

HELOISA VEIGA DIAS ALVES, Ph.D.
University of Massachusetts Dartmouth
Department of Psychology
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HIGHER EDUCATION

2007 – 2013 **PhD, Psychology**
Fulbright Program
University of Illinois at Urbana-Champaign
Illinois, USA

2003 – 2006 **MA, Mental Health**
Federal University of Rio de Janeiro (UFRJ)
Rio de Janeiro, Brazil

1996 – 2001 **BA, Psychology**
Catholic University of Rio de Janeiro (PUC-Rio)
Rio de Janeiro, Brazil

PROFESSIONAL & ACADEMIC APPOINTMENTS

Sep 2021 – present **University of Massachusetts Dartmouth**
Honors College
Dartmouth, MA
Assistant Teaching Professor

Sep 2018 – present **University of Massachusetts Dartmouth**
Psychology Department
Dartmouth, MA
Assistant Teaching Professor

Nov 2017 – Aug 2018 **Northeastern University**
Health Technology Lab
Boston, MA
Postdoctoral Research Associate

Jul 2014 – Oct 2017 **College of Medical Sciences**
Nervous System Stimulation Laboratory (LabEEL)
State University of Rio de Janeiro (UERJ)
Rio de Janeiro, Brazil
Research Associate

Feb 2013 – Aug 2017 **Catholic University of Rio de Janeiro (PUC-Rio)**
Psychology Department
Rio de Janeiro, Brazil
Postdoctoral Fellow

Aug 2007 – Dec 2012	Beckman Institute for Advanced Science and Technology Lifelong Brain & Cognition Laboratory University of Illinois at Urbana-Champaign Research Assistant
Aug 2006 – Aug 2007	Sao Jose College Rio de Janeiro, Brazil Part-Time Lecturer
Dec 2006 – Aug 2007 Jul 2014 – Dez 2015	National Institute of Traumatology & Orthopedics (INTO) Neuromuscular Research Laboratory Rio de Janeiro, Brazil Research Associate and Lecturer
Jul 2000 – Aug 2001	Applied Neuropsychology Center (CNA) Rio de Janeiro, Brazil Psychology Intern
Jan 2000 – May 2000	Volen National Center for Complex Systems Memory & Cognition Laboratory Brandeis University Waltham, MA Research Assistant

ACADEMIC AND PROFESSIONAL HONORS, FELLOWSHIPS, AND AWARDS

- Student Leadership Award: Advisor of the Year (2022)
Student Activities, Involvement, and Leadership (SAIL)
University of Massachusetts Dartmouth
- Post-doctoral scholarship (2016-2017)
Funding Agency: Research Support Foundation of the State of Rio de Janeiro (FAPERJ, Brazil)
- Post-doctoral scholarship (2013-2015)
Funding Agency: National Counsel for Technological and Scientific Development (CNPq, Brazil)
- International Travel Award (2014)
Brazilian Federal Agency for Postgraduate Education (CAPES)
Event: 28th International Congress of Applied Psychology (ICAP), Paris, France
- Fulbright Scholarship (2007-2012)
Bureau of Educational and Cultural Affairs – U.S. Department of State
- Doctoral scholarship (2007-2012)
Funding Agency: Coordination for the Improvement of Higher Education Personnel (CAPES, Brazil)
- Master's scholarship (2003-2005)
Funding Agency: National Counsel for Technological and Scientific Development (CNPq, Brazil)

RESEARCH FUNDING

- Research Grant (2016)
Funding Agency: Research Support Foundation of the State of Rio de Janeiro (FAPERJ, Brazil)
Program: Research on Aging Disorders in the State of Rio de Janeiro (FAPERJ 19/2016)
Project: *Development of protocols associating physical activity and neuromodulation: a model of interdisciplinarity in health promotion and management of age-related neurodegenerative disorders*
Award Amount: US\$ 200,000
Role: Co-Investigator
- Research Grant (2016)
Funding Agency: Research Support Foundation of the State of Rio de Janeiro (FAPERJ, Brazil)
Program: Support for Clinical Research in Teaching and Research Hospitals in the State of Rio de Janeiro (FAPERJ 17/2016)
Project: *Advanced techniques in the diagnosis and treatment of epilepsy*
Award Amount: US\$ 200,000
Role: Co-Investigator
- Research Grant (2014)
Funding Agency: Research Support Foundation of the State of Rio de Janeiro (FAPERJ, Brazil)
Program: Support for Extension Projects and Research (FAPERJ 16/2014)
Project: *Government-run community centers in the city of Rio de Janeiro: neuropsychological assessment and rehabilitation of users and investigation of the effectiveness of the activities offered*
Award Amount: US\$ 15,000
Role: Co-Investigator
- Research Grant (2014)
Funding Agency: Research Support Foundation of the State of Rio de Janeiro (FAPERJ, Brazil)
Program: Technical Training and Qualification (FAPERJ 18/2014)
Project: *Production of visual material for assessment and intervention in aging*
Award Amount: US\$ 12,000
Role: Co-Investigator

PUBLICATIONS

Furukawa E, Alsop B, **Alves** H, Vorderstrasse V, Carrasco K, Chuang C, Tripp G. (2022). Disrupted waiting behavior in ADHD: exploring the impact of reward availability and predictive cues. *Child Neuropsychology*, 9:1-20.

Vorkapic C, Leal S, **Alves** H, Douglas M, Britto A, Dantas E. (2021). Born to move: an essay on the impact of exercise on brain health and the evidence from human controlled trials. *Arquivos de Neuro-Psiquiatria*, 79:536-550.

Sayao A, **Alves** H, Furukawa E, Cagy M, Schultz-Wenk T, Tripp G, Caparelli-Daquer E. (2021). Development of a Classical Conditioning Task for Humans Examining Phasic Heart Rate Responses to Signaled Appetitive Stimuli: A Pilot Study. *Frontiers in Behavioral Neuroscience*, 15:1-11.

Vorkapic C, **Alves** H, Araujo L, Borba C, Coelho R, Nascimento E, Dantas E. (2021). Does physical activity improve cognition and academic performance in children? A systematic review of randomized control trials. *Neuropsychobiology*, Apr22:1-29 (epub).

Caparelli-Dáquer E, Malheiros-Junior SR, Edwards DJ, Reis T, Machado CF, **Alves** H. (2019). Proceedings #41: HD-tDCS Effect on Motor Evoked Potential Amplitude Elicited by Neuronavigated TMS. *Brain Stimulation*, 12:e110-e112.

Borges C, **Alves** H, Mograbi D, Pereira F, Landeira-Fernandez J, Charchat-Fichman H. (2017). Performance on cognitive tests, instrumental activities of daily living and depressive symptoms of a community-based sample of elderly adults in Rio de Janeiro, Brazil. *Dementia & Neuropsychologia*, 11:54-61.

Spenciere B, **Alves** H, Charchat-Fichman H. (2017). Scoring systems for the clock drawing test: a historical review. *Dementia & Neuropsychologia*, 11:6-14.

Barbosa ENBE, Faria CA, **Alves** H, Lima DA, Novaes R, Charchat-Fichman H. (2015). Neuropsychological profiles of mild cognitive impairment in aging (CCL). *Neuropsychologia Latinoamericana*, 7:15-23.

Faria CA, **Alves** H, Charchat-Fichman H. (2015). The most frequently used tests for assessing executive functions in aging. *Dementia & Neuropsychologia*, 9:149-155.

Alves H, Voss MW, Boot WR, Deslandes A, Cossich V, Salles JI, Kramer AF. (2013). Perceptual-cognitive expertise in elite volleyball players. *Frontiers in Psychology*, 4:36.

Voss MW, Erickson KI, Prakash RS, Chaddock L, Kim JS, **Alves** H, Szabo A, Phillips SM, Wójcicki TR, Mailey EL, Olson EA, Gothe N, Vieira-Potter VJ, Martin SA, Pence BD, Cook MD, Woods JA, McAuley E, Kramer AF. (2013). Neurobiological markers of exercise-related brain plasticity in older adults. *Brain, Behavior, and Immunity*, 28:90-99.

Voss MW, Heo S, Prakash RS, Erickson KI, **Alves** H, Chaddock L, Szabo AN, Mailey EL, Wójcicki TR, White SM, Gothe N, McAuley E, Sutton BP, Kramer AF. (2012). The influence of aerobic fitness on cerebral white matter integrity and cognitive function in older adults: Results of a one-year exercise intervention. *Human Brain Mapping*, Jun 5.

Erickson KI, Voss MW, Prakash RS, Basak C, Szabo A, Chaddock L, Kim JS, Heo S, **Alves** H, White SM, Wojcicki TR, Mailey E, Vieira VJ, Martin SA, Pence BD, Woods JA, McAuley E, Kramer AF. (2011). Exercise training increases size of hippocampus and improves memory. *Proceedings of the National Academy of Sciences USA*, 108(7):3017-3022.

Prakash RS, Voss MW, Erickson KI, Lewis JM, Chaddock L, Malkowski E, **Alves** H, Kim J, Szabo A, White SM, Wójcicki TR, Klamm EL, McAuley E, Kramer AF. (2011). Cardiorespiratory fitness and attentional control in the aging brain. *Frontiers in Human Neuroscience*, 4:229.

Voss MW, Prakash RS, Erickson KI, Basak C, Chaddock L, Kim JS, **Alves** H, Heo S, Szabo AN, White SM, Wójcicki TR, Mailey EL, Gothe N, Olson EA, McAuley E, Kramer AF. (2010). Plasticity of brain networks in a randomized intervention trial of exercise training in older adults. *Frontiers in Aging Neuroscience*, 2 pii:32.

Voss MW, Erickson KI, Prakash RS, Chaddock L, Malkowski E, **Alves** H, Kim JS, Morris KS, White SM, Wójcicki TR, Hu L, Szabo A, Klamm E, McAuley E, Kramer AF. (2010). Functional connectivity: a source of variance in the association between cardiorespiratory fitness and cognition? *Neuropsychologia*, 48(5):1394-1406.

Deslandes AC, Moraes H, **Alves** H, Pompeu FA, Silveira H, Mouta R, Arcoverde C, Ribeiro P, Cagy M, Piedade RA, Laks J, Coutinho ES. (2010). Effect of aerobic training on EEG alpha asymmetry and depressive symptoms in the elderly: a 1-year follow-up study. *Brazilian Journal of Medical and Biological Research*, 43(6):585-592.

Deslandes A, Moraes H, Ferreira C, **Veiga** H, Silveira H, Mouta R, Pompeu FA, Coutinho ES, Laks J. (2009). Exercise and mental health: many reasons to move. *Neuropsychobiology*, 59(4):191-198.

Deslandes A, Ferreira C, **Veiga** H, Cagy M, Piedade R, Pompeu F, Ribeiro P. (2006). Effects of caffeine on electrophysiological and neuropsychological indices after sleep deprivation. *Neuropsychobiology*, 54:126-133.

Puga F, **Veiga** H, Cagy M, McDowell K, Piedade R, Ribeiro P. (2005). Analysis of the influence of bromazepam on cognitive performance through the visual evoked potential (P300). *Arquivos de Neuro-Psiquiatria*, 63:228-234.

Deslandes A, **Veiga** H, Cagy M, Piedade R, Pompeu F, Ribeiro P. (2005). Effects of caffeine on the electrophysiological, cognitive and motor responses of the central nervous system. *Brazilian Journal of Medical and Biological Research*, 38:1077-1086.

Machado S, Cunha M, Bastos VH, **Veiga** H, Cagy M, McDowell K, Furtado V, Piedade R, Ribeiro P. (2005). Modificaciones en la distribución de potencia en función de la consolidación de la memoria implícita mediante una tarea de dactilografía. *Revista de Neurología*, 41:635.

Montenegro M, **Veiga** H, Deslandes A, Ferreira C, Cagy M, McDowell K, Pompeu F, Piedade R, Ribeiro P. (2005). Neuromodulatory effects of caffeine and bromazepam on visual event-related potential (P300): a comparative study. *Arquivos de Neuro-Psiquiatria*, 63:410-415.

Cunha M, Bastos VH, **Veiga** H, Cagy M, McDowell K, Furtado V, Piedade R, Ribeiro P. (2004). Changes in cortical power distribution as a function of memory consolidation in typewriting learning. *Arquivos de Neuro-Psiquiatria*, 62:662-668.

Bastos VH, Cunha M, **Veiga** H, McDowell K, Pompeu F, Cagy M, Piedade R, Ribeiro P. (2004). Analysis of cortical power distribution as a function of typewriting learning. *Brazilian Journal of Sports Medicine*, 10:494-499.

Deslandes A, **Veiga** H, Cagy M, Piedade R, Pompeu F, Ribeiro P. (2004). Effects of caffeine on visual evoked potential (P300) and neuromotor performance. *Arquivos de Neuro-Psiquiatria*, 62: 385-390.

Duchesne M, Mattos P, Fontenelle L, **Veiga** H, Rizo L, Appolinário JC. (2004). Neuropsychology of eating disorders: a systematic literature review. *Brazilian Journal of Psychiatry*, 26:107-117.

Deslandes A, **Veiga** H, Cagy M, Fiszman A, Piedade R, Ribeiro P. (2004). Quantitative electroencephalography (qEEG) to discriminate primary degenerative dementia from major depressive disorder (depression) *Arquivos de Neuro-Psiquiatria*, 62:44-50.

Veiga H, Deslandes A, Cagy M, McDowell K, Pompeu F, Piedade R, Ribeiro P. (2004). Visual event-related potential (P300): a normative study. *Arquivos de Neuro-Psiquiatria*, 62:575-581.

Bastos VH, **Veiga** H, Cunha M, Guimarães MA, Piedade R, Ribeiro P. (2003). Interhemispheric asymmetry as a function of learning a typing task. *Fisioterapia Brasil*, 6:426-431.

Cunha M, Bastos VH, Silva A, Furtado V, **Veiga** H, Piedade R, Ribeiro P. (2003). Sensorimotor integration and synaptic plasticity in the cerebellar cortex. *Fitness & Performance Journal*, 2:91-96.

Veiga H, Deslandes A, Cagy M, Fiszman A, Piedade R, Ribeiro P. (2003). Neurocortical electrical activity tomography in chronic schizophrenics *Arquivos de Neuro-Psiquiatria*, 61:712-717.

Ribeiro P., Piedade R, **Veiga** H, Deslandes A, Brandão P, Oliveira I, Souza V, Ribeiro F. (2002). Plastic coupling between learning and procedural memory. *Fitness & Performance Journal*, 1:22-29.

INVITED TALKS

- *Teaching Large Classes*
New Approaches to Teaching and Learning Conference, UMass Dartmouth (2020)
- *From the elderly to the athlete: the neuroscience of human performance and factors that modulate brain functioning*
Venture Cafe – MIT, Cambridge (2019)
- *The contributions of the EEG to neuropsychological evaluation*
Catholic University of Rio de Janeiro (PUC-Rio) (2017)
- *Brain Mapping and Mild Cognitive Impairment (MCI) in the Elderly*
2nd Symposium on Aging and Neurodegenerative Diseases (PUC-Rio) (2016)
- *Sport, Cognition, and Neuromodulation*
54th Scientific Conference – Pedro Ernesto University Hospital (2016)
- *Neuropsychology and the Neurosciences: contributions and current topics*
Joao Pessoa University (UNIFE) (2015)
- *The ins and outs of a Neuroscience Lab*
Catholic University of Rio de Janeiro (PUC-Rio) (2015)
- *Neuroscience: interdisciplinarity and current topics*
Souza Marques College (2015)

- *The effects of dance on the well-being of elderly adults*
Center for the Study and Research of Aging (CEPE) (2015)

MOST RECENT CONFERENCE PRESENTATIONS

- NYC Neuromodulation Conference (New York, 2018)
HD-tDCS Effect on Motor Evoked Potential Amplitude Elicited by Neuronavigated TMS
- 9th International Driving Symposium on Human Factors in Driver Assessment, Training and Vehicle Design (Vermont, 2017)
Hazard Perception Test (HPT): A Pilot Study in Brazil
- VI Clinical Neuropsychology Symposium – PUC-Rio (Rio de Janeiro, 2017)
Electroencephalography of healthy elderly adults under cognitive training
- IV Clinical Neuropsychology Symposium – PUC-Rio (Rio de Janeiro, 2015)
Cognitive profile of healthy, community-dwelling elderly adults
- The 2015 Alzheimer's Disease Congress (London, 2015)
The most frequently used tests to assess executive functions in aging
- 28th International Congress of Applied Psychology (Paris, 2014)
Perceptual-cognitive expertise in elite volleyball players
- XIV Brazilian Forum of Geriatric Neuropsychiatry (Rio de Janeiro, 2014)
Cognitive screening of elderly adults attending government-sponsored programs in the city of Rio de Janeiro

IN THE MEDIA

- The Making of an Olympian: What psychological and physical traits separate the world's best athletes from the rest of us?
<http://www.scientificamerican.com/article/the-making-of-an-olympian/>
- Top Athletes Excel in Mental as Well as Physical Skills
http://www.americankinesiology.org/AcuCustom/Sitename/DAM/124/KT_Spring_2013_Vol-6_No-2.pdf

CURRENT RESEARCH

- *Reward sensitivity in typically developing, school-age children*

The project aims to extend research on reward sensitivity among children by evaluating the effects of delayed reward on children's behavior choice. The project is being carried out in collaboration with the Human Developmental Neurobiology Unit at Okinawa Institute of Science and Technology Graduate University (OIST) in Japan, where Professor Gail Tripp and Dr. Emi Furukawa have been studying altered reward sensitivity in Attention-Deficit/Hyperactivity Disorder (ADHD). Improving the understanding of the nature of reward sensitivity in typically developing children, and its alternations among those with ADHD, can help refine behavior management strategies.

TEACHING

University of Massachusetts Dartmouth

- PSY 101 – General Psychology
- PSY 220 – Life Span Human Development
- PSY 250 – Biological Bases of Behavior
- PSY 308 – Cognitive Processes
- PSY 393 – Research Methods in Physiological Psychology
- PSY 501 – Physiology, Psychology, and Psychopharmacology (graduate)
- CAS 103 – Introduction to the Arts and Sciences
- HON 101 – Scholarship in the Community
- HON 301 – Research Across the Disciplines

Catholic University of Rio de Janeiro (PUC-Rio)

- Fundamentals of Neuroscience (undergraduate)
- Motivation and Emotion (graduate)

National Institute of Traumatology & Orthopedics (INTO)

- Bibliographic Search in Databases

Sao Jose College

- Educational Psychology
- Social Ecology

ADVISING (HONORS AND MASTER'S)

- *Development of a Peer Mentorship Program for College Students with ADHD: A Pilot Study*
 - Undergraduate Honors Research Project
Student: Lauren Talbot
Program: Honors College
University of Massachusetts Dartmouth (2021)
- *An investigation of the relationship among student burnout, self-efficacy, and online learning during the COVID-19 pandemic*
 - Undergraduate Honors Research Project
Student: Sophia Baxendale
Program: Psychology
University of Massachusetts Dartmouth (2020-2021)
- *The effects of mindfulness on recognition memory: An ERP study*
 - Undergraduate Honors Research Project
Student: Zachary Gemelli
Program: Psychology
University of Massachusetts Dartmouth (2020)
- *Neuropsychological and electrophysiological assessment of language development and executive functions in preschool children*
 - Master's Thesis
Student: Maria Clara Veloso de Oliveira
Program: Psychology
Catholic University of Rio de Janeiro – PUC-Rio (2018)

- *The Hazard Perception Test (HPT) in Brazilian traffic*
 - Master's Thesis
Student: Tais Areta Aparecida de Santana
Program: Medical Sciences
State University of Rio de Janeiro – UERJ (2016)

- *Influence of self-efficacy perception on functional independence and cortisol levels in patients with traumatic spinal cord injury*
 - Master's Thesis
Student: Fátima da Silva Alves
Program: Musculoskeletal System Applied Sciences
National Institute of Traumatology & Orthopedics – INTO (2015)

COMPLEMENTARY TRAINING

- | | |
|------|---|
| 2019 | Online Teaching and Learning Strategies (OTLS)
University of Massachusetts Dartmouth |
| 2016 | 2-day rTMS course: rTMS for depression, OCD and new developments
neuroCademy (held at the State University of Rio de Janeiro – UERJ) |
| 2014 | 18 th EEGLAB Workshop
Federal University of Rio de Janeiro (UFRJ) |
| 2009 | Introduction to Linux
Parkland College, IL |
| 2001 | Extension Program in Neuropsychology
Federal University of Rio de Janeiro (UFRJ) |

SERVICE

❖ ***Ad hoc reviewer for:***

- Frontiers in Psychology (Movement Science and Sport Psychology)
- Scientific Reports – Nature
- Psychology & Neuroscience (Online)
- Clinical Psychology (PUC-Rio)
- Latin American Journal of Neuropsychology
- Revista Argentina de Ciencias del Comportamiento

❖ ***Current University, College, and Departmental Service (UMass Dartmouth):***

- University Curriculum Committee
- Honors College Curriculum Committee
- STAR Center advisor
- Undergraduate Affairs Committee
- Psychology Research Methods Collaborative
- CAS 103 Collaborative
- Psychology Department Website group
- Orientation Events Coordinator

❖ **Psi Chi – International Honor Society in Psychology**

Faculty Advisor

UMass Dartmouth chapter

PROFESSIONAL AFFILIATIONS

- American Psychological Association (APA)
- Eastern Psychological Association (EPA)
- Society for the Teaching of Psychology (STP)
- Psychonomic Society