

JAVIER R. MESA, Ph.D., J.D.

Mass General Brigham
399 Revolution Dr., Ste 1140
Somerville, MA, 02145

Email: jmesa@law.harvard.edu | Phone: (305) 439-8606
<https://www.linkedin.com/in/javierrmesa/>

EDUCATION

- 2024 **Ph.D.**, Psychology (Behavioral & Cognitive Neuroscience)
University of Florida, Gainesville, FL
Advisor: Lori A. Knackstedt, PhD.
Dissertation: Role of prelimbic neurons in cocaine & alcohol polysubstance use
- 2020 M.S., Psychology (Behavioral & Cognitive Neuroscience)
University of Florida, Gainesville, FL
- 2013 **J.D.**
Florida State University College of Law, Tallahassee, FL
- 2010 **B.S. (*summa cum laude*)**, Psychology & Political Science
Florida State University, Tallahassee, FL
Minor: Philosophy

ACADEMIC & PROFESSIONAL EXPERIENCE

- 2025 – Present Postdoctoral Fellow - Neurotech Justice Accelerator at Mass General Brigham
- 2024 – 2025 Lecturer - Psychology, California State University Sacramento
- 2018 – 2024 Graduate Assistant - Knackstedt Laboratory, University of Florida
- 2015 – 2017 Assistant Public Defender - Law Office of Julianne M. Holt, Public Defender for Thirteenth Judicial District
- 2014 – 2015 Associate Attorney - Bennett, Jacobs, & Adams, P.A., Tampa, FL

PEER-REVIEWED PUBLICATIONS

- Mesa, J. R.**, Dick, S. Y., Greenan, K., Wu, L., & Knackstedt, L. A. (2025). The role of the prelimbic cortex to nucleus accumbens core projection in the reinstatement of cocaine-seeking after cocaine-alcohol polysubstance use. *Neuropsychopharmacology*, 1-9. PMID: 40841764
- Mesa, J. R.**, Carter, E., Padovan-Hernandez, Y., & Knackstedt, L. A. (2023). Alcohol consumption modulates prelimbic cortex response to cocaine in sequential cocaine and alcohol polysubstance use in the rat. *Frontiers in Pharmacology*, 14, 705. PMID: 37007027

Mesa, J. R., Wesson, D. W., Schwendt, M., & Knackstedt, L. A. (2022). The roles of rat medial prefrontal and orbitofrontal cortices in relapse to cocaine-seeking: a comparison across methods for identifying neurocircuits. *Addiction Neuroscience*, 100031. PMID: 36277334

Bechard, A.R., Logan, C.N., **Mesa, J.**, Padovan Hernandez, Y., Blount, H., Hodges, V.L., & Knackstedt, L.A. (2021). Role of prefrontal cortex projections to the nucleus accumbens core in mediating the effects of ceftriaxone on cued cocaine relapse. *Addiction Biology*, 2020 Jun 18:e12928. PMID: 32558119

Smaga, I., Fierro, D., **Mesa, J.**, Filip, M., & Knackstedt, L.A. (2020) Molecular changes evoked by the beta-lactam antibiotic ceftriaxone across rodent models of substance use disorder and neurological disease. *Neuroscience & Biobehavioral Reviews*, Epub 2020 May 30. PMID: 32485268

MANUSCRIPTS IN PROGRESS

Mesa, J.R., Lazaro-Munoz, G., Shen, F.X. (under review). The effect of framing of addiction neuroscience on hypothetical sentencing of a defendant with substance use.

Mesa, J.R., Schiro, A., Carol, R.N., & Cahill, B.S. (in preparation). Reconciling confidence epiphany attributions after Jones and Paiva.

NON-ACADEMIC PUBLICATIONS

Mesa, J. (2026, Apr 28). Prisons as Incubators of Drug Craving? How Incarceration Worsens Addiction Outcomes. *Bill of Health*.
<https://petrieflom.law.harvard.edu/2026/04/28/prisons-as-incubators-of-drug-craving-how-incarceration-worsens-addiction-outcomes/>

Mesa, J. (2023, Oct 15). We may have averted a government shutdown, but science research funding is still at risk. *The Hill: Opinion*. <https://thehill.com/opinion/white-house/4254355-we-may-have-averted-a-government-shutdown-but-science-research-funding-is-still-at-risk/>

RESEARCH SUPPORT

National Institute of Drug Abuse Diversity Supplement – Parent Grant: R33 DA045140-04S1 (PIs: Knackstedt, Cottler; 2021 - 2023):

“Identifying patterns of human polysubstance use to guide development of rodent models” (as trainee; \$71,737)

FELLOWSHIPS

2025-2027	Dana Foundation Neurotech Justice Fellowship, Petrie-Flom Center for Health Law Policy, Biotechnology, and Bioethics at Harvard Law School
2023-2024	Graduate School Fellowship, University of Florida (\$30,000)
2023	Helmsley Fellowship, Cold Spring Harbor Laboratory (\$1,435)
2018-2021	Graduate School Fellowship, University of Florida (\$90,000)
2018	Board of Education Fellowship, University of Florida (\$3,000)
2010-2013	Mason Ladd Law School Fellowship, Florida State University College of Law (\$18,000)

HONORS & AWARDS

2024	Robert A. & Phyllis Levitt Research Award, University of Florida (\$1,000)
2023	NIDA Diversity Scholars Travel Award to for Neuroscience 2023 conference in Washington, D.C. (\$1,500)
2023	Psychology Department Travel Grant for Neuroscience 2023 conference in Washington, D.C., University of Florida (\$750)
2023	Trish Calvert Ring Graduate Research Award, University of Florida (\$2,856)
2023	Office of Research Graduate Student Award of Travel Funds for Neuroscience of Addiction Course at Cold Spring Harbor Laboratory in Cold Spring Harbor, NY, University of Florida (\$400)
2023	Graduate Student Council Travel Grant to attend Neuroscience of Addiction Course at Cold Spring Harbor Laboratory in Cold Spring Harbor, NY, University of Florida (\$350)
2023	Psychology Department Travel Grant for Neuroscience of Addiction Course at Cold Spring Harbor Laboratory in Cold Spring Harbor, NY, University of Florida (\$750)
2022	Psychology Department Travel Grant for 61st Annual Meeting of the American College of Neuropsychopharmacology in Phoenix, AZ University of Florida (\$750)
2021	Psychology Department Travel Grant for Winter Conference on Brain Research in Snowmass, CO, University of Florida (\$600)
2020	Center for Addiction Research & Education Building Networks and Skills Award for Society for Neuroscience Global Connectome 2021 Virtual Conference attendance, University of Florida (\$300)
2020	1st Place Award: Graduate Student Category, North Central Florida Society for Neuroscience Chapter Conference, (\$200)
2019	Psychology Department Travel Grant for Neuroscience 2019 conference in Chicago, IL, University of Florida (\$600)
2011	Summer of Law at Oxford Award, Florida State University College of Law
2010	Phi Beta Kappa Honor Society

TEACHING EXPERIENCE

Lecturer 2024 – 2025	California State University Sacramento Drugs and Behavior Learning Theories Introductory Psychology
Graduate Instructor 2023	University of Florida Physiological Psychology
Teaching Assistant 2024 2021 2020 2018 - 2019	University of Florida Psychopharmacology Methods in Cognitive Neuroscience Functional Neuroanatomy Physiological Psychology

Guest Lecturer	University of Florida
2024	PSB 4343C: Methods in Behavioral Addiction Neuroscience
2023	PSB3002: Methods & Strategies of Research
2022	PSB 4240: Neuroadaptations in Polysubstance Use
2022	PSB3002: Biological Psychology
2021 - 2022	Sheep Brain Dissection Leader for UF Neuroscience Club
2021	PSB 4343C: Animal Models in Neuroscience Research

MENTORSHIP

Industry Mentor

	Petrie-Flom Center for Health Law Policy, Biotechnology, and Bioethics at Harvard Law School
2025 – Present	Mentee: Jared Vornhagen, B.S.

Project Mentor	Horace Greeley High School Science Research Program
2025 - Present	Mentee: Dylan Cruet-Ghosh

Graduate Mentor	University of Florida
2022 – 2024	McNair Fellowship Program
2021	Summer for Undergraduate Research at Florida
	Mentee: Emily Carter

DEGREE COMMITTEE SERVICE

Luiza Rocha	Psychology Department., California State University Sacramento, M.S., 2025
-------------	--

SERVICE

2026 – Present	Member, Life Sciences Advisory Board, Berkeley Center for Law & Technology
2025 – Present	Assistant Program Coordinator, Suffolk County District Attorney Emerging Adult Program
2023 – 2024	Grievance Co-Chair, UFF-Graduate Assistants United
2023 – 2024	Early Career Policy Ambassador, Society for Neuroscience
2020 – 2021	Member/Mentor, Diversity Awareness and Affirmation Committee
2019 – 2023	Chapter Representative, North Central Florida Chapter of the Society for Neuroscience
2018 – 2021	Chief Bargainer, UFF-Graduate Assistants United

PROFESSIONAL SOCIETIES/MEMBERSHIPS

2025 – 2021	Member, American Psychology-Law Society, APA Div. 41
2024 – Present	Member, International Neuroethics Society
2019 – 2024	Member, Society for Neuroscience
2018 – 2024	Affiliate, Center for Addiction Research and Education, University of Florida

2013 – Present Member in good standing, The Florida Bar, License No. 106112

INVITED TALKS & PRESENTATIONS

- 2026 International Neuroethics Society Annual Meeting.
Panelist/Moderator: *How Does Neuroscience Evidence Affect Legal Outcomes? Addressing Methodological Challenges in Neurolaw Research*
- 2026 Petrie-Flom Center for Health Law Policy, Biotechnology, and Bioethics at Harvard Law School
Presenter: *Neurolaw & Substance Use*
- 2026 Partners for Justice (in conjunction with the Massachusetts General Hospital Center for Law, Brain, & Behavior)
Co-Presenter: *Addictions In Court: The Science of Addiction and Implications for Practice and Policy*

POSTER PRESENTATIONS

- 2024 Center for Addiction Research and Education Annual Symposium.
University of Florida, Gainesville, FL.
Poster: **Mesa, J.R.**, Greenan, K., Knackstedt, L.A. The role of nucleus accumbens core-projecting prelimbic neurons in cocaine reinstatement after cocaine+alcohol polysubstance use.
- 2023 Society for Neuroscience 2023, Chicago, IL
Poster: **Mesa, J.R.**, Greenan, K., Knackstedt, L.A. The role of nucleus accumbens core-projecting prelimbic neurons in cocaine reinstatement after cocaine+alcohol polysubstance use.
- 2022 61st Annual Meeting of the American College of Neuropsychopharmacology, Phoenix, AZ
Poster: **Mesa, J.R.**, Davis, S.P., & Knackstedt, L.A. (2022) Simultaneous cocaine + alcohol PSU promotes greater motivation to seek both drugs over cocaine alone
- 2022 NIDA Diversity Training Workshop, Virtual Conference
Poster: **Mesa, J.R.**, & Knackstedt, L.A. (2022) Simultaneous & sequential cocaine+alcohol PSU alters neurocircuitry of cocaine seeking
- 2022 Winter Conference for Brain Research 2022, Snowmass, CO
Poster: **Mesa, J.R.**, Padovan-Hernandez, Y., & Knackstedt, L.A. (2022) Distinct Activity in Reward Neurocircuitry in a Rodent Model of Cocaine-Alcohol Polysubstance Use

- 2021 Society for Neuroscience Global Connectome, Virtual Conference
Poster: **Mesa, J.**, Hodges, V., Logan, C.N., Bechard, A.R., & Knackstedt, L.A. (2021) Involvement of prefrontal cortex in the ability of ceftriaxone to attenuate cue-primed reinstatement of cocaine seeking
- 2020 North Central Florida Society for Neuroscience Regional Chapter Conference. University of Florida, Gainesville, FL.
Poster: **Mesa, J.**, Hodges, V., Logan, C.N., Bechard, A.R., & Knackstedt, L.A. (2019) Ceftriaxone attenuates activity in the BLA and VTA during cue-primed seeking of cocaine after abstinence
- 2019 Neuroscience 2019, Chicago, IL
Poster: **Mesa, J.**, Hodges, V., Logan, C.N., Bechard, A.R., & Knackstedt, L.A. (2019) Ceftriaxone attenuates activity in the BLA and VTA during cue-primed seeking of cocaine after abstinence

PROFESSIONAL DEVELOPMENT & WORKSHOPS

- 2026 Law & Neuroscience course (Audited), Harvard Law School
- 2025 CITI Certification in Social & Behavioral Research Investigation, Good Clinical Practice
- 2023 Neuroscience of Addiction course at Cold Spring Harbor Laboratory

LANGUAGES

Native English speaker. Can read and speak fluent Spanish.