

Daniel Gustavson

Curriculum vitae

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Assistant Research Professor
Institute for Behavior Genetics
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EDUCATION

- 2016 Ph.D. in Cognitive Psychology, with Graduate Certificates in ‘Behavioral Genetics’ & ‘Quantitative Methods for Behavioral Sciences’, University of Colorado Boulder, Department of Psychology and Neuroscience. Dissertation: Gustavson, D. E. (2016). *Investigating the cognitive underpinnings of procrastination: An intervention study and a longitudinal analysis* (Doctoral dissertation).
https://scholar.colorado.edu/psyc_gradetds/100
- 2013 M.A. in Cognitive Psychology, University of Colorado Boulder, Department of Psychology and Neuroscience
- 2011 B.A. in Psychology, University of Colorado Boulder, Department of Psychology and Neuroscience

EMPLOYMENT

- 2022 – present **Assistant Research Professor.** Institute for Behavioral Genetics, University of Colorado Boulder
- 2021 – 2022 **Research Assistant Professor (2021-2022) and Research Instructor (2020-2021).** Department of Medicine, Division of Genetic Medicine, Vanderbilt University Medical Center.
- 2019 **Staff Scientist.** Department of Otolaryngology, Vanderbilt University Medical Center.
- 2016 – 2019 **Postdoctoral Scholar.** Department of Psychiatry, University of California, San Diego. Advisor: William Kremen
- 2016 **Postdoctoral Research Associate.** Institute for Behavioral Genetics, University of Colorado Boulder. Advisors: Naomi Friedman, Scott Vrieze

2010 – 2016

Graduate Research Assistant and Teaching Assistant. Department of Psychology & Neuroscience and Institute for Behavioral Genetics, University of Colorado Boulder. Advisors: Akira Miyake, Naomi Friedman

PUBLICATIONS

Peer-Refereed Journal Articles:

84. **Gustavson, D. E.**, Friedman, N. P., Corley, R. P., Wadsworth, S. J., Reynolds, C. A., & Maes, H. H. (2026). Genetic and environmental influences on music engagement across childhood and adolescence, *Developmental Psychology*, advanced online publication. <https://doi.org/10.1111/desc.70122>
83. **Gustavson, D. E.***, Borriello*, G. A., Karhadkar, M. A., Rhee, S. H., Corley, R. P., Rhea, S., Wadsworth, S. J., Friedman, N. P., & Reynolds, C. A. (2025). Stability of cognitive ability from infancy through adulthood: A combined twin and genomic investigation, *Proceedings of the National Academy of Sciences*, 122, e2426531122, <https://doi.org/10.1073/pnas.2426531122>. PMCID: PMC12130889.
*Authors contributed equally to this work.
82. **Gustavson, D. E.**, Bell, T. R., Buchholz, E. J., Zellers, S., Luczak, S. E., Reynolds, C. A., Finch, B. K., Nygaard, M., Catts, V.S., Christensen, K., Finkel, D., Kremen, W. S., Latvala, A., Martin, N. G., McGue, M., Mewton, L., Mosing, M.A., Panizzon, M. S., Plassman, B. L., Kaprio, J., Gatz, M. & Franz, C. E. for the IGEMS Consortium (2025). Genetic and environmental influences on alcohol consumption in middle to late life. *Psychology of Addictive Behaviors*, 39, 591-606. <https://doi.org/10.1037/adb0001052>. PMCID: PMC12238296.
81. Henechowicz, T. L., Coleman, P. L., **Gustavson, D. E.**, Mekki, Y. N., Nayak, S., Nitin, R., Scartozzi, A. C., Tio, E. S., van Klei, R., Felsky, D., Thaut, M. H., and Gordon, R. L. (2025). Polygenic associations between motor behaviour, neuromotor traits, and active music engagement in four cohorts. *Annals of the New York Academy of Sciences*, in press.
80. Thorpe, H. H. A., Cupertino, R. B., Pakala, S. R., Fontanillas, P., Jennings, M. V., Yang, J., Meredith, J. J., Greenwood, T., Bianchi, S. B., Vilar-Ribo, L., Niarchou, M., 23andMe Research Team, Elson, S. L., Ideker, T., Davis, L. K., MacKillop, J., deWit, H., **Gustavson, D. E.**, Mallard, T. T., Palmer, A. A., & Sanchez-Roige, S. (2025). Genome-wide association study of delay discounting identifies 14 loci and reveals transdiagnostic associations across mental and physical health, *Molecular Psychiatry*, in press.
79. McCabe, C. J., Ellingson, J. M., Hinckley, J. D., Stallings, M. S., Hopfer, C., Rhee, S. H., Corley, R. P., **Gustavson, D. E.**, Ross, J. M., & Wall, T. L. (2025). Directional associations between antisocial behavior and alcohol use disorder symptoms from

- adolescence through adulthood: A sibling comparison cross-lagged approach, *Alcohol: Clinical and Experimental Research*, advance online publication.
<https://doi.org/10.1111/acer.70134>
78. Tang, R., Bell, T. R., Elman, J. A., Reynolds, C. A., **Gustavson, D. E.**, Puckett, O. K., Panizzon, M. S., Toomey, R., McKenzie, R., Lyons, M. J., Hagler, D. J., Fennema-Notestine, C., Eyler, L. T., Dale, A. M., Franz, C. E., & Kremen, W. S. (2025). Subjective memory concern, negative affect, and cortical microstructural integrity in community-dwelling middle-aged men. *GeroScience*, advance online publication, <https://doi.org/10.1007/s11357-025-01778-4>
 77. Geel, L., Skoler, E., Corley, R. P., Reynolds, C. A., Rhee, S. H., & **Gustavson, D. E.** (2025). Evaluation of alternative models explaining parent–child similarity in negative emotionality: A longitudinal adoption study. *Child Development*, 96, 1978-1988. <https://doi.org/10.1111/cdev.70023>. PMID: 40709361.
 76. Bianchi, S. B., Vilar-Ribó, L., Palmer, A. A., **Gustavson, D. E.**, & Sanchez-Roige, S. (2025). Genomic structural equation study reveals links between anorexia nervosa and delay discounting and lack of perseverance but not other facets of impulsivity, *Frontiers in Psychiatry*, 16, 1613776. <https://doi.org/10.3389/fpsyt.2025.1613776>
 75. Mallard, T. T., Tubbs, J. D., Jennings, M., Zhang, Y., **Gustavson, D. E.**, Grotzinger, A. D., Westwater, M. L., Williams, C. M., Fortgang, R. G., 23andMe Research Team, Elson, S. D., Fontanillas, P., Davis, L. K., Raznahan, A., Tucker-Drob, E. M., Choi, K. W., Ge, T., Smoller, J. W., Palmer, A. A., & Sanchez-Roige, S. (2025). Characterizing the pleiotropic architecture of impulsivity and its links to psychopathology and neurodevelopment. *American Journal of Psychiatry*, in press.
 74. Bell, T. R., Panizzon, M., Elman, J. A., Toomey, R., Reynolds, C. A., Williams, M., Notestine, C., **Gustavson, D. E.**, Jak, A., Lyons, M. L., Franz, C. E., & Kremen, W. S. (2025). History of chronic pain and opioid use is associated with cognitive decline and mild cognitive impairment. *Journal of the International Neuropsychological Association*, in press. <https://doi.org/10.1017/S1355617725101057>. PMID: 40657909.
 73. Vilar-Ribó, L., Hatoum, A. S., Grotzinger, A., Mallard, T. T., 23andMe Research Team, Elson, S. L., Fontanillas, P., 23andMe Research Team, Palmer, A. A., **Gustavson, D. E.***, & Sanchez-Roige, S.* (2025). Impulsivity facets and substance use involvement: insights from genomic structural equation modeling, *Psychological Medicine*, 55, e51. *Both Gustavson and Sanchez-Roige are last authors. <https://doi.org/10.1017/S0033291725000145>. PMCID: PMC12039315.
 72. Nayak, S., Ladanyi, E., Eising, E., Mekki, Y., Nitin, R., Bush, C. T., **Gustavson, D. E.**, Anglada-Tort, M., Lancaster, H. S., Mosing, M., Ullen, F., Magne, C. L., Fisher, S. E., Jacoby, N., & Gordon, R. L. (2025). Musical rhythm abilities and risk for developmental speech-language problems and disorders: Epidemiological and polygenic associations, *Nature Communications*, 16. <https://doi.org/10.1038/s41467-025-60867-2>

71. **Gustavson, D. E.**, Elman, J. A., Reynolds, C. A., Eyler, L. T., Fennema-Notestine, C., Puckett, O. K., Panizzon, M. S., Gillespie, N. A., Neale, M. C., Lyons, M. J., Franz, C. E., & Kremen, W. S. (2024). Brain reserve in midlife is associated with executive function changes across 12 years. *Neurobiology of Aging*, *141*, 113-120. <https://doi.org/10.1016/j.neurobiolaging.2024.05.001>. PMCID: PMC11246793
70. **Gustavson, D. E.**, Stern, E. F., Reynolds, C. A., Grotzinger, A. D., Corley, R. P., Wadsworth, S. J., Rhee, S. H., & Friedman, N. P. (2024). Evidence for strong genetic correlations among internalizing psychopathology and related self-reported measures using both genomic and twin/adoptive approaches. *Journal of Psychopathology and Clinical Science*, *133*, 347-357. <https://psycnet.apa.org/doi/10.1037/abn0000905>. PMCID: PMC11232111
* Paper selected for Editor's Choice newsletter
69. **Gustavson, D. E.**, Morrison, C. L., Mallard, T., T., Jennings, M. V., Fontanillas, P., Elson, S. L., Palmer, A. A., Friedman, N. P., & Sanchez-Roige, S. (2024). Executive function and impulsivity predict distinct genetic variance in internalizing problems, externalizing problems, thought disorders, and compulsive disorders: A genomic structural equation modeling study, *Clinical Psychological Science*, *12*, 865-881. <https://doi.org/10.1177/21677026231207845>. PMCID: PMC11423426
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67. Horwitz, T., Zorina-Lichtenwalter, K., **Gustavson, D. E.**, Grotzinger, A. D., & Stallings, M. C. (2024). Partitioning the genomic components of behavioral disinhibition and substance use (disorder) using genomic structural equation modeling. *Behavior Genetics*, *54*, 386-397. <https://doi.org/10.1007/s10519-024-10188-9>. PMID: 38464249
66. Zheng, A., Friedman, N. P., **Gustavson, D. E.**, Corley, R. P., Wadsworth, S. J., & Reynolds, C. A. (2024). Lifestyle and psychosocial associations with cognition at the cusp of midlife using twins and siblings, *Alzheimer's and Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*, *16*, e12609. <https://doi.org/10.1002/dad2.12609>. PMCID: PMC11262029
65. Tang, R., Elman, J. A., Dale, A. M., Dorros, S. M., Eyler, L. T., Fennema-Notestine, C., **Gustavson, D. E.**, Hagler, D. J., Lyons, M. J., Panizzon, M. S., Puckett, O. K., Reynolds, C. A., Franz, C. E., & Kremen, W. S. (2024). Childhood disadvantage moderates late midlife default mode network cortical microstructure and visual memory association.

Journal of Gerontology: Series A, 79. <https://doi.org/10.1093/gerona/glad114>. PMID: 37096346.

64. **Gustavson, D. E.***, Coleman, P. L.*, Wang, Y., Nitin, R., Petty, L. E., Bush, C. T., Mosing, M. A., Wesseldijk, L. W., Ullén, F., Below, J. E., Cox, N. J., & Gordon, R. L. (2023). Exploring the genetics of rhythmic perception and musical engagement in the Vanderbilt Online Musicality Study, *Annals of the New York Academy of Sciences*, 1521, 140-154. <https://doi.org/10.1111/nyas.14964> PMID: PMC10038917.
* Authors Gustavson & Coleman made equal contributions to the manuscript.
63. **Gustavson, D. E.**, Nayak, S., Coleman, P. L., Iversen, J. R., Lense, M. D., Gordon, R. L., & Maes, H. H. (2023). Heritability of childhood music engagement and associations with language and executive function: Insights from the Adolescent Brain Cognitive Development (ABCD) study. *Behavior Genetics*, 53, 189-207, <https://doi.org/10.1007/s10519-023-10135-0>. PMID: PMC10159991.
62. **Gustavson, D. E.**, Archer, D. B., Elman, J. A., Fennema-Notestine, C., Hagler, D. J., Panizzon, M. S., Shashikumar, N., Hohman, T. J., Jefferson, A. L., Lyons, M. J., Franz, C. E., & Kremen, W. S. (2023). Associations among executive function abilities, free water, and white matter microstructure in early old age, *NeuroImage: Clinical*, 37, 103279. <https://doi.org/10.1016/j.nicl.2022.103279>. PMID: PMC9731853.
61. **Gustavson, D. E.**, Reynolds, C. A., Hohman, T. J., Jefferson, A. L., Elman, J. A., Panizzon, M. S., Neale, M. C., Logue, M. W., Lyons, M. J., Franz, C. E., & Kremen, W. S. (2023). Alzheimer's disease polygenic scores predict changes in episodic memory and executive function across 12 years in late middle age. *Journal of the International Neuropsychological Association*, 29, 136-147. <https://dx.doi.org/10.1017/S1355617722000108> PMID: PMC9392810.
60. Freis, S. M., Alexander, J. D., Corley, R. P., De La Vega, A., **Gustavson, D. E.**, Vrieze, S. I., & Friedman, N. P. (2023). Associations between executive functions assessed in different context in a genetically informative sample. *Journal of Experimental Psychology, General*, 153, 70-85. <https://doi.org/10.1037/xge0001471>. PMID: PMC10843656
59. Bell, T. R., Beck, A., Gillespie, N., Reynolds, C., Williams, M. E., **Gustavson, D. E.**, Lyons, M. J., Kremen, W. S., & Franz, C. E. (2023). A traitlike dimension of subjective memory concern over 30 years among adult male twins. *JAMA Psychiatry*, 80, 718-727. <https://doi.org/10.1001/jamapsychiatry.2023.1004>. PMID: PMC10173101
58. Franz, C. E., **Gustavson, D. E.**, Elman, J. A., Fennema-Notestine, C., Hagler, D. J., Baraff, A., Tu, X., Wu, T., DeAnda, J., Beck, A., Kaufmann, J., Whitsel, N., Finch, C. E., Chen, J., & Kremen, W. S. (2023). Associations between ambient air pollution and cognitive abilities from midlife to early old age: Modification by *APOE* genotype. *Journal of Alzheimer's Disease*, 93, 193-209. <https://doi.org/10.3233/JAD-221054>. PMID: PMC10827529

57. Bell, T. R., Elman, J. A., Beck, A., Fennema-Notestine, C., Franz, C. E., **Gustavson, D. E.**, Hagler, D., Jak, A. J., Lyons, M. J., Puckett, O. K., Toomey, R., & Kremen, W. S. (2023). Rostral-middle locus coeruleus integrity and subjective cognitive decline in early old age. *Journal of the International Neuropsychological Association*, 29, 763-774. <https://doi.org/10.1017/S1355617722000881>. PMCID: PMC10272292
56. Nitin, R., **Gustavson, D. E.**, Aaron, A., Boorom, O., Bush, C. T., Wiens, N., Vaughan, C., Persici, V., Blain, S. D., Soman, U., Hambrick, D.Z., Camarata, S.M., McAuley, J.D., Gordon, R.L. (2023). Exploring individual differences in musical rhythm and grammar skills in typically developing school-aged children. *Scientific Reports* 13, 2201. <https://doi.org/10.1038/s41598-022-21902-0>. PMCID: PMC9905575.
55. **Gustavson, D. E.**, Reynolds, C. A., Corley, R. A., Wadsworth, S. J., Hewitt, J. K., & Friedman, N. P. (2022). Genetic associations between executive functions and intelligence: A combined twin and adoption study. *Journal of Experimental Psychology: General*, 151, 1745-1761. <http://doi.org/10.1037/xge0001168>. PMCID: PMC9256856.
54. Friedman, N. P. & **Gustavson D. E.** (2022). Do rating and task measures of control abilities assess the same thing? *Current Directions in Psychological Science*, 31, 262-271. <https://doi.org/10.1177/09637214221091824>. PMCID: PMC9347699
53. Niarchou, M., **Gustavson, D. E.**, Sathirapongsasuti, J., F., Anglada-Tort, M., Eising, E., Bell, E., McArthur, E., Straub, P., the 23andMe Research Team, McAuley, J. D., Capra, J. A., Ullén, F., Creanza, N., Mosing, M. A., Hinds, D., Davis, L., K., Jacoby, N., & Gordon, R. L. (2022). Genome-wide association study of musical beat synchronization demonstrates high polygenicity. *Nature Human Behavior* <https://doi.org/10.1038/s41562-022-01359-x> PMCID: PMC9489530
52. Nayak, S., Coleman, P., Nitin, R., Ladanyi, E., **Gustavson, D. E.**, Magne, C., & Gordon, R. L. (2022). The musical abilities, pleiotropy, language, and environment (MAPLE) framework for understanding musicality-language links across the lifespan, *Neurobiology of Language*, 3, 615-664. https://doi.org/10.1162/nol_a_00079
51. Ladányi, E., Novakovic, M., Boorom, O., Aaron, A., Scartozzi, A. C., **Gustavson, D. E.**, Nitin, R., Bamikole, P., Vaughan, C., Fromboluti, E. K., Schuele, C. M., Camarata, S. M., McAuley, J. D., & Gordon, R. L. (2022). Using motor tempi to understand rhythm and grammatical skills in developmental language disorder and typical language development. *Neurobiology of Language*, 1-60. https://doi.org/10.1162/nol_a_00082. PMCID: PMC9979588
50. Mallard, T. T., Savage, J. E., Johnson, E. C., Huang, Y., Edwards, A. C., Hottenga, J. J., Grotzinger, A. D., **Gustavson, D. E.**, Jennings, M. V., Anokhin, A., Dick, D. M., Edenberg, H. J., Kramer, J. R., Lai, D., Meyers, J. L., Pandey, A. K., Harden, K. P., Nivard, M. G., de Geus, E. J. C., Boomsma, D. I., Agrawal, A., Davis, L. K., Clarke, T., Palmer, A. A., & Sanchez-Roige, S. (2022). Item-level genome-wide association study of the Alcohol Use Disorder Identification Test in three population-based cohorts. *American*

- Journal of Psychiatry*, 179, 58-70. <https://doi.org/10.1176/appi.ajp.2020.20091390>. PMID: PMC9272895.
49. Nayak, S., **Gustavson, D. E.**, Wang, Y., Below, J. E., Gordon, R. L., & Magne, C. L. (2022). Test of Prosody via Syllable Emphasis ("TOPsy"): Psychometric validation of a brief scalable test of lexical stress perception. *Frontiers in Neuroscience*, 16, 10. <https://doi.org/10.3389/fnins.2022.765945>. PMID: PMC8864136.
48. Sanderson-Cimino, M., Elman, J. A., Tu, X., Gross, A. L., Panizzon, M. S., **Gustavson, D. E.**, Bondi, M. W., Edmonds, E. C., Eppig, J. S., Franz, C. E., Jack, A. J., Lyons, M. J., Thomas, K. R., Williams, M. E., & Kremen, W. S. (2022). Practice effects in mild cognitive impairment increase reversion rates and delay detection of new impairments. *Frontiers in Aging Neuroscience*, 25. <https://doi.org/10.3389/fnagi.2022.847315>
47. Eglit, G., Elman, J. A., Panizzon, M. S., Sanderson-Cimino, M., Williams, M. E., Dale, A. M., Eyler, L. T., Fennema-Notestine, C., Gillespie, N. A., **Gustavson, D. E.**, Hatton, S. N., Hagler, D. J., Hauger, R. L., Jak, A. J., Logue, M. W., McEvoy, L. K., McKenzie, R. E., Neale, M. C., Puckett, O., Reynolds, C. A., Toomey, R., Tu, X., M., Whitsel, N., Xian, H., Lyons, M. L., Franz, C. E., Kremen, W. S. (2022). Paradoxical cognitive trajectories in men from earlier to later adulthood. *Neurobiology of Aging*, 109, 229-238. <https://doi.org/10.1016/j.neurobiolaging.2021.10.002>. PMID: PMC8715388.
46. Sanderson-Cimino, M., Elman, J. A., Tu, X., Gross, A. L., Panizzon, M. S., **Gustavson, D. E.**, Bondi, M., Edmonds, E., Eglit, G., Eppig, J. S., Franz, C. E., Jak, A. J., Lyons, M. J., Thomas, K. R., Williams, M. E., & Kremen, W. S. (2022). Cognitive practice effects delay diagnosis of MCI: Implications for clinical trials. *Alzheimer's & Dementia: Translational Research & Clinical Interventions*, 8, e12228. <https://doi.org/10.1002/trc2.12228>. PMID: PMC7654904.
45. Whitsel, N., Reynolds, C. A., Buchholz, E., Pahlen, S., Pierce, R. C., Hatton, S., Elman, J. A., Gillespie, N. A., **Gustavson, D. E.**, Puckett, O. K., Dale, A. M., Eyler, L. T., Fennema-Notestine, C., Hagler, D. J., Hauger, R. L., McEvoy, L., McKenzie, R., Neale, M. C., Panizzon, M. S., Sanderson-Cimino, M., Toomey, R., Tu, X. M., Williams, M., Bell, T., Xian, H., Lyons, M. J., Kremen, W. S., & Franz, C. E.. (2022). Long-term associations of cigarette smoking in early midlife with predicted brain aging from midlife to late life. *Addiction*, 117, 1049-1059. <https://doi.org/10.1111/add.15710>. PMID: PMC8904283.
44. **Gustavson, D. E.**, Jak, A. J., Elman, J. A., Panizzon, M. S., Franz, C. E., Gifford, K. A., Reynolds, C. A., Toomey, R., Lyons, M. J., & Kremen, W. S. (2021). How well does subjective cognitive decline correspond to objectively measured cognitive decline? Assessment of 10-12 year change. *Journal of Alzheimer's Disease*, 83, 291-304. <https://doi.org/10.3233/JAD-210123>. PMID: PMC8482061.
43. **Gustavson, D. E.**, Friedman, N. P., Stallings, M. C., Reynolds, C. A., Coon, H., Hewitt, J. K., Wadsworth, S., & Gordon, R. G. (2021). Musical instrument engagement in adolescence predicts verbal ability 4 years later: A twin and adoption study.

- Developmental Psychology*, 57, 1943-1957. <https://doi.org/10.1037/dev0001245>. PMID: PMC8842509.
42. **Gustavson, D. E.**, Coleman, P. L., Iversen, J. R., Maes, H. H., Gordon, R. L., & Lense, M. (2021). Mental health and music engagement: Review, framework, and guidelines for future studies. *Translational Psychiatry*, 11, 370. <https://doi.org/10.1038/s41398-021-01483-8>. PMID: PMC8257764.
41. **Gustavson, D. E.**, Panizzon, M. S., Kremen, W. S., Reynolds, C. A., Nygaard, M., Wod, M., Catts, V. S., Lee, T., Gatz, M., & Franz, C. E. (2021). Genetic and environmental influences on semantic verbal fluency across midlife and later life. *Behavior Genetics*, 51, 99-109. <https://doi.org/10.1007/s10519-021-10048-w>. PMID: PMC7933104.
40. Sanderson-Cimino, M., Panizzon, M. S., Elman, J. A., Tu, X., **Gustavson, D. E.**, Puckett, O., Cross, K., Notestine, R., Hatton, S. N., Eyler, L. T., McEvoy, L. K., Hagler, D. J., Neale, M. C., Gillespie, N. A., Lyons, M. J., Franz, C. E., Fennema-Notestine, C., & Kremen, W. S. (2021). Periventricular and deep abnormal white matter differ in associations with cognitive performance at midlife. *Neuropsychology*, 35, 252-264. <https://doi.org/10.1037/neu0000718>. PMID: PMC8500190.
39. Elman, J. A., Puckett, O. K., Beck, A., Fennema-Notestine, C., Cross, L. K., Dale, A. M., Eglit, G. M. L., Eyler, L. T., Gillespie, N. A., Granholm, E. L., **Gustavson, D. E.**, Hagler, D. J., Hatton, S. N., Hauger, R., Jak, A. J., Logue, M. W., McEvoy, L. K., McKenzie, R. E., Neale, M. C., Panizzon, M. S., Reynolds, C. A., Sanderson-Cimino, M., Toomey, R., Tu, X., Nathan, W., McKenna, E. W., Xian, H., Lyons, M. J., Franz, C. E., & Kremen, W. S. (2021). MRI-Assessed locus coeruleus integrity is heritable and associated with multiple cognitive domains, mild cognitive impairment, and daytime dysfunction, *Alzheimer's & Dementia*, 17, 1017-2025. <https://doi.org/10.1002/alz.12261>. PMID: PMC8248066.
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36. **Gustavson, D. E.**, Elman, J. A., Panizzon, M. S., Franz, C. E., Zuber, J., Reynolds, C. A., Jacobson, K. C., Xian, H., Toomey, R., Lyons, M. J., & Kremen, W. S. (2020).

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34. **Gustavson, D. E.**, Lurquin, J. H., Michaelson, L. E., Barker, J. E., Carruth, N. P., von Bastian, C. C., & Miyake, A. (2020). Lower general executive function is primarily associated with trait worry: A latent variable analysis of negative thought/affect measures. *Emotion*, 20, 557-571. <https://doi.org/10.1037/emo0000584>. PMCID: PMC6713624.
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29. Elman, J. A., Panizzon, M. S., **Gustavson, D. E.**, Franz, C. E., Sanderson-Cimino, M. E., Lyons, M. J., & Kremen, W. S. (2020). Aβ-positivity predicts cognitive decline but

- cognition predicts progression to A β -positivity. *Biological Psychiatry*, 87, 819-828. <https://doi.org/10.1016/j.biopsych.2019.12.021> PMCID: PMC7166153.
28. Friedman, N. P., Hatoum, A. S., **Gustavson, D. E.**, Corley, R. P., Hewitt, J. K., & Young, S. E. (2020). Executive functions and impulsivity are genetically distinct and independently predict psychopathology: Results from two adult twin studies. *Clinical Psychological Science*, 8, 519-538. <http://doi.org/10.1177/2167702619898814>. PMCID: PMC7983400.
 27. **Gustavson, D. E.**, Franz, C. E., Panizzon, M. S., Lyons, M. J., & Kremen, W. S. (2019). Internalizing and externalizing psychopathology in middle age: Genetic and environmental architecture and stability of symptoms over 15 to 20 years. *Psychological Medicine*, 1-9. <http://doi.org/10.1017/S0033291719001533> PMCID: PMC6938573.
 26. **Gustavson, D. E.**, Panizzon, M. S., Franz, C. E., Reynolds, C. A., Corley, R. P., Hewitt, J. K., Lyons, M. J., Kremen, W. S., & Friedman, N. P. (2019). Integrating verbal fluency with executive functions: Evidence from twin studies in adolescence and middle age. *Journal of Experimental Psychology: General*, 148, 2104-2119. <http://dx.doi.org/10.1037/xge0000589> PMCID: PMC6754807.
 25. **Gustavson, D. E.**, Franz, C. E., Kremen, W. S., Carver, C. S., Corley, R. P., Hewitt, J. K. & Friedman, N. P. (2019). Common genetic influences on impulsivity facets are related to goal management, psychopathology, and personality. *Journal of Research in Personality*, 79, 161-175. <https://doi.org/10.1016/j.jrp.2019.03.009> PMCID: PMC6857631.
 24. **Gustavson, D. E.**, Franz, C. E., Panizzon, M. S., Reynolds, C. A., Xian, H., Toomey, R., Lyons, M. J., & Kremen, W. S. (2019). Genetic and environmental associations between executive functions, trait anxiety, and depression symptoms in middle age. *Clinical Psychological Science*, 7, 127-142. <https://doi.org/10.1177/2167702618805075>. PMCID: PMC6433407.
 23. **Gustavson, D. E.**, Hatton, S. N., Elman, J. A., Panizzon, M. S., Franz, C. E., Hagler, D. J., Fennema-Notestine, C., Eyler, L., McEvoy, L., Neale, M. C., Gillespie, N., Dale, A. M., Lyons, M. J., & Kremen, W. S. (2019). Predominantly global genetic influences on individual white matter tract microstructure. *Neuroimage*, 184, 871-880. <http://doi.org/10.1016/j.neuroimage.2018.10.016>. PMCID: PMC6289256.
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 21. Elman, J. A., Panizzon, M. S., Logue, M. W., Gillespie, N. A., Neale, M. C., Reynolds, C. A., **Gustavson, D. E.**, Rana, B. K., Andreassen, O. A., Dale, A. M., Franz, C. E., Lyons, M. J., & Kremen, W. S. (2019). Genetic risk for coronary heart disease alters the

- influence of Alzheimer's genetic risk on mild cognitive impairment, *Neurobiology of Aging*, 237.e5-237.e12. <https://doi.org/10.1016/j.neurobiolaging.2019.06.001>. PMID: PMC6899214.
20. Eyler, T. L., Elman, J. A., Hatton, S. N., Gough, S., Mischel, A. K., Hagler, D., J., Franz, C. E., Docherty, A., Fennema-Notestine, C., Gillespie, N., **Gustavson, D. E.**, Lyons, M. J., Neale, M. C., Panizzon, M. S., Dale, A. M., Kremen, W. S (2019). Resting state abnormalities of the default mode network in mild cognitive impairment: A systematic review and meta-analysis. *Journal of Alzheimer's Disease*, 70, 107-120 <https://doi.org/10.3233/JAD-180847>. PMID: PMC6697380.
 19. Kremen, W. S., Beck, A., Elman, J. A., **Gustavson, D. E.**, Tu, X. M., Sanderson-Cimino, M. E., Panizzon, M. S., Vuoksima, E., Toomey, R., Fennema-Notestine, C., Hagler, D. J., Dale, A. M., Lyons, M. J., & Franz, C. E. (2019). Influence of young adult cognitive ability and additional education on later life cognition. *Proceeding of the National Academy of Sciences*, 116, 2021-2026. <https://doi.org/10.1073/pnas.1811537116>. PMID: PMC6369818.
 18. Logue, M. W., Panizzon, M. S., Elman, J. A., Gillespie, N. A., Hatton, S., **Gustavson, D. E.**, Andreassen, O. A., Dale, A. M., Franz, C. E., Lyons, M. J., Neale, M. C., Reynolds, C. A., Tu, X., & Kremen, W. S. (2019). Use of an Alzheimer's disease polygenic risk score to identify mild cognitive impairment in adults in their 50s. *Molecular Psychiatry*, 24, 421-430. <https://doi.org/10.1038/s41380-018-0030-8>. PMID: PMC6110977.
 17. Sanderson-Cimino, M., Panizzon, M. S., Elman, J. A., **Gustavson, D. E.**, Franz, C. E., Reynolds, C. A., Toomey, R., Lyons, M. J., & Kremen, W. S. (2019). Genetic and environmental architecture of processing speed across midlife. *Neuropsychology*, 33, 862-871. <http://doi.org/10.1037/neu0000551>. PMID: PMC6710143.
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 15. **Gustavson, D. E.**, Panizzon, M. S., Elman, J. A., Franz, C. E., Beck, A., Reynolds, C. A., Jacobson, K. C., Xian, H., Toomey, R., Lyons, M. J., & Kremen, W. S. (2018). Genetic and environmental influences on verbal fluency in middle age: A longitudinal twin study. *Behavior Genetics*, 48, 361-373. <https://doi.org/10.1007/s10519-018-9910-6>. PMID: PMC29922985.
 14. **Gustavson, D. E.**, du Pont, A., Whisman, M. A., & Miyake, A. (2018). Evidence for transdiagnostic repetitive negative thinking and its association with rumination, worry, and depression and anxiety symptoms: A commonality analysis. *Collabra*, 4, 1-18 <https://doi.org/10.1525/collabra.128>. PMID: PMC6370308.

13. **Gustavson, D. E.**, Panizzon, M. S., Elman, J. A., Franz, C. E., Reynolds, C. A., Jacobson, K. C., Friedman, N. P., Xian, H., Lyons, M. J., & Kremen, W. S. (2018). Stability of genetic and environmental influences on executive functions in midlife. *Psychology and Aging*, 33, 219-231. <https://doi.org/10.1037/pag0000230>. PMCID: PMC5905725.
12. **Gustavson, D. E.**, Panizzon, M. S., Franz, C. E., Friedman, N. P., Reynolds, C. A., Jacobson, K. C., Xian, H., Lyons, M. J., & Kremen, W. S. (2018). Genetic and environmental architecture of executive functions in midlife, *Neuropsychology*, 32, 18-30. <https://doi.org/10.1037/neu0000389>. PMCID: PMC5814340.
11. Davies, G., Lam, M., Harris, S. E., ... **Gustavson, D. E.**, ... Lencz, T., & Deary, I. J. (2018). Study of 300,486 individuals identified 148 independent genetic loci influencing general cognitive function. *Nature Communications*, 9, 1-16. <https://doi.org/10.1038/s41467-018-04362-x>. PMCID: PMC5974083.
10. Reineberg, A. D., **Gustavson, D. E.**, Benca, C., Banich, M. T., & Friedman, N. P. (2018). The relationship between resting state network connectivity and individual differences in executive functions. *Frontiers in Psychology*, 9, 1600. <https://doi.org/10.3389/fpsyg.2018.01600>. PMCID: PMC6134071.
9. Elman, J. A., Jak, A. J., Panizzon, M. S., Tu, X., Chen, T., Reynolds, C. A., **Gustavson, D. E.**, Franz, C. E., Hatton, S. N., Jacobson, K. C., Toomey, R., McKenzie, R., Xian, H., Lyons, M. J., & Kremen, W. S. (2018). Underdiagnosis of mild cognitive impairment: A consequence of ignoring practice effects. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*, 10, 372-381. <https://doi.org/10.1016/j.dadm.2018.04.003>. PMCID: PMC6039708.
8. **Gustavson, D. E.**, du Pont, A., Hatoum, A. S., Rhee, S. H., Kremen, W. S., Hewitt, J. K., & Friedman, N. P. (2017). Genetic and environmental associations between procrastination and internalizing/externalizing psychopathology, *Clinical Psychological Science*, 5, 798-815. <https://doi.org/10.1177/2167702617706084>. PMCID: PMC5831260.
7. **Gustavson, D. E.**, Stallings, M. C., Corley, R. P., Miyake, A., Hewitt, J. K., & Friedman, N. P. (2017). Executive functions and substance use: Relations in late adolescence and early adulthood. *Journal of Abnormal Psychology*, 126, 257-270. <https://doi.org/10.1037/abn0000250>. PMCID: PMC5305429.
6. **Gustavson, D. E.**, & Miyake, A. (2017). Academic procrastination and goal accomplishment: A combined experimental and individual differences investigation. *Learning and Individual Differences*, 54, 160-172. <https://doi.org/10.1016/j.lindif.2017.01.010>. PMCID: PMC5608091.
5. **Gustavson, D. E.**, Altamirano, L., Johnson, D., Miyake, A., & Whisman, M. A. (2017) Is set shifting really impaired in trait anxiety? Only when switching away from an effortfully

established task set. *Emotion*, 17, 88-101. <https://doi.org/10.1037/emo0000212>. PMCID: PMC5243939.

4. **Gustavson, D. E.**, & Miyake, A. (2016). Trait worry is associated with difficulties in working memory updating. *Cognition and Emotion*, 30, 1289-1303. <https://doi.org/10.1080/02699931.2015.1060194>. PMCID: PMC6118341.
3. Lurquin, J. H., Michaelson, L. E., Barker, J. E., **Gustavson, D. E.**, von Bastian, C. C., Carruth, N. P., & Miyake, A. (2016). No evidence of the ego-depletion effect across task characteristics and individual differences: A pre-registered study. *PloS one*, 11, e0147770. <https://doi.org/10.1371/journal.pone.0147770>. PMCID: PMC4749338.
2. **Gustavson, D. E.**, Miyake, A., Hewitt, J. K., & Friedman, N. P. (2015). Understanding the cognitive and genetic underpinnings of procrastination: Evidence for shared genetic influences with goal management and executive function abilities. *Journal of Experimental Psychology: General*, 144, 1063-1079. <https://doi.org/10.1037/xge0000110>. PMCID: PMC4658242.
1. **Gustavson, D. E.**, Miyake, A., Hewitt, J. K., & Friedman, N. P. (2014). Genetic relations among procrastination, impulsivity, and goal-management ability: Implications for the evolutionary origin of procrastination. *Psychological Science*, 25, 1178-1188. <https://doi.org/10.1177/0956797614526260>. PMCID: PMC4185275.

Publications Under Review:

- Gustavson, D. E.**, Bell, T. R., Elman, J. A., Jak, A. J., Toomey, R., Panizzon, M. S., Lyons, M. J., Kremen, W. S., Franz, C. E.*, & Reynolds, C. A.* (*under review*). Impulsivity in midlife predicts subjective cognitive decline six years later. *Authors contributed equally to this work
- Karhadkar, M. A., Friedman, N. P., Corley, R. P., Reynolds, C. A., & **Gustavson, D. E.** (*under review*). Genetic and environmental associations between processing speed and executive functions across adolescence and established adulthood.
- Brick, L. A., Benca-Bachman, C. E., Johnson, E. C., **Gustavson, D. E.**, Carper, M., & Palmer, R. H. C. (*under review*). Genetic associations among internalizing and externalizing traits with polysubstance use among young adults. *Behavior Genetics*.
- Bruellman, R., Smolen, A., Evans, D., **Gustavson, D. E.**, Ellingson, J. M., & Reynolds, C. A. (*under review*). Inflammation, mental health, and alcohol behaviors: Testing links leveraging a familial community sample, *Brain, Behavior, and Immunity*.
- Scartozzi, A. C., Wang, Y., Coleman, P. L., Du'Mottuchi, X. L., Henechowicz, T. L., **Gustavson, D. E.**, Creanza, N., Magne, C. L., Gisladdottir, R. S., Cox, N. J., Below, J. E., Nayak, S., & Gordon, R. L. (*revise and resubmit*). Genome-wide investigation of speech rhythm perception, *Human Genetics and Genomics Advances*.

- Qi, B., Highland, H. M., Graff, M., Bulik, C. M., Rhee, S. H., Stallings, M. C., Hewitt, J. K., **Gustavson, D. E.**, Reynolds, C. A., North, K. E., & Munn-Chernoff, M. A. (*revise and resubmit*). A genetic cross-lagged twin study of the longitudinal association between addiction-like behaviors and obesity, *Addiction*.
- Rader, L., Zorina-Lichtenwalter, K., **Gustavson, D. E.**, Wager, T. D., & Friedman, N. P. (*revise and resubmit*). Genetic associations link adolescent pain complaints to adult chronic pain risk: a polygenic score analysis using the ABCD study, *Journal of Pain*.
- Tang, R., Beck, A., **Gustavson, D. E.**, Eyler, L., Elman, J. A., Bell, T., Buchholz, E., Hunt, J., Vo, T., Fennema-Notestine, C., Lyons, M. J., Panizzon, M. P., Reynolds, C. A., Kremen, W. S., & Franz, C. E. (*under review*). Young adult urbanicity, late midlife neighborhood disadvantage and cognitive functioning in community-dwelling older adults. *The Journals of Gerontology, Series B: Psychological Sciences and Social Sciences*.
- Elman, J. A., Buchholz, E., Chen, R., Sanderson-Cimino, M., Bell, T. R., Whitsel, N., Bangen, K., Cronin-Golomb, A., Dale, A. M., Eyler, L. T., Gillespie, N. A., Granholm, E. L., **Gustavson, D. E.**, Hagler, D. J., Hauger, R. L., Jacobs, D. M., Jak, A. J., Logue, M. W., McKenzie, R. E., Neale, M. C., Rissman, R. A., Toomey, R., Wingfield, A., Xian, H., Fennema-Notestine, C., Franz, C. E., Lyons, M. J., Reynolds, C. A., Tu, X. M., Panizzon, M. S., & Kremen, W. S. (*under review*). Practice effects persist over two decades of cognitive testing: Implications for longitudinal research. *Alzheimer's & Dementia: Diagnosis, Assessment & Disease Monitoring*.

Selected Publications in Preparation:

- Bell, T. R., **Gustavson, D. E.**, Franz, C. E., Panizzon, M. S., Fennema-Notestine, C. F., Elman, J. A., Toomey, R., Jak, A. J., Jacobs, D., Dale, A. M., Tang, R., & Kremen, W. S. (*in preparation*). Association of subjective memory decline with objective memory decline and Alzheimer's related brain structure.
- Geel, L. G., Corley, R. P., Reynolds, C. A., Rhee, S. H., & Gustavson, D. E. (*in preparation*). Predictors of alcohol consumption: The role of genetics and impulsivity from adolescence to adulthood.
- Rader, L., Maes, H. H., Friedman, N. P., Gordon, R. L., Lense, M. D., Stallings, M. C., Reynolds, C. A., & **Gustavson, D. E.** (*in preparation*). The nature of associations between adolescent music engagement and later substance use: A twin and genomic perspective
- Karhadkar, M. A., Maes, H. H. M., Friedman, N. P., Lense, M., Reynolds, C. A., Gordon, R. L., & **Gustavson, D. E.** (*in preparation*). Heritability of activity engagement in adolescence and associations with reading and executive functions.

AWARDS AND HONORS

- 2025 Outstanding Postdoc Mentor of the Year – Honorable Mention, 2025. University of Colorado Boulder
- 2016 Dosier/Muenzinger Award for Basic Research: Department of Psychology & Neuroscience, University of Colorado Boulder
- 2014 The Lindon Eaves Award for Best Student Poster (Presented at the International Workshop on Statistical Genetic Methods for Human Complex Traits)
- 2010 Summa Cum Laude Honors, B.A. in Psychology, University of Colorado Boulder

RESEARCH EXPERIENCE

Research Support – Extramural Proposals Under Review

None at this time

Research Support as Key Personnel

- 2024-present **Principal Investigator.** *Establishing if Music Engagement is a Protective Factor in Adolescent Substance Use Using Existing Longitudinal, Genetic, and Environmental Datasets* (R01 DA059804). University of Colorado Boulder. Total: \$3,320,683. 35% effort. August 2024 – May 2029
- 2024-present **Co-investigator.** *Implications of midlife alcohol use for risk of dementia in male and female twins: Unique contributions and interactions with ApoeE4* (R21 AG087486). Total: \$71,626 (subaward to CU Boulder). April 2024 - March 2026
- 2024-present **Co-investigator.** *Gene-environment interplay among modifiable factors for AD/AD: risk and resilience across the lifespan* (R01 AG089666). Total: \$3,211,940. July 2024 - June 2029
- 2024-present **Co-investigator.** *The effects of cannabis legalization and persistent use: A longitudinal study of two twin cohorts* (R01 DA042755). Total: \$6,734,214. July 2024 - April 2029
- 2023-present **Co-investigator:** *Colorado Adoption/Twin Study of Lifespan Behavioral Development & Cognitive Aging (CATSLife2)* (R01 AG046938). June 2020 – May 2025
- 2022-present **Co-investigator.** *The VETSA Longitudinal Twin Study of Cognition and Aging (VETSA 4)* (R01 AG050595). Total: \$77,817 (subaward to CU Boulder). October 2022 – March 2025

- 2023-present **Co-investigator.** *ABCD-USA Consortium: Research Project Site at CU Boulder* (U01 DA051018). Total: \$8,156,392. March 2020 - February 2027
- 2023-present **Co-investigator.** *Effects of High Potency Cannabis Products on Mental Health and Psychosocial Functioning* (R01 DA057894). Total: \$1,928,902. October 2023 – September 2028
- 2023-present **Co-investigator.** *Understanding the links between parental and adolescent substance use; complementary natural experiments using the children of twins design.* (R01 DA054087). May 2022 – February 2027
- 2022-present **Co-investigator.** *Understanding the links between parental and adolescent substance use; complementary natural experiments using the children of twins design* (R01 DA054087). Total: \$4,620,951. October 2022 – February 2027
- 2022-present **Co-investigator.** *Adult Progression of Adolescent Onset Substance Abuse Disorder in a High Risk Sample* (R01 DA053693). Total: \$3,244,420. August 2022 – May 2027
- 2020-2023 **Principal Investigator.** *The Role of Executive Functions in Cognitive Aging and Risk for Mild Cognitive Impairment* (R03 AG065643). Vanderbilt University Medical Center (transferred to CU Boulder in March 2023). Total: \$170,000. 40% effort. September 2020 – May 2023
- 2018-2019 **Co-investigator.** *SES Health Gradients in Late Life: Testing Models of Gene-Environment Interplay in an International Twin Consortium* (R01 AG059329). National Institute on Aging (University of California, San Diego subaward). 25% effort.

Other Research Support as Graduate Student, Postdoctoral Researcher, Research Faculty

- 2019-2022 **Research Assistant Professor/Research Instructor/Staff Scientist:** *Biomarkers of Rhythmic Communication: Integrating Foundational and Translational Approaches* (DP2 HD098859), *Neurobiological Markers of Rhythm: Risk and Resilience for Language Acquisition* (R01 DC016977), *Collaborative Research: NCS-FO Biology and Function of Prosody: Integrative Approach to Individual Differences* (National Science Foundation 1926794)
- 2017-2018 **Postdoctoral Researcher:** *Gene-Environment Interplay of Social Contexts and Aging-Related Outcomes* (R01 AG050595). University of California, San Diego subaward
- 2016-2019 **Postdoctoral Researcher:** *The VETSA Longitudinal Twin Study of Cognition and Aging* (R01 AG050595). University of California, San Diego.
- 2016 **Postdoctoral Researcher:** *Neural substrates of executive function: An fMRI twin study* (R01 MH062307). University of Colorado Boulder.

- 2014-2016 **Graduate Research Assistant:** National Institute for Mental Health Pre-Doctoral Training Grant: *Research Training: Mental Health Behavior Genetics* (T32 MH016880). University of Colorado Boulder.
- 2010-2013 **Graduate Research Assistant:** *Individual Differences in Executive Functions and Expressions of Racial Biases*, National Science Foundation (BCS 0847872).

PRESENTATIONS

Session chair

- 2024 *Cognition/Executive Function* (June 2024). Behavior Genetics Association, London, England.
- 2023 *Mental Health* (June 2023). Behavior Genetics Association, Murcia, Spain.
- 2022 *Substance Use* (June 2022). Behavior Genetics Association, Los Angeles, CA.
- 2019 *Neuropsychology: Novel Methods for Detecting Cognitive Change* (July 2019). Alzheimer's Association International Conference, Los Angeles, CA.

Papers presented at conferences

- 2025 **Gustavson, D. E.**, Gordon, R. L., Lense, M. D., Friedman, N. P., Wadsworth, S. J., Reynolds, C. A., & Maes, H. H. (June 2025). Music Engagement in Adolescence is Associated with Less Alcohol Consumption: A Gene-by-Environment Investigation. Talk presented at the Behavior Genetics Association annual meeting, Atlanta, Georgia.
- 2025 **Gustavson, D. E.**, Friedman, N. P., Corley, R. P., Wadsworth, S. J., Reynolds, C. A., & Maes, H. H. (June 2025). Genetic and environmental influences on music engagement across childhood and adolescence. Talk presented at the Behavior Genetics Association annual meeting, Atlanta, Georgia.
- 2025 Rader, L., Maes, H. H., Friedman, N. P., Gordon, R. L., Lense, M. D., Reynolds, C. A., Stallings, M. C., & **Gustavson, D. E.** (2025, October). Music engagement in adolescence is associated with less alcohol consumption and substance. Poster presented by Daniel Gustavson at the World Congress for Psychiatric Genetics, Cancun, Mexico.
- 2025 Gordon, R. L., Xia, P., Rubat du M rac, T.B., Wesseldijk, L., **Gustavson, D.E.**, Henechowicz, T. L., Lind, P., Via, M., Ramdas, S., Bignardi, G., Coon, H., Corcoran, K., de Hoyos, L., Maes, H., Furtjes, A., Ull n, F., Sk lad ttir,  . Th., Medland, S., Woldford, B.N., St Pourcain, B., Mehr, S. A., Pederson, O.B.V.,

- Hansen, T.F., Stefánsson, K., Hilton, C., Fisher, S. E., Mosing, M., Gisladdottir, R. S., and Eising, E. (2025, October) Genome-wide meta-analyses of musical activities in up to 75,000 individuals. 2025 American Society of Human Genetics (ASHG) Annual Meeting, Boston, MA.
- 2025 Bell, T. R., **Gustavson, D. E.**, Franz, C. E., Panizzon, M. S., Fennema-Notestine, C., Elman, J. A., Toomey, R., Jak, A. J., Jacobs, D., Dale, A. M., Tang, R., & Kremen, W. S. (June/July 2025). Association of Subjective Memory Decline with Objective Memory Decline and Alzheimer's Related Brain Structure. Presentation submitted to the Behavior Genetics Association annual meeting, Atlanta, Georgia (June 2025) and the Alzheimer's Association International Conference (July 2025).
- 2025 Reynolds, C. A., **Gustavson, D. E.**, Friedman, N. P., Pahlen, S. Corley, R. P., & Wadsworth, S. J. (June 2025). Visual-spatial performance and change at the cusp of midlife: Education and polygenic contributions. Presentation submitted to the Behavior Genetics Association annual meeting, Atlanta, Georgia.
- 2025 Geel, L. G., Corley, R. P., Reynolds, C. A., Rhee, S. H., & Gustavson, D. E. (June 2025). Predictors of Alcohol Consumption: The Role of Genetics and Impulsivity from Adolescence to Adulthood. Presentation submitted to the Behavior Genetics Association annual meeting, Atlanta, Georgia.
- 2025 Karhadkar, M. A., Friedman, N. P., Corley, R. P., Reynolds, C. A., & **Gustavson, D. E.** (May/June 2025). Genetic and Environmental Associations Between Processing Speed and Executive Functions across Adolescence and Established Adulthood. Presentation submitted to the European Social Science Genetics Network annual meeting, Bristol, UK (May 2025) and the Behavior Genetics Association annual meeting, Atlanta, Georgia (June 2025).
- 2025 Di Dio, A.M., Corley, R.P., Gresko, S.A., **Gustavson, D.E.**, Muñoz, E., Rieselbach, M.M., Smolker, H.R., Reynolds, C.A., & Rhee, S.H. (June 2025). Evaluation of evidence for environmental influences on adult neighborhood disadvantage and socioeconomic outcomes: Results from a longitudinal twin and adoption study. Poster presentation submitted to the Behavior Genetics Association annual meeting, Atlanta, Georgia.
- 2025 Qi, B., Highland, H. M., Graff, M., Bulik, C. M., Rhee, S. H., Stallings, M., Corley, R., Hewitt, J. K., **Gustavson, D. E.**, Reynolds, C. A., North, K. E., & Munn-Chernoff, M. A. (June 2025). Genetic and Environmental Contributions to the Longitudinal Associations Between Addictive Behaviors and BMI: A Cross-Lagged Twin Analysis. Presentation submitted to the Behavior Genetics Association annual meeting, Atlanta, Georgia.
- 2024 **Gustavson, D. E.**, Bell, T., Panizzon, M. S., Elman, J. A., Franz, C. E., Kremen, W. S., & Reynolds, C. A. (October 2024). Impulsivity in midlife predicts

subjective cognitive decline and mild cognitive impairment six years later. Poster presentation at the World Congress for Psychiatric Genetics, Singapore, Singapore.

- 2024 **Gustavson, D. E.**, Borriello, G. A., Corley, R. P., Rhea, S. A., Wadsworth, S. J., Friedman, N. P., & Reynolds, C. A. (June 2024). Strong stability of cognitive ability from infancy through adulthood. Oral presentation at the Behavior Genetics Association annual meeting 2024, London, UK.
- 2024 Maes, H. H., **Gustavson, D. E.**, Friedman, N. P., Corley, R. P., Wadsworth, S. J., & Reynolds, C. A. (June 2024). Genetic epidemiology of music engagement from early to late adolescence using twin-parent modeling. Anticipated oral presentation by Hermine Maes at the Behavior Genetics Association annual meeting 2024, London, UK.
- 2024 Borriello, G. A., **Gustavson, D. E.**, Corley, R. P., Rhea, S. A., Wadsworth, S. J., Friedman, N. P., & Reynolds, C. A. (June 2024). Strong stability of cognitive ability from infancy through adulthood. Oral presentation by Giulia Borriello at the Behavior Genetics Association annual meeting 2024, London, UK
- 2024 Ehinmowo, M. I., Grotzinger, A. D., **Gustavson, D. E.**, & Friedman, N. P. (June 2024). Executive function mediates the genetic associations between ADHD and comorbid psychiatric conditions. Oral presentation by Michael Ehinmowo at the Behavior Genetics Association annual meeting 2024, London, UK
- 2024 Rader, L., Zorina-Lichtenwalter, K., **Gustavson, D. E.**, & Friedman, N. P. (June 2024). Do chronic pain polygenic scores discovered in older adults in the United Kingdom Biobank (UKB) predict adolescent pain reports in the Adolescent Brain Cognitive Development (ABCD) study? Oral presentation by Lydia Rader at the Behavior Genetics Association annual meeting 2024, London, UK
- 2024 McCabe, C. J., Wall, T.L., Stallings, M., Hopfer, C., Rhee, S., **Gustavson, D. E.**, Corley, R., Hinckley, J., Ross, J. M., & Ellingson, J. (2024, June). Evaluating directional associations between antisocial behavior and alcohol use disorder from adolescence through middle adulthood. Poster presented at the Research Society on Alcoholism annual meeting.
- 2024 **Gustavson, D. E.**, Maes, H. H., Corley, R. P., Wadsworth, S. J., Friedman, N. P., & Reynolds, C. A. (May 2024). Genetic and environmental underpinnings of music engagement in childhood through adolescence. Poster presented at the European Social Science Genetics Network meeting, Rotterdam, NL.
- 2024 Skoler, E., Geel, L., **Gustavson, D. E.**, Rhee, S. H. (April, 2024). Associations between parental autonomy granting and adolescent anxiety in a longitudinal adoption study. Poster presentation by E. R. Skoler at the 94th annual meeting of the Rocky Mountain Psychological Association, Denver, CO.

- 2024 Geel, L. G., Skoler, E. R., **Gustavson, D. E.**, & Rhee, S. H., (April 2024). Associations between parent and child negative emotionality and parenting. Oral presentation by L. G. Geel at the 94th annual meeting of the Rocky Mountain Psychological Association, Denver, CO.
- 2024 Lorenz, A., Liu, J., Fram, N. R., **Gustavson, D. E.**, Gordon, R. L., McBride C., Lui Kelvin FH, Nayak, S., Magne, C. L. (2024). Examining the complementary effects of prosody perception and musical rhythm perception on adult silent reading abilities. Anticipated presentation at the Association for Psychological Science annual meeting, 2024.
- 2023 **Gustavson, D. E.**, Elman, J. A., Reynolds, C. A., Eyler, L. T., Fennema-Notestine, C., Gillespie, N. A., Neale, M. C., Panizzon, M. S., Lyons, M. J., Franz, C. E., and Kremen, W. S. (July 2023). Predicted brain age difference scores at age 56 are associated with executive function changes across 12 years. Poster presented at the Alzheimer's Association International Conference 2023, Amsterdam, Netherlands.
- 2023 **Gustavson, D. E.**, Stern, E. F., Reynolds, C. A., Wadsworth, S. J., Rhee, S. H., & Friedman, N. P (June 2023). Examining relations among diagnosis versus self-reported ratings of internalizing traits using both genomic and twin/adoptive approaches. Oral presentation at the Behavior Genetics Association annual meeting 2023, Murcia, Spain.
- 2023 **Gustavson, D. E.**, Bell, T., Buchholz, E., Luczak, S. E., Reynolds, C. A., McGue, M., Nygaard, M., Kremen, W. S., & Franz, C. E. for the IGEMS Consortium (June 2023). Genetic and environmental influences on alcohol consumption in middle to late life. Paper presented by Tyler Bell at the Behavior Genetics Association annual meeting 2023.
- 2023 Bell, T.*, **Gustavson, D. E.***, Buchholz, E., Luczak, S. E., Reynolds, C. A., McGue, M., Plassman, B. L., Nygaard, M., Kremen, W. S., & Franz, C. E. for the IGEMS Consortium (June 2023). Genetic and environmental influences on alcohol consumption in middle to late life. Talk submitted for the Behavior Genetics Association annual meeting, Murcia, Spain. * indicates the authors contributed equally.
- 2023 Liu, J.Z., Nayak, S., Wang, Y., **Gustavson, D.E.**, Lui, K.F.H., McBride, C., Below, J.E., Gordon, R.L., Magne, C.L. (May 2023) "Got Rhythm? Individual Differences in Musical Rhythm Discrimination Predict Variation in Silent Reading Fluency" Poster Presentation at the annual meeting for the Association for Psychological Science, *Washington, DC*.
- 2022 **Gustavson, D. E.**, Archer, D. B., Elman, J. A., Fennema-Notestine, C., Hagler, D. J., Panizzon, M. S., Shashikumar, N., Hohman, T. J., Jefferson, A. L., Lyons, M.

J., Franz, C. E., & Kremen, W. S. (August 2022). Executive functions and episodic memory are associated with extracellular white matter microstructure in early old age. Poster presented at the Alzheimer's Association International Conference 2022.

2022 **Gustavson, D. E.**, Morrison, C., Mallard, T., T., Fontanillas, P., Elson, S. L., the 23andMe Research Team, Friedman, N. P., Palmer, A. A., & Sanchez-Roige, S. (June 2022). Executive function and impulsivity predict distinct genetic variance in externalizing, internalizing, thought disorders, and cognition: A genomic structure equation modeling investigation. Talk presented at the Behavior Genetics Association annual meeting, Los Angeles, CA.

2022 **Gustavson, D. E.**,* Coleman, P. L.,* Wang, Y., Nitin, R., Petty, L. E., Bush, C. T., Mosing, M. A., Wesseldijk, L. W., Ullén, F., 23andMe Research Team, Below, J. E., Cox, N. J., & Gordon, R. L. (June 2022). Exploring the genetics of individual differences in rhythmic perception and musical engagement in the Vanderbilt Online Musicality Study. Talk presented by Peyton Coleman at the Behavior Genetics Association annual meeting, Los Angeles, CA. * indicates the authors contributed equally.

2022 Brick, L. A., Benca-Bachman, C. E., **Gustavson, D. E.**, Johnson, E., Palmer, R. H. C. (June 2022). Distinct associations among genetic internalizing and externalizing factors with polysubstance use among young adults. Talk presented by Leslie Brink at the Behavior Genetics Association annual meeting, Los Angeles, CA.

2022 Coleman, P. L.*, Scartozzi, A. C.*, **Gustavson, D. E.**, Wang, Y., Nitin, R., Bush, C. T., Nayak, S., Below, J. E., Gordon, R. L. (August 2022). Multi-tissue transcriptome-wide association study identifies novel gene expression patterns for rhythmic perception and music engagement: Analysis and implications for cross-trait language and health associations. Talk presented by Peyton Coleman and Alyssa Scartozzi (co-first authors) at Society of Music Perception and Cognition Conference, Portland, Oregon.

2022 Nayak, S., **Gustavson, D. E.**, Anglada-Tort, M., Wang, Y., Bush, C., Liu, J.Z., Ladanyi, E., Bryan, K.M., Nitin, R., Ullen, F., Mosing, M., Magne C.L., Lui, K.F.H., McBride, C., Jacoby, N., & Gordon, R.L. (Aug 2022). Covariation between musical rhythm and speech-language and reading traits in the general population: converging evidence from five large adult cohorts. Talk presented by Srishti Nayak at the biennial meeting of the Society for Music Perception and Cognition. Portland, Oregon

2022 Nitin, R., **Gustavson, D. E.**, A. Aaron., Boorom, O. A., Bush, C. T., Wiens, N., Vaughan, C., Persici, V., Blain, S. D., Soman, U., Hambrick, D. Z., Camarata, S. M., McAuley, J. D., Gordon, R. L. (Aug 2022). Individual differences in rhythm and grammar in typically developing children. Talk presented by Rachana Nitin at

the biennial meeting of the Society for Music Perception and Cognition. Portland, Oregon.

- 2022 Reynolds, C. A., Elman, J. A., **Gustavson, D. E.**, Panizzon, M. S., Lyons, M. J., Franz, C. E., & Kremen, W. S. (April 2022). Polygenic scores for educational attainment and Alzheimer's disease risk differentially predict visual spatial reasoning and visual memory across midlife. Poster presented at the Cognitive Aging Conference.
- 2021 **Gustavson, D. E.**, Reynolds, C. A., Corley, R. P., Wadsworth, S. J., Hewitt, J. K., & Friedman, N. P. (Nov 2021). Genetic associations between executive functions and intelligence: A combined twin and adoption study. Poster presented at the Psychonomic Society's 62nd Annual Meeting, 2021
- 2021 Nayak, S., **Gustavson, D. E.**, Wang, Y., Below, J. E., Gordon, R. L. & Magne, C. (June 2021). Validation of a novel speech rhythm perception test: Convergence with musical rhythm and language and reading difficulties. Poster presentation at the Rhythm Production and Perception Workshop, 2021
- 2021 **Gustavson, D. E.**, Hewitt, J. K., Friedman, N. P., & Gordon, R. L. (June 2021). Distinct genetic influences on engagement with musical instruments, singing, and dancing in early adolescence and their associations with vocabulary and executive functions 5 years later. Talk presentation at Neurosciences and Music VII, Aarhus, Denmark, June 2021.
- 2021 **Gustavson, D. E.**, Reynolds, C. A., Hohman, T. J., Jefferson, A. L., Elman, J. A., Panizzon, M. S., Lyons, M. J., Franz, C. E., & Kremen, W. S (July 2021). Alzheimer's disease polygenic scores predict changes in executive function across 12 years in late middle age. Poster presented at the Alzheimer's Association International Conference.
- 2020 **Gustavson, D. E.**, Friedman, N. P., Reynolds, C. A., & Gordon, R. (October 2020). Distinct genetic influences on musical instrument, singing, and dance engagement in early adolescence and their associations with substance use behaviors. Poster presentation at the World Congress for Psychiatric Genetics, October, 2020.
- 2020 Mallard, T. T., Savage, J. E., Johnson, E. C., Huang, Y., **Gustavson, D. E.**, Jennings, M. V., Clarke, T., Palmer, A. A., & Sanchez-Roige, S. (October 2020). Multivariate GWAS elucidates the genetic architecture of alcohol consumption and misuse, corrects biases, and reveals novel associations with disease. Poster presentation at the World Congress for Psychiatric Genetics, October, 2020
- 2020 **Gustavson, D. E.**, Panizzon, M. S., Kremen, W. S., Reynolds, C. A., Pahlen, S., Nygaard, M., Wod, M., Catts, V. S., Lee, T., Gatz, M., & Franz, C. E. (July 2020). Genetic and environmental influences on semantic verbal fluency across

midlife, *Alzheimer's & Dementia*, 16, e037410. Virtual poster presentation at the Alzheimer's Association International Conference.
<https://doi.org/10.1002/alz.037410>

- 2020 **Gustavson, D. E.**, Wang, Y., Below, J., Cox, N., Magne, C., Gordon, R.L. (June 2020). Investigating the biological basis of speech rhythm sensitivity with internet-based, scalable approaches. Poster presentation at Sixth Annual BRAIN Initiative Investigators Meeting, virtual conference, June 1-2, 2020.
- 2019 **Gustavson, D. E.**, Panizzon, M. S., Elman, J., Franz, C. E., Jak, A. J., Sanderson-Cimino, M., Toomey, R., Lyons, M. J., & Kremen, W. S. (July 2019) Multiple memory tests substantially improve longitudinal prediction of progression to mild cognitive impairment, *Alzheimer's & Dementia*, 15, P896-P897. Oral presentation at the Alzheimer's Association International Conference, Los Angeles, CA.
<https://doi.org/10.1016/j.jalz.2019.06.4658>
- 2019 **Gustavson, D. E.**, Franz, C. E., Panizzon, M. S., Elman, J., Jak, A. J., Sanderson-Cimino, M., Toomey, R., Lyons, M. J., & Kremen, W. S. (July 2019) Executive functions and impulsivity predict perception of cognitive decline six years later, *Alzheimer's & Dementia*, 15, P451. Poster presentation at the Alzheimer's Association International Conference, Los Angeles, CA.
<https://doi.org/10.1016/j.jalz.2019.06.1081>
- 2019 **Gustavson, D. E.**, Franz, C. E., Panizzon, M. S., Lyons, M. J., & Kremen, W. S. (June 2019) Internalizing and Externalizing Psychopathology in Middle Age: Genetic and Environmental Architecture and Stability of Symptoms Over 15 to 20 Years. Oral presentation at the 49th annual meeting of the Behavior Genetics Association, Stockholm, Sweden.
- 2019 **Gustavson, D. E.**, Elman, J., Panizzon, M. S., Franz, C. E., Reynolds, C. A., Jacobson, K., Zuber, J., Sanderson-Cimino, M., Xian, H., Toomey, R., Lyons, M. J., & Kremen, W. S. (February 2019) Episodic memory and semantic fluency predict 6-year progression to MCI in cognitively normal middle-aged adults. Oral presentation at the International Neuropsychological Association, New York, NY.
- 2018 **Gustavson, D. E.**, Franz, C. E., Kremen, W. S., Corley, R. P., Hewitt, J. K., & Friedman, N. P. (October 2018). Common genetic influences on impulsivity facets are related to goal management, psychopathology, and personality. Oral and poster presentation at the Integrating Genetics and the Social Sciences Conference, Boulder, CO.
- 2018 **Gustavson, D. E.**, Panizzon, M. S., Elman, J. A., Franz, C. E., Reynolds, C. A., Jacobson, K. P., Xian, H., Toomey, R., Lyons, M. J., and Kremen, W. S. (June 2018). Genetic and environmental influences on verbal fluency: A new framework. Oral presentation at the 48th annual meeting of the Behavior Genetics Association, Boston, MA.

- 2018 **Gustavson, D. E.**, Panizzon, M. S., Elman, J. A., Franz, C. E., Reynolds, C. A., Jacobson, K. P., Xian, H., Toomey, R., Lyons, M. J., and Kremen, W. S. (May 2018). Genetic and environmental influences on verbal fluency: A new framework. Poster presentation at the Cognitive Aging Conference, Atlanta, GA and at the 13th Annual Lewis L. Judd Young Investigators Symposium at the University of California, San Diego (April 2018).
- 2017 **Gustavson, D. E.**, & Miyake, A. (July 2017). Genetic influences on procrastination underlie its correlations with personality, cognition, and psychopathology. Oral presentation at the 10th Biennial Procrastination Research Conference, Chicago, IL.
- 2017 Miyake, A., Carruth, N. P., Lurquin, J. H., **Gustavson, D. E.**, & Kane, M. J. (July 2017) Assignment submission times as objective measures of individual differences in academic procrastination: A classroom study (July 2017). Oral presentation by A. Miyake at the 10th Biennial Procrastination Research Conference, Chicago, IL.
- 2017 Carruth, N. P., **Gustavson, D. E.**, Lurquin, J. H., Kane, M. J., & Miyake, A. (July 2017). Identifying the key malleable predictors of academic procrastination through a semester-long, classroom-based study. Poster presentation by N. Carruth at the 10th Biennial Procrastination Research Conference, Chicago, IL.
- 2017 **Gustavson, D. E.**, Panizzon, M. S., Franz, C. E., Friedman, N. P., Reynolds, C. A., Jacobson, K. J., Xian, H., Lyons, M. J., & Kremen, W. S. (June 2017). Genetic/environmental architecture and stability of executive functions in midlife. Oral presentation at the 47th annual meeting of the Behavior Genetics Association, Oslo, Norway.
- 2017 Kremen, W., Logue, M., Panizzon, M., Elman, J., Gillespie, N., Hatton, S., **Gustavson, D.**, Andreassen, O., Dale, A., Lyons, M., Neale, M., Reynolds, C., & Franz, C (June 2017). Alzheimer's disease polygenetic risk score identified mild cognitive impairment in adults in their 50s. Oral presentation by W. Kremen at the 47th annual meeting of the Behavior Genetics Association, Oslo, Norway.
- 2016 **Gustavson, D. E.**, du Pont, A., Rhee, S. H., Corley, R. P., Hewitt, J. K., & Friedman, N. P. (June 2016). Genetic and environmental associations between procrastination and internalizing/externalizing problems. *Behavior Genetics*, 46, 785-785. Oral presentation at the 46th annual meeting of the Behavior Genetics Association, Brisbane, Australia.
- 2016 Hatoum, A., **Gustavson, D. E.**, Rhee, S. H., Corley, R. P., Hewitt, J. K., & Friedman, N. P. (June 2016). Do executive functioning and impulsivity predict overlapping variation in problem behaviors? *Behavior Genetics*, 46, 787-787.

Oral presentation by A. Hatoum at the 46th annual meeting of the Behavior Genetics Association, Brisbane, Australia.

- 2016 **Gustavson, D. E.** Executive dysfunction in trait anxiety (April, 2016). Oral presentation at the 86th annual meeting of the Rocky Mountain Psychological Association, Denver, CO.
- 2016 Hampton, L. E., Lurquin, J. H., **Gustavson, D. E.**, & Carruth, N. C. (April, 2016). Forgiving the self and others: Exploring component level differences and the effects of personality. Oral presentation by L. E. Hampton at the 86th annual meeting of the Rocky Mountain Psychological Association, Denver, CO. *Winner of RMPA Student Research Award.*
- 2015 **Gustavson, D. E.**, Lurquin, J. H., Michaelson, L. E., Barker, J. E., Carruth, N. P., von Bastian, C., & Miyake, A. (November, 2015). Executive dysfunction in trait anxiety. Poster presentation at the Psychonomic Society Annual Scientific Meeting, Chicago, IL.
- 2015 **Gustavson, D. E.**, Miyake, A., Hewitt, J. K., & Friedman, N. P. (June, 2015). Understanding the cognitive and genetic underpinnings of procrastination: Evidence for shared genetic influences with goal management and executive function abilities. *Behavior Genetics*, 45, 659-660. Oral presentation at the 45th annual meeting of the Behavior Genetics Association, San Diego, CA.
- 2015 Friedman, N. P., **Gustavson, D. E.**, Corley, R. P., Stallings, M. C., & Hewitt, J. K. (June, 2015). Stability and change in the relations among executive functions and substance use and dependence from late adolescence to early adulthood. *Behavior Genetics*, 45, 656. Oral presentation by N. P. Friedman at the 45th annual meeting of the Behavior Genetics Association, San Diego, CA.
- 2014 **Gustavson, D. E.**, Miyake, A., Hewitt, J. K., & Friedman, N. P. (June, 2014). Genetic relations among procrastination, impulsivity, and goal-management ability. *Behavior Genetics*, 44, 661. Oral presentation at the 44th annual meeting of the Behavior Genetics Association, Charlottesville, VA.
- 2014 **Gustavson, D. E.**, Miyake, A., Hewitt, J. K., & Friedman, N. P. (March, 2014). Genetic relations among procrastination, impulsivity, and goal-management ability: Implication for the evolutionary origin of procrastination. Poster presentation at the 2014 International Workshop on Statistical Genetic Methods for Human Complex Traits, Boulder, CO. *Winner of Lindon Eaves Award for Best Poster.*
- 2013 **Gustavson, D. E.**, Wagenknecht, L. E., Miyake, A. (January, 2013). The effects of religious fundamentalist values and self-affirmation on the expression of implicit gender bias. Poster presentation at the Society for Personality and Social Psychology Annual Conference, New Orleans, LA.

- 2012 **Gustavson, D. E.,** & Miyake, A. (November, 2012). Trait worry is associated with deletion difficulty but not storage capacity. Poster presentation at the Psychonomic Society Annual Scientific Meeting, Minneapolis, MN.
- 2012 **Gustavson, D. E.,** Miyake, A., Altamirano, L. J., Haynes, N. S., & Ito, T. (January, 2012). The contribution of executive-control to the manifestation of implicit racial bias: A dual-task investigation. Poster presentation at the Society for Personality and Social Psychology Annual Meeting, San Diego, CA.
- 2012 **Gustavson, D. E.,** & Miyake, A. (January, 2012). Anxiety and updating: Trait worry is related to selection difficulty during deletion. Poster presentation at the Determinants of Executive Function and Dysfunction Annual Meeting, Boulder, CO.
- 2011 **Gustavson, D. E.** & Miyake, A. (November, 2011). Anxiety and updating: Trait worry is related to selection difficulty during deletion. Poster presentation at the Psychonomic Society Annual Scientific Meeting, Seattle, WA.

Other Presentations

- 2022 **Gustavson, D. E.,** Reynolds, C. A., Hohman, T. J., Jefferson, A. L., Elman, J. A., Panizzon, M. S., Lyons, M. J., Franz, C. E., & Kremen, W. S (March 2022). Alzheimer's disease polygenic scores predict changes in executive function across 12 years in late middle age. Poster presented at the Vanderbilt Memory and Alzheimer's Center's Alzheimer's Research Day, Nashville, TN.
- 2020 **Gustavson, D. E.** (November, 2020). Associations between music engagement, cognition, and substance use in adolescence: Using twin and family studies to explore music genetics. Oral presentation at the Cognitive Science of Learning and Development series, Department of Psychology and Human Development, Vanderbilt University, Nashville, TN.

TEACHING AND MENTORSHIP EXPERIENCE

- 2025-present Mentored Postdoctoral Scholars at the Institute for Behavioral Genetics, CU Boulder. Dr. Lydia Rader (May 2025-present); Dr. Linghua Jiang (July 2025-present); Dr. Tara Henechowicz (anticipated Nov 2025)
- 2024-present Mentored graduate students through the Behavioral, Psychiatric, and Statistical Genetics program, Department of Psychology and Neuroscience, CU Boulder. Lilia Geel (2024-present); Mohini Karhadkar (2024-present)

- 2023-present Co-advised Honors Thesis projects at the University of Colorado Boulder, Department of Psychology and Neuroscience. Lilia Geel & Emma Skoler in (AY 2023-2024). Kathleen Peifer (AY 2025-2026)
- 2023-present Co-mentored undergraduate students through the Department of Psychology and Neuroscience, CU Boulder (PSYC/NRSC 4841 or related courses). Lilia Geel (2023-2024); Emma Skoler (2023-2024); Kathleen Peifer (2024-present); Vibhu Uppugonduri (2025-present)
- 2022-present Faculty Member: International Statistical Genetics Workshop – Statistical Genetic Methods for Human Complex Traits. Boulder, CO. 2022, 2023, 2024, and 2025 annual workshops.
- 2025 Taught the graduate-level course Concepts in Behavioral Genetics: Scientific Integrity/Ethics (PSYC 5112; Spring 2025).
- 2024 Mentored 2 students as part of the Summer Undergraduate Research Fellowship (SURF) program in the Department of Psychology and Neuroscience at CU Boulder.
- 2023 Advised high school student (Fairview High School, Boulder CO) in neuroimaging, cognitive, and genetic methods (Summer and Fall 2023).
- 2022 – 2023 Advised Honors Thesis student at Vanderbilt University Medical Center (Gabija Zilinskaite).
- 2020 – 2022 Initiated and lead twice-monthly “Data Analysis” call for the Vietnam Era Twin Study of Aging, where about 12 trainees, postdocs, and professors work through advanced statistical modeling topics.
- 2020 Mentored a high school student in the Music Cognition Lab as part of the School for Science and Math at Vanderbilt
- 2020 – 2022 Lectures: Vanderbilt University Medical Center.
- July 2020 – guest lecture on genetic association studies and Vanderbilt’s BioVU resource (Resident Research Bootcamp).
 - February 2021 & January 2022 – guest lecture on heritability for Human Genetics II course.
- 2017-2018 Lectures: University of California, San Diego. September 2017, July 2018, August 2018, October 2018. Various undergraduate and graduate-level courses.
- 2016-2019 Mentored 2 minority undergraduate students on research projects as part of the Advancing Diversity in Aging Research program through the University of California, San Diego and San Diego State University.

- 2010-2016 Led weekly educational lab meetings (10-20 students per semester) through cognitive psychology lab of Dr. Akira Miyake. Course: Independent Study (PSYC 2841/4841). Department of Psychology & Neuroscience, University of Colorado Boulder.
- 2010-2016 Co-supervised 6 Honors Thesis Projects in the Department of Psychology & Neuroscience, University of Colorado Boulder
- 2010-2014 Teaching Assistant: Department of Psychology & Neuroscience, University of Colorado Boulder.
- 2009 Undergraduate teaching Assistant: Department of Psychology & Neuroscience, University of Colorado Boulder. Courses/Lectures Taught as Teaching Assistant: Introduction to Psychology; Introduction to Social Psychology; Statistics and Research Methods; Advanced Cognitive Psychology

WORKSHOPS

- 2014-2019 International Workshop on Statistical Genetic Methods for Human Complex Traits (Advanced Workshop), Boulder, CO. March 2014, 2015, 2017, and 2019
- 2018 Statistical Horizons Longitudinal Analyses using Structural Equation Modeling Workshop, Los Angeles, CA. May 2018

SERVICE TO PROFESSION

Contributions to Scientific Societies

- 2025-present Information Officer for the Behavior Genetic Association executive committee

Served as Peer Reviewer for the Following Journals

Acta Psychologica
Advanced Science
Aging, Neuropsychology, and Cognition
Alcohol: Clinical and Experimental Research
Behavior Genetics
Behavior Research Methods
Biological Psychiatry
Contemporary Educational Psychology
Developmental Cognitive Neuroscience
Developmental Psychology
Developmental Science
Early Childhood Development and Care
Emotion
Eurasian Journal of Educational Research

European Journal of Personality
Evolutionary Psychology
Frontiers in Psychology
Health Psychology Research
Intelligence
International Journal of Geriatric Psychiatry
Journal of Alzheimer's Disease
Journal of American College Health
Journal of Experimental Psychology: General
Journal of Experimental Psychology: Human Perception and Performance
Journal of Learning and Instruction
Journal of Psychopathology and Clinical Science
Journal of Speech, Language, and Hearing Research
Language Learning and Development
Learning and Individual Differences
McGill Undergraduate Research Journal
Motivation and Emotion
NeuroImage: Clinical
Neuroscience
Open Journal of Medical Psychology
PeerJ – The Journal of Life and Environmental Sciences
Personality and Individual Differences
Personality and Social Psychology Bulletin
PLOS Genetics
PLOS One
Psychiatry Research
Psychogeriatrics
Psychological Science
Psychology of Addictive Behaviors
Psychonomic Bulletin & Review
Psychopharmacology
Psychophysiology
Scientific Reports

Served as Editor for Journal Articles

PLOS One (guest editor)

Served as External Peer Reviewer for Grant Review

National Science Center, Poland
National Science Foundation, USA

Transparency in Science

Pre-Registered Projects on Open Science Foundation

- Exploring beat synchronization phenotypes and their correlations with health phenotypes
- Evaluation of Alternative Models Explaining Parent–Child Similarity in Negative Emotionality: A Longitudinal Adoption Study
- Do musical parents have children with better grammar? (*currently private*)
- Music and self-reported emotional regulation in children (*currently private*)
- Heritability of activity engagement in adolescents and associations with reading and executive functions (*currently private*)

Other Projects on Open Science Foundation (open data and methods)

- Genetic and Environment Influences on Music Engagement Across Childhood and Adolescence (*currently private*)
- Stability of General Cognitive Ability from Infancy to Adulthood: A Combined Twin and Genomic Investigation <https://osf.io/a26j7/>
- Using polygenic scores for Alzheimer’s disease to identify cognitive markers in early adulthood (*currently private*)
- Impulsivity Facets and Substance Use Involvement: Insights from Genomic Structural Equation Modeling <https://osf.io/ba8dy/>
- Lifestyle and psychosocial associations with cognition at the cusp of midlife using twins and siblings <https://osf.io/tep53/>
- Genomic structural equation study reveals links between anorexia nervosa and delay discounting and lack of perseverance but not other facets of impulsivity <https://osf.io/4tjw5/>
- Executive Function and Impulsivity Predict Distinct Genetic Variance in Externalizing, Internalizing, and Thought Disorders: A Genomic Structural Equation Modeling Study <https://osf.io/nfzxs/>
- Evidence for Strong Genetic Correlations Among Internalizing Psychopathology and Related Self-Reported Measures Using Both Genomic and Twin/Adoptive Approaches <https://osf.io/dzn9w/>
- Exploring the genetics of rhythmic perception and musical engagement in the Vanderbilt Online Musicality Study <https://osf.io/fdbez/>
- Anorexia Nervosa is Genetically Associated With Delay Discounting But Not Other Facets Of Impulsivity: A Genomic Structural Equation Investigation (*currently private*)
- Genetic associations between executive functions and intelligence: A combined twin and adoption study <https://osf.io/rk6yv/>
- Advancing the understanding of individual differences in attentional control: Theoretical, methodological, and analytical considerations <https://osf.io/kw2a9/>
- The latent genetic structure of impulsivity and its relation to internalizing psychopathology <https://osf.io/5x3ft/>
- Lower general executive function is primarily associated with trait worry: A latent variable analysis of negative thought/affect measures <https://osf.io/cs8k3/>
- Evidence for transdiagnostic repetitive negative thinking and its association with rumination, worry, and depression and anxiety symptoms <https://osf.io/9gmnj/>

Press

- 2025 Press for “Stability of cognitive ability from infancy through adulthood: A combined twin and genomic investigation”.
<https://www.abc.net.au/listen/programs/healthreport/cognitive-ability-intelligence/105357942> (ABC Radio National – Health Report)
<https://www.colorado.edu/today/2025/06/16/what-does-babys-babbling-tell-you-about-their-future-intelligence-more-you-think> (CU Boulder Today)
<https://www.cpr.org/2025/06/21/baby-babbling-future-intelligence-cu-study/> (Colorado Public Radio)
<https://www.psypost.org/cognitive-ability-becomes-increasingly-stable-after-age-3-study-finds/> (PsyPost)
This is only a small selected list of news articles for this study, which also included Zoom interviews aired on Channel 7 and 9 news in the Denver area
- 2024 Press for “Brain reserve in midlife is associated with executive function changes across 12 years” <https://www.colorado.edu/asmagazine/2024/11/13/detecting-cognitive-decline-its-symptoms-start>
- 2022 Various press for “Genome-wide association study of musical beat synchronization demonstrates high polygenicity” (Niarchou et al., 2022).
ABC New South Wales (Mornings show with Kia Handley, 6/28/2022)
ABC Melbourne (radio interview with Raf Epstein, 6/16/2022)
3AW Breakfast (radio interview with Ross Stevenson & Russel Howcroft, 6/16/2022)
- 2014-2015 Various interviews and press for “Genetic relations among procrastination, impulsivity, and goal-management ability: Implications for the evolutionary origin of procrastination” (Gustavson et al., 2014). Including:
Women’s Health (Magazine)
Science et Vie (Magazine)
Open Forum (Website)
Colorado Public Radio (Radio interview)
Article featured on talk shows including Ellen and the Tonight Show with Jimmy Fallon (e.g., <https://www.youtube.com/watch?v=NKMiam0J0Hs>)

OTHER DEPARTMENTAL AND UNIVERSITY SERVICE

- 2022-present Manager of Internal Wiki for the Institute of Behavioral Genetics (IBG), University of Colorado Boulder, which hosts data and information about various projects at IBG. <https://ibg.colorado.edu/dokuwiki/doku.php?id=start>. Also head of the Data and Script Repository Committee at IBG since 2024.
- 2020-2022 Service to Vanderbilt Memory and Alzheimer’s Center (VMAC): Evaluated trainee presentations for poster prizes at 2nd and 3rd Alzheimer’s Disease Research

Day (November 2020, March 2022). Evaluated grant applications for VMAC inaugural Pilot and Feasibility Grant Program (December 2020).

2014-2015 United Government of Graduate Students (CU Boulder): Vice President of Finance & Communications Chair. Graduate student member of the Boulder Faculty Assembly's "Budget and Planning Committee" and "Administrator Appraisal Committee".

PROFESSIONAL MEMBERSHIPS

2016-Present	Behavior Genetics Association
2018-2019	International Neuropsychological Association
2019-Present	Alzheimer's Association International Society to Advance Alzheimer's Research and Treatment
2020-Present	Psychonomic Society

REFERENCES

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