**Jessica A. Bernard**
**Curriculum Vitae**
Texas A&M University
Department of Psychological and Brain Sciences
4235 TAMU
College Station, Texas 77843
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## ACADEMIC APPOINTMENTS

September 2024 **Professor** Texas A&M University
Ella McFadden Endowed Professor in Liberal Arts
Department of Psychological and Brain Sciences
Texas A&M Institute for Neuroscience
Faculty Affiliate, Center for Population Health and Aging

2021- 2024 **Associate Professor** Texas A&M University
Department of Psychological and Brain Sciences
Texas A&M Institute for Neuroscience
Faculty Affiliate, Center for Population Health and Aging

2015-2021 **Assistant Professor** Texas A&M University
Department of Psychological and Brain Sciences
Texas A&M Institute for Neuroscience

September 2013- July 2015 **Post-Doctoral Fellow** University of Colorado Boulder,
Department of Psychology and Neuroscience
ADAPT (Adolescent Development and Preventative Treatment) Program
Supervisor: Vijay Mittal, PhD

October 2012 - August 2013 **Post-Doctoral Fellow** University of Colorado Medical School
Neurology Department
Supervisor: Benzi Kluger, M.D.

## EDUCATION

August 2012 **PhD.** Department of Psychology, University of Michigan**,** Ann Arbor, MI
Cognition & Cognitive Neuroscience Area.
Advisor: Rachael D. Seidler, PhD
Dissertation: The aging cerebellum: Cortico-cerebellar connectivity, volume, and the impact on behavior.

August 2009 **M.S.** Department of Psychology, University of Michigan**,** Ann Arbor, MI
Cognition & Cognitive Neuroscience Area.

May 2007 **B.S.** Biological Psychology *cum laude,* Tufts University**,** Medford, MA

## RESEARCH TRAINING

2008-2012 LIFE – The Life Course: Evolutionary and Ontogenetic Dynamics,

A collaborative graduate program between Max Planck Institute for Human Development, Berlin; Humboldt University, Berlin; Free University of Berlin; University of Zurich; University of Virginia, and University of Michigan; twice yearly academic meetings

Fall 2007 Intensive Course in Transcranial Magnetic Stimulation.
Harvard Medical School Department of Continuing Education, Beth Israel Deaconess Medical Center. Directed by Alvaro Pascual-Leone, M.D., Ph.D

**GRANT FUNDING**
**Active (External)**
National Science Foundation
Title: New Directions in Bayesian Heterogeneous Data Integration: Methods, Theory and Applications
Role: Co-I
PI: Sharmistha Guha
Project Period: 7/1/24-6/31/27
Total Costs: $150,000
Goal: The goal of this proposal is to develop novel Bayesian regression frameworks with multi-network and multivariate objects. This is motivated by an important but understudied task of combining information across multiple neuroimaging data sources/modalities in a biologically plausible manner to detect complex neurological disorder (ND) characteristics that are hidden by considering analyses of data from a single source.

WoodNext Foundation
Title: The human cerebellum: a novel target for cognitive and motor interventions in aging & Alzheimer's Disease
Role: PI
Project Period: 12/15/23-12/14/25
Total Costs: $500,000
Goal: Quantify cerebellar functional topography in cognitively normal older adults and individuals with mild cognitive impairment, and the degree to which cerebellar transcranial magnetic stimulation modulates behavioral performance, functional activation, and network connectivity.

National Institute on Aging R01 (AG064010)
Title: A longitudinal investigation of the cerebellum in adulthood: anatomical and network changes, motor function, and cognition
Role: PI
Project Period: 9/1/19-5/31/24, No Cost Extension through 5/31/26
Total Costs: $3,049,115
Co-Is: Gerianne Alexander, Sharon Dormire, Marielle Engelen, Huiyan Sang
Goal: Determine trajectories of cerebellar structural and network decline during middle age and older adulthood with respect to motor and cognitive performance changes, and to examine sex differences in both cerebellar and behavioral trajectories

Mental Research Institute
Title: Neural pathways to positive family development: protective effects of estrogen on mother-infant relationships
Role: MPI with Dr. Rebecca Brooker
Project Period: 11/1/24-10/31/25

Total Costs: $18,000
Goal: This project will explore hormonal changes and brain networks during pregnancy and post-partum, longitudinally in multi-parous mothers. Impacts on parenting and infant outcomes will also be explored.

Michael J Fox Foundation Parkinson's Progression Markers Initiative Write Now!
Title: Cerebellar functional connectivity change in Parkinson's cognitive impairment: a Parkinson's Progression Markers Initiative Database Analysis
Role: Co-I
PI: Chi-Ying Roy Lin, Baylor College of Medicine
Project Period: 10/1/24-9/30/25
Total Costs: $7,000
Goal: Quantify differences in cerebellar networks in individuals with Parkinson's disease with and without cognitive impairment. The results from this project will serve as the foundation for future larger scale NIH grant submissions.

Circle of Giving, Oregon Health Sciences University
Title: Evaluating changes in brain functional networks during menopause
Role: MPI (Jessica Bernard, Alison Weiss (OHSU))
Performance Period: 6/1/25-5/31/26
Total Costs: $125,000
TAMU Costs: $66,179
Goal: Investigate brain network changes across the menopausal transition in humans with and without hormone therapy using dense sampling neuroimaging and in non-human primates that have undergone surgical menopause followed by immediate or delayed hormone therapy.

National Institutes of Mental Health K23 (MH129607)
Mentored Patient-Oriented Research Career Development Award
Title: Clarifying the role of psychomotor retardation in reward-based reinforcement learning deficits in MDD: a computation and fMRI Study
Role: Consultant
PI: Allison Letkiewicz
Project Period: 12/15/22-12/14/27
Total Costs: $907,935

**Active (Internal)**
Targeted Proposal Teams (TPT) Collaborative Seed Grant
Title: Mobile Brain-Computer Interface
PI: Takashi Yamauchi
Role: Co-I
Total Costs: $44,998

College of Arts and Sciences Merger Grant
Title: Defining shared properties of aging in flies and humans to improve translational research
PIs: Alex Keene, Jessica Bernard
Total Costs: $10,000

College of Arts and Sciences Merger Grant
Title: Novel methods for imaging data from multiple modalities
PIs: Sharmistha Guha, Jessica Bernard
Total Costs: $10,000

College of Arts and Sciences Merger Grant
Title: Scalable Bayesian brain image data analysis for studying cognitive and motor aging
PIs: Huiyan Sang, Jessica Bernard
Total Costs: $10,000

Texas A&M Social Sciences Collaboratory
Title: Pilot Study of Functional and Structural Changes to the Maternal Brain During Pregnancy
PIs: Rebecca Brooker, Jessica Bernard
Total Costs: $10,000

**Under Review**
National Institute on Aging R21
Title: Defining the impact of non-invasive stimulation on cerebello-thalamo-cortical physiology in advanced age
Role: MPI (Jessica Bernard and Yuming Lei)
Performance Period: 12/1/25-11/30/27
Total Costs: $421,250
Goal: Quantify the impact of non-invasive stimulation to the cerebellum on cerebello-cortical physiological interaction in the aging brain.

National Institute on Aging R01
Title: The cerebellum in aging and mild cognitive impairment: longitudinal insights into function, structural networks, and neurodegeneration
Role: PI
Performance Period: 12/1/25-11/30/30
Total Costs: $3,739,459
Goal: This work will quantify changes in cerebellar function and white matter in cognitively normal older adults as well as those with mild cognitive impairment. This work further incorporates plasma measures of Alzheimer's Disease and neurodegeneration to better understand the role of the cerebellum therein.

National Institute on Aging R01
Title: Homeokinetic predictors of cognitive health
Role: Co-I
PI: Jenna Yentes
Performance Period: 4/1/25-3/31/30
Total Costs: $3,203,108
Goal: The goal of this work is to identify the potential clinical utility of intrinsic capacity, a holistic measure of well-being, for middle-aged and older adults with varying cognitive abilities. Intrinsic capacity takes into account multiple bodily systems, and stands to provide novel insights into early identification of cognitive decline.

National Institute on Aging R01
Title: Comprehensive and integrative characterization of peripheral health, brain aging, and muscle-brain metabolic crosstalk to predict neurocognitive decline in MCI using novel stable isotope approaches
Role: Co-I
PI: Marielle Engelen
Performance Period: 10/1/25-9/30/30

Total Costs: $3,435,740
Goal: The goal of this project is to better understand peripheral health and metabolic factors that relate to brain aging and cognitive function and outcomes in advanced age.

National Institute of Mental Health R21
Title: The role of hormones in the plasticity of the maternal brain
Role: MPI (Jessica Bernard, Rebecca Brooker)
Performance Period: 4/1/24-3/31/26
Total costs: $419,375
Goal: Determine the degree to which hormonal fluctuations during pregnancy catalyze brain structural and functional changes, and their impacts on mental health and caregiving measures post-partum.

National Institute on Aging F32
Title: Neuromodulation of somatosensory cortex and cerebellum to improve brain connectivity and standing balance in older adults
Role: Co-Sponsor
PI/Trainee: Ashwini Sansare
Performance Period: 10/1/25-9/31/28

**Completed**
National Institute of Mental Health R01 (MH118741)
Title: An examination of psychomotor disturbance in current and remitted MDD: An RDoC Study
Role: Co-Investigator
PIs: Stewart Shankman, Vijay Mittal, Sebastian Walther
Project Period: 4/1/19-3/31/24
Total Costs TAMU: $100,645
Goal: Investigate psychomotor agitation and psychomotor retardation in patients with either current or remitted major depressive disorder to understand the relationship between psychomotor disturbance and disease course, and to determine differences in motor network connectivity in major depressive disorder.

Swiss National Science Foundation (SNSF)
Title: Overcoming psychomotor slowing in psychosis – a combined neuroimaging and transcranial magnetic stimulation study on the pathophysiology of motor slowing
Role: Project Partner (SNSF equivalent of Co-Investigator)
PI: Sebastian Walther
Goal: Determine the efficacy of transcranial magnetic stimulation to treat psychomotor slowing in patients with psychosis, and to determine the mechanistic underpinnings for these effects using neuroimaging.

National Institute on Aging Research Supplement to Promote Diversity in Health-Related Research (AG064010-04S1)
Role: PI, Mentor
Project Period: 9/1/2022-5/31/24
Total Costs: $120,940
Goals: This is a supplement to R01AG064010 to provide training to Mr. Ivan Herrejon, a doctoral student in my laboratory.

Texas A&M Triads for Transformation

Title: Non-invasive modulation of the dopaminergic midbrain and the influence on motor learning and retention
Role: PI
Project Period: 5/1/2018-4/31/2019 (No Cost Extension)
Total Costs: $30,000
Goal: Determine the impact of transcranial direct current stimulation targeting the midbrain, and purported to increase the release of dopamine, on motor learning and retention, as well as brain activation and resting state connectivity.

Catapult Seed Grant
Title: Stress, cognitive impairment, and self-management behaviors among rural minorities diagnosed with Type-2 diabetes
Role: Co-Investigator
PI: Idethia Shevon Harvey
Project Period: 1/15/2020-6/15/2021
Total Costs: $30,000
Goal: The goal of this work is to understand how stress and cognitive impairment impact differences in Type-2 diabetes self-management in rural African Americans.

Brain and Behavior Research Foundation NARSAD Independent Investigator Award
Title: Cerebellar Stimulation and Verbal Working Memory in Early Course Psychosis: Insights from Functional Neuroimaging
Role: Co-Investigator
Project Period: 9/2017-8/2019 (No cost extension through April 2020)
Total Direct Costs: $99,000
TAMU Direct Costs: $13,060
Goal: Test the utility of cerebellar brain stimulation for improving working memory deficits in patients with early course psychosis.

Brain & Behavior Research Foundation (NARSAD) Young Investigator Grant
Donald and Janet Boardman Family Investigator
Title: Cerebello-Prefrontal Involvement in Error Processing and Rule Learning in Youth at Ultra High-Risk for Psychosis
Role: PI
January 15, 2015 – January 15, 2017
Direct Costs: $65,000

National Institute of Mental Health (NIMH) Ruth L. Kirschstein National Research Service Award
Title: Cerebellar Contributions to Disease Course in Youth at High-Risk of Psychosis
F32MH102898-01
Role: Post-Doctoral Trainee
Sponsor: Vijay A. Mittal, Co-Sponsors: Marie T. Banich & Jessica A. Turner
October 2013-July 2015
Impact Score: 17 Percentile: 4
Direct Costs: $98,428

National Institute of Aging (NIA) National Research Service Award (NRSA) Institutional Training Grant
NIA T32AG000279
October 2012-August 2013
Role: Post-doctoral Trainee

University of Colorado Denver, Department of Neurology
PI: Robert Schwartz
Mentor: Benzi Kluger, Co-Mentor: Roger Enoka

National Institute of Aging (NIA) National Research Service Award (NRSA) Institutional Training Grant
NIA T32AG000114
2010-2012
Role: Pre-doctoral Trainee
University of Michigan, Department of Psychology
PI: Richard Miller
Mentor: Rachael D. Seidler

**AWARDS & HONORS**

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| 2025 | Chancellor EDGES Fellow, Texas A&M University |
| 2025 | Ella McFadden Endowed Professor in Liberal Arts |
| 2024 | College of Arts and Sciences Research Impact Award |
| 2023 | Research Corporation for Scientific Advancement Scialog Fellow, Molecular Basis of Cognition |
| 2022 | Association for Psychological Science Fellow |
| 2021 | Ray A. Rothrock ’77 Fellow, College of Liberal Arts, TAMU |
| 2020 | LIFE Outstanding Alumni Award, for continued excellence in interdisciplinary developmental science post PhD |
| 2019 | Dr. Robert M. Gates Inspiration Award (Teaching award, TAMU) |
| 2017 | Association for Psychological Science Rising Star |
| 2016-2017 | National Institutes of Health Clinical Loan Repayment Award (Renewal) |
| 2015 | International Congress on Schizophrenia Research Young Investigator Travel Award |
| 2014-2016 | National Institutes of Health Clinical Loan Repayment Award |
| October 2012-August 2013 | University of Colorado Integrative Physiology of Aging T32 Training Grant |
| 2012 | Rackham One-Term Dissertation Fellowship, University of Michigan |
| 2010-2012 | University of Michigan Biology of Aging T32 Training Grant |
| 2011 | Elderhostel K. Patricia Cross Doctoral Research Grant Finalist (Top 7 Of Over 100 Applications) |
| 2011 | Rackham Conference Travel Grant, University of Michigan |
| 2010 | Rackham Conference Travel Grant, University of Michigan |
| 2010 | Barbara Perry Roberson Fellowship, University of Michigan |
| 2009 | Michigan Center for Advancing Safe Transportation Throughout the Lifespan (MCASTL) Student of the Year |
| 2009 | Barbara A. Oleshansky Memorial Award |
| 2009 | NSF Graduate Research Fellowship Program Honorable Mention |
| 2008 | Rackham Graduate Student Research Grant, University of Michigan |
| 2008 | Rackham Conference Travel Grant, University of Michigan |

**SCHOLARLY WORKS**
**Published Manuscripts**
**H-index: 40 I10-index: 65 Total citations: 6,897**
**Metrics from Google Scholar Citations**
*TAMU Graduate Student or Post-Doctoral Research Fellow, #TAMU Undergraduate or Post-Baccalaureate Research Assistant

88. *Magalhães, T.N.C., *Hicks, T.H. *Jackson, T.B., *Ballard, H.K., *Herrejon, I.A., **Bernard, J.A.** (In Press) Sex-steroid hormones relate to cerebellar structure and functional connectivity across adulthood. *Human Brain Mapping*. Preprint: 10.1101/2024.06.24.600454

87. Wütrich, F., Zindel, M.O., Nadesalingam, N., Nuoffer, M.G., Kyrou, A., **Bernard, J.A.**, Shankman, S.A., Mittal, V.A., Lefebvre, S., Walther, S. (2025). Reduced finger tapping speed in patients with schizophrenia and psychomotor slowing: an exploratory fMRI study. *Frontiers in Psychiatry Schizophrenia*, 16, 1539112.

86. **Bernard, J.A.**, *Herrejon. I.A., #An, E., #Cina, Y., #Dabbiru, S., #Dempsey, J.R., #Marrie, E., #Medina, M., #Praytor, J. (2025). Altered cerebellar activation patterns in Alzheimer's Disease: An activation likelihood estimation meta-analysis. *NeuroImage:Clinical,* 46, 103770.

85. *Magalhaes, T.N.C., *Maldonado, T., *Jackson, T.B., *Hicks, T.H., *Herrejon, I.A., Rezende, T.J.R., Symm, A.C., **Bernard, J.A.** (2025). Non-invasive neuromodulation of cerebello-hippocampal volume-behavior relationships. *Brain Imaging and Behavior.* 19, 384-394.

84. Colbert, K., Salazar, B., Mazeaug, C., Hoffman, K., Bayoumi, A., **Bernard, J.A.**, Lincoln, J., Khavari, R. (2025). *Clinical Neuroimaging*, 2(1), e70022.

83. *Maldonado, T., *Jackson, T.B., & **Bernard, J.A.** (2025). Time dependent effects of cerebellar tDCs on cerebello-cortical connectivity networks in young adults. *Cerebellum,* 24, 29.

82. *Hicks, T.H., *Magalhães, T.N.C., *Jackson, T.B., *Ballard, H.K., *Herrejon, I.A., **Bernard, J.A.** (2025). Functional and structural cerebellar-behavior relationships in aging. *Brain Structure and Function*, 230, 10.

81. *Sansare, A.A., *Magalhaes, T.N.C., **Bernard, J.A.** (2025). Relationships of functional connectivity of motor cortex, primary somatosensory cortex, and cerebellum to balance performance in middle-aged and older adults. *Neurobiology of Aging,* 147, 1-11.

80. Nuoffer, M.G., Schindel, A, Lefebvre, S., Wütrich, F., Nadesalingam, N., Kyrou, A., Kerkeni, H., Kalla, R., **Bernard, J.A.**, Walther, S. (2024). Psychomotor slowing in schizophrenia is associated with aberrant postural control. *Npj Schizophrenia,* 10, 118.

79. Mazeaud, C., **Bernard, J.A.**, Salazaar, B.E., Su, J., Rajab, H., Karmonik, K., Khavari, R. (2024). Cerebellar functional connectivity relates to lower urinary tract function: a 7T study. *Neurology and Urodynamics*, 43, 2147-2156.

78. **Bernard, J.A.** (2024). Cerebello-hippocampal interactions in the human brain: a new pathway for insights into aging. *Cerebellum,* 23, 2130-2141.

77. Arelo, A., Bares, M., **Bernard, J.A.**, Bogoian, H.R., Bruchhage, M.M.K., Bryant, P., Carlson, E.S., Chan, C.C.H., Chen, L-K., Chung, C-P., Dotson, V.M., Filip, P., Guell, X., Habas, C., Jacobs, H.I.L., Kakei, S., Lee, T.M.C., Leggio, M., Misiura, M., Mitoma, H., Olivito, G., Ramanoël, S., Rezaee, Z., Samstag, C.L., Schmahmann, J.D., Sekiyama, K., Wong, C.H.Y., Yamashita, M., Manto, M. (2024). Consensus Paper: Cerebellum and ageing. *Cerebellum*, 23, 802-832.

76. DiNardo, A.R., Arditi, M., Kamat, A.M., Koster, K.J., Carrero, S., Nishiguchi, T., Lebedev, M., Bejamin, A.B., Avalos, P., Lozano, M., Moule, M.G., McCune, B., Herro, B., Ladki, M., Sheikh, A., Spears, M., *Herrejon, I.A., Kumar, S., Hutchison, R.W., Ofili, T.U., Opperman, L.A., **Bernard, J.A**., Lerner, S.P., Udeani, G., Neal, G., Netea, M.G., Cirillo, J. (2023). Bacillus Calmette-Guérin Vaccination as Defense Against SARS-CoV-2 (BADAS): A Randomized Controlled Trial to Protect Health Care Workers in the U.S. by Enhanced Trained Immune Responses. *Trials*, 24, 636.

75**. Bernard, J.A**., *McOwen, K.M, *Hyunh, A.T. (2023). New frontiers for the understanding of aging: the power and possibilities of studying the cerebellum. *Current Opinion in Behavioral Sciences*, 54, 101311.

74. *Jackson, T.B. & **Bernard, J.A.** (2023). Cerebello-basal ganglia networks and cortical network global efficiency. *Cerebellum*, 22, 588-600.

73. *^Hicks, T.H., *^Magalhães, T.N.C., *Ballard, H.K., *Jackson, T.B., Cox, S.J., **Bernard, J.A.** (2023). Network segregation in aging females and evaluation of sex steroid hormones. *Frontiers in Aging Neuroscience*. 17, 1059091. (^ contributed equally)

72. *Ballard, H.K., *Jackson, T.B., Symm, A.C**., Bernard, J.A.** (2023). Age-related differences in functional network segregation in the context of sex and reproductive stage*. Human Brain Mapping*. 44, 1949-1963.

71. *Maldonado, T., *Jackson, T.B., & **Bernard, J.A.** (2023). Anodal cerebellar stimulation increases cortical activation: evidence for cerebellar scaffolding of cortical processing. *Human Brain Mapping*. 44(4), 1666-1682.

70. *Ballard, H.K., *Jackson, T.B., *Hicks, T.H., Cox, S.J., #Miller, A.C., *Maldonado, T., **Bernard, J.A.** (2023). Hormone-sleep interactions predict cerebellar connectivity and behavior in aging females. *Psychoneuroendocrinology.* 150, 106034.

69. Wütrich, F., Lefebvre, S., Nadesalingam, N., **Bernard, J.A**., Mittal, V.A., Shankman, S.A., & Walther, S. (2023). Test-retest reliability of finger-tapping fMRI task in a healthy population. *European Journal of Neuroscience*, 57, 78-90.

68. Frosch, I.R., Damme, K.S.F., **Bernard, J.A**., Mittal, V.A. (2022). Cerebellar correlates of social dysfunction among individuals at clinical high risk for psychosis. *Frontiers in Psychiatry* 13: 1027470.

67. *Jackson, T.B., & **Bernard, J.A**. (2022). Cerebellar and basal ganglia motor network predicts trait depression and hyperactivity. *Frontiers in Behavioral Neuroscience*, 16:953303.

66. *Hicks, T.H., *Ballard, H.K., Sang, H., & **Bernard, J.A**. (2022). Age-volume associations in cerebellar lobules by sex and reproductive stage. *Brain Structure and Function*, 227, 2439-2455.

65. *Ballard, H.K., *Jackson, T.B., *Hicks, T.H. & **Bernard, J.A**. (2022). The association of reproductive stage with cerebellar network connectivity across adulthood. *Neurobiology of Aging*, 117, 139-150.

64. **Bernard, J.A.** (2022). Don't forget the little brain: A Framework for Incorporating the Cerebellum into Our Understanding of Cognitive Aging. *Neuroscience and Biobehavioral Reviews*, 137, 104639.

63. Mittal, V.A., **Bernard, J.A**., Walther, S. Cerebellar-thalamic circuits play a critical role in psychomotor function. (2021). *Molecular Psychiatry*, 26, 3666-3668.

62. *Kim, T., Buchanan, J.J., **Bernard, J.A.,** Wright, D.L. (2021). Applying transcranial direct current stimulation at PMd facilitates online and offline gain for multiple motor skills acquired in a repetitive practice context. *npj Science of Learning*, 6:31.

61**. Bernard, J.A.,** *Ballard, H.K., & *Jackson, T.B. (2021). Cerebellar dentate connectivity across adulthood: a large-scale resting state functional connectivity investigation. *Cerebral Cortex Communications*, 2:3, tgab050.

60. *Maldonado, T., **Bernard, J.A.** (2021). The polarity specific nature of single session high-definition transcranial direct current stimulation to the cerebellum and prefrontal cortex on motor and non-motor performance. *Cerebellum*, 20, 569-583.

59. Mittal, V.A., **Bernard, J.A.,** Strauss, G.P., & Walther, S. (2021). New insights into sedentary behavior highlight the need to revisit the way we see motor symptoms in psychosis. *Schizophrenia Bulletin*, 47(4), 877-879.

58. Osborne, K.J., Damme, K.S.F., Gupta, T., Dean, D.J., **Bernard, J.A.,** & Mittal, V.A. (2021). Timing dysfunction and cerebellar resting state functional connectivity abnormalities in youth at clinical high-risk for psychosis. *Psychological Medicine*, 51(8), 1289-1298.

57. *Ballard, H.K., #Eakin, S.M., #Goen, J.R.M., *Maldonado, T., **& Bernard, J.A.** (2021). Using high-definition transcranial direct current stimulation to investigate the role of the dorsolateral prefrontal cortex in explicit sequence learning. *PLoS ONE*, 16(3): e0246849.

56. ^*Imburgio, M.J., ^*Ballard, H.K., *Cornwall, A.C., Worthy, D.A., ‡**Bernard, J.A**., & ‡Orr, J.M. (2021). Preliminary effects of prefrontal tDCS on dopamine-mediated behavior and psychophysiology. *Behavioural Brain Research*, 402, 113091. (^ contributed equally; ‡ contributed equally).

55. Dean, D.J., **Bernard, J.A.**, Damme, K.S.F, O'Reilly, R., Orr, J.M., & Mittal, V.A. (2020). Longitudinal assessment and functional neuroimaging of movement variability reveals novel insights into motor dysfunction in clinical high risk for psychosis. *Schizophrenia Bulletin,* 46(6), 1567-1576.

54. Clark, S.V., Tannahill, A., Calhoun, V.D., **Bernard, J.A.**, Bustillo, J. & Turner, J.A. (2020). Weaker cerebello-cortical connectivity within sensorimotor and executive networks in schizophrenia compared to healthy controls: Relationships with processing speed. *Brain Connectivity,* 10(9), 490-503.

53. Pelletier-Baldelli, A., Orr, J.M., **Bernard, J.A.,** & Mittal, V.A. (2020) Social reward processing: a biomarker for predicting psychosis risk? *Schizophrenia Research*, 226, 129-137.

52. **Bernard, J.A.,** Nguyen, A., #Hausman, H.K., #Goen, J.R.M., *Maldonado, T., *Ballard, H.K., *Jackson, T.B., #Eakin, S.M., *Lokshina, Y. (2020). Shaky Scaffolding: Age Differences In

Cerebellar Activation Revealed Through Activation Likelihood Estimation Meta-Analysis. *Human Brain Mapping,* 41, 5255-5281.

51. *Jackson, T.B., *Maldonado, T., #Eakin, S.M., Orr, J.M., & **Bernard, J.A.** (2020). Cerebellar and prefrontal-cortical engagement during higher-order rule learning in older adulthood. *Neuropsychologia,* 148, 107620.

50. Orr, J.M., *Lopez, J., *Imburgio, M.J., Pelletier-Baldelli, A., **Bernard, J.A.**, & Mittal, V.A. (2020). Adolescents at clinical high risk for psychosis show qualitatively altered patterns of activation during rule learning. *Neuroimage: Clinical,* 27, 102286.

49. *Maldonado, T., Orr, J.M., #Goen, J.R.M., & **Bernard, J.A.** (2020). Age differences in the subcomponents of executive functioning. *The Journals of Gerontology: Series B Psychological Sciences and Social Sciences,* 75(6), e31-e55.

48. #^Hausman, H.K., *^Jackson, T.B., #Goen, J.R.M., & **Bernard, J.A.** (2020). From synchrony to asynchrony: cerebellar-basal ganglia functional circuits in young and older adults. *Cerebral Cortex,* 30, 718-729. (^contributed equally)

47. *Maldonado, T., #Goen, J.R.M., *Imburgio, M.J., #Eakin, S.M., **Bernard, J.A.** (2019). Single session high-definition transcranial direct current stimulation to the cerebellum does not impact higher cognitive function. *PLOS ONE*, 14(10), e0222995.

46. Orr, J.M., *Imburgio, M.J., **Bernard, J.A.**, Banich, M.T. (2019). Striatal-frontal network activation during voluntary task selection under conditions of monetary reward. *Cognitive, Affective, and Behavioral Neuroscience,* 19, 568-585.

45. *Ballard, H.K., #Goen, J.R.M, *Maldonado, T, & **Bernard, J.A.** (2019). Effects of cerebellar transcranial direct current stimulation on the cognitive stage of sequence learning. *Journal of Neurophysiology*, 122, 490-499.

44. Damme, K., Gupta, T., Nusslock, R., **Bernard, J.A.**, Orr, J.M., & Mittal, V.A. (2019). Cortical Morphometry in the Psychosis Risk Period: A comprehensive perspective of surface features. *Biological Psychiatry: Cognitive Neuroscience and Neuroimaging,* 4, 434-443.

43. Walther, S. **Bernard, J.A.**, Mittal, V.A., & Shankman, S.A. (2019). The utility of an RDoC motor domain to understand psychomotor symptoms in depression. *Psychological Medicine,* 49, 212-216.

42. Gupta, T., Dean, D.J., Kelley, N.J., **Bernard, J.A.,** Ristanovic, I., & Mittal, V.A. (2018). Cerebellar transcranial direct current stimulation (tDCS) improves procedural learning in nonclinical psychosis: a double-blind crossover study. *Schizophrenia Bulletin.* 44, 1373-1380.

41. Dean, D.J., Walther, S., **Bernard, J.A.**, & Mittal, V.A. (2018). Motor clusters reveal differences in risk for psychosis, cognitive function, and functional connectivity: evidence for vulnerability subtypes. *Clinical Psychological Science*, 6, 721-734.

40. **Bernard, J.A.,** Orr, J.M., Dean, D.J., & Mittal, V.A. (2018). The cerebellum and learning of non-motor associations in individuals at clinical-high risk for psychosis. *Neuroimage: Clinical,* 19, 137-146.

39. Clark, S.V., Ahmadi, A., **Bernard, J.A.**, Mittal, V.A., & Turner, J.A. (2018). Stronger default mode network connectivity is associated with poorer clinical insight in adolescents at ultra-high risk for psychosis. *Schizophrenia Research,* 193, 244-250.

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25. **Bernard, J.A.**, Orr, J.M., & Mittal, V.A. (2015). Abnormal hippocampal-thalamic white matter tract development and positive symptom course in adolescents at ultra high-risk for psychosis. *npj Schizophrenia,* 1, Article number 15009.

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17. **Bernard, J.A.** & Seidler, R.D. (2014). Moving forward: Age effects on the cerebellum underlie cognitive and motor declines. *Neuroscience and Biobehavioral Reviews*, 42, 193-207.

16. Bo, J., Lee, C.M., Kwak, Y., Peltier, S.J., **Bernard, J.A.,** Buschkuehl, M., Jaeggi, S.M., Wiggins, J.L., Jonides, J., Monk, C.S., & Seidler, R.D. (2014). Lifespan differences in cortico-striatal resting state connectivity. *Brain Connectivity*, 4, 166-180.

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12. **Bernard, J.A.** & Seidler, R.D. (2013). Relationships between regional cerebellar volume and sensorimotor and cognitive function in young and older adults. *The Cerebellum*, 12, 721-737.

11. Seidler, R.D., Kwak, Y.B., Fling, B.W., & **Bernard, J.A.** (2013). Neurocognitive mechanisms of error-based motor learning. *Advances in Experimental Medicine and Biology,* 782, 39-60.

10. **Bernard, J. A.,** Peltier, S. J., Benson, B.L., Wiggins, J. L., Jaeggi, S. M., Buschkuehl, M., Fling, B.W., Kwak, Y., Jonides, J. Monk, C. S., & Seidler, R. D. (2013). Disrupted cortico-cerebellar connectivity in older adults. *NeuroImage*, 83, 103-119.

9. **Bernard, J.A.**, & Seidler R.D. (2013). Cerebellar contributions to visuomotor adaptation and motor sequence learning: An ALE meta-analysis. *Frontiers in Human Neuroscience,* 7:27.

8. **Bernard, J.A.** & Seidler, R.D. (2012). Hand dominance and age have interactive effects on motor cortical representations. *PLOS One*, 7(9): e45443.

7. **Bernard, J. A.,** Seidler, R.D., Hassevoort, K., Benson, B.L., Wiggins, J. L., Jaeggi, S. M., Buschkuehl, M., Jonides, J. Monk, C. S., & Peltier, S.J. (2012). Resting state cortico-cerebellar functional connectivity networks: A comparison of anatomical and data-driven approaches. *Frontiers in Neuroanatomy*, 6:31.

6. **Bernard, J.A.** & Seidler, R.D. (2012). Evidence for motor cortex dedifferentiation in older adults. *Neurobiology of Aging,* 33, 1890-1899.

5. Anguera, J.A., **Bernard, J.A.,** Reuter-Lorenz, P.A., Jaeggi, S.M., Buschkuehl, M., Benson, B.L, Jennett, S., Humfleet, J., Jonides, J., & Seidler, R.D. (2012). The effects of working memory resource depletion and training on sensorimotor adaptation. *Behavioural Brain Research*, 228, 107-115.

4. **Bernard, J.A.**, Taylor, S.F., & Seidler, R.D. (2011). Handedness, dexterity, and motor cortical representations. *Journal of Neurophysiology,* 105, 88-99.

3. Seidler, R.D., **Bernard, J.A.**, Burutolu, T.B., Fling, B.W., Gordon, M.T., Gwin, J.T., Kwak, Y., & Lipps, D.B. (2010). Motor control and aging: links to brain structural, functional and biochemical changes. *Neuroscience and Biobehavioral Reviews,* 34(5), 721-733.

2. Fling, B.W., **Bernard, J.A.**, Bo, J., & Langan, J. (2008). Corpus callosum and bimanual coordination in multiple sclerosis. *Journal of Neuroscience, 28*(29), 7248-7249. Journal club feature.

1. Keene, A.C., Krashes, M.J., Leung, B., **Bernard, J.A.**, & Waddell, S. (2006). *Drosophila* dorsal paired medial neurons provide a general mechanism for memory consolidation. *Current Biology,* 16, 1524-1530.

**Invited Chapters and Commentaries**

3. Bernard, J.A. & *Hicks, T.H. (2023). The cognitive neuroscience of aging. *Oxford Research Encyclopedia of Neuroscience.* [Peer reviewed]

2. Bernard, J.A. (2022). Evaluating Brain Structure as a Predictor of the Transition to Psychosis in Clinical High-Risk Individuals. *Biological Psychiatry: Global Open Science*, 2(2), 90-91.

A Commentary On "Structural brain volumes of individuals at clinical high risk for psychosis: a meta-analysis" Vissink and colleagues, 2022, Biological Psychiatry: Global Open Science

1. Bernard, J.A. (2022). Understanding cerebellar function through network perspectives: a review of resting state connectivity of the cerebellum. *Psychology of Learning and Motivation*. 76, 1-49. https://doi.org/10.1016/bs.plm.2022.03.001 [Peer reviewed]

**Manuscripts Under Review/Revision**

*Maldonado, T., Vess, M., & **Bernard, J.A.** (Under Revision). Executive function as a buffer against death anxiety in young adults.

*Jackson, T.B., Damme, K.S.F., Mittal, V.A., **Bernard, J.A.** (Under Revision). Cerebello-basal ganglia networks in psychosis. Preprint: https://www.biorxiv.org/content/10.1101/2022.11.12.516285v1.abstract

*Herrejon, I.A., *Jackson, T.B., *Hicks, T.H., **Bernard, J.A.**, Alzheimer's Disease Neuroimaging Initiative (Under Review). Functional connectivity differences in distinct dentato-cortical networks in Alzheimer's Disease. Preprint: https://doi.org/10.1101/2024.02.02.578249

*Hicks, T.H., *Magalhães, T.N.C, & **Bernard, J.A.** (Under Review). The human cerebello-hippocampal circuit across adulthood. Preprint: https://doi.org/10.1101/2025.02.17.638640

**Invited Talks**

Flipping the brain upside down: Novel insights into aging from studying the cerebellum, October 1, 2024, Texas A&M University Department of Biology, Seminar Speaker.

Flipping the brain upside down: Novel insights into aging from studying the cerebellum, December 12, 2023, University of Iowa Institute of Neuroscience, Seminar Speaker.

On scaffolding and sex: The cerebellum in females across adulthood and aging. September 12, 2023. National Institute on Aging, Understanding Cerebellar Contributions to Cognitive and Affective Functions in Aging and AD/ADRD Workshop.

Don't forget the little brain: Cerebellar contributions to cognitive and motor aging. August 28, 2023. Rice University, CHAT Seminar.

Don't forget the little brain: Cerebellar contributions to aging and psychosis. September 28, 2022. Institute for Human Neuroscience, Boys Town National Research Hospital.

Shaky scaffolding: Cerebellar structure, networks, and function in aging. March 3, 2021, Cardiff University (virtual due to COVID-19).

Shaky scaffolding: Age differences in cerebellar function, structure, and networks and their impact on behavior. November 12, 2020. Vision and Cognition Laboratory, Boston University (virtual due to COVID-19).

Shaky scaffolding: age differences in cerebellar function, structure, and networks, and their impact on behavior, November 7, 2019. Department of Psychology Colloquium, Northeastern University.

The role of subcortical network coherence in cognitive and motor function in advanced age, April 5, 2019, Central for Translational Research on Aging and Longevity (Texas A&M University), Current Topics in Translational Research Seminar Series.

Cerebellum networks and symptom severity in ultra-high risk adolescents and patients with schizophrenia, February 16, 2017, Texas A&M Institute for Neuroscience (TAMIN) Seminar Series.

The cerebellum in cognition and motor function: lifespan developmental and clinical perspectives, October 2, 2015, Motor Neuroscience Seminar, Department of Kinesiology, Texas A&M.

The cerebellum in cognition and motor function: lifespan developmental and clinical perspectives. Department of Psychology, Center for Brain, Biology and Behavior, University of Nebraska-Lincoln. January 2015.

The cerebellum in cognition and motor function: lifespan developmental and clinical perspectives. Departments of Psychology and Neurology, University of Iowa, December 2014.

The cerebellum in cognition and motor function: lifespan developmental and clinical perspectives. Department of Psychology, Texas A&M University, October 2014.

The cerebellum in cognition and motor function: lifespan developmental and clinical perspectives. Clinical Psychology Brown Bag Series, The University of Colorado Boulder, September 8, 2014.

Cognitive contributions of the human cerebellum: Cortico-cerebellar networks, aging, & behavior. Determinants of Executive Function and Dysfunction Weekly Speaker Series, The University of Colorado, Boulder, February 28, 2012.

**Chaired/Co-Chaired Symposia**

**Bernard, J.A.,** Brooker, R.J, *Co-Chairs*
Parents develop Too: Maternal and paternal neural reorganization across the perinatal period
Society for Research in Child Development, March 23-25, 2023, Salt Lake City Utah, USA

**Bernard, J.A.**, Walther, S., *Co-Chairs*
The Promise of interventions targeting the motor system in psychosis
Schizophrenia International Research Society, May 11-15, 2023, Toronto, Canada

**Bernard, J.A.**, *Session Chair*
Cerebellar Contributions to Cognitive Aging
Understanding Cerebellar Contributions to Cognitive and Affective Functions in Aging and AD/ADRD Workshop, September 12-13, 2023, National Institute on Aging, Bethesda Maryland, USA

**Bernard, J.A.**, Brooker, R.J., *Co-Chairs*
Pregnancy and Neural Plasticity
Winter Conference on Neural Plasticity, February 17-24, 2004, Puerto Vallarta, Mexico

**Oral Conference Presentations**
*TAMU Graduate Student

**Bernard, J.A.,** *Jackson, T.B. (2023). Cerebello-basal ganglia networks in psychosis. *Schizophrenia International Research Society,* Toronto, Ontario, Canada
Presented as part of the symposium "The Promise of interventions targeting the motor system in psychosis"

**Bernard, J.A.**, *Herrejon, I. (2022). The impact of COVID-19 infection on cognitive and brain aging. *American Psychological Association* Annual Convention, Minneapolis, MN.
Presented as part of the Division 3 Symposium 2.0 "Experimentally exploring the consequences of COVID-19 on cognition"

**Bernard, J.A.** (2021). Subcortical circuits in psychosis and the psychosis spectrum. *Basic and Clinical Multimodal Imaging Conference*, Virtual due to COVID-19
Presented as part of the symposium "Imaging Psychosis From General Neuropathology to Specific Psychopathology"

**Bernard, J.A.,** *Jackson, T.B. (2021). Cerebellar basal ganglia network connectivity as a scaffold for cortical network connectivity: implications for psychopathology. *76th Annual Meeting of the Society of Biological Psychiatry,* Virtual due to COVID-19
Presented as part of the symposium "Alterations of RDOC's Sensorimotor Domain in Major Depression: Behavior, Circuits and Clinical Correlates"

**Bernard, J.A.** (2020). Cerebello-cortical networks in psychosis and aging. *International Society for Neuroimaging in Psychiatry.* Virtual symposium due to COVID-19

**Bernard, J.A.** (2020). Shaky scaffolding: Age differences in cerebellar function, structure, and networks and their impact on behavior. *32nd Annual Meeting of the Winter Conference on Neural Plasticity*, *St. Kitts & Nevis*

**Bernard, J.A.** (2019). Synchrony and asynchrony in cerebellar-basal ganglia functional circuits: implications for behavior and psychopathology. *74th Annual Meeting of the Society of Biological Psychiatry, Chicago, Illinois*
Presented as part of the symposium "Psychomotor Dysfunction in Major Depression: A Multimethod Symposium on This Understudied Aspect of Major Depression"

**Bernard, J.A.,** Orr, J.M., & *Jackson, T.B. (2017). PFC-Cerebellum connectivity with implications for hierarchical models of executive function. *ARMADILLO Southwest Regional Conference for Cognition and Cognitive Neuroscience.*

Clark, S.V., Ahmadi, A., **Bernard, J.A.,** Turner, J.A., Mittal, V.A. (2017) Insight and cerebello-cortical connectivity in adolescents at ultra high-risk of schizophrenia. *16th International Congress on Schizophrenia Research, San Diego, CA.*

**Bernard, J.A.** (2016). Cerebellar networks, function, and positive symptom progression in psychosis risk. *71st Annual Meeting of the Society of Biological Psychiatry, Atlanta, GA* Presented as part of the symposium "Role of Cerebellum In Schizophrenia Spectrum Disorders"

Boker, S.M., Seidler, R.D., & **Bernard, J.A.** (2014). Windowed cross-correlation of BOLD signals. *Alpine Brain Imaging Meeting, Champéry, Switzerland.*

Orr, J.M., Pelletier-Baldelli, A., Dean, D. J., **Bernard, J.A.,** & Mittal, V.A. (2013). Volumetric differences in youth at high risk for psychosis. *The Twenty Seventh Annual Meeting of the Society for Research in Psychopathology, Oakland, CA.* Paper Presentation Talk.

**Conference Posters/Data Blitz Presentations (2015 Onward)**

*TAMU Graduate Student, #TAMU Undergraduate Student or Post-baccalaureate research assistant, **TAMU Post-Doctoral Fellow

*Herrejon, I.A., *Jackson, T.B., *Hicks, T.H., & **Bernard, J.A.** (2025). Cerebello-basal ganglia networks across the adult lifespan. *Annual Meeting of the Cognitive Neuroscience Society*, Boston, MA.

*McOwen, K.M. and **Bernard, J.A.** (2025). Exploring the neural underpinnings of eyeblink conditioning: Cerebellar, hippocampal, and LC contributions. *Annual Meeting of the Cognitive Neuroscience Society*, Boston, MA.

**Sansare, A.A., **Magalhães, T.N.C., & **Bernard, J.A.** (2025). Cognition and not age influences the relationships between brain connectivity and balance in older adults. *American Physical Theraphy Association Combined Sections Meeting*, Houston, TX.

*Herrejon. I.A., *Jackson, T.B., *Hicks, T.H., & **Bernard, J.A.** (2025). Cerebello-basal ganglia networks in Alzheimer's Disease. *Dallas Aging and Cognition Conference*, Dallas, TX.

#Selly, PK., **Magalhães, T.N.C., & **Bernard, J.A.** (2025). Structural insights into decline: regional differences in older adults with worsening motor and balance performance. *Dallas Aging and Cognition Conference*, Dallas, TX.

*McOwen, K.M. and **Bernad, J.A.** (2025). Examining age-related changes in eye-blink conditioning: a meta-analysis. *Dallas Aging and Cognition Conference*, Dallas, TX.

**Magalhães, T.N.C., *Hicks, T.H., **Bernard, J.A.** (2025). Does the rate of lobular cerebellar and hippocampal volume decline over time differ between individuals with stable and declining MOCA scores? *Dallas Aging and Cognition Conference*, Dallas, TX.

#James, J., **Magalhães, T.N.C., #Selly, P.K., **Bernard, J.A.** (2025). The impact of menopausal changes on fine motor control. *Dallas Aging and Cognition Conference*, Dallas, TX.

**Magalhães, T.N.C., *Jackson, T.B., *Herrejon, I.A, **Bernard, J.A.** (2024). The role of sex-steroid hormones and brain volume variation in aging. *Alzheimer's Association International Conference*, Philadelphia, PA.

*Hicks, T.H., Selly, P.K., **Bernard, J.A.** (2024). Activity level, cognition, and regional cerebellar volume in healthy aging. *International Neuropsychological Society*, New York, New York.

*Maldonado, T., *Jackson, T.B., **Bernard, J.A.** (2023). The effect of cerebellar tDCS might be time dependent in young adults. *30th Annual Meeting of the Cognitive Neuroscience Society*, San Francisco, CA.

**Magalhães, T.N.C., *Maldonado, T., *Jackson, T.B., Symm, A.C., *Herrejon, I., *Hicks, T.H., **Bernard, J.A.**, (2023). Correlations between cerebellar subregions and behavior after neuromodulation in young adults. *30th Annual Meeting of the Cognitive Neuroscience Society*, San Francisco, CA.

*Ballard, H.K., *Jackson, T.B., *Hicks, T.H., Cox, S.J., Symm, A.C., *Maldonado, T., **Bernard, J.A.** (2023). Interactions between 17β-estradiol *and sleep predict cognitive performance in aging females. 2023* International Conference on *Learning and Memory*, Huntington Beach, CA.

*Herrejon, I., Denny, G.E., Cox, S.J., **Magalhães, T.N.C., **Bernard, J.A.** (2023). Cerebellar-basal ganglia networks and their role in cognitive and motor processes across the adult lifespan. *Dallas Aging and Cognition Conference,* Dallas, TX. And *30th Annual Meeting of the Cognitive Neuroscience Society*, San Francisco, CA.

**Magalhães, T.N.C., *Jackson, T.B., *Hicks, T.H., Cox, S.J., *Herrejon, I., Denny, G.E., **Bernard, J.A.** (2023). Sex steroid hormones and subcortical brain volumes in aging females and males. *Dallas Aging and Cognition Conference,* Dallas, TX.

*Hicks, T.H., **Magalhães, T.N.C., *Ballard, H.K., *Jackson, T.B., Cox, S.J., *Herrejon, I., **Bernard, J.A.** (2023). Sex hormones as predictors of cognitive decline in aging. *Dallas Aging and Cognition Conference.* Dallas, TX.

*Hicks, T.H., *Ballard, H.K., *Jackson, T.B., Cox, S.J., **Bernard, J.A.** (2023). Congential left temporal lobe cyst: a case study of rs-fMRI and cognitive performance. *International Neuropsychological Society*, San Diego, California.

Herrejon, I., *Hicks, T.H., *Jackson, T.B., **Bernard, J.A.** (2022) Functional connectivity differences in distinct dentate-cortical networks in Alzheimer's Disease and mild cognitive impairment. *29th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, California.*

*Maldonado, T., *Jackson, T.B., **Bernard, J.A.** (2022). Inhibitory cerebellar stimulation increases cortical activation: evidence for cerebellar scaffolding of cortical processing. *29th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, California.*

*Ballard, H.K., *Jackson, T.B., *Hicks, T.H., Cox, S.J., Miller, A.C., *Maldonado, T., **Bernard, J.A.** (2022). 17β-estradiol-sleep interaction differentially impact cognitive and motor behavior in females and males across adulthood. *29th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, California.*

*Ballard, H.K., *Jackson, T.B., Miller, A.C., **Bernard, J.A.** (2022). Age-related differences in functional network segregation in the context of sex and reproductive stage. *Dallas Aging and Cognition Conference.* [Cancelled Indefinitely due to COVID-19]

*Hicks, T.H., *Ballard, H.K., Cox, S.J., **Bernard, J.A.** (2022). Sex, the cerebellum, and older adulthood: investigating their influence on working memory in advanced age. *Dallas Aging and Cognition Conference.* [Cancelled Indefinitely due to COVID-19]

Herrejon, I., *Hicks, T.H., *Jackson, T.B., **Bernard, J.A.** (2022). Functional connectivity differences in distinct dentate-cortical networks in Alzheimer's Disease and Mild Cognitive Impairment. *Dallas Aging and Cognition Conference.* [Cancelled Indefinitely due to COVID-19]

*[1]Hicks, T.H., *Ballard, H.K., **Bernard, J.A.** (2022). Age-volume associations in cerebellar regions by sex and reproductive stage. *International Neuropsychological Society,* New Orleans, Louisiana. [Moved to virtual format due to COVID-19].
[1]Previously presented under last name Slonim.

*Maldonado, T., **Bernard, J.A.** (2021). Decreased cerebello-cortical connectivity following anodal transcranial direct current stimulation. *The 28th Annual Meeting of the Cognitive Neuroscience Society,* Virtual conference due to covid-19.

Herrejon, I., Koster, K., Neal, G., Matthews, R., Cirillio, J., **Bernard, J.A.** (2021). Bacillus Calmette-Guèrin vaccination in Sars-CoV-2: Assessing cognitive and brain impacts. *The 28th Annual Meeting of the Cognitive Neuroscience Society,* Virtual conference due to covid-19.

*Jackson, T.B. & **Bernard, J.A.** (2021). Subcortical coherence in pathology and cognition. *The 28th Annual Meeting of the Cognitive Neuroscience Society,* Virtual conference due to covid-19.

*Slonim, T.H., *Ballard, H.K., **Bernard, J.A.** (2021). Cerebellar volume in the context of reproductive aging. *The 28th Annual Meeting of the Cognitive Neuroscience Society,* Virtual conference due to covid-19.

*Jackson, T.B. & **Bernard, J.A.** (2020). Cerebello-striatal resting state network efficiency and cortical network coherence. *The 27th Annual Meeting of the Cognitive Neuroscience Society,* Boston, MA. [Virtual conference due to covid-19.]

*Maldonado, T. & **Bernard, J.A.** (2020). Cerebellar contributions to higher order cognition. *The 27th Annual Meeting of the Cognitive Neuroscience Society,* Boston, MA. [Virtual conference due to covid-19.]

*Ballard, H.K., *Jackson, T.B., & **Bernard, J.A.** (2020). The influence of reproductive stage on cerebellar network connectivity across adulthood. *The 27th Annual Meeting of the Cognitive Neuroscience Society,* Boston, MA. [Virtual conference due to covid-19.]

**Bernard, J.A.**, *Ballard, H.K., & *Jackson, T.B. (2020). Cerebellar dentate connectivity across adulthood: a large-scale resting state functional connectivity investigation. *The 27th Annual Meeting of the Cognitive Neuroscience Society,* Boston, MA. [Virtual conference due to covid-19.]

Gupta, T., Dean, D.J., Kelley, N.J., Bernard, J.A., Ristanovic, I., Mittal., V.A. (2019). Cerebellar tDCS improves procedural learning in nonclinical psychosis. *Organization for Human Brain Mapping Annual Meeting*, Rome, Italy.

*Jackson, T.B., **& Bernard, J.A.** (2019). Age-related deficits in second order rule learning: an fMRI study. *The 26th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA.*

*Ballard, H.K., Goen, J.R.M., & **Bernard, J.A.** (2019). The effects of cerebellar transcranial direct current stimulation on the cognitive stage of sequence learning. *The 26th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA.*

*Maldonado, T., & **Bernard, J.A.** (2019). The effect of HD-tDCS over the cerebellum on higher order cognition. *The 26th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA.*

*Maldonado, T., *Imburgio, M.J., Orr, J.M., & **Bernard, J.A.** (2019). Age-Related Activation Differences in the Subcomponents of the Unity-Diversity Model of Executive Functioning: An ALE Meta-Analysis. *The 2019 Dallas Aging and Cognition Conference 2019.*

**Bernard, J.A., ***Jackson, T.B., & #Hausman, H.K. (2019). Cerebellar network contributions to age-related cognitive and motor performance differences. *The Dallas Aging and Cognition Conference 2019.*

*Ballard, H.K., Goen, J.R.M., *Maldonado, T, **Bernard, J.A.** (2018). The effects of cerebellar transcranial direct current stimulation on the cognitive stage of sequence learning. *ARMADILLO Southwest Regional Conference for Cognition and Cognitive Neuroscience.*

*Ballard, H.K., *Imburgio, M.J., *Cornwall, A, Worthy, D.A., Orr, J.M., **Bernard, J.A.** (2018). Frontal transcranial direct current stimulation and midbrain function: dopaminergic modulation striatal connectivity, and behavior. *Texas A&M Institute for Neuroscience Spring Symposium.*

#Hausman, H., *Jackson, T.B., **Bernard, J.A.** (2018). Age-Related Declines in Cerebellar-Basal Ganglia Functional Circuits: Implications for Motor Function in Older Adulthood. *The 25th Annual Meeting of the Cognitive Neuroscience Society, Boston MA.*

*Maldonado, T, Orr, J.M., & **Bernard, J.A**. (2018). Differences in Decline in the Subcomponents of the Unity-Diversity Model of Executive Functioning between Younger and Older Adults: A Meta-Analysis. *The 25th Annual Meeting of the Cognitive Neuroscience Society, Boston, MA.*

**Bernard, J.A.,** Goen, J.R.M., & *Maldonado, T. (2017). Cerebellar-Motor Connectivity in Patients with Schizophrenia: Insight Into Negative Symptom Severity. *The 24th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA.*

Orr, J.M., *Jackson, T.B., & **Bernard, J.A.** (2017). Dissociable patterns of PFC-cerebellum connectivity with implications for hierarchical models of executive function. *The 24th Annual Meeting of the Cognitive Neuroscience Society, San Francisco, CA.*

Pelletier-Baldelli, A., **Bernard, J.A.**, Orr, J. Gupta, T., Mittal, V.A. (2017). Do youth at risk for psychosis like being liked? A functional magnetic resonance imaging investigation into social reward processing. *Poster presentation for the Society of Research in Psychopathology, Denver, CO*

Clark, S.V., **Bernard, J.A.,** Ahmadi, A., King, T.Z., Latzman, R.D., Turner, J.A., & Mittal, V.A. (2017). Cognitive insight in youth at ultra high-risk of psychosis: relationships with cognition, symptoms, and default mode connectivity. *Forty Fifth Annual International Neuropsychological Society Meeting, New Orleans, LA.*

Russell, C.E., Newberry, R.E., Mittal, V.A., & **Bernard, J.A.** (2016). Patients with schizophrenia show aberrant patterns of basal ganglia activation: evidence from ALE meta-analysis. *The Thirtieth Annual Meeting of the Society for Research in Psychopathology, Baltimore, MD.*

**Bernard, J.A.,** Orr, J.M., Dean, D.J., & Mittal, V.A. (2016). Abnormal cerebellar activation in psychosis risk during learning: Support for cerebellar dysfunction. *The Twenty-Second Annual Meeting of the Organization for Human Brain Mapping, Geneva, Switzerland.*

**Bernard, J.A.,** Orr, J.M., & Mittal, V.A. (2015). Cerebello-thalamo-motor networks and positive symptom course in individuals at ultra-high risk for psychosis: evidence from functional & structural connectivity. *The Twenty-Ninth Annual Meeting of the Society for Research in Psychopathology, New Orleans, LA.*

Pelletier-Baldelli, A., **Bernard, J.A.,** & Mittal, V.A. (2015). Affective and expressive negative symptoms: a longitudinal functional resting state connectivity study in youth at ultra high-risk for psychosis. *The Twenty-Ninth Annual Meeting of the Society for Research in Psychopathology, New Orleans, LA.*

Orr, J.M., Newberry, R.E., **Bernard, J.A.**, & Mittal, V.A. (2015). Disrupted verbal selection and the association with negative symptoms in adolescents at ultra high-risk for psychosis. *The Twenty-Ninth Annual Meeting of the Society for Research in Psychopathology, New Orleans, LA.*

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**Bernard, J.A.** & Mittal, V.A. (2015). Cerebello-cortical connectivity and symptom course in individuals at ultra high-risk for psychosis. *The Twenty-First Annual Meeting of the Organization for Human Brain Mapping, Honolulu, HI.*

Boker, S.M., Seidler, R.D., & **Bernard, J.A.** (2015). Decomposing nonstationary relationships between multiple BOLD timeseries. *Alpine Brain Imaging Meeting, Champéry, Switzerland.*

**Bernard, J.A.,** Orr, J.M., & Mittal, V.A. (2015). Abnormal hippocampal-thalamic white matter tract development and disease course in adolescents at ultra high-risk for psychosis. 15th *International Congress on Schizophrenia Research, Colorado Springs, CO.*

## PROFESSIONAL ACTIVITIES

### Grant Review Panels

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|---|---|
| 2019-20 | National Science Foundation Grant Reviewer |
| 2021 | National Institutes of Health Study Section (Adult Psychopathology, ad hoc) |
| 2022 | National Institutes of Health Study Section (Adult Psychopathology, Human Complex Mental Function, ad hoc) |

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| 2022 | National Science Foundation Grant Reviewer, ad hoc |
| 2023 | National Institutes of Health Study Section (Special Emphasis Panel, Multimodal Approaches in Neuropsychiatric Disorders) |
| 2024 | National Institutes of Health Study Section (Special Emphasis Panel, Understanding Chronic Conditions Understudied Among Women) |

**Ad Hoc Grant Review**
Biotechnology and Biological Sciences Research Council (UK), 2014
Danish Council for Independent Research: Medical Sciences, 2015
Italian Ministry of Health, 2015
Research Foundation Flanders (FWO), 2016

**Editorial Board Membership**
2022- Present *The Cerebellum*
2023-2024 *Journal of Psychopathology and Clinical Science* (formerly, *Journal of Abnormal Psychology*)
2023-Present *Scientific Reports*

**Ad Hoc Manuscript Reviewer**
Experimental Brain Research, NeuroImage, PLoS ONE, Neuroscience, Schizophrenia Bulletin, Neural Plasticity, Human Movement Science, Frontiers in Integrative Physiology, Journal of Abnormal Psychology, Brain and Behavior, Frontiers in Human Neuroscience, Medical Principles and Practice, Neuropsychologia, Cerebellum, Psychological Medicine, Human Brain Mapping, Journal of Motor Behavior, Cerebral Cortex, Journal of Neuroscience, Developmental Cognitive Neuroscience, Journal of Applied Biomedicine, Attention Perception & Psychophysics, NeuroImage:Clinical, Psychiatry Research: Neuroimaging, Applied Neuropsychology: Adult, Neuropsychology Review, Neuroscience & Biobehavioral Reviews, Journal of Nervous and Mental Disease, Cognition, Biological Psychiatry, Aging Neuropsychology and Cognition, Neuroscience Research, Brain Imaging and Behavior, Behavioral Brain Research, Brain Connectivity, Psychiatry Research, European Archives of Psychiatry and Clinical Neuroscience, Psychological Science, Proceedings of the National Academy of Sciences, Human Movement Science, Nature Neuroscience

**Society Memberships**
Cognitive Neuroscience Society, American Psychological Society, American Psychological Association

**Service Activities**

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| 2025 | Research Agreement Negotiation Task Force |
| 2024- | College of Arts and Sciences Research Fellow |
| 2023-2025 | Department of Psychology Lifespan Development Faculty Search Committee Co-Chair |
| 2023-2024 | Texas A&M Council of Principal Investigators Chair |
| 2023 | Texas A&M Provost Search Advisory Committee |
| 2022-2023 | Texas A&M Council of Principal Investigators Vice Chair |
| 2021-2022 | College of Liberal Arts Committee on Faculty Awards |
| 2020 – 2023 | Texas A&M Council of Principal Investigators |
| 2020 | Presidential Clinical Research Partnership Review Panel (TAMU) |
| 2018 – 2019 | TAMU Department of Kinesiology Motor Neuroscience Faculty Search Committee |

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|---|---|
| 2017 – Present | TAMU Department of Psychology Undergraduate Studies Committee |
| 2017 – 2019 | Texas A&M Institute for Neuroscience Graduate Recruiting Committee |
| 2017 - 2018 | TAMU Department of Kinesiology Motor Neuroscience Faculty Search Committee |
| 2016 | NIMH Research Domain Criteria Motor Domain Council Workshop Participant |
| 2016 | TAMU Psychology Affective Neuroscience Faculty Search Committee |
| 2016 | TAMU APA Summer Research Scholars Mentor (An Nguyen, Truman State University) |
| 2016 – 2017 | TAMU Psychology Faculty Development & Awards Committee |
| 2014 - Present | Organization for Human Brain Mapping Annual Meeting Abstract Reviewer |
| 2011-2012 | Cognition & Cognitive Neuroscience Graduate Admissions Committee |
| 2011-2012 | Cognition & Cognitive Neuroscience Departmental Associate (student representative at faculty meetings) |
| 2008-2011 | Cognition & Cognitive Neuroscience Area Recruitment Committee |
| 2008 | Brains Rule Day, Dec. 3, 2008, Hands On Museum, Ann Arbor, MI |
| 2008 – Present | Tufts University Alumni Admissions Program, Alumni Interviewer |
| 2008 – 2009 | Science Fair Judge, Wachusett Regional High School |
| 2008 – 2009 | Invited lecture, “How do we study the brain?” Wachusett Regional High School |
| 2007 – 2009 | Cognition & Cognitive Neuroscience Area Forum Committee |

## TEACHING EXPERIENCE

### Doctoral Students (Dissertation Committee Chair)

Ted Maldonado 2016-2021: Assistant Professor, Indiana State University
Trevor Bryan Jackson 2017-2022: Data Scientist, Vanderbilt University Memory & Alzheimer’s Center
Hannah Ballard, 2018-2022: Post-Doctoral Fellow, Academy of Fellows, Rice University
Tracey (Slonim) Hicks, 2020-Present
Ivan Herrejon, 2022-Present
Kaiti McOwen, 2022-Present

### Rotating Neuroscience Students

Yana Lokshina, Rotating TAMIN Graduate Student, Fall 2018

### Post-Doctoral Mentorship

Dr. Thamires Magalhães, 2021-Present
Dr. Ashwini Sansare, 2023-Present

### Doctoral Dissertation Committees

| | |
|---|---|
| 2015-2017 | Andrea Pelletier-Baldelli, Psychology & Neuroscience, University of Colorado Boulder – Adjunct Member |
| 2015-2017 | Kaileigh Byrne, Department of Psychological & Brain Sciences, Texas A&M University – Committee Member |
| 2015-2017 | Bo Pang, Department of Psychological & Brain Sciences, Texas A&M University – Committee Member |

2016-2018 David Houghton, Department of Psychological & Brain Sciences, Texas A&M University – Committee Member
2016-2018 Inchon Park, Department of Health & Kinesiology, Texas A&M University – Committee Member
2016-2019 Taewon Kim, Department of Health & Kinesiology, Texas A&M University – Committee Member
2017-2019 Gabriel Saenz, Department of Psychological & Brain Sciences, Texas A&M University – Committee Member
2019-2021 Hakjoo Kim, Department of Health & Kinesiology, Texas A&M University – Committee Member
2022- 2023 Oshin Tyagi, Industrial and Systems Engineering, Texas A&M University – Committee Member
2022-Present Sofie De Wandel, Center for Translational Research in Aging and Longevity, Texas A&M University – Committee Member
2022-Present Jiwei Zhang, Department of Biology, Texas A&M University – Committee Member
2022-Present Jennifer Kling, Department of Psychological & Brain Sciences, Texas A&M University – Committee Member
2022-Present Pouneh Abbasian, Interdisciplinary Engineering, Texas A&M University – Committee Member
2022-Present Hanan Guzman, Department of Psychological & Brain Sciences, Texas A&M University – Committee Member
2022-Present Lina Huynh, Department of Health & Kinesiology, Texas A&M University – Committee Member
2022-Present Sarah Peoples, Department of Psychological & Brain Sciences, Texas A&M University – Committee Member
2022-Present Sojung Youn, Department of Psychological & Brain Sciences, Texas A&M University – Committee Member
2022-Present Jack Manning, Department of Health & Kinesiology, Texas A&M University – Committee Member
2023-Present Tanisha Berrios, Department of Psychological & Brain Sciences, Texas A&M University – Committee Member
2023-Present Eshani Yeragi, Department of Biology, Texas A&M University – Committee Member

**External Doctoral Thesis Examiner**
2022 Lara Fernandez, School of Psychology, Deakin University, Melbourne, Australia

**Masters Degree Committees**
2017-2018 Hakjoo Kim, Department of Health & Kinesiology, Texas A&M University – Committee Member
2022-2023 Eryn Armstrong, Department of Health & Kinesiology, Texas A&M University – Committee Member

**Undergraduate Mentoring**
Psychology/Neuroscience 485/491 – Spring 2016-Present, >40 undergraduate students
Every semester, on average 6 students complete research credits in my laboratory, working in a hands-on research environment

**Classroom Teaching**
Fall 2022 Psychology 689 Special Topics: Cognitive Neuroscience of Aging

Fall 2018- 2021, 2023, 2024, Sp 2025 Psychology 107: Introduction to Psychology
Instructor of Record
I typically teach this course every fall, averaging ~100-200 students per semester. This class incorporates writing and presentation skills, in class activities, and traditional exams. I take advantage of open access text resources (NOBA) for this course.

Fall 2016, Spring 2017, 2018, 2019, 2021 Psychology 365: Psychology of Aging
Instructor of Record

Spring 2016 Psychology 689 Special Topics: Psychology & Neuroscience of Motor Control
Instructor of Record

**Additional Training**

2012-2013 **Colorado Clinical & Translational Sciences Institute Colorado Mentor (CO-Mentor) Training Program**. Year-long training program with monthly meetings that covered effective mentoring strategies and techniques, particularly with respect to research mentoring.