

CURRICULUM VITAE

Arnold Gutierrez, Ph.D.

Department of Psychology
The University of Texas at El Paso
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El Paso, TX 79968
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EDUCATION

July 2012 - January 2018	Ph.D., Neuroscience Neuroscience Graduate Program University of Cincinnati College of Medicine
September 2007 - June 2009	B.A., Biological Psychology California State University, San Bernardino

PROFESSIONAL EXPERIENCE

September 2024 – Present	<i>Assistant Professor</i> Department of Psychology University of Texas at El Paso
February 2024 – August 2024	<i>Assistant Project Scientist</i> Department of Psychiatry University of California, San Diego PI: Michael A. Taffe, Ph.D. <i>Project: Effects of adolescent drug vapor inhalation across aging</i>
April 2019 – January 2024	<i>Postdoctoral Fellow</i> Department of Psychiatry University of California, San Diego PI: Michael A. Taffe, Ph.D. <i>Project: The long-term behavioral effects of repeated adolescent opioid inhalation.</i>
February 2018– April 2019	<i>Research Associate/Postdoctoral Fellow</i> Department of Neuroscience The Scripps Research Institute PI: Michael A. Taffe, Ph.D. <i>Project: Pre-clinical models of opioid and psychostimulant inhalation.</i>
July 2012– January 2018	<i>Graduate Student Research Assistant</i> Division of Neurology Cincinnati Children's Hospital Medical Center Neuroscience Graduate Program University of Cincinnati College of Medicine

PI: Charles V. Vorhees, Ph.D.

Project: The role of dopamine receptors in methamphetamine-induced cognitive deficits.

April 2010 – June 2012

Graduate Student Research Assistant

General Experimental Psychology Graduate Program

Department of Psychology

California State University, San Bernardino

PI: Sanders McDougall, Ph.D. & Cynthia Crawford, Ph.D.

April 2009 – April 2010

Volunteer Research Assistant

Department of Psychology

California State University, San Bernardino

PI: Cynthia Crawford, Ph.D. & Sanders McDougall, Ph.D.

January 2005 – June 2012

Licensed Psychiatric Technician

Patton State Hospital

Department of Mental Health

(Presently the Department of State Hospitals)

State of California

HONORS & AWARDS

February 2021 – January 2024

NIH/NIGMS K12 GM068524

Institutional Research and Academic

Career Development Award (IRACDA)

Postdoctoral Fellowship

University of California, San Diego

July 2020 – June 2022

UC San Diego Chancellor's Postdoctoral Fellowship

University of California, San Diego

February 2019 – June 2020

T32AA007456

National Institute on Alcohol Abuse and Alcoholism

Role: Postdoctoral Trainee

Fall 2017

The Society for the Advancement of Chicanos/Hispanics and

Native Americans in Science Conference Travel Scholarship

SACNAS National Diversity in STEM Conference 2017

Summer 2017

University Research Council Graduate Student Stipend

and Research Cost Awards for Faculty-Student Collaboration

University of Cincinnati

September 2016 – January 2018

Fellowship for Doctoral Students

Aspiring to Academic Careers

University of Cincinnati

July 2014 – June 2017

T32ES007051

National Institute of Environmental Health and Science
Role: Predoctoral Trainee

July 2012 - June 2014

T32NS007453

National Institute of Neurological Disorders and Stroke
Role: Predoctoral Trainee

Summer 2011

ASI Research and Travel Award

California State University, San Bernardino

Winter 2010

ASI Research and Travel Award

California State University, San Bernardino

TEACHING EXPERIENCE

Formal training in teaching

Spring 2021

Introduction to College Teaching

University of California San Diego (La Jolla, CA)

Fall 2016

Teaching Effectiveness

University of Cincinnati (Cincinnati, OH)

Spring 2011

Teaching of Psychology

California State University, San Bernardino (San Bernardino, CA)

Courses taught

Spring 2025

Behavior Modification (PSYC 3347)

Instructor of Record

The University of Texas at El Paso (El Paso, TX)

Spring 2025

Seminar in Psychology: Neuroanatomy (PSYC 4345)

Instructor of Record

The University of Texas at El Paso (El Paso, TX)

Spring 2025

Seminar in Behavioral Neuroscience: Neuroanatomy (PSYC 6377)

Instructor of Record

The University of Texas at El Paso (El Paso, TX)

Fall 2024

Undergraduate Research (RSRC 4033)

Instructor of Record

The University of Texas at El Paso (El Paso, TX)

Spring 2023

Psychobiology (PSY 241)

Instructor of Record

California State University, Long Beach (Long Beach, CA)

Spring 2023

Bridges to Stem Cell Research (SCI 596)
Instructor of Record
San Diego State University (San Diego, CA)

Fall 2022

Bridges to Stem Cell Research (SCI 596)
Instructor of Record
San Diego State University (San Diego, CA)

Spring 2017

Fundamentals of Neuroscience II (NS 7079)
TA/Laboratory Instructor
Neuroscience Graduate Program, College of Medicine
University of Cincinnati (Cincinnati, OH)

Guest lectures

April 28th, 2022

Modeling opioid vapor inhalation in rodents
Course: PSYC 5539 (Current Methods in Neuroscience)
California State University, San Bernardino
(San Bernardino, CA; virtual)

April 26th, 2022

Signaling and Communication
Course: BIOL 210B (Introduction to the Biological Sciences II)
San Diego City College (San Diego, CA; virtual)

April 12th, 2022

Animal Behavior
Course: BIOL 210B (Introduction to the Biological Sciences II)
San Diego City College (San Diego, CA; virtual)

November 17th, 2021

The Respiratory System
Course: BIOL 212 (Human Anatomy)
San Diego State University (San Diego, CA)

November 1st, 2021

The Nervous System: The Brain and Cranial Nerves
Course: BIOL 212 (Human Anatomy)
San Diego State University (San Diego, CA)

September 21st, 2020

Applications in Biological Psychology & Behavioral Neuroscience
Course: PSYC 2250 (Brain and Behavior)
San Juan College (Farmington, NM; virtual)

January 31st, 2017

Pathways to a Career in Neuroscience
Course: Exploring Health Professions
University of Cincinnati (Cincinnati, OH)

Other relevant experience

Fall 2023

Overview of Graduate Fellowships Workshop: Instructor
Workshop for CASA, MARC, and IMSD scholars

San Diego State University (San Diego, CA)

Summer 2023	<i>Laboratory Professionalism & Research Ethics:</i> Instructor Workshop for the San Diego IRACDA SURF program University of California, San Diego (La Jolla, CA)
Summer 2022	<i>Pipeline to STEM II:</i> Instructor Workshop for the San Diego IRACDA SURF program University of California, San Diego (La Jolla, CA)
Spring 2022	<i>Interdisciplinary Journal Club:</i> Guest facilitator <i>BIOL 246: Colloquium in Biomedical Sciences</i> San Diego State University (San Diego, CA)
Summer 2021	<i>Laboratory Professionalism & Research Ethics:</i> Instructor Workshop for the San Diego IRACDA SURF program University of California, San Diego (La Jolla, CA)
Spring 2017	<i>Neuroscience Graduate Program core curriculum:</i> Tutor (paid) University of Cincinnati College of Medicine (Cincinnati, OH)
Fall 2015 – Spring 2018	<i>Preparing Future Faculty Program:</i> Graduate Trainee University of Cincinnati (Cincinnati, OH)

RESEARCH PUBLICATIONS

1. **A. Gutierrez**, Creehan, Y. Grant, M.A. Taffe (2024). Adult consequences of repeated nicotine and Δ^9 -tetrahydrocannabinol (THC) vapor inhalation in adolescent rats, *Psychopharmacology*, 241, 585-599.
2. **A. Gutierrez**, J.D. Nguyen, K.M. Creehan, Y. Grant, M.A. Taffe (2024). Adult Consequences of repeated nicotine vapor inhalation in adolescent rats, *Nicotine & Tobacco Research*, 26, 715-723.
3. **A. Gutierrez** & M.A. Taffe (2024). Rats Chasing the Dragon: A new heroin inhalation method, *Journal of Neuroscience Methods*, 402, 110013.
4. **A. Gutierrez**, E.L. Harvey, K.M. Creehan, M.A. Taffe (2022). The long-term effects of adolescent heroin vapor inhalation on measures of nociception and anxiety-like behavior in adult Wistar rats, *Psychopharmacology*, 239, 3939-3952.
5. **A. Gutierrez**, K.M. Creehan, G. de Guglielmo, A.J. Roberts, M.A. Taffe (2022). Behavioral effects of ethanol in the Red Swamp Crayfish (*Procambarus clarkii*), *Journal of the Experimental Analysis of Behavior*, 117, 472-492.
6. **A. Gutierrez**, J.D. Nguyen, K.M. Creehan, M. Javadi-Paydar, Y. Grant, M.A. Taffe (2022). Effects of combined THC and heroin vapor inhalation in rats, *Psychopharmacology*, 239(5), 1321-1335.

7. **A. Gutierrez**, K.M. Creehan, M.L. Turner, R.N. Tran, T.M. Kerr, J.D. Nguyen, M.A. Taffe (2021). Vapor exposure to Δ^9 -tetrahydrocannabinol (THC) slows locomotion of the Maine lobster (*Homarus americanus*), *Pharmacology Biochemistry and Behavior*, 207, 173222.
8. **A. Gutierrez**, K.M. Creehan, M.A. Taffe (2021). A vapor inhalation method for delivering heroin alters nociception, body temperature and spontaneous activity in female and male rats, *Journal of Neuroscience Methods*, 248, 108993.
9. **A. Gutierrez**, J.D. Nguyen, K.M. Creehan, M.A. Taffe (2020). Female rats self-administer heroin by vapor inhalation, *Pharmacology Biochemistry and Behavior*, 199, 173061.
10. Z.I. Abdulla, J.L. Pennington, **A. Gutierrez**, M.R. Skelton (2020) Creatine transporter knockout mice (Slc6a8) show increases in serotonin-related proteins and are resilient to learned helplessness, *Behavioral Brain Research*, 377, 112254.
11. **A. Gutierrez**, S.L. Regan, C.S. Hoover, M.T. Williams, C.V. Vorhees (2019). Effects of intrastriatal dopamine receptor D1 or D2 antagonists on methamphetamine-induced egocentric and allocentric learning and memory deficits in Sprague-Dawley rats, *Psychopharmacology* 236(7), 2243-2258.
12. R.A. Bailey, **A. Gutierrez**, T.L. Kyser, A.M. Hemmerle, J.R. Hufgard, K.B. Seroogy, C.V. Vorhees, M.T. Williams (2019). Effects of Prewaning Manganese in Combination with Adult Striatal Dopamine Lesions on Monoamines, BDNF, TrkB, and Cognitive Function in Sprague–Dawley Rats, *Neurotoxicity Research*, 35(3), 606-620.
13. M.T. Williams, **A. Gutierrez**, & C.V. Vorhees (2018). Effects of acute deltamethrin exposure in adult and developing Sprague-Dawley rats on acoustic startle response in relation to deltamethrin brain and plasma concentrations, *Toxicological Sciences*, 168(1), 61-69.
14. J.D. Nguyen, Y. Grant, T.M. Kerr, **A. Gutierrez**, M. Cole, M.A. Taffe (2018). Tolerance to hypothermic and antinociceptive effects of Δ^9 -tetrahydrocannabinol (THC) vapor inhalation in rats, *Pharmacology, Biochemistry and Behavior*, 172, 33-38.
15. M.T. Williams, **A. Gutierrez**, & C.V. Vorhees (2018). Effects of Acute Exposure of Permethrin in Adult and Developing Sprague-Dawley Rats on Acoustic Startle Response and Brain and Plasma Concentrations, *Toxicological Sciences*, 165(2), 361-371.
16. **A. Gutierrez**, M.T. Williams, & C.V. Vorhees (2017). A single high dose of methamphetamine reduces monoamines and impairs egocentric and allocentric learning and memory in adult male rats, *Neurotoxicity Research*, 33(3), 671-680.
17. J.L. Sprowles, J.R. Hufgard, **A. Gutierrez**, R.A. Bailey, S.A. Jablonski, M.T. Williams, C.V. Vorhees (2017). Differential effects of perinatal exposure to antidepressants on learning and memory, acoustic startle, and open-field activity in Sprague-Dawley rats, *International Journal of Developmental Neuroscience*, 61, 92-111.
18. **A. Gutierrez**, S.A. Jablonski, R.M. Amos-Kroohs, A.C. Barnes, M.T. Williams, C.V. Vorhees (2017). Effects of housing on methamphetamine-induced neurotoxicity and spatial learning and memory, *ACS Chemical Neuroscience*, 8(7), 1479-1489.

19. J.L. Sprowles, J.R. Hufgard, **A. Gutierrez**, R.A. Bailey, S.A. Jablonski, M.T. Williams, C.V. Vorhees (2016). Perinatal exposure to the selective serotonin reuptake inhibitor citalopram alters spatial learning and memory, anxiety, depression, and startle in Sprague-Dawley rats, *International Journal of Developmental Neuroscience*, 54, 39-52.
20. R.M. Amos-Kroohs, L.L. Davenport, **A. Gutierrez**, J.R. Hufgard, M. T. Williams, C.V. Vorhees (2016). Developmental manganese exposure in combination with developmental stress and iron deficiency: effects on behavior and monoamines, *Neurotoxicology and Teratology*, 56, 55-67.
21. R.W. Stottmann, A. Driver, **A. Gutierrez**, M.R. Sketlon, M. Muntifering, C. Stepien, L. Knudson, M. Kofron, C.V. Vorhees, M.T. Williams (2016). A heterozygous mutation in tubulin, beta 2B (TUBB2B) causes cognitive deficits and hippocampal disorganization, *Genes Brain and Behavior*, 16(2), 250-259.
22. A.A. Braun , R. M. Amos-Kroohs , **A. Gutierrez** , K.H. Lundgren , K.B. Seroogy, C.V. Vorhees, M.T. Williams (2016). 6-Hydroxydopamine-induced dopamine reductions in the nucleus accumbens, but not the medial prefrontal cortex, impair cincinnati water maze egocentric and morris water maze allocentric navigation in male Sprague–Dawley rats, *Neurotoxicity Research*, 30(2), 199-212.
23. A.A. Braun, R. M. Amos-Kroohs , **A. Gutierrez** , K.H. Lundgren , K.B. Seroogy, M.R. Skelton , C.V. Vorhees, M.T. Williams (2014), Dopamine depletion in either the dorsomedial or dorsolateral striatum impairs egocentric Cincinnati water maze performance while sparing allocentric Morris water maze learning, *Neurobiology of Learning and Memory*, 118, 55-63.
24. S.A. McDougall, J.A. Pipkin, T. Der-Ghazarian, A.M. Cortez, **A. Gutierrez**, R.J. Lee, S. Carbajal, A. Mohd-Yusof (2014). Age-dependent differences in the strength and persistence of psychostimulant-induced conditioned activity in rats: effects of a single environment–cocaine pairing, *Behavioural Pharmacology*, 25 (7), 695-704.
25. T. Der-Ghazarian, C.B. Widarma, **A. Gutierrez** , L.R. Amodeo, J.M. Valentine, D.E. Humphrey, A.E. Gonzalez, C.A. Crawford, S.A. McDougall, (2013). Behavioral effects of dopamine receptor inactivation in the caudate-putamen of preweanling rats: role of the D2 receptor, *Psychopharmacology*, 231, 651-662.
26. O.O. Kozanian, **A. Gutierrez**, A. Mohd-Yusof, S.A. McDougall (2012). Ontogeny of methamphetamine-induced and cocaine-induced one-trial behavioral sensitization in preweanling and adolescent rats, *Behavioural Pharmacology*, 23 (4), 367-379.
27. T. Der-Ghazarian, **A. Gutierrez**, F.A. Varela, M.S. Herbert, L.R. Amodeo, S. Charntikov, C.A. Crawford, S.A. McDougall (2012). Dopamine receptor inactivation in the caudate-putamen differentially affects the behavior of preweanling and adult rats, *Neuroscience*, 226, 427-440.
28. S.A. McDougall, O.O. Kozanian, V.Y. Greenfield, L.R. Horn, **A. Gutierrez**, A. Mohd-Yusof, K.A. Castellanos (2011) One-trial behavioral sensitization in preweanling rats: differential effects of cocaine, methamphetamine, methylphenidate, and D-amphetamine, *Psychopharmacology*, 217(4), 559-571.
29. S. Charntikov, T. Der-Ghazarian, M.S. Herbert, L.R. Horn, C.B. Widarma, **A. Gutierrez**, F.A. Varela, S.A. McDougall (2011). Importance of D1 and D2 receptors in the dorsal caudate-putamen for the locomotor activity and stereotyped behaviors of preweanling rats, *Neuroscience*, 183, 121-133.

INVITED TALKS

- May 14th, 2024 *Assessing the long-term effects of adolescent opioid exposure in a pre-clinical model of drug vapor inhalation,*
Department of Biomedical Sciences
Joan C. Edwards School of Medicine
Marshall University (Huntington, WV)
- March 28th, 2024 *An introduction to preclinical drug research: a journey across species,* Behavioral and Social Sciences Department
Imperial Valley College (Imperial, CA)
- March 6th, 2024 *Navigating the labyrinth of long-term effects of drug exposure: a journey across species,* Department of Psychology
Utah Valley University (Orem, UT)
- February 22nd, 2024 *Modeling the effects of opioid vapor inhalation in adolescent rodents: progress and future directions,*
Department of Psychology
University of Texas at El Paso (El Paso, TX)
- November 8th, 2023 *Behavioral consequences of repeated opioid vapor inhalation during adolescence,* Department of Psychology
California State University, Long Beach (Long Beach, CA)
- October 19th, 2023 *Head in the clouds: behavioral consequences of repeated opioid vapor inhalation during adolescence,* Department of Psychology,
University of New Mexico (Albuquerque, NM)
- April 27th, 2023 *Preclinical models of drug vapor inhalation: assessment of the long-term behavioral effects of opioid exposure during adolescence,* Department of Pharmacology and Toxicology
Michigan State University (East Lansing, MI)
- March 10th, 2023 *Using preclinical models of drug vapor inhalation to assess the long-term behavioral effects of opioid exposure during adolescence,* Department of Psychiatry
University of California, San Diego (San Diego, CA)
- January 31st, 2023 *Behavioral toxicology of drug vapor inhalation,*
Department of Microbiology and Environmental Toxicology
University of California, Santa Cruz (Santa Cruz, CA)
- December 6th, 2021 *Pre-clinical Models of Drug Vapor Inhalation in Substance Abuse Research,* Psychology Department,
California State University, San Marcos (San Marcos, CA; virtual)

- November 5th, 2021 *Pre-clinical models of vapor inhalation in biological psychology*, Psychology Club, Imperial Valley College (Imperial, CA; virtual)
- August 24th, 2021 *The effects of exposure to Δ 9-tetrahydrocannabinol (THC) vapor on thermal nociception and locomotor behavior in the Maine lobster (*Homarus americanus*)*, Addictions Special Interest Group, Department of Psychiatry, University of California, San Diego (La Jolla, CA)
- June 11th, 2021 *Navigating the Transition from Graduate Student to Postdoctoral Trainee*, Neuroscience Graduate Program, College of Medicine, University of Cincinnati, (Cincinnati, OH; virtual)
- April 9th, 2021 *Preclinical models in addiction research*, talk given virtually for the Social Sciences Club at San Juan College, San Juan College (Farmington, NM; virtual)
- February 22nd, 2021 *The behavioral pharmacology of opioid vapor inhalation in rats* Department of Psychiatry, Division of Molecular Psychiatry, Yale University (New Haven, CT; virtual)
- October 3rd, 2020 *The behavioral effects of opioid vapor exposure*, California State University Neuroscience Seminar Series, California State University, Long Beach (Long Beach, CA; virtual)
- May 28th, 2020 *The long-term effects of adolescent heroin vapor exposure*, Addictions Special Interest Group, Department of Psychiatry, University of California, San Diego (La Jolla, CA)
- October 15th, 2019 *The effects of voluntary heroin vapor exposure in adult and adolescent female rats*, Alcohol Research Center, The Scripps Research Institute (La Jolla, CA)
- February 17th, 2016 *Methamphetamine and environmental impoverishment: consequences on monoamine neurotransmission and allocentric learning and memory*, NeuroSociety, University of Cincinnati (Cincinnati, OH)
- February 5th, 2016 *The effects of methamphetamine and chronic mild stress on monoamine neurotransmission and allocentric learning and memory*, Neuroscience Graduate Program's DataBlitz University of Cincinnati, (Cincinnati, OH)

CONFERENCE PRESENTATIONS

1. **Gutierrez**, K.M. Creehan, Y. Grant, M.A. Taffe. Adult Consequences of Repeated Nicotine and Δ -9-Tetrahydrocannabinol (THC) Vapor Inhalation in Adolescent Rats, College on Problems of Drug Dependence Annual Conference, Montreal, Quebec, Canada, June 2024.
2. **Gutierrez**, N. Alammari, M.A. Taffe. Persistent Effects of Repeated Adolescent Exposure to Heroin and Delta-9-Tetrahydrocannabinol (THC) Vapor, College on Problems of Drug Dependence Annual Conference, Montreal, Quebec, Canada, June 2024.
3. **Gutierrez**, N. Alammari, M.A. Taffe. The persistent effects of repeated heroin and Δ 9-tetrahydrocannabinol (THC) vapor inhalation during adolescence, 19th Annual Lewis L. Judd Young Investigators Research Symposium, La Jolla, CA, April 2024.
4. **Gutierrez**, M.A. Taffe. The lasting effects of adolescent heroin and THC vapor inhalation in female Wistar rats, IRACDA National Conference, San Antonio, TX, June 2023.
5. **Gutierrez**, E.L. Harvey, K.M. Creehan, M.A. Taffe. Repeated inhalation of heroin vapor during adolescence produces long-lasting changes in thermal nociception and anxiety-like behavior in Wistar rats, IRACDA National Conference, Virtual meeting, June 2021.
6. **Gutierrez**, E.L. Harvey, K.M. Creehan, M.A. Taffe. The effects of repeated heroin vapor inhalation during adolescence on measures of nociception and anxiety-like behavior in adult Wistar Rats, College on Problems of Drug Dependence Annual Conference, Virtual meeting, June 2021.
7. **Gutierrez**, E.L. Harvey, K.M. Creehan, M.A. Taffe. The long-term effects of repeated heroin vapor exposure during adolescence in adult Wistar Rats, Experimental Biology, Virtual meeting, May 2021.
8. **Gutierrez**, E.L. Harvey, K.M. Creehan, and M.A. Taffe. The Long-Term Effects of Repeated Heroin Vapor Inhalation during Adolescence in Wistar Rats. Poster presentation. 16th Annual Lewis L. Judd Young Investigators Research Symposium, La Jolla, CA, February 2021.
9. **Gutierrez**, K.M. Creehan, M. Turner, R. Tran, T.M. Kerr, and M.A. Taffe. The Effects of Δ 9-Tetrahydrocannabinol (THC) Vapor Exposure in the Maine Lobster. Poster presentation. College on Problems of Drug Dependence Annual Conference, Virtual meeting, June 2020.
10. **Gutierrez**, J.D. Nguyen, K.M. Creehan, and M.A. Taffe. Self-administration of heroin by vapor inhalation in adult female Wistar rats. Poster presentation. 15th Annual Lewis L. Judd Young Investigators Research Symposium (Dept. of Psychiatry, UCSD), La Jolla, CA, June 2020.
11. **Gutierrez**, J.D. Nguyen, and M.A. Taffe. The effects of voluntary methamphetamine vapor exposure and binge intoxication in adult Wistar rats. Poster presentation. Society for Neuroscience, Chicago, IL, October 2019.
12. **Gutierrez**, J.D. Nguyen, and M.A. Taffe. Behavioral characterization of voluntary heroin vapor exposure in female rats. Poster presentation. College for Problems on Drug Dependence Annual Conference, San Antonio, TX, June 2019.

13. **Gutierrez**, and M.A. Taffe. The reinforcing properties of heroin vapor self-administration. Poster presentation. Society for Neuroscience, San Diego, CA, November 2018.
14. R.A.Bailey, **A. Gutierrez**, J.R. Hufgard, C.V. Vorhees, and M.T. Williams. Dopaminergic dysfunction in Sprague-Dawley rats as a potential mechanism for deficits in egocentric and allocentric learning and memory following developmental manganese overexposure. Poster presentation. Society for Neuroscience, San Diego, CA, November 2018.
15. Z.I. Abdulla, J.L. Pennington, **A. Gutierrez**, and M.R. Skelton. Changes in affective behaviors associated with a lack of creatine. Poster presentation. Society for Neuroscience, Washington, DC, November 2017.
16. **A. Gutierrez**, M.T. Williams, and C.V. Vorhees. Methamphetamine produces deficits in egocentric and allocentric learning and memory and in brain monoamines after a single dose in rats. Poster presentation. Society for Neuroscience, Washington, DC, November 2017.
17. T. L. Kyser, A. J. Dourson, K. H. Lundgren, R. Gulati, **A. Gutierrez**, C. V. Vorhees, and K. B. Seroogy. Neuronal degeneration in non-dopaminergic brain regions and neurochemical alterations in the DJ-1 knockout rat model of Parkinson's disease. Poster presentation. Society for Neuroscience, Washington, DC, November 2017.
18. J. L. N. Sprowles, J. R. Hufgard, **A. Gutierrez**, R. A. Bailey, S. A. Jablonski, M. T. Williams, and C. V. Vorhees. Perinatal antidepressant exposure influences spatial learning and memory, acoustic startle response, and locomotor activity in adult Sprague-Dawley rats. Poster presentation. Developmental Neurotoxicology Society, Denver, CO, June 2017.
19. **A. Gutierrez**, C.V. Vorhees, and M.T. Williams. Assessment of working memory and monoamine neurotransmitters in methamphetamine-treated adult male rats. Poster presentation. Society for Neuroscience, San Diego, CA, November 2016.
20. R.A. Bailey, **A. Gutierrez**, J.R. Hufgard, T.L. Kyser, A.M. Hemmerle, K.B. Seroogy, C.V. Vorhees, and M.T. Williams. Additive deficits on egocentric and allocentric learning induced after developmental manganese overexposure combined by 6-hydroxydopamine striatal lesions. Poster presentation. Society for Neuroscience, San Diego, CA, November 2016.
21. J. L. N. Sprowles, J. R. Hufgard, **A. Gutierrez**, R. A. Bailey, S. A. Jablonski, M. T. Williams, and C. V. Vorhees. Developmental exposure to the selective serotonin reuptake inhibitor citalopram alters spatial learning and memory, anxiety, sociability, and acoustic startle response in the offspring of Sprague-Dawley rats as adults. Poster presentation. Society for Neuroscience, San Diego, CA, November 2016.
22. T. L. Kyser, A. M. Hemmerle, K. H. Lundgren, A. J. Dourson, B. P. Phillips, J. Rich, E. C. Emmert, **A. Gutierrez**, K. C. Udobi, J. L. McGuire, S. M. Fleming, and K. B. Seroogy. Evaluating the efficacy of the DJ-1 knockout rat as a model for the prodromal stage in Parkinson's disease. Poster presentation. Society for Neuroscience, San Diego, CA, November 2016.
23. R.A. Bailey, **A. Gutierrez**, R.M. Amos-Kroohs, C.V. Vorhees, and M.T. Williams. Developmental manganese overexposure or adult 6-hydroxydopamine striatal lesions induce exacerbated learning deficits in combination. Poster presentation. Society of Toxicology, New Orleans, LA, March 2016.

24. R.A. Bailey, **A. Gutierrez**, R.M. Amos-Kroohs, C.V. Vorhees, and M.T. Williams. Egocentric and allocentric learning deficits in rats produced by developmental manganese overexposure or adulthood 6-hydroxydopamine toxicity are exacerbated in combination. Poster presentation. Society for Neuroscience, Chicago, IL, October 2015.
25. J. L. N. Sprowles, J. R. Hufgard, **A. Gutierrez**, R. A. Bailey, S. A. Jablonski, M. T. Williams, and C. V. Vorhees. Effects of Perinatal Administration of Antidepressants on Behavior of the Adult Offspring in Sprague-Dawley Rats. Poster presentation. Society for Neuroscience, Chicago, IL, October 2015.
26. **A. Gutierrez**, S.A. Jablonski, R.M. Amos-Kroohs, A.A. Braun, M.T. Williams, and C.V. Vorhees. Methamphetamine-induced changes to monoamine neurotransmission and allocentric learning and memory in barren-housed adult rats. Poster presentation. Society for Neuroscience, Chicago, IL, October 2015.
27. S.A. Jablonski, **A. Gutierrez**, T.M. Tee, K.L. Suttling, M.T. Williams, and C.V. Vorhees. Neonatal (+)-methamphetamine exposure in rats: Impairments in egocentric, allocentric, working, and contextual fear memory. Poster presentation. Society for Neuroscience, Chicago, IL, October 2015.
28. C.V. Vorhees, S.A. Jablonski, **A. Gutierrez**, T. Tee, K. Suttling, and M.T. Williams. Neonatal (+)-methamphetamine exposure impairs egocentric, allocentric, and working memory in rats. Poster presentation. Neurobehavioral Teratology Society 39th Annual Meeting, Montreal, Quebec, Canada, 2015.
29. S.A. Jablonski, **A. Gutierrez**, T.M. Tee, K.L. Suttling, M.T. Williams, and C.V. Vorhees. Neonatal (+)-methamphetamine exposure impairs egocentric learning in the Cincinnati water maze (CWM) and working memory in the radial water maze (RWM) in young rats. Poster presentation. International Behavioral Neuroscience Society, Victoria, British Columbia, Canada, June 2015.
30. M.T. Williams, R.M. Amos-Kroohs, A.A. Braun, **A. Gutierrez**, and C.V. Vorhees. Egocentric learning deficits in rats produced by developmental manganese overexposure or adulthood 6-hydroxydopamine toxicity are exacerbated by the combination. Poster presentation. Society of Toxicology, San Diego, CA, March 2015.
31. **A. Gutierrez**, R.M. Amos-Kroohs, M.T. Williams, and C.V. Vorhees. Effects of Methamphetamine and Barren Housing on Allocentric Learning and Memory in Adult Rats. Poster presentation. International Behavioral Neuroscience Society, Las Vegas, NV, June 2014.
32. **A. Gutierrez**, R.M. Amos-Kroohs, M.T. Williams, and C.V. Vorhees. Effects of methamphetamine on allocentric learning and memory in rats. Poster presentation. Society for Neuroscience, San Diego, CA, November 2013.
33. R.M. Amos-Kroohs, L.L. Davenport, **A. Gutierrez**, N. Atansanova, C.V. Vorhees, and M.T. Williams. Cognitive and behavioral deficits in a developmental model of multifactorial environmental exposure. Poster presentation. Society for Neuroscience, San Diego, CA, November 2013.
34. R.M. Amos-Kroohs, C. Bloor, **A. Gutierrez**, J. Hufgard, C. Vorhees, and M. Williams. Increased manganese and iron-deficiency during development in rats affects locomotor responses following pharmacological challenge. Poster presentation. International Behavioral Neuroscience Society, Dublin, Ireland, June 2013.

35. S.A. McDougall, J.A. Pipkin, T. Der-Ghazarian, A.M. Cortez, **A. Gutierrez**, R.J. Lee, S.M. Carbajal, J.L. Shaddox, and C.A. Crawford. Age-dependent differences in the persistence of cocaine-induced conditioned activity in adult and young rats: regional differences in Fos immunoreactivity. Poster presentation. International Behavioral Neuroscience Society, Dublin, Ireland, June 2013.
36. F.A. Varela, V. Rios, **A. Gutierrez**, J.A. Pipkin, D.R. Crowley, J.J. Johnson, and S.A. McDougall. D1 and D2 receptor stimulation in the ventrolateral striatum (VLS) of preweanling rats: Impact on locator activity and stereotypy. Poster presentation. Society for Neuroscience, New Orleans, LA, October 2012.
37. A.G. Pothier, **A. Gutierrez**, J.M. Valentine, and S.A. McDougall. One-trial behavioral sensitization in preweanling rats: impact of lidocaine infusions in the ventral tegmental area and nucleus accumbens. Poster presentation. Society for Neuroscience, New Orleans, LA, October 2012.
38. T. Der-Ghazarian, **A. Gutierrez**, C.B. Widarma, F.A. Varela, and S.A. McDougall. Paradoxical behavioral effects of DA receptor inactivation in young rats: Receptor specificity. Poster presentation. Society for Neuroscience, Washington, DC, November 2011.
39. O.O. Kozanian, **A. Gutierrez**, A. Mohd-Yusof, and S.A. McDougall. Ontogeny of cocaine and methamphetamine-induced one-trial behavioral sensitization. Poster presentation. Society for Neuroscience, Washington, DC, November 2011.
40. T. Der-Ghazarian, J.A. Pipkin, **A. Gutierrez**, S.M. Carbajal, A.M. Cortez, C.A. Crawford, and S.A. McDougall. Persistence of one-trial cocaine-induced conditioned activity in young and adult rats. Poster presentation. Society for Neuroscience, Washington, DC, November 2011.
41. T. Der-Ghazarian, L.R. Horn, M.S. Herbert, **A. Gutierrez**, C.B. Widarma, S. Charntikov, and S.A. McDougall. Paradoxical behavioral effects of DA receptor inactivation in young rats: role of the dorsal caudate-putamen. Poster presentation. Society for Neuroscience, San Diego, CA, November 2010.
42. O.O. Kozanian, V.Y. Greenfield, L.R. Horn, **A. Gutierrez**, A. Mohd-Yusof, K.A. Castellanos, and S.A. McDougall. One-trial behavioral sensitization in young rats: Differential effects of cocaine, methamphetamine, and methylphenidate. Poster presentation. Society for Neuroscience, San Diego, CA, November 2010.

SERVICE & COMMUNITY OUTREACH

September 2024 – Present

Liaison: Department of Psychology
 Liberal Arts Honors Program
 College of Liberal Arts
 The University of Texas at El Paso

September 2024 – Present

Undergraduate Program Committee
 Committee Member
 Department of Psychology
 The University of Texas at El Paso

November 2023	<i>Overview of Graduate Student Fellowships</i> Presentation for the ISMD and MARC programs San Diego State University
January 2023	<i>Introduction to Research & How to Find a Mentor</i> Presentation for the Pre-MARC program San Diego State University
February 2022	<i>Summer Undergraduate Research Fellowship (SURF) Program Admissions Committee</i> UC San Diego IRACDA SURF Program
May 2021	<i>SURF Curriculum Committee</i> UC San Diego IRACDA SURF Program
February 2017	<i>Program Recruitment Interviewer</i> University of Cincinnati, Neuroscience Graduate Program
February 2016	<i>Program Recruitment Interviewer</i> University of Cincinnati, Neuroscience Graduate Program
March 2016	<i>Brain Awareness Week Organizing Committee</i> University of Cincinnati
August 2015- May 2017	<i>Membership & Recruitment Chair</i> University of Cincinnati chapter of the Society for the Advancement of Chicanos/Hispanics and Native Americans in Science (SACNAS)
February 2015	<i>Program Recruitment Interviewer</i> University of Cincinnati, Neuroscience Graduate Program
March 2014	<i>Brain Awareness Week outreach organizer</i> University of Cincinnati

PROFESSIONAL ORGANIZATIONS

Society for Neuroscience
Position: Member

PROFESSIONAL REFERENCES

Available upon request.