**James R. Houston, Ph.D.**

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Website: <https://jamesrhouston.com> Murfreesboro, TN 37132

**Professional Experience**

Assistant Professor, September, 2018 to present

Department of Psychology

Middle Tennessee State University, Murfreesboro, TN

Postdoctoral Research Fellow, September, 2016 to July, 2018

Conquer Chiari Research Center

The University of Akron, Akron, OH

**Education**

Ph.D., Adult Development and Aging Psychology, August, 2016

The University of Akron, Akron, OH

Cognitive aging emphasis

Dissertation Topic: *Aging and context effects in working memory: an event-related potential investigation.*

M.S., Adult Development and Aging Psychology, August, 2013

The University of Akron, Akron, OH

Cognitive aging emphasis

Thesis Topic: *Behavioral and neurophysiological associates of aging and emotional word recognition.*

B.S., Psychology, March, 2011

The Ohio State University, Columbus, OH

**Publications**

**Houston, J.R.,** Lien, M-C., Ealy, D., Mallik, P., & Allen, P.A. (in preparation). On age differences in lexical node sensitivity and emotion regulation: An event-related potential study.

**Houston, J.R.**, Houston, M.L., Ealy, M-C., Lien, M-C., & Allen, P.A. (in preparation). Aging and context effects in working memory: An event-related potential investigation.

Lamancusa, K., Allen, P.A., Hall, R.J., **Houston, J.R.**, Houston, M.L., Lien, M-C., & Hayslip Jr., B. (revision under review). Does creative potential decrease through middle adulthood? *Experimental Aging Research.*

Salinas, S. D., Farra, Y. M., Khoiy, K. A., **Houston, J.R.**, Lee, C.-H., Bellini, C., & Amini, R. (2022). The role of elastin on the mechanical properties of the anterior leaflet in porcine tricuspid valves. *PLOS ONE*, *17*(5), e0267131.

**Houston, J.R.**, Maleki, J. Loth, F., Klinge, P.M., & Allen, P.A. (2022). Influence of pain on cognitive dysfunction and emotion dysregulation in Chiari malformation Type I. In M. Adamaszek, M-U. Manto, & D.J. Schutter (Eds.), *The Emotional Cerebellum*. Springer Publishing.

Houston, M.L., **Houston, J.R.**, Sakaie, K., Klinge, P.M., Vorster, S., Luciano, M.G., Loth, F., & Allen, P.A. (2021). Functional connectivity abnormalities in Type I Chiari: Associations with cognition and pain. *Brain Communications. 3*(3), fcab137.

García, M., Eppelheimer, M.S., **Houston, J.R.**, Houston, M.L., Nwotchouang, B.S., Kaut, K.P., Labuda, R., Bapuraj, J.R., Maleki, J. Klinge, P.M., Vorster, S., Luciano, M.G., Loth, F., & Allen, P.A. (2021). Adult Age Differences in Self-Reported Pain and Anterior CSF Space in Chiari Malformation. *Cerebellum.*

Garcia, M.A., Li, X., Allen, P.A., Delahanty, D.L., Eppelheimer, M.S., **Houston, J.R.**, Johnson, D.M., Loth, F., Maleki, J., Vorster, S., & Luciano, M.G. (2021). Impact of Surgical Status, Loneliness, and Disability on Interleukin 6, C-Reactive Protein, Cortisol, and Estrogen in Females with Symptomatic Type I Chiari Malformation. *Cerebellum. 20*(6), 872-886.

Mallik, P.R., Allen, P.A., Lien, M-C., Jardin, E., Houston, M.L., **Houston, J.R.**, & Jurosic, B.K. (2021). An Electrophysiological Study of Aging and Perceptual Letter-Matching. *Experimental Aging Research. 47*(1), 92-108.

**Houston, J.R.**, Hughes, M.L., Bennett, I.J., Allen, P.A., Rogers, J.M., Lien, M-C., … Luciano, M.G. (2020). Evidence of neural microstructure abnormalities in Type I Chiari Malformation: Associations among fiber tract integrity, pain, and cognitive dysfunction. *Pain Medicine. 21*(10), 2323-2335.

Nwotchouang, B.S., Eppelheimer, M., Ibrahimy, A., **Houston, J.R.**, Biswas, D., Labuda, R., … Loth, F. (2020). Clivus length distinguishes between asymptomatic healthy controls and symptomatic adult women with Chiari Malformation Type I. *Neuroradiology*. *62*(11), 1389-1400.

**Houston, J.R.**, Allen, N.J., Eppelheimer, M.S., Bapuraj, J.R., Biswas, D., Allen, P.A., & Loth, F. (2019). Evidence for sex differences in morphological abnormalities in Type I Chiari Malformation. *The Neuroradiology Journal, 32*(6), 458-466.

Garcia, M.A., Allen, P.A., Li, X., **Houston, J.R.**, Loth, F., Labuda, R., Delahanty, D.L. (2019). An examination of pain, disability, and the psychological correlates of Chiari Malformation pre- and post-surgical correction. *Disability and Health Journal*. *12*(4), 649-656.

Jardin, E., Allen, P.A., Levant, R.F., Lien, M-C., McCurdy, E.R., Villalba, A., Mallik, P., **Houston, J.R.**, & Gerdes, Z.T. (2019). Electrophysiological evidence of emotional processing deficits in alexithymia. *Journal of Cognitive Psychology. 31*(5-6), 619-633.

**Houston, J.R.**, Allen, P.A., Rogers, J.M., Lien, M-C., Allen, N.J., Hughes, … Luciano, M.G. (2019). Type I Chiari Malformation, RBANS performance, and brain morphology: Connecting the dots on cognition and macro-level brain structure. *Neuropsychology, 33*(5), 725-738.

Eppelheimer, M.E., Biswas, D., Braun, A.M., **Houston, J.R.**, Allen, P.A., Bapuraj, J.R., … Loth, F. (2019). Quantification of changes in brain morphology following posterior fossa decompression surgery in women treated for Chiari malformation type 1. *Neuroradiology, 6*(9), 1011-1022*.*

Biswas, D., Eppelheimer, M., **Houston, J.R.**, Ibrahimy, A., Bapuraj, R., Labuda, R., … Loth, F. (2019). Quantification of Cerebellar Crowding in Type I Chiari Malformation. *Annals of Biomedical Engineering*, *47*(3), 731-743.

Allen, P.A., Hughes, M.L., **Houston, J.R.**, Jardin, E., Mallik, P., McLennan, C., & Delahanty, D.L. (2019). Are There Age Differences in Consolidated Episodic Memory? *Experimental Aging Research, 45*(2), 97-119.

**Houston, J.R.**, Hughes, M.L., Lien, M-C., Martin, B.A., Loth, F., Luciano, M., Vorster, S., & Allen, P.A. (2018). An electrophysiological study of cognitive and emotion processing in Type I Chiari malformation. *The Cerebellum*, *17*(4)*,* 404-418.

**Houston, J.R.**, Pollock, J.W., Lien, M.-C., & Allen, P.A. (2018). Emotional Arousal Deficit or Emotional Regulation Bias? An Electrophysiological Study of Age-Related Differences in Emotion Perception. *Experimental Aging Research, 44*(3), 187-205.

Eppelheimer, M.S., **Houston, J.R.**, Bapuraj, J.R., Labuda, R., Loth, D.M., Braun, A.M., Allen, N.J., Heidari Pahlavian, S., Biswas, D., Urbizu, A., Martin, B.A., Maher, C.O., Allen, P.A., & Loth, F. (2018). A retrospective morphometric analysis of adult female Chiari type I patients with commonly reported and related conditions. *Frontiers in Neuroanatomy, 12,* 2.

**Houston J.R.**, Eppelheimer M.S., Pahlavian S.H., Biswas D., Urbizu A., Martin B.A., Bapuraj J.R., Luciano M., Allen P.A., Loth F. (2018). A morphometric assessment of type I Chiari malformation above the McRae line: A retrospective case-control study in 302 adult female subjects. *Journal of Neuroradiology, 45*(1), 23-31.

# Allen, P.A., Delahanty, D., Kaut, K.P., Li, X., Garcia, M., Houston, J.R., Tokar, D.M., Loth, F., Maleki, J., Vorster, S., & Luciano, M.G. (2018). Chiari 1000 Registry Project: assessment of surgical outcome on self-focused attention, pain, and delayed recall. *Psychological Medicine, 48*(10), 1634-1643.

**Houston, J.R.,** Bennett, I.J., Allen, P.A., & Madden D.J. (2016). Visual acuity does not moderate effect sizes of higher-level cognitive tasks. *Experimental Aging Research, 42*(3), 221-263.

Zelin, A.I., Erchull, M.J., & **Houston**, **J.R.** (2015). Is everybody doing it? Perceptions and misperceptions of sexual behavior in the college freshman population. *Gender Issues 32(3)*, 139-163.

#### Allen, P.A., **Houston, J.R.,** & Pollock, J.W., et al. (2014). Task-Specific and General Cognitive Effects in Chiari Malformation Type 1. PLoS ONE, (4), e94844.

**Representative conference presentations** (see website for full listing)

**Houston, J.R.** (2019). Exploring the current perspectives on cognitive and emotional aging: What does the research suggest about our aging minds? Keynote presented at the Annual Meeting for the Middle Tennessee Psychological Association, Murfreesboro, TN.

Houston, M.L., **Houston, J.R.**, Vorster, S.C., Luciano, M.G., Loth, F., & Allen, P.A. (2019). Investigating the relationship between cognitive function and neural connectivity in Type I Chiari malformation patients. Poster presented at the Annual Meeting for the Psychonomic Society, Montréal, QC.

Allen, P.A., **Houston, J.R.**, Hughes, M.L., Bennett, I.J., Loth, F., Rogers, J.M., Stoodley, M.A., Luciano, M.G., Voster, S.J. (2019). Structural Integrity (DTI) and Functional Connectivity (Resting-State fMRI) in Chiari Malformation Type I: The Effects of Pain and Cognition. Talk presented at the 2nd Annual CSF Flow Meeting, Buffalo, NY.

**Houston, J.R.**, Lien, M-C., Hughes, M.L., Mallik, P.R., & Allen, P.A. (2017). Aging and context effects in working memory: an event-related potential investigation. Poster presented at the Annual Meeting for the Psychonomic Society, Vancouver, BC.

Hughes, M.L., **Houston, J.R.**, Lien, M-C., Vorster, S., Luciano, M.G., Loth, F., & Allen, P.A. (2017). Investigating Neurological Correlates of Chiari Malformation Type I Symptomatology: A Diffusion Tensor Imaging Study of Cognition and Pain. Poster presented at the Annual Meeting for the Psychonomic Society, Vancouver, BC.

Allen, P.A.**,** & **Houston, J.R.** (2017). Proposal of a “Cerebellar” Cognitive Test Battery – Adult Perspective. Talk presented at the 2nd Annual Cerebrospinal Fluid Disorders Symposium, Providence, RI.

**Houston, J.R.,** Allen, P.A., Luciano, M.G., Vorster, S., & Loth, F. (2016). Chiari Malformation and Hyper-Vigilance: An EEG Study. Poster presented at the Annual Meeting for the Psychonomic Society, Boston, MA.

**Houston, J.R.,** Pollock, J.W., Lien, M-C., & Allen, P.A. (2015). An ERP investigation of age-related disruption of affective integration during the processing of emotional faces. Poster presented at the Annual Meeting for the Psychonomic Society, Chicago, IL.

Allen, P.A., & **Houston, J.R.** (2014). Influence of Chiari Malformation I on affective and cognitive performance. Talk presented at the International Conquer Chiari Research Conference, Akron, OH.

**Houston, J.R.,** Lien, M.-C., & Allen, P.A., (2014). Aging and the processing of emotional words, an event-related potential approach. Poster presented at The Gerontological Society of America’s 67th Annual Scientific Meeting, Washington, D.C.

**Houston, J.R.,** Bennett, I.J., Allen, P.A., & Madden D.J., (2014). Age group comparisons in cognitive aging: Do visual acuity criteria matter? Poster presented at The Gerontological Society of America's 67th Annual Scientific Meeting, Washington, D.C.

**Research and creative activity funding**

* Conquer Chiari Foundation: *High Resolution Diffusion Tensor Imaging of the Cerebellum and Brainstem in Type I Chiari Malformation: Associations with Cognitive Function and Symptomatology.*
  + Role: PI
  + Total requested funds: $26,008.00 PI Award amount: $16,088.00
  + Status: Funded
* R01 GRANT13477741: *Longitudinal Influence of Adult Age and Isolation on Chiari Malformation Symptoms.*
  + Role: Co-PI
  + Total requested funds: $3,828,374.00 Sub-award amount: $131,256.00
  + Status: Not funded
* R01 NS109414: *Natural History of Middle Adulthood in Chiari Malformation Type I.*
  + Role: Co-PI
  + Total requested funds: $3,830,288.00 Sub-award amount: $130,512.00
  + Status: Not funded

**Professional memberships**

Fellow, Psychonomic Society, 2020 to present

Member, Division 20: Adult Development and Aging, 2020 to present

Member, Division 7: Developmental Psychology, 2020 to present

Member, Psychonomic Society, 2016 to 2020.

Student member, Psychonomic Society, 2014 to 2016.

**Peer review responsibilities**

Review editor, Frontiers in Cognition, 2022 to present

Consulting editor, Experimental Aging Research, 2020 to present.

Ad hoc reviewer, Scientific Reports, 2021 to present

Ad hoc reviewer, Fluids and Barriers of the CNS, 2020 to present.

Ad hoc reviewer, Frontiers in Neurology, 2020 to present.

Ad hoc reviewer, Psychological Reports, 2019 to present.

Ad hoc reviewer, Frontiers in Psychology, 2019 to present.

Ad hoc reviewer, Attention, Perception, and Psychophysics, 2018 to present.

Ad hoc reviewer, Social Neuroscience, 2018 to present.

Ad hoc reviewer, Developmental Cognitive Neuroscience, 2017 to present.

Ad hoc reviewer, Experimental Aging Research, 2017 to present.

Ad hoc reviewer, Journal of Cognitive Psychology, 2015 to present.

Ad hoc reviewer, Public Library of Science (PLoS) One, 2014 to present.

**Teaching experience**

Assistant Professor, Psychology 6600: Independent Research in Psychology, Middle Tennessee State University, May 2021, to present.

Assistant Professor, Psychology 3020: Basic Statistics for the Behavioral Sciences, Middle Tennessee State University, August, 2019, to present.

Assistant Professor, Psychology 4610/5610: Adult Development and Aging, Middle Tennessee State University, January, 2019, to present.

Assistant Professor, Psychology 3990: Research in Psychology (Topic: Cognitive Neuroscience of Aging), Middle Tennessee State University, January, 2019, to present.

Assistant Professor, Psychology 2300: Developmental Psychology, Middle Tennessee State University, August, 2018, to December, 2018.

Assistant Professor, Psychology 3590: Personality Psychology, Middle Tennessee State University, August, 2018 to present.

Lecturer and Primary Instructor, Psychology 230: Developmental Psychology, The University of Akron, January, 2014 to May, 2014.

Lecturer and Primary Instructor, Psychology 110: Quantitative Methods in Psychology, The University of Akron, September, 2013 to December, 2013.

Lecturer and Primary Instructor, Psychology 100DL: Introduction to Psychology (Distance Learning), The University of Akron, January, 2013 to May, 2013.

Lecturer and Primary Instructor, Psychology 100H: Introduction to Psychology (Honors), The University of Akron, September, 2012 to December, 2012.

Lecturer and Primary Instructor, Psychology 100: Introduction to Psychology, The University of Akron, September, 2011 to May, 2012.

**Graduate mentoring and advising**

|  |  |  |  |
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| **Student** | **Role** | **Topic** | **Year** |
| Denise Ealy | MA Thesis Chair | Examining the mechanisms of forgetting associated with age-related differences in creativity | 2022-2023 |
| Brenna Armfield | MA Thesis Committee Member | Predicting job performance parameters from working memory performance | 2021-2022 |
| Jennifer Johnson | MA Thesis Committee Member | Does emotion perception in music and speech prosody show a negative bias? A neural oscillation investigation | 2020-2021 |
| Maitane García | Ph.D. Thesis Committee Member | Perfil neuropsicológico asociado a la Malformación de Chiari tipo I: implicaciones del cerebelo en el funcionamiento cognitive | 2020-2021 |
| Haylie Stoltz | MA Thesis Committee Member | Trauma’s relation to neuropsychological functioning and the vulnerability of the LGB community | 2019-2020 |
| Hao Ngo | MA Thesis Committee Member | Does growing up with technology enhance sensory integration? | 2019-2020 |
| Richard Evitts | MA Thesis Committee Member | Narcissism and selection decisions: Do narcissists select narcissists? | 2019-2020 |
| Meredith Russell | MA Thesis Committee Member | Trouble at work: A model testing relationships among job strain, social support, cooperativeness, and well-being | 2019-2020 |
| Kara Ann Wilson | MA Thesis Committee Member | Priority and distinctiveness: enhancing free recall using categorical network | 2018-2019 |

**Undergraduate mentoring and advising**

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| **Student** | **Role** | **Topic** | **Year** |
| Lisa Hardie | Thesis Advisor | Viewing Gender Differences in Emotional Response, Attention, and Memory Using EEG | 2018-2019 |
| Natalie Wiswesser | Thesis Mentor | An Electrophysiological Study on Sex-Related Differences in Emotion Perception | 2017-2018 |
| Jenna Jwayyed | Thesis Mentor | Cognitive correlates of refugee status | 2015-2016 |
| Victoria Boni | Thesis Mentor | The Correlation between Depression and Exercise/Diet | 2015-2016 |
| Ann Rossmiller | Thesis Mentor | The effects of selective attention on memory performance and studying | 2015-2016 |
| Hannah Croft | Thesis Mentor | Sex Differences in Divided and Focused Attention: Are women better at multi-tasking? | 2014-2015 |
| Heidi Honeck | Thesis Mentor | Global Precedence as a Function of Handedness | 2013-2014 |

**University service responsibilities**

**Role Organization Year**

Chair MT-Internal Grant Opportunities committee 2021-present

Leadership MTSU Positive Aging Consortium 2019-present

Member MTSU Aging Studies 2019-present

Member Faculty Research and Creative Activity committee 2020-2021

**Departmental service responsibilities**

**Role Organization Year**

Member Ad hoc Research Space committee 2020-present

Member Long-Range Planning committee 2019-present

Member Social and Professional Activities committee 2019-present

Member Ad hoc Tenure-Track Search committee 2021-2022

Co-chair Ad hoc Tenure-Track Search committee 2020-2021

Member Faculty Liaison committee 2020-2021

Member Diversity, Inclusion, & Equity committee 2020-2021

Chair Diversity, Inclusion, & Equity committee 2019-2020

Member Research Pool Users committee 2019-2020

Member Ad hoc Tenure-Track Search committee 2019-2020

**Additional service responsibilities**

Senior Thesis Mentor (11 total students), Central Magnet High School, 2018-present

Invited Speaker, St. Clair Senior Center, 2019-present

Project Judge, Middle Tennessee State University Invention Convention, 2019

Invited Speaker, Ohio State Graduate Fair in Psychology (5 presentations, 2011 to 2015).

Invited Speaker, Akron STEM school visitation day, The University of Akron, 2015.

District Mentor, Ohio State Science Fair, The University of Akron, 2015.

District Judge, Western Reserve District 5 Science day, The University of Akron, 2015.

Treasurer, Gerontology Association, The University of Akron, 2013 to 2014.

**Related training**

Certificate in Asynchronous Distance Learning, Awarded by Middle Tennessee State University, July, 2019.

Certificate in Synchronous Distance Learning, Awarded by the University of Akron Institute for Teaching and Learning, April, 2013.

**Fellowships, Scholarships, and awards**

**Title Organization Year**

Fellowship Psychonomic Society 2020-present

Graduate Research Fellowship The Conquer Chiari Foundation 2015-2016

Paul E. Panek Endowed Scholarship The University of Akron 2015-2016

in Psychology

Graduate Research Fellowship The Conquer Chiari Foundation 2014-2015

Master’s Thesis Research Scholarship The University of Akron 2013

Graduate Student Travel Award The University of Akron 2012

Pathways Academic Scholarship The Ohio State University 2011

Provost Academic Scholarship The Ohio State University 2011