# Marilyn Horta, PhD

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#### **Research Interests**

Social-Cognitive & Affective Neuroscience • Lifespan Development • Healthy & Vulnerable Aging • Chronic Pain • Decision-making • Substance Use Risk • Intervention Science

#### **Education**

2014 - 2020 University of Florida, Gainesville, FL, USA

**Dual-Specialization Program** 

Developmental Psychology & Behavioral & Cognitive Neuroscience

#### PhD in Psychology

**Dissertation:** "Chronic intranasal oxytocin administration effects on dynamic emotion identification & related functional connectivity in healthy older adults" (Read here)

#### **Gerontology Graduate Certificate**

#### MS in Psychology

**Thesis:** "Effects of single-dose intranasal oxytocin administration on dynamic facial emotion identification among young & older adults" (Read here)

2013 – 2014 Emory University, Atlanta, GA, USA

Post-Baccalaureate Research Education Program

2009 - 2013 Florida State University, Tallahassee, FL, USA

Honors College & Dual-Degree Program

**BS** in Psychology

**BS** in International Affairs

#### **Positions**

**2024 -** Department of Health Outcomes & Behavior at the H. Lee Moffitt Cancer Center & Research

Institute

**Position:** Applied Research Scientist

Supervisors: Christine Vinci, PhD & Vani Simmons, PhD

**2022 – 2024** Department of Psychology at the University of Florida (NIA 3R01AG072658-01A1S1)

**Position:** Research Scientist **Supervisor:** Natalie Ebner, PhD

**2020 – 2022** National Institute on Drug Abuse Substance Abuse Training Center in Public Health T32

Program at the University of Florida (NIDA T32DA035167)

**Position:** Postdoctoral Fellow **Mentor:** Roger Fillingim, PhD **Director:** Linda Cottler, PhD

2018 The Laboratory of Brain & Cognition at McGill University & the Montreal Neurological

Institute

Position: Summer Research Trainee

Mentor: Nathan Spreng, PhD

**2017 – 2019** National Institute on Aging T32 Fellowship on Physical, Cognitive, & Mental Health in Social

Context at the University of Florida (NIA T32AG020499)

**Position:** Predoctoral Fellow **Mentor:** Natalie Ebner, PhD **Director:** Michael Marsiske, PhD

2015 Multimodal Neuroimaging Training Program at Carnegie-Mellon University & the University

of Pittsburgh (NIDA R90DA023420 & NIDA T90DA022761)

Position: Summer Research Fellow

**Mentors:** Kirk Erickson, PhD, Fatma Uyar, PhD **Directors:** Peter Gianaros, PhD, William Eddy, PhD

2014 - 2020 Social Cognitive & Affective Development Lab at the University of Florida

**Position:** Graduate Assistant **Mentor:** Natalie Ebner, PhD

2013 – 2014 Post-Baccalaureate Research Education Program at Emory University (NIGMS

R25GM089615-04)

**Position:** Post-Baccalaureate Research Fellow **Mentors:** James Rilling, PhD, Jennifer Mascaro, PhD

Directors: Gordon Churchward, PhD, Catherine Quinones, PhD, Charles Moran, PhD

#### **Peer-Reviewed Publications**

Bibliography available here

**Horta M,** Shoenfelt A, Lighthall NR, Perez E, Frazier I, Heemskerk A, Lin T, Wilson RC, Ebner NC. Age-group differences in trust-related decision-making and learning. Sci Rep. 2024 Jan 2;14(1):68. doi: 10.1038/s41598-023-50500-x. PMID: 38167997; PMCID: PMC10762071.

Ebner NC, **Horta M**, El-Shafie D. New directions for studying the aging social-cognitive brain. Curr Opin Psychol. 2023 Nov 29;56:101768. doi: 10.1016/j.copsyc.2023.101768. Epub ahead of print. PMID: 38104362.

**Horta M†**, Polk R†, Ebner NC. Single dose intranasal oxytocin administration: Data from healthy younger & older adults. Data in Brief. 2023 Dec. doi: 10.1016/j.dib.2023.109669. **†Share equal authorship** 

**Horta M†**, Polk R†, Lin T, Perez E, Ojeda M, Porges EC, Nazarloo HP, Carter CS, Ebner NC. Evaluating the neuropeptide-social cognition link in ageing: the mediating role of basic cognitive skills. Philos Trans R Soc Lond B Biol Sci. 2022 Aug 29;377(1858):20210048. doi: 10.1098/rstb.2021.0048. Epub 2022 Jul 11. PMID: 35858076; PMCID: PMC9274329. **†Share equal authorship** 

Rung JM, Kidder QA, **Horta M**, Berry MS, Ebner NC. Associations between alcohol use & peripheral, genetic, & epigenetic markers of oxytocin in a general sample of young & older adults. Brain Behav. 2022 Mar;12(3):e2425. doi: 10.1002/brb3.2425. Epub 2022 Feb 11. PMID: 35146961; PMCID: PMC8933764.

**Horta M†**, Lin T†, Heald K, Heemskerk A, Darboh B, Levi A, Spreng RN, Turner GR, Ebner NC. Loneliness progression among older adults during the early phase of the COVID-19 pandemic in the United States & Canada. J Gerontol B Psychol Sci Soc Sci. 2021 Dec 14:gbab229. doi: 10.1093/geronb/gbab229. Epub ahead of print. PMID: 34905015. **†Share equal authorship** 

Valdés-Hernández PA, Polk R, **Horta M**, Frazier I, Perez E, Ojeda M, Porges EC, Cruz-Almeida Y, Feifel D, Ebner NC. Chronic oxytocin administration in older men modulates functional connectivity during animacy perception. Aging Brain, 1, 100023. 2021. doi: 10.1016/j.nbas.2021.100023

Rung JM, **Horta M**, Tammi EM, Perez E, Ojeda MC, Lin T, Harris G, Somerville J, Salmeron D, Beltz SE, Sandesara B, Feifel D, Ebner NC. Safety & tolerability of chronic intranasal oxytocin in older men: results from a randomized controlled trial. Psychopharmacology (Berl). 2021 Sep;238(9):2405-2418. doi: 10.1007/s00213-021-05862-3. Epub 2021 May 12. PMID: 33982141; PMCID: PMC8115997.

Conner LB, **Horta M**, Ebner NC, Lighthall NR. Value network engagement & effects of memory-related processing during encoding & retrieval of value. Brain Cogn. 2021 Aug;152:105754. doi: 10.1016/j.bandc.2021.105754. Epub 2021 May 28. PMID: 34052683; PMCID: PMC8489736.

**Horta M**, Pehlivanoglu D, Ebner NC. The Role of Intranasal Oxytocin on Social Cognition: An Integrative Human Lifespan Approach. Curr Behav Neurosci Rep. 2020 Dec;7(4):175-192. doi: 10.1007/s40473-020-00214-5. Epub 2020 Sep 12. PMID: 33717829; PMCID: PMC7951958.

**Horta M**, Kaylor K, Feifel D, Ebner NC. Chronic oxytocin administration as a tool for investigation & treatment: A cross-disciplinary systematic review. Neurosci Biobehav Rev. 2020 Jan;108:1-23. doi: 10.1016/j.neubiorev.2019.10.012. Epub 2019 Oct 21. PMID: 31647964; PMCID: PMC6949379.

**Horta M**, Ziaei M, Lin T, Porges EC, Fischer H, Feifel D, Spreng RN, Ebner NC. Oxytocin alters patterns of brain activity & amygdalar connectivity by age during dynamic facial emotion identification. Neurobiol Aging. 2019 Jun;78:42-51. doi: 10.1016/j.neurobiolaging.2019.01.016. Epub 2019 Jan 29. PMID: 30870779; PMCID: PMC6545147.

Frazier I, Lighthall NR, **Horta M**, Perez E, Ebner NC. CISDA: Changes in Integration for Social Decisions in Aging. Wiley Interdiscip Rev Cogn Sci. 2019 May;10(3):e1490. doi: 10.1002/wcs.1490. Epub 2019 Jan 3. PMID: 30605250; PMCID: PMC8142223.

Gui WJ, Wang PY, Lei X, Lin T, **Horta M**, Liu XY, Yu J. Sleep facilitates consolidation of positive emotional memory in healthy older adults. Memory. 2019 Mar;27(3):387-396. doi: 10.1080/09658211.2018.1513038. Epub 2018 Aug 24. PMID: 30142023; PMCID: PMC8108548.

Li T, **Horta M**, Mascaro JS, Bijanki K, Arnal LH, Adams M, Barr RG, Rilling JK. Explaining individual variation in paternal brain responses to infant cries. Physiol Behav. 2018 Sep 1;193(Pt A):43-54. doi: 10.1016/j.physbeh.2017.12.033. Epub 2018 May 3. PMID: 29730041; PMCID: PMC6015531.

Ebner NC, Bailey PE, **Horta M**, Joiner JAE, Chang SWC (2017). Multidisciplinary perspective on prosociality in aging. In J Sommerville & J Decety (Eds.), Social Cognition: Development Across the Life Span (1st ed., pp. 303–325). Routledge. doi: 10.4324/9781315520575

Ebner NC, **Horta M**, Lin T, Feifel D, Fischer H, Cohen RA. Oxytocin modulates meta-mood as a function of age & sex. Front Aging Neurosci. 2015 Sep 10;7:175. doi: 10.3389/fnagi.2015.00175. PMID: 26441637; PMCID: PMC4565056.

## **Preprints**

**Horta M**, Shoenfelt A, Lighthall NR, Perez E, Frazier I, Heemskerk A, ... Ebner NC. (2023, April 21). Agegroup Differences in Trust-related Decision-making & Learning. https://doi.org/10.31234/osf.io/4hsu7

## **Open Science Projects**

**Horta M†**, Polk R†, Ebner NC. (2023). Single Dose Intranasal Oxytocin Administration: Data from Healthy Younger and Older Adults. OpenNeuro. [Dataset] doi:10.18112/openneuro.ds004725.v1.0.1. **†Share equal authorship** 

**Horta M,** Shoenfelt A. (2023, February 15). Age differences in trust-related decision-making & learning. Retrieved from osf.io/cn8a2

Polk R, Horta M, Lin T, Porges E, Ojeda M, Nazarloo HP, ... Ebner NC. (2022, April 13). Evaluating the neuropeptide-social cognition link in aging: The mediating role of basic cognitive skills. https://doi.org/10.17605/OSF.IO/XV38Y

Rung JM, Horta M, Ebner NC. (2022, February 28). Safety & Tolerability of Chronic OT in Older Men: Data & Analyses. https://doi.org/10.17605/OSF.IO/PNX9U

Lin T, Horta M, Ebner NC, Turner GR, Spreng RN, Heald K, ... Darboh BS. (2021, March 17). Loneliness Progression Among Older Adults During the COVID-19 Pandemic in the United States & Canada. Retrieved from osf.io/2vdsh

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2022 - 2024	PA-21-071 Research Supplement to Promote Diversity in Health-Related Research (NIA 3R01AG072658-01A1S1, PI: Ebner)	\$328,639
	<b>Project Title:</b> Characterizing & modulating neurocognitive processes of learning to trust & distrust in aging	
2021 - 2024	The University of Florida Center for Advancing Minority Pain & Aging Science Pilot Grant (NIA P30AG059297, PI: Fillingim)	\$25,000
	<b>Project Title:</b> Understanding the impact of chronic pain on decision-making in aging	

Honors & Awards		
	Extramural	
2024	Florida Consortium on the Neurobiology of Cognition Best Question Award	\$200
2023	Scientific Research Network on Decision Neuroscience & Aging Open Data Award	\$1000
2023	US Association for the Study of Pain Travel Award	\$450
2023	National Institute on Drug Abuse Diversity Scholars Network	
2021	Enhanced Interdisciplinary Research Training Institute on Hispanic Substance Abuse Fellowship	\$2000
2020	Institute for Learning & Retirement at Oak Hammock Robert Levitt Graduate Student Award for Aging Research	\$250
2019	Kavli Summer Institute in Cognitive Neuroscience Fellowship	~\$2000
2019	Institute for Learning & Retirement at Oak Hammock, Leighton E. Cluff Graduate Student Award for Aging Research	\$1200
2018	Scientific Research Network on Decision Neuroscience & Aging Mentorship/Collaboration Award	\$5000
2015 & 2020	Scientific Research Network on Decision Neuroscience & Aging Conference Travel Awards (2 awards total)	~\$4000
2014	Honorable Mention, Ford Foundation Fellowship Program	N/A
Intramural (University of Florida)		
2022	McKnight Brain Institute Training Enhancement Opportunity Award	\$2877
2020	Schumacher Award for Outstanding Dissertation in Psychology	\$2000
2019 – 2020	Jacquelin Goldman Dissertation Award	\$23,000

2019	College of Liberal Arts & Sciences Dissertation Fellowship	\$7000
2018	College of Liberal Arts & Sciences Conference Travel Award	\$300
2018	McKnight Brain Institute Travel Award	\$500
2016 – 2017	Jacquelin Goldman Single Year Awards (2 awards total)	\$12,000
2015 – 2019	Graduate Student Council Travel Awards (5 awards total)	\$1750
2015 – 2018	Office of Research Travel Awards (3 awards total)	\$1200
2015	Jacquelin Goldman Research Award	\$2000
2014 – 2019	Jacquelin Goldman Fellowship in Developmental Psychology	\$25,000
2014 – 2019	Graduate School Diversity Enhancement Award	\$20,000
2014 – 2018	Department of Psychology Conference Travel Awards (5 awards total)	\$2600
2014	Board of Education Summer Fellowship	\$1600

### **Presentations**

#### **Chaired Symposia**

**Horta M**. Oxytocin in social contexts: recent insights from neuroscience & behavior. Speakers: Alaerts K, Pehlivanoglu D, Sunahara C, Meisner O. Society for Social Neuroscience Virtual Meeting, November 2023.

**Horta M**, Pehlivanoglu D. Neurophysiological & behavioral determinants of deception risk in aging. Speakers: Charness N, Pehlivanoglu D, Lighthall NR, Lin T. Florida Consortium on the Neurobiology of Cognition Annual Meeting, Jupiter, FL, May 2023.

#### **Oral Presentations & Invited Talks**

**Horta M.** Chronic pain, substance use, & decision-making in adulthood & aging. Resource Centers for Minority Aging Research Annual Meeting, Los Angeles, CA, March 2023.

**Horta M.** Age differences in trust-related decision-making. North Central Florida Society for Neuroscience Annual Chapter Conference, Gainesville, FL, February 2023.

**Horta M.** Age differences in trust-related decision-making. Dallas Aging & Cognition Conference. University of Texas at Dallas, Dallas, TX, February 2023.

**Horta M.** Chronic pain & decision-making in adulthood & aging. University of Central Florida, Orlando, FL, October 2022.

**Horta, M.** Career Development Progress. Enhanced Interdisciplinary Research Training Institute on Hispanic Substance Abuse Annual Mentoring Meeting, Grand Rapids, MI, September 2022.

**Horta M.** Characterizing pain & co-occurring substance use across the adult lifespan in a community sample. Accounting for Older Adults in Substance Use Research, Treatment, & Policy Symposium at the College on Problems of Drug Dependence Annual Scientific Meeting, June 2022.

**Horta, M.** Oxytocin effects on functional connectivity relating to emotion identification in aging. Oxytocin & Vasopressin Workshop at the Ettore Majorana Foundation & Centre for Scientific Culture, Erice, IT, May 2022.

<sup>\*</sup> Indicates supervised undergraduate/post-baccalaureate student

- **Horta M.** Characterizing pain & co-occurring substance use across the adult lifespan in a community sample. Emerging Addiction Science Seminar Series at the Center of Alcohol & Substance Use Studies at Rutgers University, Piscataway, NJ, April 2022.
- **Horta M.** Brain-behavioral approaches to social cognition in aging. University of Miami, Miami, FL, April 2022.
- **Horta M**. Career Development Progress. Enhanced Interdisciplinary Research Training Institute on Hispanic Substance Abuse Annual Mentoring Meeting, Chicago, IL, November 2021.
- **Horta M.** Brain-behavioral approaches to social cognition in aging. University of Texas at Dallas, Dallas, TX, October 2021.
- **Horta M**. Biopsychosocial factors underlying chronic pain & pain self-management in Hispanic & non-Hispanic adults: Final research prospectus. Enhanced Interdisciplinary Research Training Institute on Hispanic Substance Abuse Summer Meeting, Pasadena, CA, June 2021.
- **Horta M**, Lin T, Polk R, Feifel D, Ebner NC. Chronic intranasal oxytocin administration effects on dynamic emotion identification & related functional connectivity in healthy older adults. North Central Florida Society for Neuroscience 11<sup>th</sup> Annual (Virtual) Chapter Conference, Gainesville, FL, February 2021.
- **Horta M**, Lin T, Peeling S\*, Heemskerk A\*, Spreng RN, Turner GR, Ebner NC. Loneliness & substance use during the COVID-19 pandemic among older adults in the US & Canada. University of Florida College of Public Health & Health Professions Virtual Research Day, Gainesville, FL, February 2021.
- **Horta M**, Lin T, Polk R, Feifel D, Ebner NC. Effects of chronic intranasal oxytocin administration on dynamic emotion identification in older adults. 10<sup>th</sup> Annual Institute for Learning in Retirement Student Research on Aging Poster Competition & the Robert Levitt Awards at Oak Hammock, Gainesville, FL. February 2020.
- **Horta M**, Ziaei M, Lin T, Porges EC, Fischer H, Feifel D, Spreng RN, Ebner NC. Oxytocin alters patterns of brain activity & amygdalar connectivity by age during dynamic facial emotion identification. North Central Florida Society for Neuroscience Conference, Gainesville, FL, January 2020.
- Valdes-Hernandez PA, **Horta M**, Frazier I, Porges EC, Polk R, Perez E, Ojeda M, Cruz-Almeida Y, Morris JP, Feifel D, Ebner NC. Chronic oxytocin administration in older men modulates functional connectivity of the posterior superior temporal sulcus during social perception. Society for Neuroscience, Chicago, IL, October 2019.
- Ebner NC, Månsson KNT, Lin T, Lussier D, **Horta M**, Frazier I, Weir D, Feifel D, Fischer H. Neuroplasticity & cognitive benefits associated with chronic intranasal oxytocin administration in aging. Alpine Brain Imaging Meeting, Champery, Switzerland, January 2019.

#### **Poster Presentations**

- Alaerts K, Prinsen J, Ebner CN, **Horta M**, Zhao W, Kendrick KM. Announcement of the oxytocin brain imaging data exchange initiative. Organization for Human Brain Mapping, Seoul, KR, June 2024.
- **Horta M**, Polk R, Ebner NC. Introducing an open dataset to examine single-dose intranasal oxytocin effects in healthy younger and older adults. Florida Consortium on the Neurobiology of Cognition, Miami, FL, May 2024.
- Lyons P, El-Shafie D, **Horta M**, Lin T, Ebner NC. Loneliness-Moderated Effects of Chronic Pain on Analytical Reasoning. University of Florida Pain Research Day, Gainesville, FL, April 2024.

- Lyons P, El-Shafie D, **Horta M**, Lin T, Ebner NC. Loneliness-Moderated Effects of Chronic Pain on Analytical Reasoning. University of Florida Spring Undergraduate Research Symposium, Gainesville, FL, April 2024.
- **Horta M**, Shoenfelt A, Perez E, Lighthall NR, Ebner NC. Learning to trust: The role of uncertainty and experience for younger and older adults. Social and Affective Neuroscience Society, Toronto, ON, April 2024.
- Polk R, El-Shafie D, **Horta M**, Perez E, Heemskerk A, Lin T, Feifel D, Ebner NC. Chronic intranasal oxytocin administration increases positive mood in older adults. Social and Affective Neuroscience Society, Toronto, ON, April 2024.
- **Horta M**, Polk R, Ebner NC. Introducing an open dataset to examine single-dose intranasal oxytocin effects in healthy younger and older adults. Society for Social Neuroscience, Tsukuba, JP, March 2024.
- **Horta M**, Shoenfelt A, Lighthall NR, Perez E, Frazier I, Heemskerk A, Lin T, Wilson RC, Ebner NC. Facing Trustworthiness: Age-group differences in trust-related decision-making & learning. Gerontological Society of America, Tampa, FL, November 2023.
- **Horta M**, Shoenfelt A, Lighthall NR, Perez E, Frazier I, Heemskerk A, Lin T, Wilson RC, Ebner NC. Facing Trustworthiness: Age-group differences in trust-related decision-making & learning. Scientific Research Network on Decision Neuroscience & Aging, Santa Barbara, CA, May 2023.
- **Horta M,** Chaudhari PV, Cottler L, Fillingim R, Striley C. Characterizing chronic pain & co-occurring substance use across the adult lifespan in a community sample. US Association for the Study of Pain Annual Meeting, Durham, NC, April 2023.
- **Horta M**, Chaudhari PV, Cottler L, Fillingim R, Striley C. Characterizing chronic pain & co-occurring substance use across the adult lifespan in a community sample. National Hispanic Science Network, Grand Rapids, MI, September 2022.
- Polk R<sub>1</sub>, **Horta M<sub>1</sub>**, Lin T, Porges E, Ojeda M, Nazarloo HP, Carter CS, Ebner NC. Evaluating the neuropeptide-social cognition link in aging: The mediating role of basic cognitive skills. Oxytocin & Vasopressin Workshop at the Ettore Majorana Foundation & Centre for Scientific Culture, Erice, IT, May 2022. **†Share equal authorship**
- Wright K, **Horta M**, Rung J, Polk R, Heemskerk A\*, Feifel D, Ebner NC. Safety & tolerability of chronic oxytocin administration & the modulatory role on affiliative processes in aging. North Central Florida Chapter of Society for Neuroscience Annual Meeting, Gainesville, FL, January 2022.
- Polk R<sub>†</sub>, **Horta M<sub>†</sub>**, Lin T, Porges E, Ojeda M, Nazarloo HP, Carter CS, Ebner NC. Evaluating the neuropeptide-social cognition link in aging: The mediating role of basic cognitive skills. North Central Florida Chapter of Society for Neuroscience Annual Meeting, Gainesville, FL, January 2022. **†Share equal authorship**
- **Horta M**, Lin T, Heald K, Heemskerk A\*, Peeling S\*, Darboh B, Levi A, Spreng RN, Turner GR, Ebner NC. Loneliness, social support, & substance use among older adults in Canada & the United States before & during the COVID-19 pandemic. National Hispanic Science Network Annual Virtual Conference, September 2021.
- **Horta M**, Lin T, Heald K, Heemskerk A\*, Peeling S\*, Darboh B, Levi A, Spreng RN, Turner GR, Ebner NC. Loneliness, social support, & substance use among older adults in Canada & the United States before & during the COVID-19 pandemic. College on Problems of Drug Dependence Annual Scientific Virtual Meeting, June 2021.

- Rung JM, Tammi E, **Horta M**, Feifel D, Berry MS, Ebner NC. Safety & tolerability of intranasal oxytocin in older women. College on Problems of Drug Dependence Annual Scientific Virtual Meeting, June 2021.
- Myers E\*, Lussier D, **Horta M**, Frazier I, Polk R, Feifel D, Ebner NC. Increase in empathy & insula volume after 4-week intranasal oxytocin administration in older adults. North Central Florida Chapter of the Society for Neuroscience Annual Conference, Gainesville, FL, January 2019.
- Lussier D, **Horta M**, Porges EC, Woods A, Cohen RA, Ebner NC, Cruz-Almeida Y. Pain modulation is associated with cingulate morphology in older adults with musculoskeletal pain. Society for Neuroscience, San Diego, CA, November 2018.
- **Horta M**, Ziaei M, Lin T, Porges EC, Fischer H, Feifel D, Spreng RN, Ebner NC. Intranasal oxytocin modulates amygdalar connectivity by age during dynamic facial emotion identification. Society for Neuroscience, San Diego, CA, November 2018.
- **Horta M**, Ziaei M, Lin T, Porges EC, Fischer H, Feifel D, Spreng RN, Ebner NC. Intranasal oxytocin modulates amygdalar connectivity by age during dynamic facial emotion identification. Resting-State & Brain Connectivity Conference, Montreal, QC, CA, September 2018.
- Lussier D, Hayes R, **Horta M**, Lin T, Frazier I, Weir D, Perez E, Feifel D, Månsson KNT, Fischer H, Ebner NC. Four-week intranasal oxytocin vs. placebo administration modulation of amygdala & accumbens volume. Organization for Human Brain Mapping, Suntec, SG, June 2018.
- Månsson KNT, Cortes DS, Lin T, **Horta M**, Frazier I, Lussier D, Feifel D, Fischer H, Ebner NC. Neuroplasticity after acute & repeated exposure to oxytocin: a multi-site MRI analysis. Organization for Human Brain Mapping, Suntec, SG, June 2018.
- Salmeron D\*, Somerville J\*, **Horta M**, Plasencia GM, Weir D, Hofmann B\*, Feifel D, Cruz-Almeida Y, Ebner NC. Safety of chronic intranasal oxytocin administration & functional benefits in aging. Cognitive Aging Conference, Atlanta, GA, May 2018.
- Salmeron D\*, Somerville J\*, **Horta M**, Plasencia GM, Weir D, Hofmann B\*, Feifel D, Cruz-Almeida Y, Ebner NC. Safety of chronic intranasal oxytocin administration & functional benefits in aging. Poster on the Hill Conference, Washington, DC, April 2018.
- Salmeron D\*, Somerville J\*, **Horta M**, Plasencia GM, Weir D, Hofmann B\*, Anton SD, Cohen RA, Fischer H, Feifel D, Cruz-Almeida Y, Ebner NC. Safety of acute intranasal oxytocin administration in healthy adults. Spring Undergraduate Research Symposium, University of Florida, Gainesville, FL, March 2018.
- Salmeron D\*, Somerville J\*, **Horta M**, Plasencia GM, Weir D, Hofmann B\*, Feifel D, Cruz-Almeida Y, Ebner NC. Safety of acute intranasal oxytocin administration in healthy adults. Florida Undergraduate Research Conference, Melbourne, FL, February 2018.
- Salmeron D\*, **Horta M**, Somerville J\*, Plasencia GM, Weir D, Hofmann B\*, Anton SD, Cohen RA, Fischer H, Feifel D, Ebner NC. Safety of acute intranasal oxytocin administration in healthy older adults. Undergraduate Research Day, University of Florida, Gainesville, FL, October 2017.
- Conner L, Dalton I, **Horta M**, Gulliford D, Frazier I, Ebner NC, Lighthall N. Information integration in economic value judgments: Shift from affective to deliberative decision network regions. Society for Social & Affective Neuroscience Annual Meeting, Los Angeles, CA, March 2017.
- Ebner NC, Lin T, **Horta M**, Woods A, Cohen RA, Feifel D, Fischer H. Intranasal oxytocin affects perceptions of facial trustworthiness in young & older adults. Society for Social & Affective Neuroscience Annual Meeting, Los Angeles, CA, March 2017.

- **Horta M**, Lin T, Ziaei M, Soliman A\*, Porges EC, Feifel D, Oliveira D, Fischer H, Cohen RA, Ebner NC. Effects of single-dose intranasal oxytocin on dynamic facial emotion identification among young & older adults. Society for Social & Affective Neuroscience Annual Meeting, Los Angeles, CA, March 2017.
- Lin T, **Horta M**, Fischer H, Feifel D, Cohen RA, Ebner NC. Effects of intranasal oxytocin on perceptions of trustworthiness in aging. Gerontological Society of America Annual Meeting, New Orleans, LA, November 2016.
- Ebner NC, Chen H, Porges EC, Lin T, **Horta M**, Fischer H, Feifel D, Cohen RA. Oxytocin's effect on resting-state functional connectivity varies by age & sex. Society for Social & Affective Neuroscience Annual Meeting, New York, NY, April 2016.
- Ebner NC, Chen H, Porges EC, Lin T, **Horta M**, Fischer H, Feifel D, Cohen RA. Oxytocin's effect on resting-state functional connectivity varies by age & sex. Cognitive Aging Conference, Atlanta, GA, April 2016.
- **Horta M**, Lin T, Garcia A, Ebner NC. Functional connectivity during dynamic emotion identification: effects of age & oxytocin. Society for Social & Affective Neuroscience Annual Meeting, New York, NY, April 2016.
- **Horta M**, Lin T, Gulliford D, Cohen RA, Ebner NC. Dynamic emotion identification: effects of age & oxytocin. The Gerontological Society of America Annual Meeting, Orlando, FL, November 2015.
- **Horta M**, Lin T, Fischer H, Cohen RA, Feifel D, Ebner NC. Does oxytocin affect meta-mood & prosocial decision-making in aging? University of Florida Annual Spotlight on Aging Research, Gainesville, FL, September 2015.
- Balasubramaniyan A, Clark M, **Horta M**, Uyar F, Karim H, Erickson K. Examining sex differences in a visual food cue task. Multimodal Neuroimaging Training Program Summer Workshop Symposium on Health Neuroscience, Pittsburgh, PA, July 2015.
- **Horta M**, Lin T, Fischer H, Cohen RA, Feifel D, Ebner NC. Does oxytocin affect emotional competence & prosocial decision-making in aging? Association for Psychological Science Annual Convention, New York, NY, May 2015.
- **Horta M**, Lin T, Fischer H, Cohen RA, Feifel D, Ebner NC. Does oxytocin affect emotional competence & prosocial decision-making in aging? Annual Institute for Learning in Retirement Student Research on Aging Exposition & Awards, Gainesville, FL, March 2015.
- **Horta M**, Lin T, Fischer H, Cohen RA, Feifel D, Ebner NC. Does oxytocin affect emotional competence & prosocial decision-making in aging? Scientific Research Network on Decision Neuroscience & Aging Conference, Miami, FL, March 2015.
- Lin T, **Horta M**, Fischer H, Cohen RA, Feifel D, Ebner NC. Effects of intranasal oxytocin on perceptions of facial trustworthiness vary by age & gender. Scientific Research Network on Decision Neuroscience & Aging Conference, Miami, FL, March 2015.
- **Horta M**, Rilling JK. Longitudinal effects of PURPLE intervention on paternal neural responses to infant cries. Society for Psychophysiological Research 54th Annual Meeting, Atlanta, GA, September 2014.
- **Horta M**, Rilling JK. Longitudinal effects of PURPLE intervention on paternal neural responses to infant cries. Emory University Laney Graduate School STEM Research & Career Symposium, Atlanta, GA, March 2014.

## **Skill-Building Workshops & Summer Schools**

#### Competitive

2023	Summer School on Modeling Heterogeneity: Advances in Behavioral Decision Analytics, Innsbruck, AT
2023	National Institute of Drug Abuse Diversity Scholars Network Mock Grant Review, Bethesda, MD
2021	Enhanced Interdisciplinary Research Training Institute on Hispanic Substance Abuse, University of Southern California, Pasadena, CA
2020 – 2021	Adolescent Brain Cognitive Development (ABCD) ReproNim Course on Reproducible Data Analyses, Enrolled Student
2020 – 2021	Neurohackademy Online
2019	Kavli Summer Institute in Cognitive Neuroscience, Santa Barbara, CA
2017	Summer School in Social Neuroscience & Neuroeconomics, Duke University, Durham, NC
2017	RAND Summer Institute for Aging Research, Santa Monica, CA
2015	Multimodal Neuroimaging Training Program Summer Workshop & Symposium on Health Neuroscience, University of Pittsburgh & Carnegie Mellon University, Pittsburgh, PA
2012	Center for Neuroscience Summer Undergraduate Research Program, University of Pittsburgh, Pittsburgh, PA
	Non-competitive/Invited
2022	Methods in Neuroscience at Dartmouth fMRI Image Acquisition & Analyses Virtual Course with SPM & ICA
2021	Creating Experiments in PsychoPy Virtual Workshop
2020	Postdoc Writing Program, University of Florida, Gainesville, FL
2019	Scientific Research Network on Decision Neuroscience & Aging Data Harmonization Workshop, Miami, FL
2018	Resting-State & Brain Connectivity Educational Workshop, Montreal Neurological Institute, Montreal, QC, CA
2018	Event-related Potential (ERP) Mini Bootcamp, University of Florida, Gainesville, FL
2017	Transcranial direct current stimulation (tDCS) Workshop, University of Florida, Gainesville, FL
2017	Scientific Research Network on Decision Neuroscience & Aging Tools of the Trade Workshop: Human Neuroimaging Methods & Best Practices, Los Angeles, CA

## Methodological Background & Experience

- Statistical Training & Coursework
  - o Computational Modeling Workshop, University of Florida, 2024
  - o Modeling the Mind Virtual Course, University of Arizona, 2022
  - Pittsburgh Summer Methodology Series: Designing Ambulatory Assessment Studies & Multilevel Modeling for Longitudinal Data Virtual Workshop, 2021
  - Bayesian Statistics Workshop, University of Florida, Gainesville, FL, 2020
  - CLP6529C: Applied Multivariate Statistics, University of Florida, Gainesville, FL, 2015
  - CLP6528C: Measurements, Research Design, & Statistics 2, University of Florida, Gainesville, FL, 2014

- CLP6527C: Measurements, Research Design, & Statistics, University of Florida, Gainesville, FL. 2014
- The Odum Institute for Research in Social Science Summer Workshop, University of North Carolina, Chapel Hill, NC, 2014
- Neuroimaging (fMRI, DWI), EEG/ERP, tDCS, & eye-tracking data collection
- Philips Achieva 3T MRI Operator
- Pharmacological & behavioral intervention administration
- Non-human primate & human research
- Research regulation (IRB, Clinical Trials)
- Coding experience (Matlab, Unix, R)
- Software experience:
  - o Neuroimaging data analysis (Brain Voyager, FSL, SPM, CONN, PLSC)
  - Neuroimaging data visualization (Caret, MANGO, MRIcron)
  - EEG/ERP analysis (EEGlab/ERPlab)
  - Statistical analysis (SPSS, SAS, Stata, G\*Power, NeuroPower)
  - Motion tracking (MaxTRAQ, MaxMATE)
  - Audio editing & analysis (Audacity, PRAAT)
  - Experimental design (E-Prime, PsychoPy3)

### **Teaching Experience**

Spring 2022 Role: Guest Speaker

**Course:** University of Florida Pain & Aging Journal Club **Lecture:** "Social-decision-making in chronic pain"

**Spring 2022** Role: Guest Lecturer

Course: Research Colloquium in Developmental Psychology (DEP6059)

**Lecture:** "Neuropeptide administration & measurement in aging"

Fall 2021 Role: Guest Lecturer

Course: University of Florida Department of Psychology MRI Interest Group

Lecture: "Network Parcellation Selection & their Effects on Developmental Samples &

Individual Differences: Review of Bryce et al., 2021"

Fall 2021 Role: Guest Lecturer

Course: Research Colloquium in Behavioral & Cognitive Neuroscience (PSY6930)

Lecture: Early Research Career Interview with Graduate Students

Instructor: Lori Knackstedt, PhD

Spring 2021 Role: Guest Lecturer

Course: University of Florida Department of Psychology MRI Interest Group

**Lecture:** "Overview of the CONN Functional Connectivity Toolbox"

Fall 2020 Role: Guest Lecturer

**Course:** Research Colloquium in Developmental Psychology (DEP6059)

Lecture: "PRISMA & CONSORT Guidelines, Open Science Framework, & Professional

Development"

Instructor: Natalie Ebner, PhD

**Spring 2020** Role: Guest Lecturer

**Course:** University of Florida Department of Psychology MRI Interest Group **Lecture:** "Overview of Partial Least Squares Analysis for Neuroimaging Data"

**Spring 2019 Role:** Graduate Course Instructor

Course: General Psychology (PSY2012)

**Spring 2016** Role: Graduate Teaching Assistant

**Course:** General Psychology (PSY2012)

Instructor: Nicole Dorey, PhD

Fall 2015 Role: Graduate Teaching Assistant & Guest Lecturer

**Course:** Lifespan Developmental Psychology (DEP3053) **Lecture:** "Socioemotional Development in Early Adulthood"

Instructor: Natalie Ebner, PhD

**2014 – 2017** Role: Graduate Teaching Assistant

Course: Developmental Psychology (DEP3053)

Instructor: Marina Klimenko, PhD

### **Mentorship Experience**

Mentee: Julia Cochran, Undergraduate, University of Florida

Program: NIH PA-21-071 Diversity Supplement

Project: Mechanisms of Oxytocin's Analgesia in Older Adults (NIA 3R01AG059809-04S1)

Role: Mentored on experimental methodology & career development

Mentee: Amber Heemskerk, Post-Baccalaureate, University of Florida

Program: NIH PA-20-222 Diversity Supplement

Project: Uncovering & Surveilling Financial Deception Risk in Aging (NIA 3R01AG057764-03S1)

Role: Mentored on experimental methodology, paper writing, & career development

Mentee: Dinia Salmeron, Undergraduate, University of Florida

**Program:** University Scholars

Project: Safety of chronic intranasal oxytocin administration in aging

Role: Mentored on experimental methodology, statistical analysis, paper writing, & career development

Mentee: Jessie Somerville, Undergraduate, University of Florida

**Program:** National Science Foundation Research Experiences for Undergraduates

**Project:** Safety of single-dose intranasal oxytocin administration in aging

Role: Mentored on experimental methodology, statistical analysis, paper writing, & career development

Mentee: Katie Buzzanca, Undergraduate, University of Florida

Program: National Science Foundation Research Experiences for Undergraduates

Project: Differences in response inhibition during an emotional go/no-go task among healthy young & older

adults (Senior Thesis)

Role: Mentored on experimental methodology, statistical analysis, paper writing, preparation for senior

thesis defense, & career development

#### **Service**

# Journal Reviews

2023 Journal of Psychiatry & Brain Science2023 Data in Brief

2023 Scientific Data

2023 Journal of Gerontology: Psychological Sciences2021 Social Cognitive & Affective Neuroscience

**2020 - 2023** Psychoneuroendocrinology

2020	Translational Psychiatry
2017	Psychology & Aging
2014	Cognition & Emotion

#### **Volunteer & Organizational Work**

**2022 – Role:** Workshops Committee Member

Program: Early Career Leadership Committee of the National Hispanic Science Network

2021 - 2023 Role: Reviewer

**Program:** Leighton E. Cluff Graduate Student Award for Aging Research

**2020** Role: Member

Program: Research Scientist Search Committee for the Department of Psychology at the

University of Florida

**2019** Role: Volunteer

Program: Brain Awareness Week, North Central Florida Chapter of the Society for

Neuroscience

**2019** Role: Lead Graduate Organizer

**Program:** 9th Annual Institute for Learning in Retirement Student Research on Aging

Poster Competition & the Robert Levitt Awards at Oak Hammock

**2018** Role: Lead Graduate Organizer

Program: Dr. Jacquelin Goldman Speaker Series: Dr. Mara Mather

**2018** Role: Graduate Co-organizer

Program: 8th Annual Institute for Learning in Retirement Student Research on Aging

Exposition & the Robert Levitt Awards at Oak Hammock

**2014 – 2020** Role: Member

Program: Diversity Affirmation & Awareness Committee at the University of Florida

**2012 – 2013 Role**: Editor

Program: Florida State University Council for Undergraduate Research & Creativity

#### **Professional Affiliations**

- American Psychological Association Division 20 (Adult Development & Aging)
- American Psychological Association Division 50 (Society of Addiction Psychology)
- Association for Psychological Science
- College on Problems of Drug Dependence
- Gerontological Society for America
- International Association for the Study of Pain
- National Hispanic Science Network on Drug Abuse
- North Central Florida Chapter of the Society for Neuroscience
- Scientific Research Network on Decision Neuroscience & Aging
- Social & Affective Neuroscience Society
- United States Association for the Study of Pain
- University of Florida Center for Addiction & Research Education
- University of Florida Center for Advancing Minority Pain & Aging Science
- University of Florida Pain Research & Intervention Center of Excellence

## **Media Appearances**

Hamilton E. (2024, February 12). Older adults rely more on trust in decision making. It could open them
up to scams. University of Florida News [Internet]. <a href="https://news.ufl.edu/2024/02/elderly-scams/">https://news.ufl.edu/2024/02/elderly-scams/</a>

- Perez E, Shoenfelt A, Horta M, Ebner NC, Lighthall NR. (2024, January 22). Facing wolves in sheep's clothing: How younger and older adults differ in trust-related decision-making and learning. Behind the Paper by Springer Nature. <a href="https://communities.springernature.com/posts/facing-wolves-in-sheep-s-clothing-how-younger-and-older-adults-differ-in-trust-related-decision-making-and-learning">https://communities.springernature.com/posts/facing-wolves-in-sheep-s-clothing-how-younger-and-older-adults-differ-in-trust-related-decision-making-and-learning</a>
- In Your Brain Podcast, Deception Risk Episode, July 7, 2023 (Listen here)
- University of Florida Center for Addiction Research & Education Podcast, Episode 13, October 22, 2021 (<u>Listen here</u>)