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## Jaime L. Tartar Chair, Department of Psychology and Neuroscience Nova Southeastern University Department of Psychology and Neuroscience 3301 College Avenue Fort Lauderdale, FL 33314 954-262-8192, tartar@nova.edu

## **EDUCATION**

Post-Doctoral Studies, December 2003 - July 2006, Harvard Medical School, Department of Psychiatry, Laboratory of *in vitro* neurophysiology, Advisor: Robert W. McCarley

Ph.D., Psychology: Behavioral Neuroscience Specialization, 2004, University of Florida. Advisor: Darragh P. Devine

M.A., Psychology, 2001, Florida Atlantic University. Advisor: Allan J. Nash

B.S., Psychology, 1997, Nova Southeastern University

## **EMPLOYMENT HISTORY**

Professor of Psychology and Behavioral Neuroscience, Nova Southeastern University.

- Chair of Psychology Major (2009-2011)
- Research Director (2010-present)
- Chair of Behavioral Neuroscience Major (2013-2015)
- Behavioral Neuroscience Program Director (2015-2021)
- Neuroscience Program Director (2021-2023)
- Chair of the Department of Psychology and Neuroscience (2023-present)

Research Technician, Center for Complex Systems and Brain Sciences (Dr. Robert Vertes), Florida Atlantic University (1999-2000)

United States Army and Army Reserves: Advanced Training: Computer Science School, Ft. Gordon, GA. Awarded Top Secret Security Clearance. Officer Commission Awarded 05/2000, Medical Service Corps (1998-2004)

## SYNERGISTIC ACTIVITIES

- Co-Founder and CEO of The Society for NeuroSports, a non-profit academic society.
- Scientific Advisor for Enchanted Wave, LLC
- Scientific Consultant for NESTRE Health and Performance, LLC

## HOSPITAL OR AFFILIATED INSTITUTION'S APPOINTMENTS

1999-2001, 2007-2010: Invited Researcher, Children's Diagnostic and Treatment Center, Ft. Lauderdale FL.

2006-2012: Consultant, Laboratory of Neuroscience, Harvard Medical School Department of Psychiatry, VA Boston Healthcare System.

#### **RESEARCH INTERESTS**

<u>Stress</u>: mechanisms and consequences of chronic and acute stress. <u>Sleep</u>: consequences of sleep loss on health. <u>Emotion</u>: mechanisms by which state changes in emotion can influence cognitive processes. <u>Sports Neuroscience</u>: The relationship between exercise and sports activities and brain health.

### **ADDITIONAL TRAINING**

- December 12-13th and May 8-9 2016: National Society for Experiential Education Workshops
- September 12-13, 2016. NIH Toolbox Training Workshop, University of Maryland, College Park Campus
- Fall, 2008: ERP Boot Camp, Society for Psychophysiological Research
- 2004-2006: Sleep Medicine Program. Harvard Medical School
- Summer, 2000: University of Florida Short Course in Genetic Techniques

## FUNDING AWARDS

Grant # BCS 2222174 (Co-PI) National Science Foundation \$350,000 08/01/2022-07/31/2025 Identifying the Role of Mind Wandering in Stress Related Changes in Executive Attention and Inflammation

Grant # M02-21-01-T0028 (PI) Nutrasource Pharmaceuticals \$110,926 06/30/2022 – 06/29/2023 A Randomized, Double-Blind, Placebo-Controlled Study to Evaluate the Impacts of Revactin® on Male Sexual Health and Quality of Life

Grant # P031c 210035 (NSU PI) Department of Education \$46,000 01/01/202-09/01/2023

Grant # P031c160143 (NSU PI) STEM Pathways for Acceleration, Completion, and Transfers Success (STEM PACTS) Department of Education \$158,750 5/9/2022 – 12/31/2022

Grant # 334821 (PI) STEM Educate, Intern and Employ (EngInE) Nova Southeastern University \$14,940 5/30/2017 - 5/30/2022

Interdisciplinary Timeline Assessment of Brain Injury in NFL Players and Fighters Grant # 335411 (PI) Nova Southeastern University \$14,970 7/1/2016 - 6/30/2017 Examining the Stress-Gut Microbiome Interface: A Systems Biology Approach

Grant # NQ-0010-64501 (NSU PI) Department of Education \$55,000 5/30/2014 - 9/30/2016 STEM Ladder to Success

Grant # P120A140012 (Co- PI) Department of Education \$280,743 4/30/2014 - 9/30/2017 Science Peer and Research Collaborative (SPARC)

Grant # 333189 (PI) Nova Southeastern University \$9,995 6/1/2013 - 6/30/2014 A Novel Approach to Test Multisensory Emotion Processing After Sleep Loss

Grant # P120A140012 (Co- I) Department of Defense \$498,000 3/30/2013 - 9/30/2016 Reshaping the Future: Integrating Cutting Edge Equipment to Enhance Research, Education, and Outreach at Nova Southeastern University (PI Smith, R)

Grant # 335382 (PI) Nova Southeastern University \$14,980 7/1/2013 - 6/30/2014 An Integrative Analysis of Chronic Sleep Restriction's Effect on Cancer Risk

Grant # 335883 (PI) Nova Southeastern University \$9,964 7/1/2012 - 6/30/2013 Sleep Gene Polymorphisms and Psychological Health: A Translational Approach

Grant # 333189 (PI) The Society for Teaching Psychology \$20,000 11/29/2011 - 11/30/2012 Research Initiative in Psychology for High School Students: A First Year Pilot Program Grant # 335522 (PI) Nova Southeastern University \$9,597 7/1/2010 - 12/31/2011 Electrophysical and Neurophysical Measures of Emotional Regulation in HIV-Infected Women

Grant # 335468 (PI) Nova Southeastern University \$9,718 7/1/2009 - 6/30/2010 Emotional Influences on Cognitive Processing in HIV Infected Women

Grant # T32 HL07901 National Heart Blood and Lung Institute Electrophysiological responses of neurons in the hippocampus after sleep perturbations 01/10/2004-08/30/2006.

## PUBLICATIONS

\* Indicates undergraduate student co-authors, \*\* Indicates graduate student co-authors

Original articles:

- 1. Sims, S. T., Kerksick, C. M., Smith-Ryan, A. E., Janse de Jonge, X. A., Hirsch, K. R., Arent, S. M., ... **Tartar JL** & Antonio, J. (2023). International society of sports nutrition position stand: nutritional concerns of the female athlete. Journal of the International Society of Sports Nutrition, 20(1), 2204066.
- Gonzalez, D. E., McAllister, M. J., Waldman, H. S., Ferrando, A. A., Joyce, J., Barringer, N. D., ... Tartar J.L. & Kreider, R. B. (2023). International society of sports nutrition position stand: tactical athlete nutrition. Journal of the International Society of Sports Nutrition, 19(1), 267-315.
- 3. Van Hauwermeiren, O., Kwamanakweenda, J., Pino, J., Peacock, C., **Tartar, J. L.,** & Cuc, A. (2023). The Dark Triad and Professional Fighters: Destigmatizing Male Combat Athletes. Cureus, 15(1).
- 4. Cabrera, D., Thompson, K., Thomas, J. D., Peacock, C., Antonio, J., **Tartar, J. L**., ... & Tartar, A. (2023). Dysregulation of miR-155 Expression in Professional Mixed Martial Arts (MMA) Fighters. Cureus, 15(2).
- Thompson, K. I.\*\*, Chau, M.\*\*, Lorenzetti, M. S.\*\*, Hill, L\*\*. D., Fins, A. I., & Tartar, J. L. (2022). Acute sleep deprivation disrupts emotion, cognition, inflammation, and cortisol in young healthy adults. Frontiers in Behavioral Neuroscience, 16, 945661.
- 6. Giannos, P., Prokopidis, K., Forbes, S. C., Celoch, K., Candow, D. G., & **Tartar, J. L.** (2022). Gene Expression Changes of Murine Cortex Homeostasis in Response to Sleep

Deprivation Hint Dysregulated Aging-like Transcriptional Responses. Brain Sciences, 12(7), 825.

- Robino, A. E., Feldman, D. M., Stein, A. N., Schmaltz, M. A., Fitzpatrick, H. A., Tartar, J. L., ... & Feldman, O. (2022). Sustained Effects of Animal-Assisted Crisis Response on Stress in School Shooting Survivors. Human-Animal Interaction Bulletin, (2022).
- Boucher, L., Feingold, J., Concannon, K., Talavera, S., Tartar, J., & Collins, W. M. (2022). Memory and attention while SCUBA diving at shallow and deep depths: An open water study. NeuroSports, 1(2), 5.
- 9. **Tartar, J. L.,** Hiffernan, F. S.\*, Freitas, K. E\*\*, Fins, A. I., & Banks, J. B. (2021). A Functional Adenosine Deaminase Polymorphism Associates with Evening Melatonin Levels and Sleep Quality. Journal of circadian rhythms, 19.2021.
- Tartar, J. L., Banks, J. B., Marang, M.\*\*, Pizzo, F.\*, & Antonio, J. (2021). A Combination of Caffeine, TeaCrine®(Theacrine), and Dynamine®(Methylliberine) Increases Cognitive Performance and Reaction Time Without Interfering With Mood in Adult Male Egamers. Cureus, 13(12).
- 11. Kalman DS, Hoh C., Petersen B., Flynn S., Evans C.\*\*, Antonio J., Tartar J. A Randomized Double-Blind Evaluation of the Gastrointestinal, Body Composition, Stress Response and Cognitive Function Impacts of Creatine Supplementation in Healthy Adults". EC Nutrition 16.11 (2021): 19-28.
- Banks, J.B., Antonio, J., Holtzman, A. S\*\*., Marang, M\*\*., Weber, C\*\*., Alverez-Beaton, A.\*, Patel, A\*. & Tartar, J. T. (2021) Creatine and Cognitive Functioning: What is the role of Exercise Frequency? Journal of the Society for Neurosports. NeuroSports: Vol. 1, Article 9.
- Tartar, J. L., Antonio, J., Kalman, D. S., Hewlings, S. J., Baisley, J., Marang, M\*\*., Peacock, C. A. (2021). An Evaluation of the Effects of a Non-caffeinated Energy Dietary Supplement on Cognitive and Physical Performance: A Randomized Double-Blind Placebo-Controlled Study. *Cureus*, 13(7).
- 14. Evans, C.\*\*, Mekhail, V.\*\*, Kaminski, J\*\*., Peacock, C., **Tartar, J**., Santana, J. C., & Antonio, J. (2021). The Effects of an Energy Drink on Measures of Cognition and Physical Performance. *Journal of Exercise Physiology Online*, *24*(3), 75-82.
- 15. Thompson, K.\*\*, Celoch, K., Pizzo, F.\*, Fins, A. I., & **Tartar, J.** (2021). Validation of a Single Channel EEG for the Athlete: A Machine Learning Protocol to Accurately Detect Sleep Stages. NeuroSports, 1(1), 11.
- 16. Antonio, J., Cabrera, D.,\*\* Knafo, S.\*, Thomas, J., Peacock, C., & Tartar, J. (2021). Neurofilament Light (NFL) in Division II Female Soccer Players: A Potential Biomarker for Brain Trauma. *Journal of Exercise Physiology Online*, 24(1).

- 17. Ali, A.\*, Peacock, C., & **Tartar, J**. (2021). Training Frequency, Weight, and Mental Well-being During COVID-19 Lockdown in Professional Mixed Martial Arts Fighters. *Research Directs in Health Sciences*, *1*(1).
- Czartoryski, P., Garcia, J., Manimaleth, R., Napolitano, P., Watters, H., Weber, C., Tartar, J, ... & Antonio, J. (2020). Body composition assessment: A comparison of the DXA, Inbody 270, and Omron. Journal of Exercise and Nutrition, 3(1).
- 19. **Tartar JL**, Cabrerra D, Thomas J., Knafo S., Peacock CA. The "Warrior" COMT Val/Met Genotype Occurs in Greater Frequencies in Mixed Martial Arts Fighters Relative to Controls.. Journal of Sports Science and Medicine. 2020;19, 38-42.
- Burgess, V. N., Antonio, J., Bland, H. W., Wagner, R., Tartar, J. L., & Melton, B. F. (2020). The effect of timing and type of exercise on the quality of sleep in trained individuals. International Journal of Exercise Science, 13(7), 837.
- Smith RP, Easson C, Lyle SM\*\*, Kapoor R\*\*, Donnelly C\*\*, Parikh E\*, Lopez JV, Tartar JL. Gut microbiome diversity is associated with sleep physiology in humans. PLoS One. 2019; (14)10 e0222394.
- 22. Antonio J, Knafo S\*, Kenyon M\*, Ali A\*, Carson C\*, Ellerbroek A, Weaver C, Roberts J, Peacock CA, Tartar JL. Assessment of the FTO gene polymorphisms (rs1421085, rs17817449 and rs9939609) in exercise-trained men and women: the effects of a 4-week hypocaloric diet.. Journal of the International Society of Sports Nutrition. 2019; 16(1) 36.
- 23. **Tartar JL**, Kalman D, Hewlings S. A prospective study evaluating the effects of a nutritional supplement intervention on cognition, mood states, and mental performance in video gamers. Nutrients. 2019; 11(10). pii: E2326.
- 24. Carrera F\*, Boucher LB. **Tartar JL.** The Effects of Video Gaming with a Brain-Computer Interface on Mood and Physiological Arousal. Games for Health Journal. 2019. 8(5):366-36
- 25. Antonio J, Burgess V\*\*, Carson C\*, Ellerbroek A, Axelrod C\*, Peacock CA, Silver T, Tartar JL. High-Protein Diet Has No Effect on Sleep Quality and Quantity in Exercise-Trained Men and Women. Journal of Exercise and Nutrition. 2019; 2 (1): 3.
- 26. Serrano J\*\*, Banks JB, Fagan TJ, **Tartar JL.** The influence of Val158Met COMT on physiological stress responsivity. Stress. 2019; Dec 26:1-4.
- Antonio, J., Kenyon, M., Horn, C., Jiannine, L., Carson, C., Ellerbroek, A., ... & Tartar, J. (2019). The effects of an energy drink on psychomotor vigilance in trained individuals. Journal of functional morphology and kinesiology, 4(3), 47.
- 28. Hill, LM\*\*, Starratt VG, Fernandez M, **Tartar JL**. Positive affective priming decreases the middle LPP response to negative images. Brain and Behavior. 2018; e01198.
- 29. **Tartar JL**, Salzmann S.\*, Pierreulus R\*, Antonio J. Acute Aerobic Exercise Decreases a Neurophysiological Response to Emotionally Negative Stimuli. Journal of Exercise and Nutrition. 2018; 1(5).

- Silver T, Ellerbroek A, Peacock CA, Knafo SM, Tartar, JL, Antonio J. High and Low Impact Physical Activity Positively Influences Female Bone Density, Journal of Exercise and Nutrition. 2018; 1(5).
- 31. Antonio J, Knafo SM\*, Kapoor R\*\*, **Tartar JL**. A fat mass and obesity-associated gene polymorphism influences fat mass in exercise-trained individuals. Journal of the International Society of Sports Nutrition. 2018; 15:40.
- 32. Hill LH\*\*, Lorenzetti MS\*\*, Lyle S\*\*, Fins AI, Tartar A, **Tartar JL.** COMT Val158Met Polymorphism Associates with Emotion Processing and Cortisol Levels in Women. Brain and Behavior 2018;8(2):e00883.
- 33. Antonio J, Leaf A, Carson C\*, Ellerbroek A, Silver T, Peacock CA, **Tartar, JL**. Bone Mineral Density in Competitive Athletes. 208; Bone, 1, 2.
- 34. Antonio J, Knafo S\*, Ellerbrook A, Sliver T, Vargas L, Peacock C, **Tartar JL**. The relationship between the ACTN3 genotype and measures of stress, exercise performance and body composition. Under Revision. Journal of Strength and Conditioning Research. 2017; 20(6).
- 35. Trivedi MS, Holger D\*\*. Bui AT\*\*, Craddock TJ, **Tartar JL**. Short-term sleep deprivation leads to decreased systemic redox metabolites and altered epigenetic status. PloS one. 2017; 12(7), e0181978.
- 36. Chayo I\*, Fernandez M, Sandor S\*, **Tartar JL.** Neurophysiological Processing of an Emotional Task is Sensitive to Time-of-Day. Journal of Circadian Rhythms. 2017; 23;15(1).
- Eldakar OT, Tartar JL, Garcia D\*, Ramirez V\*, Dauzonne M\*, Armani Y\*, Gallup AC. Acute Physical Stress Modulates the Temporal Expression of Self-Reported Contagious Yawning in Humans. Adaptive Human Behavior and Physiology. 2017; 3(2):156-70.
- Olivera IE\*, Fins KC\*, Rodriguez SA\*, Abiff SK\*, Tartar JL, Tartar A. Glycoside hydrolases family 20 (GH20) represent putative virulence factors that are shared by animal pathogenic oomycetes, but are absent in phytopathogens. BMC Microbiol. 2016;16(1):232.
- Banks JB, Welhaf MS\*\*, Hood AV\*, Boals A, Tartar JL. Examining the role of emotional valence of mind wandering: All mind wandering is not equal. Consciousness and cognition. 2016 Jul 31;43:167-76.
- 40. Viena TD\*\*, Gobin CM\*\*, Fins AI, Craddock TJ, Tartar A, **Tartar JL**. A PER3 Polymorphism Interacts with Sleep Duration to Influence Transient Mood States in Women. J Circadian Rhythms. 2016; 14: 3.
- 41. Banks JB, **Tartar JL**, Tamayo, B<sup>\*\*</sup>. Examining Factors involved in stress related working memory impairments: Independent or condition effects? Emotion, Conscious and Cognition. 2016;43:167-76.
- 42. Tartar JL, Fins AI, Lopez A\*\*, Sierra LA\*\*, Silverman SA\*\*, Thomas SV\*, Craddock TJA. Sleep Restriction and Delayed Sleep Associate with Psychological Health and Biomarkers of Stress and Inflammation in Females. Sleep Health. 2015 1;4: 249–256.

- 43. Gobin CM\*\*, Banks JB, Fins AI, **Tartar JL**. Poor sleep quality is associated with an increased negativity bias and decreased sustained attention. Journal of Sleep Research. 2015. 24(5):535-42...
- 44. Alomari RA\*\*, Fernandez M, Banks JB, Acosta J\*\*, **Tartar JL**. Acute stress decreases the LPP ERP response to emotional pictures and impairs sustained attention: time-sensitive effects. Brain Sciences 2015 ;5(2):201-19.
- 45. McIntosh RM\*\*, **Tartar JL**, Rosselli M, Widmayer, S. HIV-Related Attention Bias and Processing Deficits in the Regulation of Emotion: An ERP Analysis. Journal of Neurophysiology and Clinical Neuroscience. 2015; 27(1):e32-9.
- Alfarra R\*, Fins AI, Chayo I\*, Tartar JL. One night of sleep deprivation dysregulates behavioral and neurophysiological measures of emotion processing. Biological Psychology. 2014, 13(104):1-7.
- Fernandez M, Acosta J\*, Douglass K,\* Doshi NK\*, Tartar JL. Speaking Two Languages Enhances an Auditory but Not a Visual Neural Marker of Cognitive Inhibition. AIMS Neuroscience. 2014; 1(2): 145-157.
- Tartar JL, McIntosh RM\*\*, Rosselli M, Widmayer S, Nash AJ. HIV-positive females show blunted neurophysiological responses in an emotion-attention dual task paradigm. Clinical Neurophysiology, 2014, 125(6):1164-1173
- 49. Banks JB, **Tartar JL**, Welhaf M.\* Where's the Impairment: An Examination of Factors that Impact Sustained Attention Following a Stressor. Cognition and Emotion, 2014;28(5):856-866.
- Fernandez M., Tartar JL, Padron D\*, Acosta J\*. Neurophysiological Marker of Inhibition Distinguishes Language Groups on a Non-Linguistic Executive Function Test. Brain Research, 2013, 83(3):330-6.
- Dabrowski KM\*, Castano DJ, Tartar JL. Basic Neuron Model Electrical Equivalent Circuit: An Undergraduate Laboratory Exercise. The Journal of Undergraduate Neuroscience Education (JUNE), 2013, 12(1):A49-A52.
- 52. Viena TV\*\*, Banks JB, Barbu IM\*, Schulman AH, and **Tartar JL**. Differential effects of mild chronic stress on cortisol and SIgA responses to an acute stressor. Biological Psychology, 2012, 91:307–311.
- 53. Klopp C\*, Garcia, C\*, Schulman AH, **Tartar JL**, Acute social stress increases biochemical and self-report markers of stress without altering spatial learning in humans, Neuroendocrinology Letters, 2012, 33(4):101–106.
- 54. \*Reprinted by editor invitation to European sister journal: Activitas Nervosa Superior Rediviva, 2012, 54(1):15–20.
- 55. **Tartar JL**, DeAlmeida K\*, McIntosh RM\*\*, Rosselli M, Nash AJ. Emotionally negative pictures increase attention to a subsequent auditory oddball stimulus, International Journal of Psychophysiology. 2012;83(1):36-44.
- 56. Domingo S\*, Lalwani LN\*, **Tartar JL**. Grapheme-color association is linked to creativity. Imagination, Cognition and Personality. 2011. 30(3): 289 299.

- 57. Murphy L\*, Denis R\*, Ward CP, **Tartar JL**. Academic stress differentially influences perceived stress, cortisol and immunoglobulin-A. Stress. 2010; 13(4): 365–370.
- 58. **Tartar JL**, McKenna JT, Ward CP, Strecker RE, McCarley RW, Brown RE. Sleep Fragmentation reduces Hippocampal CA1 Pyramidal Cell Excitability and Response to Adenosine. Neurosci. Lett. 2010; 469: 1-5.
- 59. Tartar JL, Ward CP, Cordeira JW\*, Legare SL\*, Blanchette AJ\*, McCarley RW, Strecker RE. Experimental sleep fragmentation and sleep deprivation in rats increases exploration in an open field test of anxiety while increasing plasma corticosterone levels. Behav Brain Res. 2009; 11;197(2):450-3
- 60. McGuire M, **Tartar JL**, Cao Y, McCarley RW, White DP, Strecker RE, Ling L. Sleep fragmentation impairs ventilatory long-term facilitation *via* adenosine A1 receptors. Journal of Physiology. 2008;586(Pt 21):5215-29.
- 61. McKenna JT, Cordeira JW, Christie MA, **Tartar JL**, McCoy JG, Lee E, McCarley RW, Strecker RE. Assessing sleepiness in the rat: a multiple sleep latencies test compared to polysomnographic measures of sleepiness. Journal of Sleep Research. 2008;17; 365-375.
- 62. McKenna JT, **Tartar JL**, Ward CP, Thakkar MM, Cordeira JW, McCarley RW, Strecker RE. Sleep fragmentation elevates behavioral, electrographic and neurochemical measures of sleepiness. Neuroscience. 2007;146(4):1462-73.
- 63. McCoy JG, **Tartar JL**, Bebis AC, Ward CP, McKenna JT, Baxter MG, McCarley RW, McGaughy J, Strecker RE<sup>.</sup>. Experimental sleep fragmentation impairs attentional set-shifting in a rodent model of obstructive sleep apnea. Sleep. 2007;30(1):52-60.
- 64. **Tartar JL**, Ward CP, McKenna JT, Thakkar MM, Arrigoni E, McCarley RW, Brown RE, and Strecker RE. Hippocampal synaptic plasticity and spatial learning are impaired in a rat model of sleep fragmentation. Eur J Neurosci. 2006;23(10):2739-48.
- 65. **Tartar JL**, King MA, Devine, DP. Glutamate-mediated neuroplasticity in a limbic input to the hypothalamus. Stress. 2006 Mar;9(1):13-9.
- Tartar JL, Sheehan CM, Nash AJ, Starratt C, Puga A, Widmayer S. ERPs differ from neurometric tests in assessing HIV-associated cognitive deficit.. NeuroReport. 2004; 15(10):1675-1678.
- 67. **Simpkiss JL**, Devine DP. Responses of the HPA axis after chronic variable stress: Effects of novel and familiar stressors. Neuroend. Lett. 2003;24(1-2):97-103.

#### **Book Chapters**

- 1. Young, K., Hibel, J., Fernandez, M., & **Tartar, J.** (2017). Single session therapy and neuroscience: Scaffolding and social engagement. In Beaudoin, M. and Duvall, J. (Ed). Collaborative Therapy and Neurobiology. New York: Routledge.
- 2. **Tartar JL,** Thomas, J\*\*, and Gobin CM\*\*. (2019). The. Neurobiology of Addiction. In M.D. Reiter (Ed.), Substance Abuse and the Family, Under Review, Routledge publishing, Inc.

- 3. **Tartar JL** and Gobin CM\*\*. (2019). The Genetics of Addiction. In M.D. Reiter (Ed.), Substance Abuse and the Family, Under Review, Routledge publishing, Inc.
- 4. Allison Brager and **Jaime Tartar** (2021). Chapter 1: Introduction to Brain Health [Online Course]. In Fahmy, R. (Ed.), NASM Certified Wellness Coach. National Academy of Sports Medicine.
- 5. **Jaime Tartar** and Allison Brager (2021). Chapter 5: Sleep [Online Course]. In Fahmy, R. (Ed.), NASM Certified Wellness Coach. National Academy of Sports Medicine.

#### **Conference Presentations:**

**Simpkiss JL**, Devine, D. P. Altered regulation of the HPA axis after exposure to acute and chronic stress: effects of novel and familiar stressors. Society for Neuroscience Abstracts. 2001:35:412.5.

**Simpkiss, JL,** Nash AJ, Sttarratt C, Widmayer S. Cognitive deficit in HIV-infected adult women: an event-related potentials (P300) study. Psychophysiology Abstracts. 2002:39: S76.

**Simpkiss JL**, Devine DP. Electrophysiological changes in central stress circuits. Society for Neuroscience Abstracts. 2002:36:865.10.

**Simpkiss JL**, King MA, Devine DP. Electrophysiologically-induced changes in HPA-axis functioning. Society for Neuroscience Abstracts. 2003;29:192.8.

**Simpkiss, JL,** Divine J, Bauer MC, Devine DP. Amygdaloid mediation of N/OFQ-induced anxiety. International Narcotics Research Conference Abstracts. 2003;34: P 124

Devine DP, Bauer MC, Kolesov, S, **Tartar JL**. Effects of N/OFQ antagonists on anxiety-related behavior. Society for Neuroscience Abstracts. 2003;29:396.14.

Devine DP, Bauer MC, Kolesov S, Hersh C, **Tartar JL.** N/OFQ- induced anxiogenesis: pharmacological and environmental challenges. Society for Neuroscience Abstracts. 2004; 762.6.

**Tartar JL**, McKenna JT, Arrigoni E, Strecker RE, McCarley RW, Brown RE. Changes in hippocampal Synaptic plasticity on a rodent model of sleep apnea. Society for Neuroscience Abstracts. 2004;663.10.

**Tartar JL,** McCoy JG, Ward CP, McKenna JT, Andrito N, Thakkar MM, Brown RE, McCarley RW, Strecker RE. Polysomnographic changes in a rat model of sleep fragmentation. Society for Neuroscience Abstracts. 2005, 309.2

Strecker RE, Bebis AC, **Tartar JL**, McCoy JG, Ward CP, Buckley EN, McKenna JT, Christie MA, Thakkar MM, Baxter MG, McGaughy J, McCarley RW. Sleep fragmentation impairs complex learning in an extra - dimensional set - shifting task. Society for Neuroscience Abstracts. 2005, 309.1.

Ward CP, Blanchette AJ, **Tartar JL**, Strecker RE, McCarley RW, Saper CB, Lu J. Effect of lesions of the ventrolateral preoptic nucleus on water maze performance. Society for Neuroscience Abstracts. 2005, 309.13.

McKenna JT, **Tartar JL**, Ward CP, Thakkar MM, Cordeira J, Ling L., McGuire M, McCarley RW, Strecker, RE . A rodent model of obstructive sleep apnea: measures of vigilance states and adenosine. Society for Neuroscience Abstracts, 2005, 31, 700.11.

Ward CP, McCoy, JG, **Tartar JL**, McKenna JT, McCarley RW, Strecker RE. Hippocampal-Dependent Memory in a Rat Model of Obstructive Sleep Apnea. Sleep, 2005 28(supp), A7.

McKenna JT, **Tartar JL**, Cordeira J\*, McCoy JG, Lee E, McCarley RW, Strecker RE. Assessing the propensity to sleep in the rat: a multiple sleep latencies test compared to polysomnographic measures. Society for Neuroscience Abstracts, 2007, 31, 700.11.

Domingo S\*. Lalwani LN\*, **Tartar JL**. Association of synesthesia and creativity amongst a general population. Association for Psychological Sciences Abstracts, 2008. X-127.

Denis R\*, Faso K\*, **Tartar JL**. Examination stress enhances long term memory performance. Association for Psychological Sciences Abstracts, 2009.

Denis R\*, Murphy L\*, Starratt VG, **Tartar JL** The stress is worse than you think: examination stress increases cortisol levels but not the perception of stress. Association for Psychological Sciences Abstracts, 2009.

deAlmeida K\*, **Tartar, JL**. The effects of emotion on cognitive processing. Society for Neuroscience Abstracts, 2009, 674.5.

Denis R\*, **Tartar, JL**. Examination stress and memory performance. Society for Neuroscience Abstracts, 2009, 777.3.

**Tartar, J**, McIntosh RM, Rosselli M, Nash AJ. Emotional influences on cognitive processing in HIVinfected women. Society for Neuroscience Abstracts, 2009, 674.6.

Singh AR\*, Anton CA\*, McIntosh R, Rosselli M. **Tartar JL**. Electrophysiological and Neuropsychological Correlates of Emotion Regulation. Southeastern Psychological Association Abstracts, March, 2011. Undergraduate Poster Session.

Alomari R\*, Lynch A\*, Rosselli M, **Tartar JL.** The Influence of emotional stimuli on attention sharing in a dual modality ERP Paradigm: effects of varying interstimulus intervals. Undergraduate Poster Session. Southeastern Psychological Association Abstracts, March, 2011.

Viena T\*, Barbu I\*, Schulman AH, **Tartar JL**. The impact of psychological stress in an acute stress challenge: an investigation into biochemical, social and personality correlates. Southeastern Psychological Association Abstracts, March, 2011. Undergraduate Poster Session.

Garcia C\*, Klopp C\*, Schulman AH, Tartar JL, "The impact of acute psychological stress on spatial learning." Southeastern Psychological Association Abstracts, March, 2011, 18-2.

McIntosh RM\*\*, Tartar JL, Rosselli M, Nash AJ. Emotion and cognition in HIV-infected women. Southeastern Psychological Association Abstracts, March, 2011, 90-2

Yassin S\*, Srour A\*, **Tartar JL**, Boucher L. Selective attention to negative emotional stimuli. Society for Neuroscience. Society for Neuroscience Abstracts, 2011.

Alfarra, A\*, **Tartar J.L** The effects of 24 hours of sleep deprivation on a neurophysiological measure of emotion, self-reported anxiety, and cortisol levels. Society for Neuroscience Abstracts, 2011.

Viena, T<sup>\*\*</sup>, Fins AI, Tartar A, **Tartar JL**. "Sleep gene polymorphisms and psychological health: A translational approach." Program No. 486.27. 2012 Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012. Online.

Akhi MB\*, Banks JB, **Tartar JL**. An EMG classroom demonstration of the effect of acute stress on muscle performance: A Brain Awareness Week project. Program No. 21.16. 2012 Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012. Online.

Gobin CM\*\*, Fins AI, Banks JB, **Tartar, JL**. The effect of chronotype on stress response, sustained attention, and emotional memory. Program No. 570.14. 2013 Neuroscience Meeting Planner. San Diego CA, Society for Neuroscience, 2013. Online.

Dabrowski KM\*, Castano DJ, **Tartar JL**. Basic Neuron Model Electrical Equivalent Circuit: An Undergraduate Laboratory Exercise. Program No. 21.27. 2013 Neuroscience Meeting Planner. San Diego CA, Society for Neuroscience, 2013. Online.

Starratt VG, **Tartar JL**, Scheyd, G. The neurophysiology of perceived attractiveness. 25th Annual Meeting of the Human Behavior and Evolution Society. 2013. Miami Beach, FL.

Fieldstone SC\*\*, Lewis JE, Black R, Thomas S\*, Cruz LE\*, **Tartar JL.** How Does Disgust Sensitivity Influence Moral Decisions: Measuring Even Related Brian Potentials. 2014. Conference of the International Congress of Applied Psychology, 2014. Paris, France.

Lorenzetti MS\*\*, Hill LD\*\*, Chayo I\*, **Tartar JL**, Fins, AI.. Time-of-day Effects on Responses to Clinical Health Measures. June, 2016. Poster presented at Associated Professional Sleep Societies (APSS) Meeting, Denver, CO.

Lyle S.\*\*, Tatin X.\*\*, Hill LD.\*\*, Lorenzetti M.\*\*, Tartar A., **Tartar JL**. The Association Between the COMT Val158Met Polymorphism and Emotion and Cognitive Performance. November 2016. Poster Presented at the Society for Neuroscience Meeting San Diego, CA.

Antonio J, Knafo S\*, Ellerbrook A, Sliver T, Vargas L, Peacock C, **Tartar JL**. The relationship between the ACTN3 genotype and measures of stress, exercise performance and body composition. Proceedings of the Fourteenth International Society of Sports Nutrition Conference and Expo, June 22-24, 2017, Phoenix AZ.

Skicki J\*\*, Lorenzetti MS\*\*, **Tartar JL**, Craddock TJ, Fins AI. A Preliminary Comparison of Food Consumption, Appetite, and Exercise in Chronic and Experimental Sleep Restriction Groups. April 2017. Poster presented at Associated Professional Sleep Societies (APSS) Meeting, Denver, CO.

Lorenzetti MS<sup>\*\*</sup>, Skicki J<sup>\*\*</sup>, Craddock TJ, Fins AI. **Tartar JL.** The Psychological and Physiological Implications of Sleep Restriction Sleep Restriction: A Comparison of Chronic and Experimental Sleep Restriction. April 2017. Poster presented at Associated Professional Sleep Societies (APSS) Meeting, Denver, CO.

Assefa E\*, XF Tatin\*\*, MS Lorenzetti\*\*, Fins AI, Tartar A, **Tartar JL**\*\*. Sleep Deprivation Results in Increased Expression of Cancer-Related miRNAs in Humans. April 2017. Poster presented at Associated Professional Sleep Societies (APSS) Meeting, Denver, CO.

**Tartar JL**, Salzmann S\*, Pierrelus R\*, Antonio J. Acute Aerobic Exercise Improves Neurophysiological Measures of Emotion Processing. Proceedings of the Fourteenth International Society of Sports Nutrition Conference and Expo, June 22-24, 2017, Clearwater Beach AZ.

Knafo SM,\*, Kapoor R\*\* Antonio J, **Tartar JL**. You Say You're Fit, but Your Genes Say You're Fat: A Polymorphism in the Fat mass and obesity associated (FTO) Gene Predicts Body Fat in Well-Trained Athletes. Proceedings of the Fifteenth International Society of Sports Nutrition Conference and Expo, June 7-9, 2017, Clearwater Beach FL.

**Tartar, J. L.,** Hiffernan, F. S.\*, Freitas, K. E\*\*, Fins, A. I., & Banks, J. B. (2021). A Functional Adenosine Deaminase Polymorphism Associates with Evening Melatonin Levels and Sleep Quality. Journal of circadian rhythms, 19.2021.

**Tartar, J. L.,** Banks, J. B., Marang, M.\*\*, Pizzo, F.\*, & Antonio, J. (2021). A Combination of Caffeine, TeaCrine®(Theacrine), and Dynamine®(Methylliberine) Increases Cognitive Performance and Reaction Time Without Interfering With Mood in Adult Male Egamers. Cureus, 13(12).

Kalman DS, Hoh C., Petersen B., Flynn S., Evans C.\*\*, Antonio J., **Tartar J**. A Randomized Double-Blind Evaluation of the Gastrointestinal, Body Composition, Stress Response and Cognitive Function Impacts of Creatine Supplementation in Healthy Adults". EC Nutrition 16.11 (2021): 19-28.

Banks, J.B., Antonio, J., Holtzman, A. S<sup>\*\*</sup>., Marang, M<sup>\*\*</sup>., Weber, C<sup>\*\*</sup>., Alverez-Beaton, A.<sup>\*</sup>, Patel, A<sup>\*</sup>. & **Tartar, J. T**. (2021) Creatine and Cognitive Functioning: What is the role of Exercise Frequency? Journal of the Society for Neurosports. NeuroSports: Vol. 1, Article 9.

**Tartar, J. L.,** Antonio, J., Kalman, D. S., Hewlings, S. J., Baisley, J., Marang, M\*\*., Peacock, C. A. (2021). An Evaluation of the Effects of a Non-caffeinated Energy Dietary Supplement on Cognitive and Physical Performance: A Randomized Double-Blind Placebo-Controlled Study. *Cureus*, *13*(7).

Evans, C.\*\*, Mekhail, V.\*\*, Kaminski, J\*\*., Peacock, C., **Tartar, J**., Santana, J. C., & Antonio, J. (2021). The Effects of an Energy Drink on Measures of Cognition and Physical Performance. *Journal of Exercise Physiology Online*, *24*(3), 75-82.

Antonio, J., Cabrera, D.,\*\* Knafo, S.\*, Thomas, J., Peacock, C., & **Tartar, J.** (2021). Neurofilament Light (NFL) in Division II Female Soccer Players: A Potential Biomarker for Brain Trauma. *Journal of Exercise Physiology Online*, 24(1).

Ali, A.\*, Peacock, C., & **Tartar, J**. (2021). Training Frequency, Weight, and Mental Well-being During COVID-19 Lockdown in Professional Mixed Martial Arts Fighters. *Research Directs in Health Sciences*, *1*(1).

# INVITED ADDRESSES AND SYMPOSIA

- Introduction for Oliver Sacks, Nova Southeastern University Farquhar College of Arts and Sciences, Distinguished Speakers Series, April 19<sup>th</sup>, 2007.
- Presentation for Nova Southeastern University Farquhar College of Arts and Sciences Psi Chi and Psychology club, "Sleep", October 16<sup>th</sup>, 2007.
- Presentation for Nova Southeastern University Farquhar College of Arts and Sciences Psi Chi and Psychology club, "Ethics and Animal Research", April 8<sup>th</sup>, 2008.
- Faculty Convocation Address, Nova Southeastern University Farquhar College of Arts and Sciences, September 8, 2009.
- Faculty Lecture Series, Nova Southeastern University Farquhar College of Arts and Sciences "Stress Kills" Jan. 6<sup>th</sup>, 2009.
- NSU, Center for Psychological Studies, "Psychotropic drugs and the brain," March 17, 2010.
- TedX Presentation "Stress and the brain: The Good, the Bad and the Misunderstood" March 2012.
- Educational Development Cooperation Annual Life Science Conference ("BioTech 2012"). Sleep genes and psychological health", May 2012.
- NSU Ambassadors Board, Invited Address, "Stress and Health" March, 6<sup>th</sup> 2013
- NSU Institute for Neuro-Immune Medicine. "The Physiological and Psychological Consequences of Sleep Loss" January 9th 2015.
- Booher Inn of Court Pupillage Group Presentation. "Stress Hacking". Fort Lauderdale, FL. January 14, 2016.
- Shepard Broad College of Law. Seminar "The Balancing Act: Managing Your Work and Life in a 24/7/365 World". January 22, 2016
- NSU Shepard Broad College of Law, Leo Goodwin Sr. Hall. Co-Presenter. "Balance Your Body, Mind & Spirit for Law School Success" March 29, 2016
- Acute Aerobic Exercise Improves Neurophysiological Measures of Emotion Processing. Proceedings of the Fifteenth International Society of Sports Nutrition Conference and Expo, June 7-9, 2017, Clearwater Beach FL.
- When Did Cortisol Become the "Carbs" of the Endocrine System? Proceedings of the Fifteenth International Society of Sports Nutrition Conference and Expo, June 7-9, 2017, Clearwater Beach FL.
- Presentation to Coconut Creek High School. "Stress and the Brain", May, 2018.
- Faculty Convocation Address, Nova Southeastern University, August 24th, 2018
- Keynote Speaker at the Miami Dade College Undergraduate Research Symposium. "Failing to Succeed" September 22, 2018
- Nova Southeastern University Commencement Speaker May 17th 2021
- Keynote Speaker for The Florida Distance Learning Association (FDLA) Conference, A Brain Wellness Toolbox: How Modern Neuroscience Can Help Us Achieve Post-Pandemic Learning Goals. October 2021.
- Tartar JL and Brager A. Esports for newbs. Panel Presentation at the Supply Side West Conference. October 2021.
- Train Hard, But Sleep Well: Why Sleep Matters NASM Virtual Optima Conference October 2021
- "Why Sleeping Matters for Wellness" NSU's Planned Giving Council, October 28th
- "Sleep and Health" Rotary Club of Fort Lauderdale, December 7<sup>th</sup> 2021

# PROFESSIONAL REFEREE EXPERIENCE

• October, 2014. NASA BMED Behavioral Health and Performance Peer Review Panelist, Washington D.C.

- March, 2014. NASA BMED Behavioral Health and Performance Peer Review Panelist, Washington D.C.
- March, 2016. NASA BMED Behavioral Health and Performance Peer Review Panelist, Washington D.C.
- March 2017 NASA BMED Behavioral Health and Performance Peer Review Panelist, Washington D.C.
- November 2017: Florida Breast Cancer Foundation Grant Reviewer
- July 2018, Chair: NASA BMED Behavioral Health and Performance Panel, Washington D.C
- July 2021, NASA HERO Behavioral Medicine and Sleep Panelist. Washington D.C
- September 2021, TRISH Biomedical Research Advances for Space Health (BRASH) panelist. Washington D.C

Ad hoc referee for the following journals:

Stress: The International Journal of the Biology of Stress; PLoS ONE, Biological Psychology; Psychoneuroendocrinology; Brain, Behavior, and Immunity; Physiology and Behavior

## PROFESSIONAL AWARDS AND HONORS

- Nova Southeastern University President's Distinguished Faculty of Year 2021
- Nova Southeastern University College of Psychology Professor of the Year 2021
- Nova Southeastern University and Honorary Doctorate Recipient, May 17th 2021
- Nova Southeastern University Student Life Professor of the Year Winner, 2018
- Nova Southeastern University Student Life Professor of the Year Nomination, 2009
- Nova Southeastern University Farquhar College of Arts and Sciences Excellence in Teaching Award, 2009
- Nova Southeastern University Division of Social and Behavioral Sciences Teacher of the Year, 2009
- Levitt Dissertation Award for Outstanding Achievement in Psychobiology, 2003
- Schumacher Award for Excellence in Doctoral Dissertation Research, 2003
- International Narcotics Research Conference Student Award, 2003
- Health Emotions Research Institute Student Award, 2003

# TEACHING EXPERIENCES AND AFFILIATIONS

2006-present	Nova Southeastern University, Ft. Lauderdale, Florida.
2005	Stonehill College, Easton, MA Neuroendocrinology Course Instructor
2002-2003	University of Florida, Gainesville, FL Psychophysiology Course Instructor
2001	University of Florida, Gainesville, FL Psychophysiology Lab Instructor

## STUDENT MENTORING ACTIVITIES

#### Graduate Committee Chair for M.S. In Experimental Psychology

- Tatiana Viena, (2011-2013), Ph.D. earned in 2018 at Florida Atlantic University (received full stipend)
- Rima Alomari, (2011-2013), currently working in industry
- Christina Gobin (2012-2014), Ph.D. candidate.at University of Florida (received full stipend)
- Lauren Hill, (2014-2016), Ph.D. candidate at Florida International University (received full stipend)
- Sarah Lyle (2015-2017), Ph.D. candidate at University of Georgia (received full stipend)
- Ritishka Kapoor (2017-2019), PhD Candidate in Public Health, Florida International Universsty
- Kayla Thompson (2018-2020), PhD Candidate in Psychology, Nova Southeastern University
- Dominick Cabrera (2018-2020), Accepted to DO program, Nova Southeastern University
- Mykola Marang (2020-current)
- Minh Chau (2021-current)

## Graduate Committee Member

- Roger McIntosh (2007-2012) (Ph.D. in Psychology, Florida Atlantic University)
- Brittany Tamayo (2011-2013) (M.S. in Experimental Psychology)
- Benita Benny (2011-2013) (M.S. in Experimental Psychology)
- Alex Srour (2012-2014) (M.S. in Experimental Psychology)
- Juliana Acosta (2012-2014) (M.S. in Experimental Psychology)
- Audrey Hood (2015-2017) (M.S. in Experimental Psychology)
- Margaret Smith (2015-present) (Research Advisor Ph.D in Clinical Psychology)
- John Skicki (2015-present) (Research Advisor Psy.D. in Clinical Psychology)
- Kayla Thompson (2020-present) (Research Advisor Ph.D in Clinical Psychology)

#### Internship Mentor

• Xavier Tatin (March-September 2016) M.S. program, AgroParisTech, France.

Undergraduate Students Divisional Honors Theses

- Kristen deAlmeida- Divisional Honors Thesis completed spring, 2012
- Randy Denis- Divisional Honors Thesis completed spring , 2010
- Ramey Alfarra- Divisional Honors Thesis completed spring, 2012
- Sarah Yassin (co-advisor)- Divisional Honors Thesis completed spring, 2012

## Independent Study

• Advised 59 undergraduate students in independent study.

## SERVICE

## Curriculum Development

- 2010-2012. Developed the Behavioral Neuroscience Major at Nova Southeastern University.
- 2008-2009. Developed the Minor in Behavioral Neuroscience
- 2007-2010. Developed the Master's in Experimental Psychology Program Development

## Courses Developed (and taught)

- Psychophysiology
- Hormones and Behavior
- Introduction to Neuroscience
- Behavioral Genetics
- Research Methods in Behavioral Neuroscience
- Gene Therapy and Neurotechnology (first year seminar)
- Sleep and Dreams (Honors)
- The Misbehaving Brain (Honors)
- Sleep and Dreams (M.S. program)

• Behavioral Neuroscience (M.S. program)

## Outreach

- 2012-2017: Initiated and operate the annual Behavioral Neuroscience Summer Training Program for High School Students
- 2013, 2014: Initiated and oversaw the Psychology Bowl for High School Students
- 2011-2013: Initiated and oversaw the Brain Bowl for High School Students

Other Service 2007 • Nova Southeastern University Host for Oliver Sacks 2007 • Head of Gender Psychology Faculty Search Committee • Organized and facilitated the NSU "Plastic Brain" Research Symposium 2008 2008 • Faculty Marshall for the 2008 Undergraduate Commencement Ceremony 2009 • Nova Southeastern University Faculty Host for Craig Venter 2009 • Presentation on "Social Capital" to the FCAS honors students 2009 • Internal Review of Physical Therapy Committee Member 2009 • Nova Southeastern University Faculty Host for Jack Kevorkian 2013 NSU University School Career Connections, 2006 – Present • Undergraduate Student Symposium poster judge and faculty advisor 2009-201 • Organized and co-facilitate the Psychology Graduate Research Series (formerly "Hot Topics in Psychology") 2013-Present • Behavioral Neuroscience Curriculum Committee 2006-2014 Honors Program Coordinating Committee member 2006-2014 • Farquhar College Academic Integrity Committee Member 2007-2008 • Head of Experimental Psychology Faculty Search Committee 2007-2009 • Faculty Council Executive Committee Member 2007-2009 General Education Review Committee Member 2008-2009 • Member of the Rank and Review Committee Task Force 2008-2009 • Member of Experimental Psychology Faculty Search Committee 2008-2009 • Member of Division of Social and Behavioral Sciences Director Search Committee 2008-2012 • Faculty Advisor for Psychology Club 2009-2010 • Member of Experimental Psychology Faculty Search Committee 2009-2010 • Member of First Year Seminar (UNIV1010) Task Force 2009-2010 • Math Performance Review Committee 2009-2013 • Title V program Nova Southeastern University Faculty Mentor 2009-2013 • Member of the Nova Southeastern University Task force for Student Mentoring 2009-Present • Psychology Curriculum Review Committee Member 2010-2012 • Member of University Learning Outcomes Assessments Task Force 2010-Present • Faculty Advisor of Neuroscience Club 2011-Present • Organize and host the NSU Neuroscience Journal Club 2011-Present • M.S. in Experimental Psychology Curriculum Committee Member 2011-Present Institutional Review Board Member, Nova Southeastern University 2012-Present • Provost's Scholarship Review Committee

2013-2015	• Faculty External Funding Committee
2014-Present	• Life Science South Florida Conference Organizing Committee
2015-Present	Razor's Edge Research Committee Member
2015-Present	<ul> <li>Undergraduate Student Symposium Steering Committee</li> </ul>
2016-Present	<ul> <li>Provost's Research and Scholarship Awards Council</li> </ul>
2016	College of Psychology Webinar "The Biology of Sleep"
2017	Member: Genetic Counseling Taskforce
2017	Experiential Learning Taskforce: Research
2017	Organizer for the College of Psychology Experiential Learning Initiative