Aaron Shain Heller

CURRICULUM VITAE

Associate Professor

Department of Psychology University of Miami P.O. Box 248185 Coral Gables, FL 33124-0751 Ph: (305) 284-9498 Fx: (305) 284-3402 Email: aheller@miami.edu

Academic Appointments

| 2021-Present | Associate Professor |
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| 2015-2021 | Assistant Professor Department of Psychology Department of Psychiatry Department of Neuroscience Sylvester Comprehensive Cancer Center (Member) University of Miami |

Education & Training

| 2013-2015 | Postdoctoral Associate of Psychology in Psychiatry Weill Cornell Medical College |
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| 2012-2013 | Predoctoral psychology intern at Weill-Cornell Medical College/New York Presbyterian Hospital |
| 2006-2013 | PhD, Clinical Psychology University of Wisconsin – Madison |
| 2004-2006 | Lab Manager & Research Assistant Center for Neuroscience, Department of Psychology University of California, Davis |
| 2003-2004 | Travelled in South America |
| 1999-2003 | Bachelor of Arts University of California, Berkeley |

Awarded Research Grants

2023 National Institute of Mental Health (R01) Mapping links between real-world diversity, positive emotion, and neural dynamics in anhedonia Role: Principal Investigator Amount awarded: \$3,085,452 2022 National Science Foundation Research Initiation: Using Real-Time Measures of Emotion to Predict Self-Efficacy and Persistence in Statics Role: Co-Principal Investigator Amount awarded: \$199,999 2021 National Institute of Mental Health (R21) Using Real-World, Personally Meaningful Events to build Computational Models of Emotion

| | Role: Principal Investigator Amount awarded: \$275,000 |
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| 2020 | University of Miami COVID-19 Rapid Response Grant <i>The Role of CBOS in the Mitigation of COVID-19 Related Health and Educational Disparities</i> Role: Co-Investigator Amount awarded: \$37,000 |
| 2020 | Sylvester Comprehensive Cancer Center: Magic Leap Project Using Augmented Reality (AR) to promote agency, self-efficacy, positive affect, and social connection in women undergoing chemotherapy for breast cancer. Role: Principal Investigator Amount awarded: \$10,000 |
| 2018-2020 | Society of Behavior Change R01 Supplement (NCI) <i>Culturally Adapted Cognitive Behavioral Stress and Self-Management (C-CBSM) Intervention</i> <i>for PC</i> Role: Co-Investigator Amount awarded: \$806,399 |
| 2018-2023 | National Institute on Aging (R01) <i>Novel Cognitive and Functional Measures for Alzheimer's Disease Prevention Trials</i> Role: Co-Investigator Amount awarded: \$1,442,325 |
| 2018-2020 | John Templeton Foundation Pathways To Character Grant <i>Characterizing Character Growth Following Breast Cancer Diagnosis Using Mobile Health</i> Role: Principal Investigator Amount awarded: \$225,000 |
| 2017-2018 | Society for a Science of Clinical Psychology Varda Shoham Clinical Science Training Initiative <i>Modernizing a training clinic to enhance patient monitoring</i> Role: Principal Investigator Amount awarded: \$1,500 |
| Grants Awa | rded to Mentees |
| 2024-2027 | National Science Foundation GRFP to Nicole Fridling-Cook Utilizing Mobile Health to Explore Resilience and Wellbeing Role: Primary Advisor |
| 2023-2025 | National Institute of Mental Health (F31) An Ecological Momentary Assessment Study of Intolerance of Uncertainty: Linking Computational Measures with Clinical Factors Role: Co-Sponsor |
| 2018-2021 | National Science Foundation GRFP to Lara Baez Harnessing mHealth to identify individual differences in resilience of young women with breast |

Honors and Awards

cancer.

Role: Primary Advisor

2017 Faces of the Future Presentation Society for Research in Psychopathology

| 2016 | Career Development Leadership Program Anxiety and Depression Association of America |
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| 2015 | Rising Star Award Association for Psychological Science |
| 2015 | Hot Topics Presentation American College of Neuropsychopharmacology |
| 2014 | Travel Fellowship Wisconsin Symposium of Emotion |
| 2013 | Clinical Psychology Intern Research Award Weill-Cornell Medical College |
| 2011 | Ramona O. Messerschmidt Clinical Psychology Award University of Wisconsin – Madison |
| 2010-2012 | Hertz and Royalty Research Travel Award University of Wisconsin – Madison |
| 2008 | Scholarship and Travel Award Beck Institute for Cognitive Therapy and Research |
| 2006-2008 | NIMH Emotion Research Training Grant recipient |

Peer Reviewed Publications

- 1. Kahhale I, Puccetti NA, **Heller AS**, Hanson, JL (In Press). Probing connections between social connectedness, mortality risk, and brain age: A preregistered study. *Journal of Personality and Social Psychology*.
- 2. **Heller AS** (In Press) Adding to the neuroimmune network model: A commentary on Nusslock et al. *Journal of Child Psychology and Psychiatry*.
- Pedreira PB, Fleszar-Pavlović SE, Walsh EA, Noriega Esquives B, Moreno PI, Perdomo D, Heller AS, Antoni MH, & Penedo FJ (In Press). Familism, family cohesion, and health-related quality of life in Hispanic prostate cancer survivors. *Journal of Behavioral Medicine*.
- 4. Villano WJ, Kraus NI, Reneau TR, Jaso BA, Otto AR, **Heller AS** (In Press) The causes and consequences of drifting expectations. *Psychological Science*.
- 5. Gong R, **Heller A**, Moreno, Yanez B, Penedo FJ (In Press). Low Social Well-Being in Advanced and Metastatic Prostate Cancer: Effects of a Randomized Controlled Trial of Cognitive Behavioral Stress Management. *International Journal of Behavioral Medicine*, 10.1007/s12529-024-10270-w.
- 6. Villano WJ, **Heller AS** (In Press) Depression is associated with blunted affective responses to naturalistic reward prediction errors. *Psychological Medicine.*
- 7. Reneau TR, Villano WJ, Jaso BA, **Heller AS** (In Press). The affective benefits of real-world exploration during the COVID-19 pandemic. *Journal of Psychopathology and Clinical Science* (formerly *Journal of Abnormal Psychology*).
- 8. Reis JC, Travado L, **Heller AS**, Oliveira FPM, Almeida SD, Sousa B, Costa, DC, Antoni MH (In Press). Greater perceived stress management skills and heightened brain metabolic activity in cortical and subcortical stress processing regions in metastatic breast cancer patients. *Brain Imaging & Behavior*
- Davis BR, Jaso BA, Cleveland AS, Kohn-Wood LP, Heller AS, Ashad-Bishop KC. (2023). The Power of Community: The Role of Community-Based Organizations in Mitigating COVID-19-Related Impacts on Well-Being Among South Florida's Minoritized Populations. *Global Journal of Community Psychology Practice*, 14(2), 1 - 18.

- Villano WJ, Kraus NI, Reneau TR, Jaso BA, Otto AR, Heller AS (2023) Individual differences in naturalistic learning link negative emotionality to the development of anxiety. *Science Advances*. Jan 4;9(1). doi: 10.1126/sciadv.add2976
- Puccetti NA, Villano WJ, Stamatis CA, Hall KA, Torrez VF, Neta M, Timpano KR, Heller AS (2023) Negative interpretation bias connects to real-world daily affect: a multistudy approach. *Journal of Experimental Psychology: General.* 52(6):1690-1704 doi: 10.1037/xge0001351
- Baez LM, Puccetti NA, Stamatis CA, Jaso BA, Timpano KR, Heller AS (2023). Identifying real-world affective correlates of cognitive risk factors for internalizing disorders. *Emotion*. Apr;23(3):678-687. doi: 10.1037/emo0001117.
- 13. Saragosa-Harris NM, Cohen AO, Reneau TR, Villano WJ, **Heller AS**, Hartley CA (2022). Real-world exploration increases across adolescence and relates to affect, risk-taking, and social connectivity. *Psychological Science*. Oct;33(10):1664-1679. doi: 10.1177/09567976221102070
- Fisher HM, Taub CJ, Lechner SC, Lee DJ, Heller AS, Antoni MA (2022) Does the Broaden-and-Build Theory explain reduction in social disruption after a brief relaxation intervention for breast cancer undergoing treatment? *Behavior Therapy*. Sep;53(5):995-1008. https://doi.org/10.1016/j.beth.2022.04.002
- Puccetti NA, Villano WJ, Fadok J, Heller AS (2022). Temporal Dynamics of Affect in the Brain: Evidence from Human Imaging and Animal Models. *Neuroscience & Biobehavioral Reviews*. Feb;133:104491. doi: 10.1016/j.neubiorev.2021.12.014
- Baez LM, Newport JD, Stowe ZN, Knight BT, Heller AS (2021). The severity and role of somatic depressive symptoms in psychological networks in a longitudinal sample of peripartum women. *Journal of Psychiatric Research* Oct;142:283-289. doi: 10.1016/j.jpsychires.2021.07.049
- Jaso BA, Kraus NI, Heller AS (2021) Identification of careless responding in ecological momentary assessment research: from post-hoc analyses to real-time data monitoring. *Psychological Methods*. Sep 16. doi: 10.1037/met0000312
- Puccetti NA, Schaefer SM, van Reekum CM, Ong A, Almeida DM, Ryff CD, Davidson RJ, Heller AS, (2021) Linking amygdala persistence to real-world emotional experience and psychological well-being. Apr 21;41(16):3721-3730. *Journal of Neuroscience*. doi: 10.1523/JNEUROSCI.1637-20.2021
- Heller AS, Stamatis CA, Puccetti NA, Timpano KR (2021) Daily affective experiences distinguish psychiatric symptom domains. *Journal of Abnormal Psychology*. 130(4), 319–332. DOI: 10.1037/abn0000670
- Jayawickreme E, Infurna FJ, Alajak K, Blackie LER et al., (2021) Post-Traumatic Growth as positive personality change: Methodological considerations. *Journal of Personality*. Feb;89(1):145-165. doi: 10.1111/jopy.12591.
- 21. Heller AS, Shi TC, Ezie CEC, Reneau TR, Gibbons C, Baez LM, Hartley CA (2020). Association between real-world experiential diversity and positive affect relates to hippocampal-striatal functional connectivity. *Nature Neuroscience*. 3(7):800-804. doi: 10.1038/s41593-020-0636-4.
- Travado L, Antoni M, Oliveira F, Almeida S, Almeida P, Heller AS, Sousa B, Costa, D (2020). Negative affect and stress-related brain metabolism in metastatic breast cancer patients. *Cancer*. 126(13):3122-3131. doi: 10.1002/cncr.32902
- 23. Lapate RC, **Heller AS** (2020). Context matters for affective chronometry. *Nature Human Behavior.* 4(7):688-689. doi: 10.1038/s41562-020-0860-7
- 24. Stamatis CA, Puccetti NA, Charpentier CJ, **Heller AS**, Timpano KR (2020). Repetitive negative thinking following exposure to a natural stressor prospectively predicts altered stress reactivity and decision making in the laboratory. *Behaviour Research & Therapy*. 129:103609. doi: 10.1016/j.brat.2020.103609.
- Villano WJ, Ezie CEC, Gillis R, Otto AR, Heller AS (2020). Temporal dynamics of real-world emotion are more strongly linked to prediction error than outcome. *Journal of Experimental Psychology: General*. 149(9), 1755–1766. https://doi.org/10.1037/xge0000740

- 26. **Heller AS**, Bagot RC (2020). Is hippocampal replay a mechanism for anxiety and depression? *JAMA Psychiatry*. 77(4):431-432. doi:10.1001/jamapsychiatry.2019.4788
- Latzman RD, DeYoung CG, HiTOP Neurobiological Foundations Workgroup. (2020). Using empiricallyderived dimensional phenotypes to accelerate clinical neuroscience: the Hierarchical Taxonomy of Psychopathology (HiTOP) framework. *Neuropsychopharmacology*. 45(7):1083-1085. doi: 10.1038/s41386-020-0639-6
- 28. Kong F, **Heller AS**, van Reekum CM, Sato W (2020). Editorial: Positive neuroscience: The neuroscience of human flourishing. *Frontiers in Human Neuroscience*. 14:47. doi: 10.3389/fnhum.2020.00047
- Baez LM, Heller AS (2020). Impact of age at onset on the phenomenology of depression in treatmentseeking adults in the STAR*D trial. *Journal Affective Disorders*. Feb 1;262:381-388. doi: 10.1016/j.jad.2019.10.036
- 30. **Heller AS** (2020). From conditioning to emotion: Translating animal models of learning to human psychopathology. *The Neuroscientist.* Feb;26(1):43-56. doi: 10.1177/1073858419866820.
- 31. Jaso BA, Hudiburgh SE, **Heller AS**, Timpano KR (2020). The relationship between affect intolerance, maladaptive emotion regulation, and psychological symptoms. *International Journal of Cognitive Therapy* 13:67–82.
- 32. Casey BJ, **Heller AS**, Gee DG, Cohen AO (2019). Development of the Emotional Brain. *Neuroscience Letters*. Feb 6;693:29-34. doi: 10.1016/j.neulet.2017.11.055.
- 33. **Heller AS**, Fox AS, Davidson RJ (2019) Parsing Affective Dynamics to Identify Risk for Mood and Anxiety Disorders. *Emotion.* Mar;19(2):283-291. doi: 10.1037/emo0000440.
- Heller AS, Ezie CEC, Otto AR, Timpano KR (2018). Goal-Directed Decision Making and Negative Affect: The Moderating Role of Stress. *Behaviour Research & Therapy*. Dec;111:19-26. doi: 10.1016/j.brat.2018.09.007.
- 35. Khalsa SS, Adolphs R, Cameron OG, Critchley HG, et al., (2018) Interoception and mental health: a roadmap. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging* 3(6):501-513 https://doi.org/10.1016/j.bpsc.2017.12.004.
- Nomi JS, Schettini E, Voorhies W, Bolt TS, Heller AS, Uddin LQ (2018) Resting-state Brain Signal Variability in Prefrontal Cortex is Associated with ADHD Symptom Severity in Children. *Frontiers in Human Neuroscience*. 2018 Mar 12;12:90. doi: 10.3389/fnhum.2018.00090.
- 37. Jutagir DR, Blomberg BB, Carver CS, Lechner SC, Timpano KR, Bouchard LC, Gudenkauf LM, Jacobs JM, Diaz A, Lutgendorf SK, Cole SW, Heller AS, Antoni MH (2017) Social Well-Being is Associated with Less Pro-Inflammatory and Pro-Metastatic Leukocyte Gene Expression in Women after Surgery for Breast Cancer. Breast Cancer Res Treat. Aug;165(1):169-180. doi: 10.1007/s10549-017-4316-3.
- Nomi JS, Bolt TS, Chiemeka Ezie CE, Uddin LQ, Heller AS (2017). Moment-to-moment BOLD Signal Variability Reflects Regional Changes in Neural Flexibility Across the Lifespan. *Journal of Neuroscience* 37(22):5539-5548. doi: 10.1523/JNEUROSCI.3408-16.2017
- Ryff CD, Heller AS, Schaefer SM, van Reekum CM, Davidson RJ (2016). Purposeful Engagement, Healthy Aging, and the Brain. *Curr Behav Neurosci Rep.* Dec;3(4):318-327. doi: 10.1007/s40473-016-0096-z.
- 40. Grupe DW, Heller AS (2016). Brain imaging alterations in PTSD. Psychiatric Annals. 46(9): 519-526.
- 41. **Heller AS** (2016). Rethinking strategies for when to acquire neural markers associated with treatment response. *Molecular Psychiatry* 21(12):1655-1656. doi: 10.1038/mp.2016.176.
- 42. Heller AS, Cohen AO, Dreyfuss M, Casey BJ (2016). Changes in cortico-subcortical and subcorticosubcortical connectivity impact impulsivity to emotional cues across development. *Social Cognitive and Affective Neuroscience* 11(12):1910-1918.

- 43. **Heller AS** (2016). Cortical-Subcortical Interactions in Depression. *Frontiers in Systems Neuroscience*. 10:1-20. doi: 10.3389/fnsys.2016.00020
- 44. Cohen AO, Breiner K, Steinberg L, Bonnie RJ, Scott ES, Taylor-Thompson KA, Rudolph MD, Chein J, Richeson JA, **Heller AS**, Silverman MR, Dellarco DV, Fair DA, Galván A, Casey BJ (2016). When is an adolescent an adult? Assessing cognitive control in emotional and non-emotional contexts. *Psychological Science*. 27(4):549-62. doi: 10.1177/0956797615627625.
- 45. Cohen AO, Dellarco DV, Breiner K, Helion C, **Heller AS**, Rahdar A, Pedersen, G, Chein J, Dyke JP, Galvan A, Casey BJ (2016). The Impact of Emotional States on Cognitive Control Circuitry and Function. *Journal of Cognitive Neuroscience*. 28(3):446-59. doi: 10.1162/jocn_a_00906.
- 46. Heller AS & Casey BJ (2016). The Neurodynamics of emotion: Delineating typical and atypical emotional processes during adolescence. *Developmental Science*. 19(1):3-18. doi: 10.1111/desc.12373
- 47. Heller AS (2015). Neural predictors of depression symptom course. *Current Opinion in Psychology.* 4:104-109.
- 48. Richey JA, Damiano CR, Sabatino A, Rittenberg A, Petty C, Bizzell J, Voyvodic J, **Heller AS**, Coffman MC, Smoski M, Davidson RJ & Dichter GS (2015). Neural mechanisms of emotion Regulation in Autism Spectrum Disorder. *Journal of Autism and Developmental Disorders.*
- Heller AS, Fox AS, Wing EK*, McQuisition KM*, Vack NJ, Davidson RJ (2015). The Neurodynamics of Affect in the Laboratory Predicts Persistence of Real-World Emotional Responses. *Journal of Neuroscience* 35(29):10503-10509.
- 50. **Heller AS**, Lapate RC, Mayer KE*, & Davidson RJ (2014). The face of negative affect: Trial-by trial corrugator responses to negative pictures are positively associated with amygdala and negatively associated with ventromedial prefrontal cortex activity. *Journal of Cognitive Neuroscience* 26(9): 2102-2110.
- Heller AS, Johnstone T, Peterson M, Kolden G, Kalin N, & Davidson RJ (2013). Increases in prefrontal cortex activity when regulating negative emotion predicts symptom severity trajectory in depression. JAMA Psychiatry 70(11):1181-1189.
- 52. **Heller AS**, van Reekum CM, Schaefer SM, Lapate RC, Radler BT, Ryff, CD, & Davidson, RJ (2013). Sustained striatal activity predicts eudaimonic well-being and cortisol output. *Psychological Science* 24(11):2191-2200.
- Heller AS, Johnstone T, Light S, Peterson M, Kolden G, Kalin N, & Davidson RJ (2013). Changes in sustained fronto-striatal circuitry resulting from antidepressant treatment correlates with changes in positive affect in major depression. *American Journal of Psychiatry* 170(2):197-206.
- 54. Lee H, **Heller AS**, van Reekum CM, Nelson B, & Davidson RJ (2012). Amygdala prefrontal coupling underlies individual differences in emotion regulation. *NeuroImage* 62(3):1575-1581.
- 55. Light SN, **Heller AS**, Johnstone T, Kolden GG, Peterson MJ, Kalin N, & Davidson RJ (2011). Reduced Ventrolateral Prefrontal Cortex Activity While Inhibiting Positive Affect Predicts Anhedonia Treatment Response in Major Depressive Disorder. *Biological Psychiatry* 70(10):962-968.
- 56. Heller AS, Greischar LL, Honor A*, Davidson RJ (2011). Simultaneous acquisition of corrugator electromyography and functional magnetic resonance imaging: A new method for objectively measuring affect and neural activity concurrently. *NeuroImage* 58(3):930-934.
- Heller AS, Johnstone T, Shackman AJ, Light S, Peterson M, Kolden G, Kalin N, & Davidson RJ (2009). Reduced capacity to sustain positive emotion in major depression reflects diminished maintenance of fronto-striatal brain activation. *Proceedings of the National Academy of Sciences* 106(52):22445–22450.
- 58. Deouell LY, **Heller AS**, Malach R, D'Esposito M, Knight RT (2007) Cerebral responses to change in spatial location of unattended sounds. *Neuron* 55(6):985-996.
- 59. Ranganath C, **Heller AS**, Wilding EL (2007) Dissociable correlates of two classes of retrieval processing in prefrontal cortex. *Neuroimage* 35(4):1663-1673.

- 60. Cohen MX, **Heller AS**, Ranganath C (2005) Functional connectivity with anterior cingulate and orbitofrontal cortices during decision-making. *Brain Res Cogn Brain Res* 23(1):61-70.
- 61. Ranganath C, **Heller A**, Cohen MX, Brozinsky CJ, Rissman J (2005) Functional connectivity with the hippocampus during successful memory formation. *Hippocampus* 15(8):997-1005.

Book Chapters

- 1. Puccetti NA, Villano WJ, **Heller AS** (2021). The Neuroscience of Affective Dynamics In: Waugh, C., Kuppens, P. (Eds.) *Affective Dynamics*.
- Baez LM, Antoni MH, Heller AS (2021) Using dynamic personality theories, cognitive neuroscience, and mHealth to uncover the process of posttraumatic personality change in women with breast cancer. In: Infurna, F.J., Jayawickreme, E (Eds.). *Redesigning Research on Post-Traumatic Growth*. New York: Oxford University Press.
- 3. Heller AS (2018). Functional Brain Imaging and PTSD. In: Marmar, C., Nemeroff C.B. (Eds.), *Post-Traumatic Stress Disorder*. New York: Oxford University Press.
- 4. Heller AS (2018). When, and in what ways are emotions adaptive and maladaptive? In: Fox, A.S., Lapate, R.C., Shackman, A.J. & Davidson, R.J. (Eds.), *The Nature of Emotion: Fundamental Questions* (2nd edition). New York: Oxford University Press.
- Schaefer SM, van Reekum CM, Lapate RC, Heller AS, Grupe DW, Davidson RJ (2018). The temporal dynamics of emotional responding: Implications for well-being and health from the MIDUS Neuroscience Project. In: Ryff, C.D., Krueger, R.F. (Eds.), Oxford Handbook of Integrative Health Science. New York: Oxford University Press.

Memberships in Professional Societies

Association for Psychological Science Cognitive Neuroscience Society Social & Affective Neuroscience Society for Research in Psychopathology Society for Neuroscience

Service to the Field

| 2023-2024 | President; Social Affective Neuroscience Society |
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| 2022-2023 | Vice President; Social Affective Neuroscience Society |
| 2021-2022 | Board member; Social Affective Neuroscience Society |
| 2021-2022 | Co-Organizer, Preconference to Annual Society for Affective Science Meeting |
| 2020-2021 | Co-Organizer, Preconference to Annual Society for Affective Science Meeting |
| 2018-2019 | Co-Organizer; Annual Social & Affective Neuroscience Conference |
| 2017-2018 | Co-Organizer; Clinical Neuroscience Preconference to Annual Social & Affective Neuroscience Conference |
| 2017 | Program Committee; Society for Research in Psychopathology |
| 2015 | Program Committee; Social & Affective Neuroscience |
| 2014 | Program Committee; Social & Affective Neuroscience |
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Institutional Service

| 2017-2018 | Clinical Faculty Search Committee |
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| 2015-Present | Co-Chair, Technical Committee: Neuroimaging Suite |
| 2017 | Antonio Orlando Award Review Committee |
| 2016-2017 | Psychological Services Center Subcommittee |
| 2016-2017 | Clinical Faculty Search Committee |
| 2015-2016 | Clinical Faculty Search Committee |
| 2015-2016 | Member, Communications and Development Committee: Neuroimaging Suite |
| 2015-2016 | Co-Chair, Education and Training Committee: Neuroimaging Suite |
| 2011-2012 | UW-Madison Recreational Sports Governance Board |
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Reviewing

Editorial Board:

| 2021-Present | Consulting Editor, Journal of Abnormal Psychology |
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| 2017-Present | Consulting Editor, <i>Emotion</i> |
| 2018-Present | Consulting Editor, Social Cognitive and Affective Neuroscience |
| 2019 | Frontiers in Human Neuroscience (co-edited special issue) |

Ad Hoc Reviewer: American Journal of Psychiatry, Behavioral Brain Research, Biological Psychiatry, Biological Psychiatry: Cognitive Neuroscience & Neuroimaging, Biological Psychology, Cerebral Cortex, Clinical Psychological Science, Cognitive Affective & Behavioral Neuroscience, Cortex, Developmental Science, Emotion, Frontiers in Human Neuroscience, Frontiers in Psychology, Human Brain Mapping, Journal of Abnormal Psychology, Journal of Cognitive Neuroscience, Journal of Consulting and Clinical Psychology, Journal of Experimental Psychology: General, Journal of Neuroscience, Journal of Psychiatric Research, Motivation & Emotion, Nature Communications, Nature Human Behavior, Neuroimage, Neuropsychopharmacology, Neuroscience and Biobehavioral Reviews, Neuroscience Letters, PLOS One, Proceedings of the National Academy of Sciences, Psychophysiology, Psychoneuroendocrinology, Scientific Reports, Social Cognitive & Affect Neuroscience

Licensure

2022-present Licensed Psychologist, State of Florida (PY11615)

Selected Professional Presentations

Peer Reviewed Conference Symposia Presentations

- 1. **Heller AS** (2023, April) *Ecological drivers of emotion and their links to psychopathology*. Brotman M (Chair), Digital Tools, Daily Rhythms and Developmental Psychopathology: Exploring Naturalistic Associations with Affective Dynamics. Anxiety & Depression Association of America, Washington DC.
- Heller AS (2022, November) The affective benefits of real-world exploration depend on the presence of environmental threat. In. Heller AS, Gee D (Co-Chairs), The impact of the COVID-19 pandemic on neural and behavioral markers of mental health across child and adolescent development. ABCT 56th Annual Convention, New York.
- Otto R, Pedrosa LF, Heller A, Davies H, Faraji SE (2020, October). Using psychophysiology and computational models to understand emotional responses to the outcomes of risky choices. In Clark, L.A., Freeman, C., Weinberg, A., Otto, A.R., & Yip, S.W. Risky business: using psychophysiology to understand risk and reward in health and illness. Symposium to be given at the 60th Anniversary Annual Meeting of the Society for Psychophysiological Research. Vancouver, BC. October 2020.

- Heller AS, Shi TC, Ezie CEC*, Reneau TR*, Saragosa-Harris NM, Gibbons CJ, Hartley CA (2019, October). *The Affective Benefit of Experiential Diversity & its Neural Mechanisms*. In E. V. Goldfarb; V. P. Murty (Co-chairs), Neural Circuits, Memory, and Emotion. Nanosymposium Presented at the Society for Neuroscience Meeting, Chicago, IL.
- 5. Stamatis CA, Puccetti NA, **Heller AS**, & Timpano KR (2019, October). Effects of obsessive-compulsive spectrum symptoms on decision-making: The moderating role of stress. In Abramovitch, A. (Chair), Recent advances in neuroscience and decision making in Hoarding and OCD. Symposium presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Atlanta, GA.
- Heller AS (2019, March). Instability of negative emotion specifically predicts risk for psychopathology. In C. Waugh & A.S. Heller (Co-chairs), The Importance of Affective Dynamics in Emotional, Social, and Behavioral Regulation. Symposium presented at the International Conference on Psychological Science Meeting, Paris, FR.
- Heller AS, Brown CA, Puccetti NA, Villano WJ, Jaso BA, Ezie CEC, Timpano KR (2018, November) Utilizing Bi-Factor Models to Identify the Emotional Dynamics Promoting Common and Unique Risk For Mood and Anxiety Disorders. In A.S. Heller & A.G. Wright (Co-chairs), Models and Methods for Capturing Affective Processes in Psychopathology. Symposium presented at the Association for Behavioral and Cognitive Therapies Meeting, Washington, DC.
- 8. Brown CA, Puccetti NA, **Heller AS**, & Timpano, K.R. (2018, November). The impact of repetitive negative thinking on risk and loss aversion in response to stress. Symposium presented at the annual meeting of the Association for Behavioral and Cognitive Therapies, Washington, DC.
- 9. **Heller AS**, Ezie CEC, Timpano K (September, 2017) *Goal-Directed Decision Making and Negative Affect: The Moderating Role of Stress.* In Faces of the Future Symposium. Talk presented at the Society for Research in Psychopathology Meeting, Denver CO.
- Heller AS (September, 2016) Affective neurodynamics. In, Stress and Neuroplasticity Predictors of Psychopathology: Implications for Personalized Medicine. Symposium presented at the International Society of Psychoneuroendocrinology Meeting, Miami, FL
- Heller AS (September, 2016) Reward-related emotional neurodynamics in health and psychopathology. In A. Holmes (Chair), Network approaches to in the study of psychiatric illness. Symposium presented at the Society for Research in Psychopathology Meeting, Baltimore, MD
- Heller AS, Fox AS, Wing EK, Davidson, RJ (November, 2015) Variability in real-world daily emotion predicts lower well-being and is associated with increased variability in prefrontal BOLD engagement. In J Dunsmoor (Chair). Stress and Negative Emotion. Nanosymposium Presented at the Society for Neuroscience Meeting, Chicago, IL.
- 13. **Heller AS**, Johnstone T, Peterson M, Kolden GG, Kalin N, Davidson RJ. (December, 2015). *Affective Neurodynamics Predict Depression Treatment Response.* In Hot Topics Presentation. Symposium presented at the annual American College of Neuropsychopharmacology meeting, Hollywood, FL.
- Heller AS (March, 2014). The Temporal Dynamics of Reward Processing in Well-Being and Depression In Individual Oral Presentations: Depression. Symposium presented at the annual Anxiety and Depression Association of American Meeting, Chicago, IL

Invited Talks

- 1. **Heller AS** (October, 2022) Risk for psychopathology is linked to overlearning from small prediction errors. The City University of New York Psychology Seminar Series.
- 2. **Heller AS** (September, 2022) Risk for psychopathology is linked to overlearning from small prediction errors. UT Austin Department of Psychology Colloquium.
- 3. **Heller AS** (May 2022) Overlearning from Small Prediction Errors in Risk for Psychopathology. Social Affective Neuroscience Annual Meeting.

- 4. **Heller AS** (May 2022) The affective and neural benefits of real-world experiential diversity. Florida Consortium on the Neurobiology of Cognition
- Heller AS (January 2022) The affective and neural benefits of real-world experiential diversity before, during, and (still during) the COVID-19 pandemic. Center for Neuromodulation in Depression and Stress Speaker Series.
- 6. **Heller AS** (September, 2021) The affective and neural benefits of real-world experiential diversity before, during, and (still during) the COVID-19 pandemic. McKnight Research Seminar, University of Miami
- Heller AS (April, 2021) Using computational modeling to determine the drivers of real-world emotion in response to personally meaningful events. K. McRae (Moderator). Invited Flash Talks, Annual meeting of the Society for Affective Science. San Francisco, CA
- Heller AS, Baez LM*, Antoni MA (August, 2019) Characterizing Character Growth Following Breast Cancer Diagnosis Using Mobile Health & Lab Assessments. Pathways to Character Workshop, Wake Forest University & John Templeton Foundation
- Heller AS, Puccetti NA* (May, 2019) Persistence of Amygdala Activity Following Negative Stimuli Predicts Day-to-Day Affective Experience. Presentation at the MidLife in the United States (MIDUS) meeting. Madison, WI
- 10. Heller AS (March, 2019) Affective and Neural Dynamics, and Psychopathology. Clinical Psychology Seminar. McGill University, Montreal, Canada
- Heller AS (May, 2018) Affective and Neural Dynamics, and Psychopathology Across the Lifespan In S.H Goodman & J. Ostrov (co-Chairs) Association for Psychological Science Rising Star Clinical Science Forum. San Francisco, CA
- Heller AS, Baez LM*, Antoni MA (April, 2018) Characterizing Character Growth Following Breast Cancer Diagnosis Using Mobile Health & Lab Assessments. Pathways to Character Workshop. Arizona State University & John Templeton Foundation
- 13. **Heller AS** (October, 2018) *Affective and Neural Dynamics, and Psychopathology.* Clinical Psychology Seminar, Northwestern University, Evanston, IL
- 14. **Heller AS** (March, 2017) *Individual Differences in the Variability of Affective Experiences.* Clinical Psychology Seminar, Yale University, New Haven, CT
- 15. Heller AS (January, 2016) Affective Neurodynamics. In J. Zaki, L. Somerville, R. Thompson (Coorganizers) Emotional Dynamics. Symposium presented at the Emotion Preconference to the Annual Society for Personality and Social Psychology Meeting, San Diego, CA.

Instruction

Course Head

| Spring 2022 | Psy604 Cognition and Emotion |
|-------------|---|
| Spring 2021 | Psy604 Cognition and Emotion |
| Spring 2021 | Psy260 Introduction to Personality Psychology |
| Spring 2020 | Psy604 Cognition and Emotion |
| Spring 2020 | Psy260 Introduction to Personality Psychology |
| Spring 2020 | Psy670 Practicum in Clinical Psychology |
| Spring 2019 | Psy604 Cognition and Emotion |
| Spring 2019 | Psy670 Practicum in Clinical Psychology |
| Spring 2018 | Psy604 Cognition and Emotion |

| Spring 2018 | Psy670 Practicum in Clinical Psychology |
|-----------------------|---|
| Fall 2017 | Psy260 Introduction to Personality Psychology |
| Spring 2017 | Psy604 Cognition and Emotion |
| Spring 2017 | Psy670 Practicum in Clinical Psychology |
| Fall 2016 | Psy260 Introduction to Personality Psychology |
| Spring 2016 | Psy604 Cognition and Emotion |
| Spring 2016 | Psy670 Practicum in Clinical Psychology |
| Fall 2015 | Psy670 Practicum in Clinical Psychology |
| Co-Instruction | |
| Spring 2010 | Psy710 Multiple Regression & Linear Models |

Refereed Poster Presentations

2023

- Landon CH, Villano WJ, Heller AS (2023, October) Internalizing symptoms moderate the relationship between autobiographical memory and prediction errors. Poster presented at the annual Society for Research in Psychopathology meeting, St. Louis, MO
- Puccetti NA, Stamatis CA, Timpano KR, Heller AS (2023, May) Representational similarity analysis reveals a common brain network supporting worry and rumination. Poster presented at the annual Social Affective Neuroscience Society meeting, Santa Barbara, CA.
- Villano WJ, Jaso BA, Reneau TR, Baldassano C, Heller AS (2023, May) Exploring the generalization of affective schemas through neural event segmentation. Poster presented at the annual Social Affective Neuroscience Society meeting, Santa Barbara, CA.
- Baez LM, Heller AS (2023, May) Differential Trajectories of Internalizing Symptoms Over the Course of the Menstrual Cycle. Poster presented at the annual Social Affective Neuroscience Society meeting, Santa Barbara, CA.
- Villano WJ, Heller AS (2023, April) Brace Yourself: Bracing for the worst has short-term affective benefits but impedes long-term prediction error learning. Poster presented at the annual Society for Affective Science meeting, Long Beach, CA
- Pedreira PB, Moreno PI, Perdomo D, Heller AS, Antoni MH, Penedo FJ (2023, April) Family cohesion moderates the association between familism and disease-specific quality of life in Hispanic prostate cancer survivors Poster presented at the annual Society for Behavioral Medicine, Phoenix, AZ
- Silvera CA, Pedreira PB, Moreno PI, Perdomo D, Heller AS, Antoni MH, Penedo FJ (2023, April) Machismo and fatalism moderate the associations between pain interference and anxiety and depression in Hispanic prostate cancer patients Poster presented at the annual Society for Behavioral Medicine, Phoenix, AZ

2022

Villano WJ, Kraus NI, Reneau TR, Jaso BA, Otto AR, Heller AS (April, 2022) Negative Emotionality Is Associated with Overlearning from Small Prediction Errors. Poster presented at the Society for Affective Science meeting.

Villano WJ, Kraus NI, Reneau TR, Jaso BA, Otto AR, Heller AS (Feb 2022) Overlearning from Small Prediction

Errors Drives Inaccurate Expectations in Neurotic Individuals. Poster presented at the Reinforcement Learning and Decision Making meeting, Providence, RI.

- Naiman TRS, Heller AS, Fareri DS (2022, May) Temporal dynamics of the neural response to social relative to non-social rewards. Poster presented at the Social Affective Neuroscience Society meeting.
- Douma A, Tovin C, Nguyen K, Hryckowian J, Satpute A, Heller A, Uddin L, Nomi J (2022, June). Individual Differences in Cognitive and Affective Flexibility. Poster presented at the Organization of Human Brain Mapping meeting, Glasgow, Soctland.

2021

- Baez LM, Puccetti NA, Stamatis CA, Jaso B, Timpano KR, Heller AS (2021, November) Identifying Real-world Affective Correlates of Cognitive Risk Factors for Anxiety Disorders. Presented at the Association for Behavioral and Cognitive Therapies Conference.
- Baez LM, Grogans SE, Anderson AS, Islam S, DeYoung KA, Heller AS, Shackman AJ (2021, May) Using Affective Dynamics to Predict Dysphoria over 30 Months: A Partial Least Squares Regression Analysis. Presented at the Wisconsin Symposium on Emotion.
- Thomas LE, Baez L, Jaso B, Villano W, Heller A. (2021, November). Using Ecological Momentary Assessment to Understand the Links Between Affective Dynamics and Psychopathology. Presented at the Harvard Women in Psychology, Annual Trends in Psychology Summit in Cambridge, MA.
- Puccetti NA, Moraes EK, Stamatis CA, Timpano KR, Heller AS. (2021, October). Neural substrates of repetitive negative thinking: an fMRI analysis of overlapping worry and rumination signals in the brain. Presented at the 2021 Society for Neuroscience Meeting
- Puccetti NA, Moraes EK, Stamatis CA, Timpano KR, Heller AS. (2021, October) Neural substrates of repetitive negative thinking: an fMRI analysis of idiographic worry and rumination inductions. Presented at the 2021 Society for Research in Psychopathology Conference.
- Villano WJ, Jaso BA, Reneau TR, Otto AR, Heller AS (2021, April) Investigating the trade-offs between precision and positive surprise in the prediction of uncertain, real-world outcomes. Presented at the 2021 Society for Affective Science Conference.

2020

- Stamatis CA, Puccetti NA, Heller AS, Timpano KR. (2020, November). Set shifting deficits related to transdiagnostic risk for psychopathology: A hierarchical Bayesian drift diffusion modeling approach. Poster presented at the Annual Association for Behavioral and Cognitive Therapies Conference Meeting, Philadelphia, PA.
- Reneau TR, Heller AS (2020, May Cancelled) Ratio of eudaimonic well-being to hedonic positive affect is positively associated with functional connectivity in the salience network. Poster presentation at the Social Affective Neuroscience Society meeting, Santa Barbara, CA, USA.
- Baez LM, Heller AS. (2020, April Cancelled) Impact of prediction error on the longitudinal network structure of affect. Poster presentation at the Society for Affective Science meeting, San Francisco, CA, USA.
- Jaso BA, Kraus N, Heller AS. (2020, April Cancelled) Methods to automatically identify careless responding in ecological momentary assessment research: From post-hoc analyses to real-time data monitoring. Poster presentation at the Society for Affective Science meeting, San Francisco, CA, USA

Puccetti NA, Villano WJ, Stamatis CA, Torrez VF, Timpano KR, Heller AS. (2020, April - Cancelled) Individual

differences in emotional face-processing predict dynamic patterns of affect in daily life. Poster presentation at the Society for Affective Science meeting, San Francisco, CA, USA.

- Villano WJ, Otto AR, Ezie CEC, Gillis R, Heller AS (2020, April Cancelled). Temporal course of real-world emotion is more strongly linked to prediction error than outcome. Poster presentation at the Society for Affective Science meeting, San Francisco, CA, USA.
- Fisher HM, Taub CJ, Ream ME, Lechner SC, Lee DJ, Heller AS, & Antoni MH. (2020, April Cancelled). Does the Broaden-and-Build Theory explain reduction in social disruption after a brief relaxation protocol for breast cancer? Poster presentation at the 41st Annual Meeting of the Society of Behavioral Medicine, San Francisco, CA, USA.

2019

- Arditte Hall KA, Brown CA, Puccetti N, Heller AS, Timpano KR (2019, October). Poorer Set Shifting Ability Prospectively Predicts Trauma-Related Rumination among Individuals Exposed to Hurricane Irma. Poster presented at the Annual Association for Behavioral and Cognitive Therapies Conference Meeting, Washington DC.
- Jaso BA, Villano W, Ezie CEC, Heller AS (2019, October). Utilizing empirically derived emotion groups to better understand symptoms of psychopathology. Poster presented at the Annual Association for Behavioral and Cognitive Therapies Conference Meeting, Washington DC.
- Stamatis CA, Puccetti NA, Heller AS, Timpano KR (2019, October). Decision-making in hoarding and OCD symptoms: A behavioral economic perspective. Poster presented at the Annual Association for Behavioral and Cognitive Therapies Conference Meeting, Washington DC.
- Baez L & Heller AS (2019, September). Adolescent Age At Onset of Depression: A Unique Psychological Symptom Network. Poster presented at the Annual Meeting of the Society for Research in Psychopathology, Buffalo, NY.
- Puccetti NA, Schaefer SM, van Reekum CM, Ryff CD, Davidson RJ, Heller AS (2019, September). Persistence of amygdala activity following negative stimuli predicts day-to-day affective experience. Annual Meeting of the Society for Research in Psychopathology, Buffalo, NY.
- Nomi JS, Bolt T, Heller AS, Uddin LQ (2019, July). Test-Retest Reliability of Resting-State BOLD Signal Variability Measures. Poster presented at the Organization for Human Brain Mapping, Rome, IT.
- Puccetti NA, Brown CA, Timpano KR, Heller AS (2019, May). Patterns of day-to-day affect differentially mediate the effect of repetitive negative thinking on depression and anxiety symptoms. Poster presented at the Social Affective Neuroscience Society meeting, Miami Beach, FL.
- Baez L, Puccetti N, Villano W, Ezie CEC, Brown CA, Timpano KR, Heller AS (2019, May). How is repetitive negative thinking associated with daily affective dynamics? Poster presented at the Social Affective Neuroscience Society meeting, Miami Beach, FL.
- Puccetti NA, Schaefer SM, van Reekum CM, Ryff CD, Davidson RJ, Heller AS (2019, March). Persistent amygdala activity following negative stimuli predicts day-to-day affective experience. Poster presented at the 2019 Wisconsin Symposium on Emotion.
- Baez L & Heller AS (2019, March). Adolescent Age At Onset of Depression: A Unique Psychological Symptom Network. Poster presented at the 2019 Wisconsin Symposium on Emotion.

- Westwright JS, Szeto A, Heller AS, McCabe PM, Mendez AJ (2018, November). Regulation of pancreatic islet oxytocin by autonomic nervous system agonists. Poster presented at the Annual Society for Neuroscience Meeting, San Diego, CA.
- Baez L, Kamisetty S, Villano WJ, Newport J, Heller AS (2018, November). Using Mobile Health to Assay Change in Real World Affect in Women with Peripartum Depression. Poster presented at the Annual Association for Behavioral and Cognitive Therapies Conference Meeting, Washington DC.
- Brown CA, Puccetti NA, Heller AS, Timpano, KR (2018, November). The impact of repetitive negative thinking on risk and loss aversion in response to stress. Poster presented at the Annual Association for Behavioral and Cognitive Therapies Conference Meeting, Washington DC.
- Hudiburgh SE, Jaso BA, Heller AS, Timpano KR (2018, November). If You're Stressed, Don't Suppress: Understanding the Relationship between Affect Intolerance, Maladaptive Emotion Regulation, and Psychological Symptoms. Poster presented at the Annual Association for Behavioral and Cognitive Therapies Conference Meeting, Washington DC.
- Nomi JS, Bolt T, Heller AS, Uddin LQ (2018, September). Test-Retest Reliability of Resting-State BOLD Signal Variability Measures, Poster presented at the Biennial Conference on Brain Connectivity, Montreal, CA
- Puccetti NA, Brown CA, Timpano KR, Heller AS (2018, September). Repetitive negative thinking as a transdiagnostic mediator between symptom severity and decision-making under stress. Poster presented at the Annual Meeting of the Society for Research in Psychopathology, Indianapolis, IN.
- Villano W, Ezie CE C, Jaso B, Heller AS (2018, September). Risk for depression is associated with altered affective reactivity to prediction errors. Poster presented at the Annual Meeting of the Society for Research in Psychopathology, Indianapolis, IN.
- Saragosa-Harris NM, Reneau TR, Villano WJ, Cohen AO, Heller AS, Hartley CA (2018, August). Affective sensitivity to real-world exploration is heightened in adolescence. Poster presented at the Annual Flux Congress, Berlin, GER
- Saragosa-Harris NM, Cohen AO, Reneau TR, Villano WJ, Heller AS, Hartley CA (2018, May). Real-world exploration is associated with greater positive affect in adolescents and adults. Poster presented at the Annual Social Affective Neuroscience Society Meeting, Brooklyn, NY.
- Villano W, Ezie CEC, Gillis RC, Otto RA, Heller AS (2018, May). Emotional variability is associated with risk for depression. Poster presented at the Annual Social Affective Neuroscience Society Meeting, Brooklyn, NY.

2017

- Villano W, Ezie CEC, Jaso B, Heller AS (2017, September). Emotional Variability Is Associated With Risk For Depression. Poster presented at the Annual Meeting of the Society for Research in Psychopathology, Denver, CO
- Jaso BA, Ezie CEC, Timpano KR, Heller AS (2017, November) Using EMA to Delineate the Specific Affective Dynamics Associated With Maladaptive Cognitive Styles Poster presented at the Annual Meeting of the Association for Behavioral and Cognitive Therapies, San Diego, CA.
- Yang J, Heller AS. (2017, Summer) Physiology and feeling: Emotional coherence and activation in the ventromedial prefrontal cortex. Presented at the University of Miami College of Arts and Sciences Summer Research Program for Underrepresented Minorities & Women

2016

Nomi JS, Bolt TS, Ezie C*, Uddina LQ, Heller AS (2016, September). Moment-to-Moment BOLD Variability Reflects Functional Specialization Across the Lifespan. Poster presented at the Annual Flux Meeting, St. Louis, MO.