, Massachusetts Institute of Technology. Sep 2008 – Aug 2009. Total over study period: $97,258.

41. “Assessing and Communicating Movement Stereotypy and Arousal Telemetrically in Individuals with Autism Spectrum Disorder.” Nancy Lurie Marks Family Foundation. **Goodwin PI**. Sep 2008 – Aug 2011. Total over study period: $158,000.

42. “A Prospective Multi-System Evaluation of Infants at Risk for Autism.” DOD (AS073092). **Goodwin Co-I**. Herbert PI, Harvard Medical School. Sep 2008 – Aug 2010. Total over study period: $850,000.

43. “Developing New Methods for Supporting the Innovative Technology for Autism Initiative Community.” Autism Speaks. **Goodwin PI**. Aug 2008 – Jul 2009. Total over study period: $20,000.

44. “Assessing Information Processing and Capacity for Understanding Language in Non-Verbal Children with Autism Spectrum Disorder.” Autism Speaks. **Goodwin Co-I**. Benaisch PI, Rutgers University. Jul 2008 – Jun 2011. Total over study period: $250,000.

45. “HCC: Collaborative Research: Social Emotional Technologies for Autism Spectrum Disorders.” NSF (0705647). **Goodwin Subcontract PI**. Picard PI, Massachusetts Institute of Technology. Sep 2007 – Aug 2011. Total over study period: $900,000.

46. “Autism Spectrum Disorder: Recent Advances in Infantile Origins, Early Childhood Detection, and Intervention.” American Psychological Association and Autism Speaks. **Goodwin Co-PI**. Lipsitt PI, Brown University. Jul 2007. Total over study period: $20,000.

47. “Telemetric Assessment of Movement Stereotypy in Children with Autism Spectrum Disorder.” Autism Speaks. **Goodwin Co-PI**. Groden PI, The Groden Center. Sep 2006 – Aug 2008. Total over study period: $118,000.

<u>Completed Internal Funded Grants</u>

48. “Computational Phenotyping of Specific Phobia.” Northeastern Tier I. Robinaugh PI, **Goodwin, Co-PI**, Jul 2022 – Sep 2023. $50,000.

49. "Visualizing Physiological Arousal in Real-Time to Enhance Communication, Self-Regulation, and Learning in Autism Spectrum Disorders." Tier I. **Goodwin PI**. Sep 2011 – Aug 2013. Total over study period: $50,000.

50. "Exploring the Use of Innovative Technologies in Behavioral Health." Tier I. **Goodwin Co-PI**. Lincoln PI, Northeastern University. Sep 2011 – Aug 2013. Total over study period: $50,000.

Completed Consulting on External Grants

51. "Collaborative Computational Deep Phenotyping of Irritability." NIMH. Brotman PI. Sep 2020 – Aug 2024.

52. "Understanding Eating Disorders in Autism." University of Kansas Medical Center. Wallisch PI. Sep 2020 – Aug 2022.

53. "Evaluating Cardiovascular Reactivity in Children who Engage in Disruptive Behavior and Noncompliance during Medical Procedures." Emory University. Scheithauer PI. Sep 2020 – Aug 2022.

54. "Deep Learning to Transform Clinician Autism Diagnostic Assessments and More." NIMH SBIR Phase II. Oberleitner PI, Behavior Imaging Solutions. Sep 2018 – March 2019.

55. "Attentional, Temperamental, and Physiological Process Underlying Anxiety in Preschoolers with ASD." NICHD (1RO1MH111652-01). Chawarska PI, Yale University. Mar 2017 – Jan 2022.

56. "UCLA Center for Translational Research in Neurodevelopment: UC-TRaN." NICHD (1 U54 HD087101-01). Bookheimer PI, University of California Los Angeles. Nov 2015 – May 2020.

57. "Biomarkers of Emotion Regulation, Social Response & Social Attention in ASD." Clinical Research Associates /Simons Foundation for Autism Research Initiative. Sheinkopf PI, Brown University. Sep 2015 - Sep 2018.

58. "Clinical and Behavioral Phenotyping of Autism and Related Disorders." NIMH (1ZIAMH002868-09). Swedo PI, National Institute of Mental Health. Sep 2015 – Aug 2020.

59. "Change-Sensitive Measurement of Emotion Dysregulation in ASD." NICHD (R01-HD079512). Mazefsky PI, University of Pittsburgh. Sep 2014 – May 2019.

TEACHING & ADVISING

Classroom Teaching

Lead Instructor, Course Developer. Critical Appraisal of the Scientific Research Literature (PHTH5240). Graduate. Taught Summer 2013 (5 students) and Summer 2012 (8 students).

Lead Instructor, Course Developer. Theoretical Foundations in Personal Health Informatics (HINF5200). Graduate. Fall 2025 (15 students), Fall 2024 (6 students), Fall 2023 (5 students), Fall 2022 (13 students), Fall 2021 (5 students), Fall 2019 (5 students), Fall 2017 (5 students), Fall 2016 (5 students), Fall 2015 (13 students), Fall 2014 (6 students), Fall 2013 (6 students), and Fall 2012 (5 students).

Lead Instructor. Adapted existing syllabus. College: An Introduction (HSCI100). Undergraduate. Taught Spring 2020 (15 students), Spring 2014 (17 Students), and Fall 2013 (18 students).

Lead Instructor, Course Developer. Evaluating Scientific Evidence (PHTH5240). Graduate. Taught Spring 2014 (2 students).

Lead Instructor, Adapted existing syllabus. Health Care Research (HLTH5450). Undergraduate. Taught Spring 2019 (6 students), Fall 2017 (19 students), Spring 2017 (20 students), Fall 2016 (18 students), Fall 2015 (19 students), and Fall 2014 (25 students).

Lead Instructor, Adapted existing syllabus. Principles of Epidemiology in Medicine & Public Health (PHTH4202). Undergraduate. Spring 2024 (25 students), Spring 2023 (19 students), Spring 2022 (17 students), and Fall 2020 (15 students).

Advising and Mentoring

NSF CAREER Award Mentor

1. Sarah Ostadabbas, "Learning Visual Representations of Motor Function in Infants as Prodromal Signs for Autism," Northeastern University, 2022-2027, Awarded.

NIH K Award Mentor

1. Anna Wallisch, "Examining Mechanisms of Challenging Eating Behaviors in Children with Autism Using a Biopsychosocial Approach," University of Kansas, 2024-2028, Awarded.
2. Heather Nuske, "Reducing Challenging Behaviors in Children with Autism through Digital Health," University of Pennsylvania, 2020-2024, Awarded.
3. Briana Taylor, "Circadian Phase, Sleep, and Challenging Behavior in Autism Spectrum Disorder," Maine Health, 2020-2024, Awarded.

Research Scientists

4. Yorgos Stratis, Ph.D., College of Engineering, Northeastern University, 2024-, Funded.
5. Tales Imbiriba, Ph.D., College of Engineering, Northeastern University, 2020-2024, Funded.
6. James Heathers, Ph.D., Dept. of Health Sciences, Northeastern University, 2019-2020, Funded.
7. Rick Palumbo, Ph.D., Dept. of Health Sciences, Northeastern University, 2015-2018, Funded.
8. Nancy Soja, Ph.D., Dept. of Health Sciences, Northeastern University, 2015-2018, Visiting Appt.
9. Ian Kleckner, Ph.D., Dept. of Psychology, Northeastern University, 2013-2015, Funded.
10. Murat Akcakaya, Ph.D., College of Electrical and Computer Engineering, Northeastern University, 2012-2014. Funded.

Postdoctoral Fellows

11. Somaieh Amraee, Ph.D., Institute for Experiential AI, Northeastern University, 2022-. Funded.
12. Utku Demir, Ph.D., Roux Institute, Northeastern University, 2020-2022, Funded.
13. James Heathers, Ph.D., Dept. of Health Sciences, Northeastern University, 2018-2019, Funded.
14. Hooman Nezamfar, Ph.D., Dept. of Electrical and Computer and Engineering, Northeastern University, 2016-2017, Funded.
15. Jillian Sullivan, Ph.D., Dept. of Health Sciences, Northeastern University, 2015-2017, Funded.
16. Rick Palumbo, Ph.D., Dept. of Health Sciences, Northeastern University, 2015-2017, Funded.
17. Mohammad (Sina) Moghadamfalahi, Ph.D., Dept. of Electrical and Computer and Engineering, Northeastern University, 2015-2016, Funded.

Doctoral Students

Primary Mentor

18. Yuna Watanabe, Personal Health Informatics, Northeastern University, 2023 – , Funded.
19. Carey Barey, Personal Health Informatics, Northeastern University, 2023 –, Funded.
20. Natasha Yamane, Personal Health Informatics, Northeastern University, 2020–2025, Funded.
21. Catalina Cumpanasoiu, Personal Health Informatics, Northeastern University, Funded, Graduated 2020.
22. Alex Ahmed, Personal Health Informatics, Northeastern University, Funded, Graduated 2020. NSF Graduate Fellowship Recipient. NIH F31 Predoctoral Fellowship to Promote Diversity in Health-Related Research Recipient. 2018 Huntington 100 Recipient.
23. Oliver Wilder-Smith, Personal Health Informatics, Northeastern University, Funded, Graduated 2017.

Doctoral Committee Member

24. Ashutosh Singh, College of Engineering, Northeastern University, 2025-
25. John Hester, Personal Health Informatics, Northeastern University, 2022-
26. Rithika Lakshminarayanan, Personal Health Informatics, Northeastern University, 2024-
27. Michael Potter, College of Engineering, Northeastern University, Graduated 2026.
28. Prasanth Murali, Khoury College of Computer Science, Northeastern University, Graduated 2023.
29. Teresa O'Leary, Personal Health Informatics, Northeastern University, Graduated 2023.
30. Kipp Bradford, School of Architecture, Princeton University, 2022-
31. Coral Schuster, Behavioral Science, University of Rhode Island, Graduated 2023.
32. Aditya Ponnada, Personal Health Informatics, Northeastern University, Graduated 2021.
33. Everlyne Kimani, Khoury College of Computer Science, Northeastern University, Graduated 2021.
34. Charles Fage, College of Science and Technology, University of Bordeaux, Graduated 2018.
35. Rick Palumbo, Dept. of Psychology, University of Rhode Island, Graduated 2015.
36. Heather McGhee, Dept. of Psychology, University of Rhode Island, Graduated 2015.
37. Micah Eckhardt, Media Arts & Sciences, Media Lab, Massachusetts Institute of Technology, Graduated 2015.
38. Siwei Liu, Developmental Quantitative Methods, College of Health and Human Development, Pennsylvania State University, Graduated 2012.
39. Daniel Schulman, College of Computer and Information Science, Northeastern University, Graduated 2012.
40. Jackie Lee, Media Arts & Sciences, Media Lab, Massachusetts Institute of Technology, Graduated 2011.

Master of Science

Primary Mentor

41. Kashish Jain, Khoury, Northeastern University, Graduated 2023.
42. Elizabeth Lanspa, Health Informatics, Northeastern University, Graduated 2020.

Committee Member

43. Ustav Nandi, College of Engineering, Northeastern University, 2024 - .
44. Prateek Gulati, College of Engineering, Northeastern University. 2022 – .
45. Kathan Vyas, College of Engineering, Northeastern University, Graduated 2021.

46. Everlyne Kimani, Khoury College of Computer Science, Northeastern University, Graduated 2020.
47. Kelsey Thompson, Dept. of Communication Sciences & Disorders, Northeastern University, Graduated 2015.
48. Iris Chin, Dept. of Psychology, University of Connecticut, Graduated 2013.
49. Steve Babbin, Dept. of Psychology, University of Rhode Island, Graduated 2012.
50. Daniella Aube, Dept. of Psychology, University of Rhode Island, Graduated 2011.
51. Sophia Yuditskaya, Media Arts & Sciences, Media Lab, Massachusetts Institute of Technology, Graduated 2010.

Undergraduate Capstone

52. Frank Escobar, Dept. of Health Sciences, Northeastern University, 2024.
53. Nasim Sheikhi, Dept. of Psychology, Northeastern University, 2024.
54. Julian Gonzalez, Dept. of Health Sciences, Northeastern University, 2024.
55. Adele Rossignol, Departmental Honors in Psychology, Wheaton College, 2023.
56. Kyleigh Watson, Dept. of Health Sciences, Northeastern University, 2022.
57. Mark Markarian, Dept. of Health Sciences, Northeastern University, 2022.
58. Aidan Baglivo, Dept. of Health Sciences, Northeastern University, 2021.
59. Ashnee Patel, Dept. of Health Sciences, Northeastern University, 2016.
60. Alberto Urbaneja, Dept. of Health Sciences, Northeastern University, 2016.
61. Alex DiNoto, Dept. of Health Sciences, Northeastern University, 2014.
62. Hilary Andreff, Health Informatics, College of Computer and Information Science, Northeastern University, 2014.

SERVICE

Northeastern University

Department

- Associate Chair of Research, Dept. of Health Sciences, 2023 - .
- Member, Health & Technology/Data, Hiring Committee, Dept. of Health Sciences, 2022.
- Chair, Merit Committee, Dept. of Health Sciences, 2022.
- Member, Bylaws Committee, Dept. of Health Sciences, 2021–2024.
- Chair, Bylaws Committee, Dept. of Health Sciences, 2020.
- Associate Chair, Dept. of Health Sciences, Fall 2018-2020.
- Member, Appointment Tenure & Promotion Committee, Dept. of Health Sciences, 2018 – .
- Chair, Merit Review Committee, Dept. of Health Sciences, 2018-2020.
- Member, Merit Review Committee, Dept. of Health Sciences, 2011–2014.
- Member, Master of Public Health Admission Committee, Dept. of Health Sciences, 2014–2017.
- Member, Master of Public Health Curriculum Committee, Dept. of Health Sciences, 2012–2017.
- Member, Environmental & Occupational Health Faculty Search Committee, Health Sciences Dept., Fall 2011.

College

- Member, Awards/Recognition Committee, Bouvé, 2024 -
- Member, Bouvé Research Committee, Bouvé, 2024 -
- Chair, Bouvé Research Committee, Bouvé, 2023 -2024.
- Co-Chair, Chair Search Committee, Dept. of Health Sciences, 2022.
- Member, Faculty Hiring Committee, Khoury, 2022.

- Member, Bouvé Research Committee, 2021 –.
- Member, Bouvé Dean Leadership Committee, 2019.
- Member, Director of Digital Health Search Committee, Bouvé & Khoury, 2018-2019.
- Member, Faculty Hiring Committee, Khoury, 2015.
- Member, Chair Search Committee, Bouvé, 2013 –2015.
- Core Faculty (hiring, curriculum, admissions, faculty recruitment), Personal Health Informatics, 2011-present.

University
- Co-Chair, Institute for Public Health Technology Task Force, 2025-.
- Co-Chair, Precision Health & Technology MS Program Development, 2025-.
- Inaugural Faculty Member, Interdisciplinary Ph.D. Program, 2022 –.
- Core Member/Faculty Leadership Committee, Institute for Experiential AI, 2021 – .
- Research Development Lead, Roux Institute, 2020-2022.
- Member, Faculty Search Committee, Institute for Experiential AI, 2020.
- Core Faculty, Institute for Experiential Robotics, 2020 – .
- Member, SAIL Data Oversight Committee, Chancellor's Office, 2019.

Professional Service

Discipline and Profession
- NIH Loan Repayment Program Ambassador, 2018 – .
- Executive Program Committee Member, Gatlinburg Conference, 2015 – .
- Scientific Advisory Board Member, Autism Speaks, 2014 –2017.
- Faculty, National Institutes of Health, Office of Behavioral and Social Science Research, Mobile Health (mHealth) Training Institute, 2012 – .
- External Advisor, Interagency Autism Coordinating Committee, Dept. of Health & Human Services, 2012.
- Executive Committee Member, Society for Ambulatory Assessment, 2011 – 2017.
- Executive Committee Member (Student Liaison, Web Committee, Nominations Committee, Conference Program Committee), International Society for Autism Research, 2008 – .

Journal Reviewer
- Editorial Board Member, Autism Research, 2023 - .
- Guest Editor, Special Issue on "Technologies in the Daily Lives of Individuals with Autism," Journal of Autism and Developmental Disorders, November 2015.
- Editorial Board Member, Autism: International Journal of Research and Practice, 2012 – .
- Guest Editor, Special Issue on "Autism & Technology," Autism: International Journal of Research and Practice, January 2010.
- Editorial Board Member, Focus on Autism and Other Developmental Disorders, 2007–2015.

Regular reviewer for professional journals including: ACM Transactions on Computer-Human Interaction; American Journal of Intellectual and Developmental Disabilities; Autism: International Journal of Research and Practice; Autism Research; Biological Psychology; Computers in Biology & Medicine; Emotion; Engineering Reports; Focus on Autism and Other Developmental Disorders; Frontiers in Psychiatry; Frontiers in Psychology; IEEE Conference on Systems, Man, and Cybernetics; IEEE Pervasive Computing; IEEE Transactions on Accessible Computing; IEEE Transactions on

Affective Computing; IEEE Transactions on Biomedical Engineering; IEEE Transactions on Learning; Interaction Design; Interactive, Mobile, Wearable, and Ubiquitous Technologies; Infant Behavior and Development; Infant Mental Health; Interaction Design Conference; Interactive, Mobile, Wearable, and Ubiquitous Technologies; International Conference on Affective Computing and Intelligent Interaction; International Journal of Child-Computer Interaction; International Journal of Human Computer Interaction; International Journal of Psychophysiology; International Symposium on Wearable Computers; JAMA Pediatrics; Journal of Autism and Developmental Disorders; Journal of Clinical Child and Adolescent Psychology; Journal of Child Psychology and Psychiatry; Journal of Intellectual Disability Research; Journal of Medical Internet Research; Journal of Mental Health & Clinical Psychology; Journal of Neurodevelopmental Disorders; Methods of Information in Medicine; International Conference on Movement and Computing; Molecular Autism; Nature Digital Medicine; Pediatrics; Pervasive; Physiology & Behavior; Psychological Science; Psychophysiology; Research in Autism Spectrum Disorders; Research on Child and Adolescent Psychopathology; Scientific Reports; Translational Psychiatry; Ubicomp.

Grant Reviewer
Autism Science Foundation, Autism Speaks, Center for Integration of Medicine and Innovative Technology, Canadian New Frontiers in Research Fund, EU Marie-Curie ASSISTD Programme, Israel Science Foundation, Nancy Lurie Marks Family Foundation, National Institutes of Health (AdopTech, BBBP, CPDD, NCCIH, NIDA, SBIR), National Science Foundation (CAREER, CRI-IIS-HCC, GRFP, INSPIRE, SCH, SenSE), Netherlands Organisation for Health Research and Development, Simons Foundation for Autism Initiative, Swiss National Science Foundation.

Federal, Foundation, and Industry Scientific Advisory Board Member
- Human Health, 2024 –
- Respect for Neurodevelopment, 2023 –
- Radical Hope, 2022 – 2025.
- Autism Speaks, 2022 – 2025.
- Maplight Therapeutics, 2021-2022.
- NIDA. Collaborative Computational Deep Phenotyping of Irritability, 2020 – 2024.
- Autism Together, 2018-2019.
- Biosensor, Inc., 2018-2019.
- Helen Hamlyn Centre for Design, Royal College of Art, 2011-2018.
- Pear Therapeutics, 2018-2020.
- Advanced Research Projects Agency – Health (ARPA-H) Planning Group, Member. 2017-2018.
- STRIVR, Inc., 2017-2018.
- Shire, Inc., 2017-2018.
- Janssen Pharmaceuticals, 2015 – 2023.
- SRI, 2015-2016.
- Emaptica, Inc., 2014 – 2026.
- Blackthorn Therapeutics, 2016-2018.
- Affectiva, Inc., 2012-2021.

Community and Public
- Member, Board of Directors, Ascendigo Autism Services, 2015 –
- Mentor, Three Dot Dash, 2012-2021.

MEDIA APPEARANCES

Autism Speaks, BBC, Boston Globe, Boston Herald, Curbed, Fox 25, The Guardian, Healthline, International Business Times, Medical Xpress, MIT Technology Review, New Atlas, Newsweek, The New Yorker, The Pharmaceutical Journal, Scientific American, Simons Foundation Autism Research Initiative, Spectrum News, Telegraph, Wired Magazine, Yahoo Finance.