Jamie L. Hanson

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Academic Appointments

	University of Pittsburgh Associate Professor	Pittsburgh, PA
09/2016 - 05/2024	Department of Psychology University of Pittsburgh Assistant Professor	Pittsburgh, PA
09/2016 -	Department of Psychology University of Pittsburgh Research Scientist	Pittsburgh, PA
04/2021 -	Learning Research and Development Center University of Pittsburgh Faculty Affiliate Center on Race and Social Problems	Pittsburgh, PA

Education & Training

02/2014 – 08/2016	University of North Carolina at Chapel Hill and Duke University	Durham, NC
	Postdoctoral Fellow, Center for Developmental Science and	
	Carolina Consortium on Human Development Supervisors: Drs. Ahmad Hariri and Kenneth Dodge	
09/2005 -02/2014	University of Wisconsin-Madison	Madison, WI
	Ph.D., Individual Graduate Major in Developmental Affective	
	Neuroscience, Department of Psychology	
	Supervisors: Drs. Richard Davidson and Seth Pollak	
08/1999 - 07/2003	University of Pennsylvania	Philadelphia, PA
	B.A. with Honors in Psychology (Magna Cum Laude)	
	Thesis Advisor: Dr. Martha Farah	

Grant Funding

2024-2026	National Institute on Aging, F31 (<u>F31AG090048)</u> Proposal Title: A Different Type of Economic Fragility: Wealth and Adolescent Problem Behavior, Role: Co-Sponsor (for Jermon Drake)
2023-2028	National Institute of Child Health and Human Development, R01 (<u>HD110423</u>) Proposal Title: A Different Type of Economic Fragility: Wealth and Adolescent Problem Behavior
	Total Costs: \$ 2,936,380; Role: Co-Investigator
2022-2024	National Institute of Mental Health, R21 (MH128793) Proposal Title: Investigating
	Links Between Racial and Ethnic Discrimination, Neurobiology, and Internalizing
	Symptomatology
	Direct Costs: \$250,000; Role: Principal Investigator
2022-2024	Institute of Education Sciences, Exploration Grant (R305A220236) Proposal Title:
	COVID-19 Adapted Schooling and Adolescents' Academic and Socioemotional
	Adjustment
0000 0000	Total Costs: \$892,623; Role: Co-Investigator
2022-2023	Internal Award, Learning Research & Development Center, University of Pittsburgh <i>Proposal Title: Testing Links Between Motivation, Achievement, and Neurobiology</i>

	Direct Costs: \$101,768; Role: Principal Investigator
2021	Pitt Momentum Funds, University of Pittsburgh
	Proposal Title: Understanding the Role of the Brain in Race/Ethnicity Based
	Stressors and Behavioral Challenges Among Youth of Color
	Direct Costs: \$52,174; Role: Principal Investigator
2021	Development Fund Seed Grant, CMU-Pitt BRIDGE (MRI) Center, University of
	Pittsburgh and Carnegie Mellon University
	Proposal Title: TeenBrainOnline: Breaking New Ground in Resolving Teen Mental
	Health Challenges
	Direct Costs: \$31,800; Role: Co-Investigator
2020-2021	National Institute of Child Health and Human Development, R03 (HD095048)
	Proposal Title: Neurodevelopmental Pathways Linking Physical Abuse and Affective
	Dysregulation
	Direct Costs: \$100,000; Role: Principal Investigator
2019-2020	Internal Award, Learning Research & Development Center, University of Pittsburgh
	Proposal Title: Income Dynamics and Adolescent Development: Understanding
	Behavioral and Academic Disparities Through Dense Sampling of Income,
	Parenting, and Perceptions of Financial Stress
	Direct Costs: \$149,404; Role: Principal Investigator
2019	Pitt Innovation Challenge (PInCh®) Poster Award Winner, Clinical and Translational
	Science Institute, University of Pittsburgh
	Proposal Title: TeenBrainOnline
	Direct Costs: \$25,000; Role: Co-Investigator
2018-2019	Steven Manners Faculty Development Award, University Center for Social and
	Urban Research, University of Pittsburgh
	Proposal Title: Leveraging ecological momentary assessments to understand
	associations between poverty, stress exposure, and environmental volatility
	Direct Costs: \$9,900; Role: Principal Investigator
2018-2019	Social Science Research Initiative, Office of the Senior Vice Chancellor for
	Research, University of Pittsburgh
	Proposal Title: Understanding Mechanisms that Shape Student Success: The Role
	of Motivation and Cognition in Academic Achievement
	Direct Costs: \$37,500; Role: Co-Investigator
2015-2019	National Institute of Mental Health, Loan Repayment Program Award (Clinical,
	Extramural—Project Title: Reward and Emotion Reactivity After Early Stress)
	Role: Principal Investigator
2014-2015	National Institute of Child Health and Human Development, T32 Fellowship
	(HD007376: Human development: Interdisciplinary research training)
	Role: Training Grant Trainee
2010-2013	National Institute on Drug Abuse, F31 Fellowship (DA028087: Neurodevelopmental
	correlates of reward processing and adolescent substance abuse)
	Direct Costs: \$ 84,876; Role: Trainee/Fellow

Publications ([†] denotes equal contribution to this work; *denotes trainee authors [staff; graduate students]; # denotes undergraduate student from my research lab)

Peer-Reviewed Journal Articles:

- [69] *Kahhalé I*, Barry KR*,* Ong DC, Zaki J, & **Hanson JL**, (*accepted*). Exploring the Role of Empathy in the Association Between Early Life Adversity and Antisocial Behavior. *Affective Science*.
- [68] Wang SB*# & Hanson JL. (accepted). Childhood socioeconomic position relates to adult decisionmaking: evidence from a large cross-cultural investigation. *PLOS ONE.*
- [67] *Hunter-Rue D**, Miller P, **Hanson JL**, & Votruba-Drzal E. (*accepted*). Relations Between Adolescent Perceptions of Household Chaos and Externalizing and Internalizing Behaviors in Low- and Middle-Income Families. *Journal of Research on Adolescence.*
- [66] Weng Y, Kruschwitz J, Rueda Delgado LM, Ruddy K, **... Hanson JL** ... Robert Whelan, & IMAGEN Consortium. (*2024*). A robust brain network for sustained attention from adolescence to adulthood

that predicts later substance use. *eLife Preprint* available at: <u>https://doi.org/10.1101/2024.04.03.587900</u>

- [65] Hanson JL, Kahhalé I*, & Sen S*. (2024). Integrating Data Science and Neuroscience in Developmental Psychopathology: Formative Examples and Future Directions. *Development and Psychopathology.* doi: <u>http://10.1017/S0954579424001056</u>
- [64] Sequeira SL, Silk JS, Jones NP, Forbes EE, Hanson JL, Hallion LS, & Ladouceur CD. (2024). Pathways to adolescent social anxiety: Testing interactions between neural social reward function and perceived social threat in daily life. *Development and Psychopathology.* doi: https://doi.org/10.1017/S0954579424001068
- [63] Kahhalé I, Puccetti NA, Heller AS, & Hanson JL. (2024). Probing connections between social connectedness, mortality risk, and brain age: A preregistered study. *Journal of Personality and Social Psychology.* doi: <u>https://doi.org/10.1037/pspi0000465</u>
- [62] Shirtcliff EA, Ruttle PL, Hanson JL, Smith B, & Pollak SD. (2024). Cortisol's Diurnal Rhythm Indexes the Neurobiological Impact of Child Adversity in Adolescence. Biological Psychology, 187: 108766
- [61] Hayashi S, Caron B, Heinsfeld AS, Vinci-Booher S, ... Hanson JL ... Port N, & Pestilli, F. (2024). brainlife. io: A decentralized and open-source cloud platform to support neuroscience research. Nature Methods. <u>https://doi.org/10.1038/s41592-024-02237-2</u>
- [60] Hanson JL, Adkins DJ*, Bacas*, E, & Zhou PE*#. (2024). Examining the Reliability of Brain Age Algorithms Under Varying Degrees of Subject Motion. Brain Informatics, 11: 9 <u>https://doi.org/10.1186/s40708-024-00223-0</u>
- [59] Chung, M. K., Azizi, T., Hanson, J. L., Alexander, A. L., Pollak, S. D., & Davidson, R. J. (2024). Altered Topological Structure of the Brain White Matter in Maltreated Children through Topological Data Analysis. *Network Neuroscience*. https://doi.org/10.1162/netn_a_00355
- [58] Norbom LB, Rokicki J, Eilertsen EM, Wiker T, Hanson JL, Dahl A, Alnæs D, Fernández-Cabello S, Beck D, Agartz I, Andreassen OA, Westlye LT, & Tamnes CK. (2024). Parental education and income are linked to offspring cortical brain structure and psychopathology at 9–11 years. JCPP Advances, e12220. https://doi.org/10.1002/jcv2.12220
- [57] Kahhalé I*, Hanson JL, Raine A. & Byrd AL. (2024). Associations Between Subtypes of Empathy and Aggression in High-Risk Adolescents. *Journal of Psychopathology and Behavioral Assessment*. <u>https://doi.org/10.1007/s10862-023-10112-1</u>
- [56] Miller P, Blatt LR, Hunter D, Barry KR, Jamal Orozco NP, Hanson JL, and Votruba-Drzal E. (2024). Economic hardship and adolescent behavioral outcomes: Within- and between-family associations. *Development and Psychopathology*, doi:10.1017/S0954579423001451
- [55] Palacios-Barrios EE*, Patel K, & Hanson JL. (2024). Early Life Interpersonal Stress and Depression: Social Reward Processing as a Potential Mediator. Progress in Neuropsychopharmacology & Biological Psychiatry, 129. 110887
- [54] Schiller D, Yu ANC, Alia-Klein N, Becker S, Cromwell HC, Dolcos F, ... Hanson JL, ... Lowe L. (2023). The Human Affectome. *Neuroscience & Biobehavioral Reviews*, 105450.
- [53] Hanson JL, O'Connor K*, Adkins DJ*, & Kahhalé I*. (2023). Childhood Adversity and COVID-19 Outcomes in the UK Biobank. Journal of Epidemiology and Community Health. doi: <u>http://dx.doi.org/10.1136/jech-2023-221147</u>
- [52] Kahhalé I*, Barry KR, & Hanson JL. (2023). Positive parenting moderates associations between childhood stress and corticolimbic structure. PNAS-Nexus, 2, 6, pgad145, <u>https://doi.org/10.1093/pnasnexus/pgad145</u>
- [51] Kahhalé I*, Buser NJ*, Madan CR, & Hanson JL. (2023). Quantifying Numerical and Spatial Reliability of Amygdala and Hippocampal Subdivisions in FreeSurfer. Brain Informatics, Preprint available at: <u>https://www.biorxiv.org/content/10.1101/2020.06.12.149203v1</u>
- [50] Nweze T, Banaschewski T, Ajaelu C, Okoye C, Ezenwa M, Whelan R ... Hanson JL, & IMAGEN Consortium. (2023). Trajectories of cortical structures associated with chronic stress: A bivariate latent change score approach. Journal of Child Psychology and Psychiatry
- [49] Bacas E*, Kahhalé I, Raamana PR, Pablo JB, Anand AS, & Hanson JL. (2023). Probing Multiple Algorithms to Calculate Brain Age: Examining Reliability, Relations with Demographics, and Predictive Power. Human Brain Mapping, Preprint available at: https://www.biorxiv.org/content/10.1101/2022.06.17.496576v1
- [48] Nweze T, Ezenwa M, Ajaelu C, **Hanson JL**, & Okoye C. (2023). Cognitive variations following exposure to childhood adversity: Evidence from a pre-registered, longitudinal study.

eClinicalMedicine, 56, 101784.

- [47] Richie-Halford A, Cieslak M, Ai K, Caffarra S, Covitz S, Franco AR, Karipidis II, Kruper J, Milham M, Avelar-Pereira B, Roy E, Sydnor VJ, Yeatman J, The Fibr Community Science Consortium, Satterthwaite TD, & Rokem A. (2022). An open, analysis-ready, and quality-controlled resource for pediatric brain white-matter research. *Scientific Data*, 9, 616, <u>https://www.nature.com/articles/s41597-022-01695-7</u>
- [46] Norbom LB, Hanson JL, van der Meer D, Ferschmann L, Røysamb E, von Soest T, … Tamnes CK. (2022). Parental socioeconomic status is linked to cortical microstructure and language abilities in children and adolescents. *Developmental Cognitive Neuroscience*, 56, 101132. https://doi.org/10.1016/j.dcn.2022.101132
- [45] Sequeira SL, Forbes EE, Hanson JL & Silk JS. (2022). Positive valence systems in youth anxiety: A scoping review. Journal of Anxiety Disorders, 89, 102588. https://doi.org/10.1016/j.janxdis.2022.102588
- [44] Barry KR[†], Hanson JL^{†*}, Calma-Birling D^{*}, Lansford JE, Bates JE, & Dodge KA. (2022). Developmental Connections Between Socioeconomic Status, Self-Regulation, and Adult Externalizing Problems. Developmental Science, e13260, <u>https://doi.org/10.1111/desc.13260</u>
- [43] Hair N, Hanson JL, Wolfe B, & Pollak SD. (2022). Low Household Income and Neurodevelopment from Infancy through Adolescence. *PLoS ONE*, 17(1), e0262607. <u>https://doi.org/10.1371/journal.pone.0262607</u>
- [42] Donofry SD, Stillman CM, Hanson JL, Sun S, Loucks EB, Forrester T, & Erickson, KI. (2021). Promoting brain health through physical activity among adults exposed to early life adversity: Potential mechanisms and theoretical framework. *Neuroscience & Biobehavioral Reviews*, 131, 688-703. <u>https://doi.org/10.1016/j.neubiorev.2021.09.051</u>
- [41] Hanson JL, Williams AV, Bangasser DA, & Peña CJ. (2021). Impact of Early Life Stress on Reward Circuit Function and Regulation. *Frontiers in Psychiatry*, 1799. <u>https://doi.org/10.3389/fpsyt.2021.744690</u>
- [40] Kennedy BR^{#†}, Hanson JL[†], van den Bos W, Rudolph KD, Davidson RJ, & Pollak SD. Accumbofrontal White Matter is Associated with Developmental Stress Exposure and Reward Learning. *Neuropsychopharmacology*, 46(13), 2288-2294. <u>https://doi.org/10.1038/s41386-021-01129-9</u>
- [39] Hanson JL & Nacewicz BM. (2021). Amygdala Allostasis and Early Life Adversity: Considering Excitotoxicity and Inescapability in the Sequelae of Stress. Frontiers in Human Neuroscience, 250. <u>https://doi.org/10.3389/fnhum.2021.624705</u>
- [38] Gilmore AD*, Buser NJ* & Hanson JL. (2021). Variations in structural MRI quality significantly impact commonly used measures of brain anatomy. *Brain Informatics* 8, 7. <u>https://doi.org/10.1186/s40708-021-00128-2</u>
- [37] Sequeira SL, Silk JS, Jones NP, Hanson JL, Forbes EE, Ladouceur CD. (2021). From scanners to cell-phones: Neural and real-world responses to social threat in adolescent girls. Social Cognitive Affective Neuroscience, 16(7), 657-669. https://doi.org/10.1093/scan/nsab038
- [36] Palacios-Barrios EE*[†], Hanson JL[†], Barry KR, Albert WD, White SF, Skinner AT, Lansford JE, & Dodge KA. (2021). Lower neural value signaling in the prefrontal cortex is related to childhood family income and depressive symptomatology during adolescence. *Developmental Cognitive Neuroscience.* 48, 100920. <u>https://doi.org/10.1016/j.dcn.2021.100920</u>
- [35] Sequeira SL, Silk JS, Ladouceur CD, Hanson JL, Ryan ND, Dahl R, Morgan J, & Forbes EE. (2021). Association of Neural Reward Circuitry Function With Response to Psychotherapy in Youths With Anxiety Disorders. *American Journal of Psychiatry*, 178(4), 343-351. https://doi.org/10.1176/appi.ajp.2020.20010094
- [34] Shirtcliff EA, Hanson JL, Phan JM, Ruttle P & Pollak SD. (2020). Hyper- and Hypo-Cortisol Functioning in Post-Institutionalized Adolescents: The Role of Severity of Neglect and Context. *Psychoneuroendocrinology*, 124, 105067. <u>https://doi.org/10.1016/j.psyneuen.2020.105067</u>
- [33] Yazgan I*, Hanson JL, Bates JE, Lansford JE, Petit GS, & Dodge KA. (2020). Cumulative Early Childhood Adversity and Later Antisocial Behavior: The Potential Mediating Role of Neurocognitive Functioning. *Development and Psychopathology*, 33(1), 340-350. <u>https://doi.org/10.1017/S0954579419001809</u>
- [32] Albert WD, Hanson JL, Skinner AE, Dodge KA, Steinberg L, Deater-Deckard K, Bornstein MH, & Lansford JE. (2020) Individual differences in executive function partially explain the socioeconomic gradient in middle-school academic achievement. *Developmental Science*,

23(5), e12937. https://doi.org/10.1111/desc.12937

- [31] Kraynak TE, Marsland AL, Hanson JL, & Gianaros PJ. (2019). Retrospectively reported childhood physical abuse, systemic inflammation, and resting corticolimbic connectivity in midlife adults. Brain Behavior and Immunity, 82, 203-213. <u>https://doi.org/10.1016/j.bbi.2019.08.186</u>
- [30] Meier MH, Schriber RA, Beardslee J, Hanson JL, & Pardini D. (2019). Associations between Adolescent Cannabis Use and Adult Brain Structure: A Prospective Study of Boys Followed to Adulthood. Drug and Alcohol Dependence, 202, 191-199. <u>https://doi.org/10.1016/j.drugalcdep.2019.05.012</u>
- [29] Hanson JL, Albert WD, Skinner AT, Shen SH[#], Dodge KA, & Lansford JE. (2019). Resting state coupling between the amygdala and ventromedial prefrontal cortex is related to household income in childhood and indexes future psychological vulnerability to stress. *Development and Psychopathology, 31*(3), 1053-1066. <u>https://doi.org/10.1017/S0954579419000592</u>
- [28] Becker S, Bräscher A-K, Ferdenzi C, Ellingsen D-M, Calma-Birling D*, Musser E, Hanson J, Lowe L, Martin L, Joffily M, Noll-Hussong M, Bensafi M, Lidhar N, Chan R, Pintos Lobo R, Bannister S, Olino T, Eerola T, & Wang Y. (2019). The Role of Hedonics in the Human Affectome. *Neuroscience & Biobehavioral Reviews*, 102, 221-241. https://doi.org/10.1016/j.neubiorev.2019.05.003
- [27] Palacios-Barrios EE* & Hanson JL. (2019). Poverty and self-regulation: Connecting psychosocial processes, neurobiology, and the risk for psychopathology. Comprehensive Psychiatry, 90, 52-64. <u>https://doi.org/10.1016/j.comppsych.2018.12.012</u>
- [26] Hanson JL, Gilmore A*, Holmes CJ, Yu T, Barton AW, Beach SR, Galván A, MacKillop J, Windle M, Chen E, Miller GE, Sweet LH, & Brody GH. (2019). A family-focused intervention influences hippocampal-prefrontal connectivity through gains in self-regulation. *Child Development*, 90(4), 1389-1401. <u>https://doi.org/10.1111/cdev.13154</u>
- [25] Miller AB, Sheridan MA, Hanson JL, McLaughlin KA, Bates JE, Lansford JE, Pettit GS, & Dodge KA. (2018). Dimensions of deprivation and threat, psychopathology, and potential mediators: A multiyear, longitudinal analysis. *Journal of Abnormal Psychology*, 127 (2), 160-170. <u>https://doi.org/10.1037/abn0000331</u>
- [24] Hanson JL, Knodt AR, Brigidi BD, & Hariri AR. (2018). Heightened connectivity between the ventral striatum and medial prefrontal cortex as a biomarker for stress-related psychopathology: Understanding interactive effects of early and more recent stress. *Psychological Medicine*, 48 (11), 1835-1843, *https://doi.org/10.1017/S0033291717003348*
- [23] Harms MB, Shannon-Bowen K, Hanson JL, & Pollak SD. (2018). Instrumental learning and cognitive flexibility processes are impaired in children exposed to early life stress. *Developmental Science*, 21 (4), e12596. <u>https://doi.org/10.1111/desc.12596</u>
- [22] Chung MK, Hanson JL, Adluru N, Alexander AL, Davidson RJ, & Pollak, SD. (2017). Integrative Structural Brain Network Analysis in Diffusion Tensor Imaging. *Brain Connectivity*, 7(6): 331-346. <u>https://doi.org/10.1089/brain.2016.0481</u>
- [21] Hanson JL, van den Bos W, Roeber B, Rudolph KD, Davidson RJ, & Pollak SD (2017). Early adversity and learning: Implications for typical and atypical behavioral development. *Journal of Child Psychology and Psychiatry*, 58(7), 770–778. <u>https://doi.org/10.1111/jcpp.12694</u>
- [20] Scult MA, Knodt AR, Hanson JL, Ryoo M, Adcock RA, Hariri AR, Strauman TJ. (2016). Individual Differences in Regulatory Focus Predict Neural Response to Reward. Social Neuroscience, 12(4), 419-429. <u>https://doi.org/10.1080/17470919.2016.1178170</u>
- [19] Hanson JL, Albert D, Iselin AR, Carré JM, Dodge KA, & Hariri AR. (2016). Cumulative stress in childhood is associated with blunted reward-related brain activity in adulthood. Social Cognitive and Affective Neuroscience, 11(3):405-412. <u>https://doi.org/10.1093/scan/nsv124</u>
- [18] Hanson JL, Knodt AK, Brigidi BD, & Hariri AR. (2015). Lower structural integrity of the uncinate fasciculus is associated with a history of child maltreatment and future psychological vulnerability to stress. *Development and Psychopathology*, 27(4pt2):1611-1619. https://doi.org/10.1017/S0954579415000978
- [17] Hair NL, Hanson JL, Wolfe BL, & Pollak SD. (2015). Child poverty, academic achievement, and brain development. *JAMA Pediatrics,* 169(9):822-829. <u>https://10.1001/jamapediatrics.2015.1475</u>
- [16] Dismukes AR, Shirtcliff EA, Hanson JL, & Pollak SD. (2015). Context influences the interplay of endocrine axes across the day. *Developmental Psychobiology*, 57(6):731-741. <u>https://doi.org/10.1002/dev.21331</u>
- [15] Hanson JL, Hariri AR, & Williamson DE. (2015). Blunted ventral striatum development in

adolescence reflects emotional neglect and predicts depressive symptoms. *Biological Psychiatry*, 78(9):598-605. <u>https://doi.org/10.1016/j.biopsych.2015.05.010</u>

- [14] Chung, MK, Hanson JL, Ye J, Davidson RJ, & Pollak SD (2015). Persistent homology in sparse regression and its application to brain morphometry. *IEEE Transactions on Medical Imaging*, 34(9):1928-1939. <u>https://10.0.4.85/TMI.2015.2416271</u>
- [13] Hanson JL, Nacewicz BM, Sutterer MJ, Cayo AA, Schaefer SM, Rudolph KD, Shirtcliff EA, Pollak SD, & Davidson RJ. (2015). Behavior problems after early life stress: Contributions of the hippocampus and amygdala. *Biological Psychiatry*, 77(4):314-23. <u>https://doi.org/10.1016/j.biopsych.2014.04.020</u>
- [12] Caldwell JZK, Essex MJ, Kalin NH, Slattery MJ, Armstrong JM, Hanson JL, Sutterer MJ, Stodola DE & Davidson RJ. (2015). Preschool externalizing behavior predicts gender-specific variation in adolescent amygdala, hippocampus, and prefrontal cortical volumes. *PLoS ONE*, 10(2):e0117453. <u>https://doi.org/10.1371/journal.pone.0117453</u>
- [11] Gorka AX, Hanson JL, Jacobson SR, & Hariri AR (2014). Reduced hippocampal and medial prefrontal gray matter mediate the association between reported childhood maltreatment and trait anxiety in adulthood and predict sensitivity to future life stress. *Biology of Mood & Anxiety Disorders*, 4:12. <u>https://doi.org/10.1186/2045-5380-4-12</u>
- [10] Hanson JL, Hair N, Shen DG, Shi F, Gilmore JH, Wolfe BL, & Pollak SD. (2013) Family poverty affects the rate of human infant brain growth. *PLoS ONE*, 8(12): e80954. https://doi.org/10.1371/journal.pone.0080954
- [9] Chung MK, Hanson JL, Lee H, Adluru N, Alexander AL, Davidson RJ, & Pollak SD (2013). Persistent homological sparse network approach to detecting white matter abnormality in maltreated children: MRI and DTI multimodal study. *Medical Image Computing and Computer-Assisted Intervention - MICCAI 2013*, 16(Pt 1):300-307. https://doi.org/10.1007/978-3-642-40811-3 38
- [8] Hanson JL, Chung MK, Adluru N, Alexander AL, Davidson RJ, & Pollak SD. (2013). Early neglect is associated with alterations in white matter integrity and cognitive functioning. *Child Development*, 84(5):1566-78. <u>https://doi.org/10.1111/cdev.12069</u>
- [7] Hanson JL, Suh JW, Nacewicz BM, Sutterer MJ, Cayo AA, Stodola DE, Burghy CA, Hongzhi W, Avants BB, Yushkevich PA, Essex MJ, Pollak SD, & Davidson RJ. (2012). Robust automated amygdala segmentation via multi-atlas diffeomorphic registration. *Frontiers in Neuroscience*, 6:166. <u>https://doi.org/10.3389/fnins.2012.00166</u>
- [6] Hanson JL, Chung MK, Avants, BB, Rudolph KD, Shirtcliff EA, Gee JC, Davidson RJ, & Pollak SD. (2012). Structural variations in prefrontal cortex mediate the relationship between early childhood stress and spatial working memory. *Journal of Neuroscience*, 32(23), 7917-7925. <u>https://doi.org/10.1523/JNEUROSCI.0307-12.2012</u>
- [5] Strang NM, Hanson JL, & Pollak SD. (2012). The importance of biological methods in linking social experience with social and emotional development. *Monographs of the Society for Research in Child Development*, 77(2), 61-66. https://doi.org/10.1111/j.1540-5834.2011.00662.x
- [4] Hanson JL, Chandra A, Wolfe BL, & Pollak SD (2011). Association between income and the hippocampus. *PLoS ONE*, 6(5): e18712. https://doi.org/10.1371/journal.pone.0018712
- [3] Hanson JL, Chung MK, Avants BB, Shirtcliff EA, Gee JC, Davidson RJ, & Pollak SD. (2010). Early stress is associated with alterations in the orbitofrontal cortex: a tensor-based morphometry investigation of brain structure and behavioral risk. *Journal of Neuroscience*, 30(22), 7466-7472. <u>https://doi.org/10.1523/JNEUROSCI.0859-10.2010</u>
- [2] Bauer PM., Hanson JL, Pierson RK, Davidson RJ, & Pollak SD. (2009). Cerebellar volume and cognitive functioning in children who experienced early deprivation. *Biological Psychiatry*, 66(12), 1100-1106. <u>https://doi.org/10.1016/j.biopsych.2009.06.014</u>
- [1] Eatough EM, Shirtcliff EA, Hanson JL, & Pollak SD. (2009). Hormonal reactivity to MRI scanning in adolescents. *Psychoneuroendocrinology*, 34(8), 1242-1246. https://doi.org/10.1016/j.psyneuen.2009.03.006

Book Chapters:

- [5] Hanson JL. (2022). There Are Many Reasons That People Succeed in Academia. In C.R. Madan (Ed). Academia and the World Beyond. New York, NY: Springer Publishing.
- [4] Chung MK, Hanson JL, & Pollak SD. (2016). Statistical analysis on brain surfaces. In H Ombao, M Lindquist, W Thompson & J Aston (Eds). Handbook of Modern Statistical Methods: Neuroimaging Data Analysis. New York, NY: Taylor & Francis

- [3] Hanson JL & Hackman D. (2012). Cognitive neuroscience and SES disparities. In T Seeman, W Evans, & B Wolfe (Eds). Biological consequences of socioeconomic inequalities. New York, NY: Russell Sage Foundation.
- [2] Hanson JL, Chandra A, Moss E, Bhattacharya J, Pollak SD, & Wolfe B. (2012). Brain development and poverty: A first look. In T Seeman, W Evans, & B Wolfe (Eds). Biological consequences of socioeconomic inequalities. New York, NY: Russell Sage Foundation.
- [1] Hilt L, **Hanson JL**, & Pollak SD. (2011). Emotion dysregulation. In B Brown and M Prinstein (Eds.), Encyclopedia of adolescence. San Diego, CA: Academic Press.

Journal Commentaries:

- [2] Chung MK, Hanson JL, Davidson RJ & Pollak SD. (2023). Discussion of "LESA: Longitudinal Elastic Shape Analysis of Brain Subcortical Structures. *Journal of the American Statistical Association*, 118(541): 20–21
- [1] Hair NL, Hanson JL, Wolfe BL, & Pollak SD. (2016). Association Between Child Poverty and Academic Achievement-In Reply. *JAMA Pediatrics*, 170(2):180.

Manuscripts Under Review (*Trainee authors; †Equal contribution to this work):

- [7] *Kahhalé I** & **Hanson, JL**. Dimensions of Early Life Adversity and Empathy Development in a Longitudinal Sample of Youth: A Registered Report.
- [6] Hanson JL. Examining Links Between Eviction Stress and Child Mental Health Issues
- [5] Miller P, Jones EJ, Gibson-Davis CM, **Hanson JL**, & Votruba-Drzal E. The Role of Family Wealth in Shaping Adolescent Mental Health
- [4] Jones EJ, Miller P, Gibson-Davis CM, Hanson JL, & Votruba-Drzal E. Family Wealth and Adolescent Physical Health.
- [3] Suarez GL, Burt SA, Bezek JL, Westerman HB, **Hanson JL**, Klump KL, & Hyde LW. Structural Brain Correlates of Resilience Among Youth Exposed to Neighborhood Disadvantage.
- [2] *Kahhalé I**, Byrd AL, & **Hanson JL**. Exploring the Nexus of Early Life Adversity and Empathy: A Comprehensive Review of Past Research and Recommendations for Future Directions
- [1] Miller P, Podvysotska T, **Hanson JL**, & Votruba-Drzal E. How Family Assets and Debts Relate to Children's Achievement and Behavior Problems Across Development

Manuscripts in Preparation:

[1] Hanson JL, Adkins DJ*, & Barry KR*. Probing Links Between Socioeconomic Status and Subdivisions of the Hippocampus and Amygdala: Age and Sex-Specific Effects of Poverty on Brain Volume. Preprint available at: <u>https://www.biorxiv.org/content/10.1101/2023.03.10.532071v1</u>

Opinions and Editorials

[1] Hanson JL, Cohen AO, Fountain EN, Haney-Caron E, Insel C, & Rosenbaum GM. (2021, June 1). Does Science Still Matter at the Supreme Court? [Letter to the editor]. *The Crime Report*. Retrieved from <u>https://thecrimereport.org/2021/06/01/how-the-supreme-court-ignored-science-in-the-rush-to-judge-teens/</u>

Teaching & Mentoring

Teaching:

University of Pittsburgh

- 2024, Spring Affective Science (PSY3266, Graduate level); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.6/5
- 2023, Fall **Behavioral Neuroscience** (PSY2475, Graduate level); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.8/5
- 2023, Fall **Risk, Resilience, and Early Stress** (PSY1323, Undergraduate, upper-level seminar); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.69/5

2023, Spring	Risk, Resilience, and Early Stress (PSY1323, Undergraduate, upper-level seminar); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.71/5
2022, Fall	Emotion and the Brain (PSY1467, Undergraduate, upper-level seminar); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.63/5
2022, Spring	Risk, Resilience, and Early Stress (PSY1323, Undergraduate, upper-level seminar); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.59/5
2021, Fall	Behavioral Neuroscience (PSY2475, Graduate level); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.89/5
2021, Fall	Topics in Cognitive Psychology: Emotion and the Brain (PSY1054, Undergraduate, upper-level seminar); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.74/5
2021, Spring	Risk, Resilience, and Early Stress (PSY1323, Undergraduate, upper-level seminar); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.64/5
2020, Fall	Topics in Cognitive Psychology: Emotion and the Brain (PSY1054, Undergraduate, upper-level seminar); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.77/5
2020, Spring	Topics in Developmental Psychology: Risk, Resilience, and Early Stress (PSY1053, Undergraduate, upper-level seminar); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.64/5
2019, Fall	Behavioral Neuroscience (PSY2475, Graduate level); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.82/5
2019, Fall	Topics in Cognitive Psychology: Emotion and the Brain (PSY1054, Undergraduate, upper-level seminar); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.86/5
2019, Spring	Topics in Developmental Psychology: Risk, Resilience, and Early Stress (PSY1053, Undergraduate, upper-level seminar); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.75/5
2018, Fall	Topics in Cognitive Psychology: Emotion and the Brain (PSY1054, Undergraduate, upper-level seminar); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.86/5
2018, Spring	Behavioral Neuroscience (PSY2475, Graduate level); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.82/5
2017, Spring	Topics in Cognitive Psychology: Emotion and the Brain (PSY1054, Undergraduate, upper-level seminar); Student Evaluations (average based on course organization, appropriateness of evaluation, and instructor effectiveness): 4.61/5
University of North Ca	
2016, Spring	Postdoctoral Facilitator, Pro-seminar in Developmental Science: Cognitive Development from a Neuroscience Perspective (PSYC 781)

2015, Fall
 Postdoctoral Facilitator, Pro-seminar in Developmental Science: The Family as a Context for Development, Continuity, and Change in Externalizing Behaviors in Early Childhood (PSYC 781)
 2014, Spring
 Postdoctoral Facilitator, Pro-seminar in Developmental Science: Cultivating a

2014, Fall	Developmental Science of Flourishing (PSYC 781) Postdoctoral Facilitator, Advanced Seminar in Human Development: Developmental Science and Education (EDUC 881)	
University of Wisconsi 2009, Fall	<i>in-Madison</i> Teaching Assistant, Introduction to Child Development (PSYCH 560)	
2009, Spring	Teaching Assistant, Introduction to Child Development (PSYCH 560)	
<u>Guest Lecturing</u> : <i>University of North Ca</i> 2014-2015		
2014-2015	Biology in Public Discourse (PUBPOL 590S), "Neuroimaging: Triumphs, Trials and Tribulations"	
University of Wisconsi		
2010-2013	Introduction to Child Development (PSYCH 560), "Introduction to the Biological Foundations of Development"	
<u>Primary Mentoring (<i>Ur</i></u> University of Pittsburg		
2023	6 students for directed research credits (through the Psychology department, as well as the Neuroscience department)	
2022	6 students for directed research credits (through the Psychology department, as well as the Neuroscience department)	
2021	8 students for directed research credits (through the Psychology department, as well as the Neuroscience department)	
2020	16 students for directed research credits (through the Psychology department, as well as the Neuroscience department)	
2019	12 students for directed research credits (through the Psychology department, as well as the Neuroscience department)	
2018	11 students for directed research credits (through the Psychology department, as well as the Neuroscience department)	
2017-2018	3 students for directed research credits (through the Psychology department)	
Primary Mentoring (Gr		
Fall 2023-	Sriparna Sen, Joint Clinical-Developmental Program (Department of	
present	 Psychology) Arts and Sciences Fellowship, University of Pittsburgh (2023) 	
Fall 2019- present	Isabella Kahhalé, Joint Clinical-Developmental Program (Department of Psychology)	
present	Andrew W. Mellon Predoctoral Fellowship, University of Pittsburgh	
	 (2023) Ruth Myers Research Excellence Award, University of Pittsburgh Craduate Education Committee (2022) 	
	 Graduate Education Committee (2023) Summer Graduate Research Grant, Psi Chi Intl. Honors Society in Psychology (2022) 	
	 Arts and Sciences Fellowship, University of Pittsburgh (2019) 	
Fall 2019-2023	 Debbie Bitran, Developmental Program (Department of Psychology) B² Training Grant (from Joint CMU-Pitt Center for the Neural Basis of 	
Fall 2017-	Cognition) Recipient (2019-2021) Esther Palacios-Barrios, Joint Clinical-Developmental Program (Department of	
Spring 2023	Psychology)	
	National Science Foundation Graduate Research Fellowship (2019- 2022)	
	• Ford Fellow (2019-2022)	
	 President's Award, Society for Research in Psychopathology (2019) Frances Degen Horowitz Millennium Scholars Program, Society for 	

Research in Child Development (2019)K. Leroy Irvis Fellowship, University of Pittsburgh (2017-2018)

Mentoring Committees (Unde	rgraduate):
Fall 2023-present	Simon Wang, Department of Psychology (primary mentor)
	John Knox Hall Scholarship award, 2024
	Brackenridge Fellowship, University of Pittsburgh, 2023
	 DeVito-Lipner Family Fund Award, University of Pittsburgh, 2023
	 Chancellor's Undergraduate Research Fellowship, University of Pittsburgh,
	• Chancellor's Ondergraduate Research Fellowship, Oniversity of Fittsburgh, 2023
Fall 2023- Spring 2024	Dylan LeCroy, Honors' Thesis, Department of Psychology (committee chair)
Fall 2022-Spring 2023	Chloe Horter, Honors' Thesis, Department of Psychology
Fall 2020-Spring 2021	Xiaoying Dong, Honors' Thesis, Department of Psychology
Fall 2020-Spring 2021	Maya Mauer, Honors' Thesis, Department of Psychology (committee chair)
Spring 2019-Fall 2019	Bryan Kennedy, Honors' Thesis, Department of Neuroscience (committee chair)
Spring 2018	Sarah Lazzaro, BPhil Thesis Committee, Department of Psychology
Fall 2017-Spring 2018	Shutian Shen, Honors' Thesis, Department of Psychology
Mentoring Committees (Grade	uate; University of Pittsburgh, Department of Psychology unless otherwise noted)
Summer 2024- <i>present</i>	Claire Stout, Comprehensive Exam Committee
Spring 2024-present	Melanie Grad-Freilich, Master's Thesis Committee
Summer 2023- present	Petra Rupert, Dissertation Committee
Summer 2023- present	Amar Ojha, Dissertation Committee (Department of Neuroscience, Unive Pittsburgh)
Fall 2022- <u>present</u>	Zelal Kilic, Graduate Advisory Committee
Fall 2022- <u>present</u>	Melanie Grad-Freilich, Graduate Advisory Committee
Fall 2022-present	Claire Stout, Graduate Advisory Committee
Fall 2018- <u>present</u>	Tamara Podvysotska, Graduate Advisory Committee
Spring 2024	Chelsea Ptak, Master's Thesis Committee
Fall 2023-Spring 2024	
Summer 2023- Spring 2024	Brianna Natale, Dissertation Committee
	Carly Lenniger, Master's Thesis Committee
Summer 2023- Spring 2024	Maria Perica, Dissertation Committee
Fall 2021-Spring 2023	Daniesha Hunter, Master's Thesis Committee
Summer 2021-Spring 2024 Fall 2018-Fall 2022	Daniesha Hunter, Graduate Advisory Committee
	Tamara Podvysotska, Comprehensive Exam Committee
Fall 2020-Spring 2023	Samuel Elliott, Master's Thesis Committee
Fall 2020-Fall 2021	Tamara Podvysotska, Master's Thesis Committee
Fall 2021-Spring 2023	Kristina Dickman, Comprehensive Exam Committee
Fall 2021- Spring 2023	Maria Perica, Comprehensive Exam Committee
Summer 2021- Fall 2022	Nabila Jamal-Orozco, Comprehensive Exam Committee
Fall 2021	Katie Webb, Dissertation Committee (Department of Psychology, Universe Wisconsin-Milwaukee)
Fall 2021-Summer 2022	Emily Hutchinson, Master's Thesis Committee
Summer 2021- Spring 2022	Stephanie Sequeira, Dissertation Committee
Fall 2016-Spring 2022	Stephanie Sequeira, Graduate Advisory Committee
Fall 2019-Spring 2021	Maria Perica, Master's Thesis Committee
Spring 2019-Spring 2021	Brenden Tervo-Clemmens, Dissertation Committee
Fall 2019-Fall 2020	Laura Betancur, Dissertation Committee
Summer 2020-Fall 2020	Whitney Ringwald, Comprehensive Exam Committee
Summer 2018-Summer 2020	Rosalind Elliott, Dissertation Committee
Summer 2019-Fall 2020	Stephanie Sequeira, Comprehensive Exam Committee
Spring 2018-Summer 2019	Susan Kuo, Dissertation Committee
Spring 2018-Summer 2019	Chardée Galan, Dissertation Committee
Spring 2018-Summer 2019	Dana Rosen, Dissertation Committee
Spring 2018-Spring 2019	Orma Ravindranath, Master's Thesis Committee
Spring 2018	Maria Camacho, Reprint Examination Committee (Department of Neuros
	University of Pittsburgh)

Spring 2018-Fall 2018	Brenden Tervo-Clemmens, Comprehensive Exam Committee
Fall 2018-Fall 2019	Stephanie Sequeira, Master's Thesis Committee
Spring 2017-Fall 2017	Bart Larson, Dissertation Committee
Fall 2016-Spring 2018	Thomas Kraynak, Master's Thesis Committee

Awards & Honors

2022	Dietrich School's Award for Excellence in Graduate Mentoring (untenured category)
2040	University of Pittsburgh, Office of Graduate Studies
2019	Robert L. Fantz Memorial Award for Young Psychologists
0040	American Psychological Foundation
2019	Matilda White Riley Behavioral and Social Sciences Early-Stage Investigator Paper
	Awardee
	NIH Office of Behavioral and Social Sciences Research
2017	APS "Rising Star"
	American Psychological Society
2015	Trainee Professional Development Award
	Society for Neuroscience
2015	Travel Award
	HealthEmotions Research Institute
	Wisconsin Symposium on Emotion
	University of Wisconsin-Madison
2014-2015	Fellowship
	Carolina Consortium on Human Development
	Center for Developmental Science
	University of North Carolina at Chapel Hill
2014	Fellowship
	Sackler Summer Institute
	Sackler Institute, Cornell University
2014	Health & Society Scholars Fellowship Finalist (<i>declined</i>)
	Robert Wood Johnson Foundation
2012	Fellowship
	Summer Institute on Social Developmental Neuroscience
	University of Maryland
2012	Friends of the Waisman Center Award
2012	University of Wisconsin-Madison
2012	Travel Award
2012	Sackler Colloquium on Biological Embedding of Early Social Adversity
	National Academy of Sciences
2011	Fellowship
2011	NIMH Summer Institute in Cognitive Neuroscience
	University of California Santa Barbara
2011	Schwartz Fellowship
2011	
	Department of Psychology
2011	University of Wisconsin-Madison Travel Award
2011	
	NIMH Meeting on "The Determinants of Executive Function & Dysfunction"
2040 2040	University of Colorado at Boulder
2010, 2012	Vilas Travel Award
	Graduate School
~~~~	University of Wisconsin-Madison
2010	Dissertation Grant
	Robert Wood Johnson Foundation
2009	Hertz Award
	Department of Psychology
	University of Wisconsin-Madison
2006	John Merck Fellowship
	Sackler Summer Institute on the Biology of Developmental Disabilities

Cornell University

### Additional Research Training

06/2015	Structural Equation Modeling Workshop, Curran-Bauer Analytics	Chapel Hill, NC
08/2003	Instructors: Drs. Patrick Curran and Daniel Bauer Analysis of Functional NeuroImages (AFNI) Boot Camp, Medical College of Wisconsin	Milwaukee, WI
08/2003 - 08/2005	Primary Instructor: Dr. Robert Cox <b>Post-Baccalaureate Researcher</b> , Joint position at the Child Emotion Research Laboratory and the	Madison, WI
08/2003	Waisman Center, Laboratory for Brain Imaging & Behavior, University of Wisconsin-Madison <i>Supervisors</i> : Drs. Richard Davidson and Seth Pollak <b>Analysis of Functional NeuroImages (AFNI) Boot</b> <b>Camp</b> , Medical College of Wisconsin <i>Primary Instructor</i> : Dr. Robert Cox	Milwaukee, WI

#### **Invited Lectures & Colloquia**

#### For Academic Audiences:

- [21] Hanson JL. (2024, February 8). Advancing Neurobiological Understanding in the Study of Childhood Adversity and Developmental Adaptations. Lecture presented at Clinical Current Works series, Yale University, New Haven, CT.
- [20] Hanson JL. (2023, June 13). Connecting Adversity and Neurobiology to Understand the Development of Psychopathology. Lecture presented at Clinical Neuroscience Grand Rounds at the National Institutes of Health, Washington, DC.
- [19] Heller AS & Hanson JL. (2023, April 25). Identifying Links Between Discrimination, Brain Age, Symptoms of Negative Emotion, And Biological Aging Among Hispanics/Latinos. Lecture presented at Hispanic Community Health Study / Study of Latinos Brain Aging Group Special Interest Group (University of California at Davis), Virtual Meeting
- [18] Hanson JL. (2023, April 14). Connecting Adversity and Neurobiology to Understand the Development of Psychopathology. Lecture presented at New York University's Department of Child and Adolescent Psychiatry Grand Rounds, Virtual Meeting
- [17] Hanson JL. (2023, April 10). Advancing Neurobiological Understanding in the Study of Childhood Adversity and Developmental Adaptations. Lecture presented at the Institute of Child Development, University of Minnesota, *Minneapolis, MN.*
- [16] Hanson JL. (2022, February 23). Connecting Adversity, Resilience, and Neurobiology to Understand the Impacts of Environmental Experiences. Lecture presented at the Cognition, Affect, and Temperament Lab (Director: Dr. Koraly Pérez-Edgar, Penn State University, Virtual Meeting.
- [15] Hanson JL. (2022, February 9). Early Adversity & Learning: Charting New Directions Through Behavior, Neuroimaging, and Computational Modeling. Lecture presented at the McLean Hospital Imaging Center Speaker Series, Harvard University Medical School, Virtual Meeting.
- [14] Hanson JL. (2021, October 19). Amygdala Allostasis and Early Life Adversity. Discussion panel in the Gunnar Laboratory for Developmental Psychobiology Research (PI: Dr. Megan Gunner, University of Minnesota). Virtual Meeting.
- [13] Hanson JL. (2021, August 19). How I Learned to Continually Worry and Think Too Much About Structural MRI Quality. Lecture presented at niQC International Neuroinformatics Coordinating Facility Special Interest Group, Virtual Meeting.
- [12] Hanson JL. (2019, June 10). Allostasis, Stress Sensitivity, & Adaptive Calibration After Early Adversity. Lecture presented at the Developmental Risk and Resilience Unit, University College London; London, England, UK.
- [11] Hanson JL. (2019, May 15). Early Adversity & Internalizing Psychopathology: Advancing

Neurobiological Models and Focusing on Mechanism. Lecture presented at the Carolina Consortium on Human Development 30th Anniversary Symposium (CCHD@30); Chapel Hill, NC.

- [10] Hanson JL. (2018, June 6). Focusing on Neurodevelopment and Motivation to Understand Socioeconomic Differences in Academic Achievement. Lecture presented at the 6th International Workshop on Advanced Learning Sciences, Pittsburgh, PA.
- [9] Hanson JL. (2017, October 12). Allostasis & adaptive calibration after early life adversity: Suggestive ideas from amygdala structure & function. Lecture presented at the Developmental Affective Neuroscience Symposium, University of Pittsburgh- Department of Psychiatry, Pittsburgh, PA.
- [8]. Hanson JL. (2017 October 3). Understanding Neurodevelopment and Cumulative Early Life Stress, Lecture presented at 'The Seventh Annual on the Shoulders of Giants Scientific Symposium', Child Mind Institute, New York, NY.
- [7] Hanson JL. (2016, June 24). Corticolimbic Circuits and Stress: Understanding Risk for Internalizing Psychopathology and Allostatic Models of Development. Lecture presented at the Annual Meeting of Academy of Behavioral Medicine Research. Whistler, British Columbia.
- [6] Hanson JL. (2014, October 8). Reward functioning and early life stress: Integrating affective neuroscience and developmental psychopathology. Lecture presented at the University of North Carolina at Chapel Hill, Department of Psychology. Chapel Hill, NC.
- [5] Hanson JL. (2013, December 10). Socioeconomic Status and Brain Development. Lecture presented at the University of Wisconsin-Madison, Waisman Center, Early Childhood Seminar Series, Madison, WI.
- [4] Hanson JL. (2012, November 28). Early adversity and the medial temporal lobe: Insights from structural brain imaging. Lecture presented at NIMH Center Meeting on Early Experiences, Stress and Neurobehavioral Development, Seattle, WA.
- [3] Hanson JL. (2011, May 5). Neurobiological consequences of early stress exposure: Examining executive functioning and the prefrontal cortex. Lecture presented at Columbia University, Department of Psychology, Departmental Colloquium, New York, NY.
- [2] Hanson JL. (2009, September 10). NIH brain scan and poverty project: Preliminary findings. Lecture presented at the Russell Sage Foundation, San Francisco, CA.
- [1] Hanson JL. (2008, November 13). Income and brain development with applications to cognition and health. Lecture presented at the Russell Sage Foundation, New York, NY.

For Public Audiences:

- [14] Hanson JL. (2024, May 14). Brain Science & Learning. Lecture presented remotely to the Pittsburgh Montessori School Parent School Community Council. *Virtual Meeting.*
- [13] Hanson JL. (2023, August 1). The Science of Learning: Key Research Results Important for Education. Lecture presented remotely to the Pittsburgh Public School Board Education Committee. Virtual Meeting.
- [12] Hanson JL. (2022, April 21). Trauma In Utero & Implications on Infant Mental Health. Lecture presented remotely to Child Advocates of Fort Bend [Fort Bend, TX] via Trauma Informed Care Conference and ReadyNation's Brain Science Speakers Bureau. Virtual Meeting.
- [11] Hanson JL. (2021, August 24). Building Strong Communities by Supporting Youth: Adversity, Brain Development and "Simple Interactions". Lecture presented remotely to Mansfield Discovery Depot [Storrs, CT] via ReadyNation's Brain Science Speakers Bureau. Virtual Meeting.
- [10] Hanson JL. (2021, June 22). The Pandemic & Young Minds. Keiki Talk presented at Hawai'i Children's Action Network, Honolulu, HI. Virtual Meeting.
- [9] Hanson JL. (2020, February 13). Understanding Adolescent Neurodevelopment: Moving from Basic Science to the Classroom. Professional development lecture presented at the Winchester Thurston School, Pittsburgh, PA.
- [8] Hanson JL. (2019, April 12). Impact of Poverty on Brain Development. Lecture presented in conjunction with the Society for Neuroscience's BrainFacts.org and Annual Meeting of the National Science Teachers' Association, St. Louis, MO
- [7] Hanson JL & Walsh MJ. (2019, March 29). Conversations with Clairton. (Presentation to school district and city officials). Lecture present through "Clairton Cares", Clairton, PA.
- [6] Hanson JL. (2018, August 17). Connections Between Adverse Childhood Experiences & Health:

Bridging "Neurons to Neighborhoods. Lecture presented at the Positive Health Clinic, Allegheny Health Network, Pittsburgh, PA.

- [5] Hanson JL. (2018, August 2). Building Strong Communities by Supporting Youth: Adversity, Brain Development and "Simple Interactions. Lecture presented remotely to Save the Children USA (Kentucky Chapter) via ReadyNation's Brain Science Speakers Bureau.
- [4] Hanson JL. (2017, September 11). How Motivation & Cognition Factors May Shape Student Success. Lecture presented at Northgate School District, School Board Meeting, Pittsburgh, PA.
- [3] Hanson JL. (2017, September 7). Stress & Development. Lecture presented at the Youth Research Advisory Board, Children's Hospital of Pittsburgh, Pittsburgh, PA.
- [2] Hanson JL. (2016, September 19). Early experience and brain development. Roundtable discussion at the Homewood Brushton YWCA, Pittsburgh, PA.
- [1] Hanson JL. (2015, September 17). Science Cafe: The Teenager's Mind. North Carolina Museum of Natural Sciences. Lecture presented at the North Carolina Museum of Natural Sciences, Raleigh, NC.

### **Conference Presentations**

Chaired Conference Symposia:

- [8] Hanson JL. Understanding the Impacts of Environmental Unpredictability and Volatility on Typical and Atypical Development. Panelists: Philip Fisher, Catherine Demers, Portia Miller, and Sarah Collier Villaume. Paper Symposium chaired at the **2021 biennial meeting of the Society for Research** on Child Development, Virtual Meeting.
- [7] Hanson JL. Connecting environmental experience to the emergence of self-regulation: Insights from typical and atypical populations. Panelists: Annie Brandes-Aitken, Stephen Braren, and Daniel Berry. Paper Symposium chaired at the 2019 biennial meeting of the Society for Research on Child Development, Baltimore, MA.
- [6] Pena CL & Hanson JL. Enduring Consequences of Early Stress II. Panelists: Kevin Bath, Jeremy Gray, Bridget Callaghan, Taylor Keding, Carina Block, Elyse Morin, and Samantha Keller. Nanoymposium organized for the 2016 Annual Meeting for Society for Neuroscience, San Diego, CA.
- [5] Hanson JL. Emerging research in developmental neurogenetics: Novel insights into intermediate neural phenotypes of affective dysregulation. Panelists: Michael Pluess, Rebecca Waller, and Christina Di Iorio. Paper Symposium chaired at the 2015 biennial meeting of the Society for Research on Child Development, Philadelphia, PA.
- [4] Hanson JL & Kigar SL. The neurobiological sequelae of early-life stress. Panelists: Kerry Ressler, Stephen Suomi, Mar Sanchez, Nicholas Allen, Jeremy Rosenkranz, Bonnie Goff, Jeremy Gray, Allie Rodgers, Emma Sarro, Elizabeth Cox, and Tiffany Doherty. Nanoymposium organized and chaired at the 2014 Annual Meeting for Society for Neuroscience, Washington, DC.
- [3] Hanson JL. Emerging early adversity and psychopathology: Investigating potential neurobiological mechanisms. Panelists: Nathan Fox, Sara Jaffee, Eamon McCrory. Paper Symposium chaired at the 2013 biennial meeting of the Society for Research on Child Development. Seattle, WA.
- [2] Hanson JL & Mashoodh R. Early life stress and behavioral development. Panelists: Patrick McGowan, Dario Maestripieri, Dylan Gee, Brittany Howell, Jennifer Blaze, Millie Rincón Cortés, and Rahia Mashoodh. Nanoymposium organized and chaired at the 2012 Annual Meeting for Society for Neuroscience, Washington, DC.
- [1] Hanson JL. Early life experience and the emotional brain. Panelists: Regina Sullivan, Nim Tottenham, Tania Roth, David Lyons, Anna Braun, Brittany Howell. Nanoymposium organized and chaired at the 2009 Annual Meeting for Society for Neuroscience, Chicago, IL.

<u>Talks:</u>

- [14] Hanson JL. (2023, March 23). Advancing Neurobiological Understanding in the Study of Early Adversity and Developmental Adaptations. Preconference Presentation at the 2023 biennial meeting of the Society for Research on Child Development "Progress and Future Challenges in Understanding Atypical Development" (Festschrift for Dante Cicchetti), Salt Lake City, UT
- [13] **Hanson JL**. (2021, September 30). Connecting Adversity, Resilience, and Neurobiology to Understand the Impacts of Environmental Experiences. Lecture presented at the **7th**

**International Symposium on Resilience Research** (organized by Leibniz Institute for Resilience Research; Mainz, Germany). *Virtual Meeting.* 

- [12] Hanson JL. (2021, September 20). Expanding Bioecological Conceptualizations of Unpredictability and Volatility: Connections with Behavioral and Neurobiological Development. Lecture presented at the Annual Flux Congress. Virtual Meeting.
- [11] Hanson JL. (2021, April 29). Advancing Novel Metrics of Neurobiology to Understand the Impacts of Early Adversity. Lecture presented at the Annual Meeting of Social & Affective Neuroscience Society. Virtual Meeting.
- [10] Hanson JL. (2020, October 23). fMRI Signal Variability in Reward Neural Hubs Relate To Early-Life Adversity And Symptoms Of Depression. Lecture presented at the Annual Meeting of the International Society for Developmental Psychobiology. Virtual Meeting.
- [9] Hanson JL. (2020, September 9). Furthering Understanding of the Development of Psychopathology Through Rich Modeling of Developmental Process, Behavior, & Neurobiology. Lecture presented at the Annual Flux Congress. Virtual Meeting
- [8] Hanson JL, Calma-Birling D, Lansford J, Bates J, Bates GS, & Dodge KA. Early poverty interacts with adolescent inhibitory control and physiological reactivity to predict adult externalizing problems Paper presentation at the 2019 biennial meeting of the Society for Research on Child Development, Baltimore, MA
- [7] Hanson JL, Knodt AR, Radtke SR, Brigidi BD, & Hariri AR. The interaction of childhood trauma and recent stress are associated with heightened ventral striatum-medial prefrontal cortex connectivity: Relations with depression and anxiety. Nanoymposium presentation at the 2016 annual meeting for Society for Neuroscience, San Diego, CA.
- [6] Hanson JL, Williamson DE, & Hariri AR. Polygenic risk and intermediate neural phenotypes: Focusing on neural reward reactivity to understand cigarette smoking. Paper presentation at the 2015 biennial meeting of the Society for Research on Child Development, Philadelphia, PA.
- [5] Hanson JL, Williamson DE, & Hariri AR. Decrease in reward-related ventral striatum reactivity during adolescence reflects early life stress and predicts depressive symptomatology. Nanoymposium presentation at the 2014 annual meeting for Society for Neuroscience, Washington, DC.
- [4] Hanson JL, Davidson RJ, & Pollak SD. Reward learning and early adversity: Neurobiological mechanisms of behavioral risk. Paper presentation at the 2013 biennial meeting of the Society for Research on Child Development, Seattle, WA.
- [3] Hanson JL, Pollak SD, & Davidson RJ. Early life stress & medial temporal lobe morphometry. Nanoymposium presentation at the 2012 annual meeting for Society for Neuroscience, Washington, DC.
- [2] Hanson JL. Remarks at The Edward Zigler SRCD Biennial Policy Pre-Conference at the 2011 biennial meeting of the Society for Research on Child Development, Montreal, Quebec.
- [1] Hanson JL, Pollak SD, & Davidson RJ. The correlates of early experience on structural brain development. Nanoymposium presentation at the biennial meeting of the 2009 annual meeting for Society for Neuroscience, Chicago, IL.

Posters (first author):

- [9] Hanson JL, Knodt, AK, Dodge KA, & Hariri AR. (2015). Early life stress is associated with decreased reward-related activity and intrinsic functional connectivity of the ventral striatum as well as symptoms of depression in adulthood. Society for Neuroscience Abstracts, 349.04/AA15.
- [8] Hanson JL, Chung MK, Avants BB, Rudolph KD, Shirtcliff EA, Gee JC, Davidson RJ, & Pollak SD. (2011). Child maltreatment, cumulative lifetime stress and amygdala volume. Society for Neuroscience Abstracts 927.09/VV93
- [7] Hanson JL, Chung MK, Avants BB, Shirtcliff EA, Gee JC, Pollak SD, & Davidson RJ. (2011). Structural brain correlates of successful stress regulation in children. Cognitive Neuroscience Society 2011 Annual Meeting, E43.
- [6] Hanson JL, Chung MK, Pollak SD, & Davidson RJ. (2010). Development of the medial temporal lobe: Cross-sectional & longitudinal insights into behavioral change. Society for Neuroscience Abstracts 91014/LLL46
- [5] Hanson JL, Chung MK, Avants B, Shirtcliff EA, Schlaak S, Gee J, Davidson RJ, & Pollak SD. (2010). Effects of early deprivation and neglect on adolescent brain structure and neuropsychological functioning. b, 3-069, (89).

- [4] Hanson JL, Oakes TR, Sutterer MJ, Schaefer SM, Nacewicz BM, Kirkland JZ, Pollak SD, & Davidson RJ. (2009). A comparison of automated volumetric methods and hand-tracing of the hippocampus and amygdala. Meeting of the Organization for Human Brain Mapping #360-SA-PM.
- [3] Hanson JL, Chung MK, Oakes TR, Pollak SD, & Davidson RJ (2009). Chronic life stress is associated with volumetric reductions in the corpus callosum. Biennial Meeting of the Society for Research in Child Development 1-043, (20).
- [2] Hanson JL, Chung MK, Sutterer MJ, Nacewicz BM, Pollak SD, & Davidson RJ. (2008). Smaller amygdalae are associated with early social deprivation in childhood. Society for Neuroscience Abstracts 47711/QQ10.
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### **Professional Activities**

Service to Non-Profits:

• Board of Directors, *Project Destiny* (Pittsburgh Non-Profit focused on youth development and health disparities, 2018-*present*)

Scientific Advisory / External Advisory Boards:

• Improving Adolescent mentaL health by reducing the Impact of PoVErty (ALIVE), King's College London, Directors: Drs. Mark Jordans and Crick Lund

Editorial Boards (current):

- Journal of Cognitive Neuroscience
- Journal of Research on Adolescence
- Affective Science
- Developmental Cognitive Neuroscience [Associate Editor, handling ~50-75 manuscripts/year]

Editorial Boards (previous): Frontiers in Psychology (Emotion Science)

Grant Review, NIH Study Sections: NIH 2024/05 ZRG1 F02A-W (20)

<u>Ad hoc Grant Reviewing:</u> US-Israel Binational Science Foundation; Netherlands Organisation for Scientific Research; Flux Society Dissertation Awards Committee (Developmental Cognitive Neuroscience Professional Society)

<u>Conference Reviewing:</u> 2019 Meeting of the Society for Affective Science; 2017 Biennial Meeting for the Society for Research in Child Development; 2023 Flux Annual Meeting (Symposiums)

Conference Planning: 2023 Flux Program Planning Committee

Ad hoc Journal Reviewing (~1 review/month; full reviewer record available at

https://www.webofscience.com/wos/author/record/1832298) including: Affective Science; Archives of General Psychiatry; Behavioural Brain Research; Biological Psychiatry; Child Development; Cortex; Development & Psychopathology; Developmental Cognitive Neuroscience; Developmental Psychobiology; Developmental Psychology; Developmental Science; Human Brain Mapping; JAMA Pediatrics; Journal of the American Academy of Child and Adolescent Psychiatry; Journal of Neuroscience; Molecular Psychiatry; Nature Medicine; Nature Neuroscience; NeuroImage; NeuroImage: Clinical; Neuropsychopharmacology; Pediatrics; Proceedings from the National Academy of the Sciences; Psychological Medicine; Psychoneuroendocrinology; Psychosomatic Medicine; Social and Cognitive Affective Neuroscience; Translational Psychiatry; Trends in Cognitive Sciences

<u>Professional Memberships</u>: Society for Research in Child Development; Society for Neuroscience; Flux Congress (Developmental Cognitive Neuroscience Professional Society)

Departmental Service:

University of Pittsburgh		
Fall 2023-Spring 2024	Department of Psychology Bio-Health Assistant Professor Search Committee	
Spring 2023	Dietrich School's Award for Excellence in Graduate Mentoring Reviewer,	
	Dietrich School of Arts & Science, University of Pittsburgh	
Fall 2021-	LRDC Communications Committee, Learning Research & Developmental	
	Center, University of Pittsburgh	
Fall 2021	Pitt Momentum Funds Grant Reviewer, Office of the Provost, University of	
	Pittsburgh	
Fall 2021-	Developmental Area Group Events Committee, Department of Psychology	
Spring 2019	Departmental IRB review, Department of Psychology	
Fall 2018-Spring 2019	Joint Department of Psychology/LRDC Faculty Search Committee (2 open-	
	rank positions)	
Fall 2018- present	Departmental Colloquium Committee, Department of Psychology	
Summer 2017	Tim Post Award Selection Committee, Department of Psychology	
Spring 2017-	Departmental Diversity Committee, Department of Psychology	
Fall 2016-Spring 2017	Multimodal Neuroimaging Training Program Symposium, Co-Organizer	
University of North Carolina at Chapel Hill		
2014-2015	Colloquium Planning Committee, Carolina Consortium on Human	
	Development	

University of Wisconsin-Madison

2011-2012 Colloquium Planning Committee, Department of Psychology

#### Media Coverage (selected)

"412 Kids: 'Helicopter' parenting may be the norm, but science says risks have rewards" **Pittsburgh Post Gazette** (2024, June 26). Retrieved June 26, 2024, from <u>https://www.post-gazette.com/news/health/2024/06/26/parenting-styles/stories/202406260003</u>

"Teenagers often know when their parents are having money problems – and that knowledge is linked to mental health challenges, new research finds" **Yahoo! News** (2024, March 8). Retrieved March 31, 2024, from <u>https://uk.news.yahoo.com/finance/news/teenagers-often-know-parents-having-133813892.html</u>

"People who experienced childhood adversity had poorer COVID-19 outcomes, new study shows" **Yahoo! News** (2023, November 29). Retrieved November 29, 2023, from <a href="https://uk.news.yahoo.com/people-experienced-childhood-adversity-had-133941784.html">https://uk.news.yahoo.com/people-experienced-childhood-adversity-had-133941784.html</a>

"Study links childhood trauma to COVID-19 deaths, hospitalizations" **Medical Xpress** (2023, November 3). Retrieved November 3, 2023, from <u>https://medicalxpress.com/news/2023-11-links-childhood-trauma-covid-deaths.html</u>

"Positive parenting buffers the effect of stress on the brain, study suggests" **Medical Xpress** (2023, June 14). Retrieved June 14, 2023, from <u>https://medicalxpress.com/news/2023-06-positive-parenting-buffers-effect-stress.html</u>

"A little-studied brain circuit could have big effects on learning." **Pittwire News Service** (2021, October 20). Retrieved October 20, 2021, from <u>https://www.pitt.edu/pittwire/features-articles/little-studied-brain-circuit-could-have-big-effects-learning</u>

"Growing Up Through the Cracks." **Pittsburgh Post-Gazette** (2019, January 14). Retrieved January 31, 2019, from <u>https://newsinteractive.post-gazette.com/childhood-poverty-allegheny-county-mapping-inequality/growing-up-through-the-cracks/</u>

"Strengthening self-regulation in childhood may improve resiliency later in life." **Medical Xpress** (2018, November 1). Retrieved November 18, 2018, from <u>https://medicalxpress.com/news/2018-</u>

11-self-regulation-childhood-resiliency-life.html

"Pitt Study: Abuse in childhood can lead to misbehavior later." **Pittsburgh Post-Gazette** (2017, March 1). Retrieved March 1, 2017, from <u>http://www.post-gazette.com/news/health/2017/03/01/Pitt-Study-Abuse-during-childhood-can-lead-to-misbehavior-later-in-life/stories/201703010043</u>

"Evidence grows of poverty's toll on young brains." **USA Today.** (2016, July 6). Retrieved July 14, 2016, from <u>http://www.usatoday.com/story/news/investigations/2016/07/06/evidence-grows-povertys-toll-young-brains/86571856/</u>

"Early life stress and adolescent depression linked to impaired development of reward circuits." **ScienceDaily**. (2015, October 29). Retrieved October 29, 2015, from <u>http://www.sciencedaily.com/releases/2015/10/151029102524.htm</u>

"Early childhood stress affects brain's response to rewards." **ScienceDaily**. (2015, October 19). Retrieved October 23, 2015, from <u>http://www.sciencedaily.com/releases/2015/10/151019110955.htm</u>

"What's going on in there? Researcher explains teenage mind". **WRAL.com**. (2015, September 14). Retrieved September 30, 2015, from <u>http://www.wral.com/what-s-going-on-in-there-researcher-explains-teenage-mind/14899328/</u>

"How Poverty Stunts Kids' Brain Development". **Huffington Post**. (2015, July 24). Retrieved September 30, 2015, from <u>http://www.huffingtonpost.com/entry/how-poverty-stunts-childrens-brain-development_55b13476e4b08f57d5d3f990</u>

"Poverty Disturbs Children's Brain Development and Academic Performance". **Scientific American**. (2015, July 22). Retrieved September 30, 2015, from <u>http://www.scientificamerican.com/article/poverty-disturbs-children-s-brain-development-and-academic-performance/</u>

"What Poverty Does to Kids' Brains". **Mother Jones**. (2015, July 20). Retrieved September 30, 2015, from <u>http://www.motherjones.com/politics/2015/07/child-brain-poverty-academic-achievement</u>

"Does Moving Poor People Work? (Op-Ed)". **The New York Times**. (2014, September 16). Retrieved September 30, 2015, from <u>http://www.nytimes.com/2014/09/17/opinion/does-moving-poor-people-work.html</u>

"Childhood Stress Decreases Size of Brain Regions". **Scientific American**. (2014, August 16). Retrieved September 30, 2015, from

http://www.scientificamerican.com/podcast/episode/childhood-stress-decreases-size-of-brain-regions/

"UW researchers show how early stress hurts brain development". **Milwaukee Journal Sentinel**. (2014, July 4). Retrieved September 30, 2015, from <u>http://www.jsonline.com/news/health/uw-researchers-show-how-early-stress-hurts-brain-development-b99304197z1-265866281.html</u>

"Early life stress can leave lasting impacts on the brain." **ScienceDaily**. (2014, June 27). Retrieved September 30, 2015, from <u>http://www.sciencedaily.com/releases/2014/06/140627133107.htm</u>

"Wisconsin Researchers: Poverty Influences Brain Development in Children". **DianeRavitch.com**. (2013, December 17). Retrieved September 30, 2015, from <a href="http://dianeravitch.net/2013/12/17/wisconsin-researchers-poverty-influences-brain-development-in-children/">http://dianeravitch.net/2013/12/17/wisconsin-researchers-poverty-influences-brain-development-in-children/</a>

"Poverty conditions may hinder early brain development, UW-Madison study suggests". Milwaukee

Journal Sentinel. (2013, December 12). Retrieved September 30, 2015, from <a href="http://www.jsonline.com/blogs/news/235473321.html">http://www.jsonline.com/blogs/news/235473321.html</a>

"Poverty influences children's early brain development". **ScienceDaily**. (2013, December 11). Retrieved September 30, 2015, from <u>http://www.sciencedaily.com/releases/2013/12/131211183752.htm</u>

"Stress Alters Kids' Brains". **Discovery News**. (2012, June 8). Retrieved September 30, 2015, from <u>http://news.discovery.com/human/psychology/child-stress-memory-brain-120608.htm</u>

"Stress may delay brain development in early years". **ScienceDaily**. (2012, June 6). Retrieved September 30, 2015, from <u>http://www.sciencedaily.com/releases/2012/06/120606164936.htm</u>

"Children's Mental Health At Risk From Chronic Financial Instability". **Huffington Post**. (2012, May 15). Retrieved September 30, 2015, from <u>http://www.huffingtonpost.com/2012/05/15/children-mental-health_n_1514845.html</u>