

Curriculum Vitae

Mercedes Fernández

Nova Southeastern University
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Education	Ph. D.	The University of Arizona _____ Tucson, AZ May 1998, Department of Psychology. Advisor Gary E. Schwartz. Dissertation titled <i>EEG Measures of Subjects with Idiopathic Chemical Sensitivity: A Test of the Sensitization Model</i> .
	M. A.	Florida Atlantic University _____ Boca Raton, FL April 1995, Department of Psychology. Advisor Allan J. Nash. Thesis titled <i>The Effects of Standard and Deviant Tones on Event-Related Brain Potentials and Reaction-Times to Visual Stimuli</i> .
	B. A.	Florida International University _____ Miami, FL April 1990, Department of Psychology. Advisor Lorraine E. Bahrick. Honors thesis titled <i>Arbitrary Pairings of Objects and Odors in Four-Month-Old Infants</i> .
	B. A.	Florida International University _____ Miami, FL April 1987, Major in English.
Postdoctoral Fellowship	1998–1999	Veterans Affairs Medical Center _____ Tucson, AZ Postdoctoral Fellow.
Professional License		Licensed Clinical Psychologist, State of Florida No. PY6180.
Languages		Fluent in English and Spanish.
Academic Positions	10/2017–present	Nova Southeastern University _____ Davie, FL Professor of Psychology.
	8/2013–7/2016	Nova Southeastern University _____ Davie, FL Experimental Psychology Graduate Program Chair.
	8/2009–10/2017	Nova Southeastern University _____ Davie, FL Associate Professor of Psychology.
	2/2009–4/2009	Carlos Albizu University _____ Miami, FL Associate Professor of Psychology, Neuropsychology Program Coordinator.

	2003–2009	Carlos Albizu University _____ Miami, FL Assistant Professor of Psychology, Neuropsychology Program Coordinator.
	2000–2001	University of Miami, Touch Research Institute _____ Miami, FL Senior Research Associate.
Clinical Positions	2000–present	Self-Employed _____ Miami, FL Neuropsychologist.
	2003–2009	Carlos Albizu University _____ Miami, FL Clinical Supervisor.
	Apr.–Dec. 2001	Neurological Consultants, Sunrise Medical Group _ Hollywood, FL Neuropsychologist.
	2000–2001	Centers for Psychological Growth _____ Miami, FL Neuropsychologist.
Grants	• Does Bilingualism Shape Inhibitory Control Processes and Executive Function? National Science Foundation (2416246) (\$699,977). (Awarded 7/2024, PI). • HSI Conference: Hispanic-focused STEM Ideas for Inspiration and Innovation. National Science Foundation (1748199) (\$98,792). (Awarded 8/2017, Co-PI). • Does Learning a Second Language Enhance Inhibitory Processes and Executive Function? National Science Foundation (1632377) (\$167,298). (Awarded 9/2016, PI). • Minority Science and Engineering Improvement Program. Science Peer and Research Collaborative (SPARC). Department of Education (P120A1400120) (\$279,596). (Awarded 10/2014, Co-I). • Neurophysiological Changes during Narrative Therapy Conversation. President's Faculty Research & Development Grant (\$10,000). (Awarded 5/2013, Co-I). • Auditory and Visual Inhibitory Control Differences in Bilinguals and Monolinguals. Dean's Mini Grant (\$1,500) (Awarded 1/2013, PI). • Neural and Cognitive Inhibition in Bilinguals. Chancellor's Faculty Research & Development Grant (\$9,991.32). (Awarded 5/2010, PI). • Bilingualism and Neural Inhibition. Dean's Mini Grant (\$1,491.50) (Awarded 4/2010, PI). • Received grant of electrophysiology equipment from Lexicor Corp (2006). • The University of Arizona Minority Graduate Student Research Award (1996). • Graduate Fellowship from the National Institute on Deafness and Other Communication Disorders (1995).	
Service	• Panel & Ad-hoc reviewer, National Science Foundation (2018, 2019, 2022).	
Honors	• Faculty of the Year Award (2008).	
Professional Memberships	• National Academy of Neuropsychology	
	• American Academy of Clinical Neuropsychology	

Publications

- Fernandez, M., Chavez, M. A., Cabrera Ranaldi, E. dIRM., Ayachit, S. & Friedman, M. (2024). Dual-language testing improves bilinguals' verbal scores. *The Clinical Neuropsychologist*, 1–12. <https://doi.org/10.1080/13854046.2024.2353409>
- Bryniarska, A., Ramos, J. A. & Fernández, M. (2024). Machine learning classification of event-related brain potentials during a visual Go/NoGo task. *Entropy*, 26(3). <https://doi.org/10.3390/e26030220>
- Fernandez, M., Banks, J.B., Gestido, S. & Morales, M. (2023). Bilingualism and the executive function trade-off: A latent variable examination of behavioral and event-related brain potentials. *Journal of Experimental Psychology: Learning, Memory, & Cognition*, 49(7), 1119–1144. <https://doi.org/10.1037/xlm0001186>
- Hill, L., Starrat, V.G., Fernandez, M. & Tartar, J.L. (2019) Positive affective priming decreases the middle late positive potential response to negative images. *Brain & Behavior*, 9(1). <https://doi.org/10.1002/brb3.1198>
- Chayo, I., Fernandez, M., Sandoor, S. & Tartar, J.L.(2017) Neurophysiological processing of an emotional task is sensitive to time of day. *Journal of Circadian Rhythms*, 15. <https://doi.org/10.5334/jcr.148>
- 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.
- Alomari, R.A., Fernandez, M., Banks, J.B., Acosta, J. & Tartar, J.L.(2015). Acute stress dysregulates the LPP ERP response to emotional pictures and impairs sustained attention: Time-sensitive effects. *Brain Sciences*, 5(2), 201–219. <https://doi.org/10.3390/brainsci50202001>
- Misdráji-Hammond, E., Lim, N.K., Fernandez, M. & Burke, M.E. (2015). Object familiarity and acculturation do not explain performance differences between Spanish-English bilinguals and English monolinguals on the Boston Naming Test. *Archives of Clinical Neuropsychology*, 30. <https://doi.org/10.1093/arclin/acu065>
- Fernandez, M., Acosta, J., Douglass, K., Doshi, N. & Tartar, J.L. (2014). Speaking two languages enhances an auditory but not a visual neural marker of cognitive inhibition. *AIMS Neuroscience*, 1(2), 145–157. <https://doi.org/10.3934/Neuroscience.2014.2.145>
- Fernandez, M., Tartar, J.L., Padron, D. & Acosta, J.(2013). Neurophysiological marker of inhibition distinguishes language groups on a non-linguistic executive function test. *Brain & Cognition*, 83(3), 330–336. <https://doi.org/10.1016/j.bandc.2013.09.010>
- Vega, C. & Fernandez, M.(2010). Errors on the WCST correlate with language proficiency in Spanish/English bilingual children. *Archives of Clinical Neuropsychology*,26,(2), 158–164. <https://doi.org/10.1093/arclin/acq097>
- Friedman, M.A., Fernandez, M., Wefel, J.S., Myszká, K.A., Champlin, R.E., & Meyers, C.A. (2009). Course of cognitive decline in hematopoietic stem cell transplantation: A within-subjects design. *Archives of Clinical Neuropsychology*,24(7),689–698. <https://doi.org/10.1093/arclin/acp060>
- Friedman, M. A. & Fernandez, M. (2008). Hematological malignancies. In C.A. Meyers: *Cognition & Cancer*. New York: Cambridge University Press.
- Friedman, M. A., Fleming, L., Fernandez M., Bienfang, P., Schrank, K., Dickey, R., Bottein, M., Backer, L., Ayyar, R., Weisman, R., Watkins, S., Granade, R. & Reich A. (2008). Ciguatera Fish Poisoning: Treatment, prevention and management. *Marine Drugs*, 6, 456–479.
- Friedman, M. A., Arena, P., Levin, B., Fleming, L., Fernandez, M., Weisman, R., Bernstein, J., Schrank, K., Blythe, D., Backer, L. & Reich, A. (2007). Neuropsychological study of Ciguatera Fish Poisoning: A longitudinal case-control study. *Archives of Clinical Neuropsychology*, 22, 545–553.
- Bell, I. R., Brooks, A. J., Baldwin, C. M., Fernandez, M., Figueredo, A. J. & Witten, M. L. (2005). JP-8 jet fuel exposure and divided attention test performance in 1991 gulf war veterans. *Aviation, Space, and Environmental Medicine*, 76, 1136–1144.

- Fernandez, M., Hernandez-Reif, M., Field, T., Diego, M., Sanders, C., & Roca, A. (2004). EEG during lavender and rosemary exposure in infants of depressed and non-depressed mothers. *Infant Behavior and Development*, 27, 91–100.
- Fernandez, M., Blass, E. M., Hernandez-Reif, M., Field, T., Diego, M., & Sanders, C. (2003). Sucrose attenuates a negative electroencephalographic response to an aversive stimulus for newborns. *Developmental and Behavioral Pediatrics*, 24, 1–6.
- Sanders, C., Diego, M., Fernandez, M., Field, T., Hernandez-Reif, M., & Roca, A. (2002). EEG asymmetry responses to lavender and rosemary odorants in adults and infants. *International Journal of Neuroscience*, 112, 1305–1320.
- Baldwin, C. M., Bell, I. R., Fernandez, M. & Schwartz, G. E. R. (2000). Multiple Chemical Sensitivity. In: *Women and Health*, ed. M. B. Goldman & M. C. Hatch. New York: Academic Press.
- Fernandez, M., Schwartz, G. E. R. & Bell, I. R. (1999). Subjective ratings of odorants by women with chemical sensitivity. *Toxicology and Industrial Health*, 15, 577–581.
- Fernandez, M., Bell, I. R. & Schwartz, G. E. R. (1999). EEG sensitization during chemical exposure in women with and without chemical sensitivity of unknown etiology. *Toxicology and Industrial Health*, 15, 305–312.
- Bell, I. R., Baldwin, C. M., Fernandez, M. & Schwartz, G. E. R. (1999). Neural sensitization model for multiple chemical sensitivity: Overview of theory and empirical evidence. *Toxicology and Industrial Health*, 15, 295–304.
- Nash, A. J. & Fernandez M. (1996). P300 and allocation of attention in dual modality tasks. *International Journal of Psychophysiology*, 23, 171–180.
- Schwartz, G. E., Bell, I. R., Dikman, Z. V., Fernandez, M., Kline, J. P., Peterson, J. M. & Wright, K. P. (1994). EEG responses to low-level chemicals in different age groups and cacosmics. *Toxicology and Industrial Health*, 10, 633–643.
- Fernandez, M. & Bahrnick, L. (1994). Sensitivity to arbitrary object-odor pairings by four-month-old infants. *Infant Behavior and Development*, 17, 471–474.

Invited Talks

“Bilingualism and the Brain.” Miami Dade College, Miami, FL, November 2013.

Invited Papers

Friedman, M., Fernandez, M., Backer, L., Dickey, R., DeGrasse, S....Fleming, L. (2017). Updated review of Ciguatera Fish Poisoning. *Marine Drugs*, 15. <https://doi.org/10.3390/md15030072>