**Carlos A. Bolaños-Guzmán, Ph.D.**

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## RESEARCH GOALS

To establish *causal* relationships between early-life experiences, brain, biochemistry, and behavior. My research interests center on investigating how exposure to psychotropic drugs (e.g. stimulants, antidepressants), and stress (whether physical or emotional), modifies the biochemical integrity of neuronal pathways involved in the regulation of mood and motivated behaviors, and how these pharmacological and/or environmental manipulations early-in-life affect biochemical and behavioral functioning later in adulthood. Understanding the relationship(s) between brain and behavior from a developmental perspective can provide novel insights for the development of therapeutics for stress and drug dependence. As noted by my professional development and publication record below, I have been involved in research questions with high degree of translational relevance.

## EDUCATION

2000 PhD, Experimental Psychology. Northeastern University, Boston, MA.
1995 MA, Experimental Psychology. California State University, San Bernardino, CA.
1993 BA, Psychology. California State University, San Bernardino, CA.

## ACADEMIC APPOINTMENTS

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| 2016–present | Associate Professor, Psychological and Brain Sciences and Institute for Neuroscience, Texas A&M University, College Station, TX. |
| 2011–16 | Associate Professor, Psychology and Neuroscience. Florida State University. |
| 2004–11 | Assistant Professor, Psychology and Neuroscience. Florida State University. |
| 2000–04 | Postdoctoral Fellow, University of Texas, Southwestern Medical Center, Dallas. |
| 2000 | Postdoctoral Fellow, Yale University. Department of Psychiatry (New Haven, CT). |

## ADMINISTRATIVE APPOINTMENTS

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| 2018–present | **Assistant Provost** for Diversity. Texas A&M University. |
| 2018–present | **Director**, Accountability, Climate, Equity, and Scholarship (ACES) Fellows Program. Texas A&M University. |
| 2018–present | **Director**, ADVANCE Scholars Program. Texas A&M University. |

## HONORS/AWARDS/FELLOWSHIPS

2019 Elected Chair, Annual Conference Program Committee, National Hispanic Science Network on Drug Abuse (NHSN).
2016 Elected Fellow to the American College of Neuropsychopharmacology (ACNP).
2016 Elected to National Steering Committee, National Hispanic Science Network on Drug Abuse (NHSN).
2014 Nancy Marcus Professorship. Florida State University – "… *supports and recognizes a superior researcher at FSU with a demonstrated extraordinary commitment to students from groups underrepresented in math and science and attract them to and advance their career in these fields*."
2012 Elected to Editorial Board, Neuropsychopharmacology.
2012 Developing Scholar Award, Florida State University.
2012 Elected Full Member to the American College of Neuropsychopharmacology (ACNP).
2009 Nominated, Teaching Award for Excellence in Undergraduate Teaching (FSU).
2009 Elected Associate member, American College of Neuropsychopharmacology (ACNP).
2006 Early Career Investigator Travel Award: NIDA and APA Divisions 28 & 50. (Psychopharmacology and Addictions), New Orleans, LA.
2005 First Year Assistant Professor Award, Florida State University Office of Research, Council for Research and Creativity. January 2005.
2004 NARSAD Young Investigator Award.
2002-06 Travel Fellowship: American College of Neuropsychopharmacology (ACNP).
2001-04 National Research Service Award (NRSA). National Institute on Drug Abuse.
2001 International Behavioral Neuroscience Society Travel Award: Cancún, Mexico.
1999 Gordon Conference on Catecholamines Travel Award: Oxford, UK.
1997-00 Pre-Doctoral Fellowship National Institute on Mental Health.
1997 Gordon Conference on Catecholamines, New Hampshire.
1996 Society for Neuroscience Scholar.
1995 Neuroscience Internship, Neuropsychiatric Institute, UCLA.
1995 Outstanding Graduate Student of the Year, California State University, San Bernardino.
1994-95 Pre-Doctoral Fellowship, California State University System.
1993-95 Graduate Equity Fellowship, California State University System.

## RESEARCH SUPPORT

**Active:**

2019–2024 **Serotonin Receptors that Potentiate Addiction-related Behavioral and Molecular Effects induced by Methylphenidate plus SSRI Exposure**

(R01DA046794-01A1), National Institute on Drug Abuse, $1,703,010. **Role: Co-PI** (50% effort). 4/1/19–1/31/2024.

2019–2024 **Rapid and Long-lasting Antidepressant Action by Targeting HCN Channels** (R01MH120637-01), National Institute for Mental Health, $62,420. **Role: Co-I** (5% effort). 8/15/19–5/31/2024.

**Completed:**

2018–2019 **Rapid and Long-lasting Antidepressant Action by Targeting HCN Channels** (1R56MH115409-01A1), National Institute of Mental Health, $15,698. **Role: Co-I** (5% effort). 7/1/18–8/31/19.

2010–2016 **Ontogeny of Drug Exposure and Mood Dysregulation** (1R01DA026854-A1), National Institute on Drug Abuse, $1,5615. **Role: PI.** 4/1/10—3/31/16.

2013–2016 **Ontogeny of Drug Exposure and Mood Dysregulation** (3R01DA026854-04S1), National Institute on Drug Abuse, $29,504. **Role: Sponsor** (PI: Maria Greenwood, Department of Psychology, Florida State University). 4/1/13–3/31/15.

2008–2011 **Ontogeny Physical versus Emotional Stress and Reward Pathways** (R21DA022351), National Institute on Drug Abuse, $373,733. **Role: PI.** 4/1/08– 3/31/11.

2005–2006 **Adolescent Antidepressant Treatment and Drug Reward** (R03DA020089), National Institute for Drug Abuse, $72,000. **Role: PI.** 7/1/05–6/30/06.

2004–2006 **Brain-Derived Neurotrophic Factor (BDNF) Signaling Pathways in the Mesolimbic Dopamine System: Role in Depression**. NARSAD Young Investigator Award. $60,000. **Role: PI.** 8/1/04–6/30/06.

2011–2012 **Neurobiology of Physical versus Emotional Stress.** Florida State University Office of Research, Planning Grant. $12,000. **Role: PI.** 12/1/11–11/30/12.

2007–2010 **Long-term Neurobiological Effects of Nicotine Exposure During Adolescence in Male Rats** (07KN-01), Florida Department of Health. James & Esther King Biomedical Research Program. $357,767. **Role: PI.** 7/1/07–06/31/10.

2007–2008 **Long-Term Neurobiological Effects of Early Life Nicotine Exposure in Rats.** Florida State University Office of Research, Planning Grant. $12,000. **Role: PI.** 4/1/07–3/31/08

2006–2007 **Regulation of Basal Extracellular Neurotransmitters in a Neurofibromatosis Type1 Mouse Model**. Florida State University Office of Research, Equipment Grant. $51,469. **Role: PI.** 2/14/06–2/28/07.

## TRAINEE FELLOWSHIPS SPONSORED

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| 2014–2016 | **Neurocircuitry Underlying Ketamine-induced Antidepressant Effects During Adolescence** (F31MH103939-01A), Individual National Research Award, National Institute of Mental Health, $75,454. PI: Eric M. Parise, Department of Psychology, Florida State University. 9/30/14–10/30/16 |
| 2015–2016 | McKnight Fellowship, Florida Education Fund. PI: Kidane Dashew, Neuroscience Program, Florida State University. 2015–2016. $28,000 |
| 2014 | **Behavioral and Genetic Profiles of Mice Witnessing Stressful Events.** National Science Foundation GRFP. PI: Jacob Brewer. **Honorable mention**. |
| 2014 | **New Model to Understanding Metabolic Syndrome and Depression Comorbidity.** National Science Foundation GRFP. PI: Omar K. Sial. Not funded. |
| 2013–2016 | McKnight Fellowship, Florida Education Fund. PI: Lyonna F. Alcantara, Department of Psychology, Florida State University. 2013–2016. $60,000 |
| 2013–2015 | **Ontogeny of Drug Exposure and Mood Dysregulation** (3R01DA026854-04S1), National Institute on Drug Abuse, $36,504. PI: Maria Greenwood, Neuroscience Program, Florida State University. 4/1/13 –3/31/15. |
| 2009–2011 | **The Long-term Neurobiological Consequences of Emotional Stress During Adolescence in Male Mice** (F31MH092029-01A1). PI: Brandon L. Warren, Neuroscience Program, Florida State University. Not funded. |
| 2009–2011 | **Long-term consequences of Antidepressant Exposure During Adolescence in Male Rats** (F31DA027300-01), Individual National Research Award, National Institute on Drug Abuse, $95,202. PI: Sergio D. Iñiguez, Neuroscience Program, Florida State University. 8/1/09–11/30/11. |
| 2009 | Ford Foundation Predoctoral Fellowship, The National Academies. PI: Sergio D. Iñiguez, Neuroscience Program, Florida State University. (Fellowship declined; PI accepted the F31 fellowship from NIDA.) |
| 2007–2009 | McKnight Fellowship, Florida Education Fund. PI: Sergio D. Iñiguez, Neuroscience Program, Florida State University. $60,000 |

## PUBLICATIONS

**Peer-reviewed Journal Articles (in chronological order)**

*ISI Web of Knowledge Citation Index h-index value = 35; February 2020.*
*Google Scholar Citation Index h-index value = 38; February 2020.*

1. McDougall SA, Duke MA, **Bolaños CA**, Crawford CA (1994) Ontogeny of behavioral sensitization in the rat: effects of direct and indirect dopamine agonists. *Psychopharmacology*, 116, 448-458.

2. Pruitt LD, **Bolaños CA**, McDougall SA (1995) The effects of dopamine $D_1$ and $D_2$ antagonists on cocaine-induced place preference in preweanling rats. *European Journal of Pharmacology*, 283, 125-131.
3. McDougall SA, **Bolaños CA** (1995) Behavioral effects of the reversible dopamine antagonist flupenthixol are not potentiated by N-ethoxycarbonyl-2-ethoxy-1,2-dihydroquinoline in the preweanling rat. *Pharmacology, Biochemistry & Behavior*, 50, 127-131.
4. Crawford CA, McDougall SA, **Bolaños CA**, Hall S, Berger P (1995) The effects of the kappa agonist U-50,488 on cocaine-induced conditioned and unconditioned behaviors and Fos immunoreactivity. *Psychopharmacology*, 120, 392-399.
5. **Bolaños CA**, Clair MA, Garmsen GM, McDougall SA (1996) Effects of the kappa opioid agonist U-50,488 on morphine-induced place preference conditioning in the preweanling and periadolescent rat. *European Journal of Pharmacology*, 317, 1-8.
6. Duke CA, Meier TL, **Bolaños CA**, Crawford CA, McDougall SA (1997) Paradoxical effects of kappa- opioid stimulation on the locomotor activity and Fos immunoreactivity of the preweanling rat: role of dopamine receptors. *Behavioral Neuroscience*, 111, 1114-122.
7. **Bolaños CA**, Glatt S, Jackson D (1998) Subsensitivity to dopaminergic drugs in periadolescent rats: a behavioral and neurochemical analysis. *Developmental Brain Research*, 111, 25-33.
8. Glatt SJ, **Bolaños CA**, Trksak GH, Crowder-Dupont C, Jackson D (2000) Prenatal cocaine exposure alters behavioral and neurochemical sensitization to amphetamine in adult rats. *Neuropharmacology*, 39, 599-610.
9. **Bolaños CA**, Trksak GH, Glatt SJ, Jackson D (2000) Prenatal cocaine increases serotonergic inhibition of electrically-evoked acetylcholine release from rat striatal slices at adulthood. *Synapse*, 36, 1-11.
10. Glatt SJ, **Bolaños CA**, Trksak GH, Jackson D (2000) Effects of prenatal cocaine exposure on dopamine system development: a meta-analysis. *Neurotoxicology and Teratology*, 22, 617-629.
11. Chao JR, Ni YG, **Bolaños CA**, Rahman Z, DiLeone RJ, Nestler EJ (2002) Characterization of the mouse adenylyl cyclase type VIII gene promoter: regulation by cAMP and CREB. *European Journal of Neuroscience*, 16, 1284-1294.
12. **Bolaños CA**, Trksak GH, Cohen OS, Jackson D (2002) Differential serotonergic inhibition of in vitro striatal $^3$[H]acetylcholine release in prenatally cocaine-exposed male and female rats. *Progress in Neuro-Psychopharmacology & Biological Psychiatry*, 26, 1339-1348.
13. Eisch AJ, **Bolaños CA**, de Wit J, Simonak RD, Pudiak CM, Barrot M, Verhaagen J, Nestler EJ (2003) BDNF in the ventral midbrain-nucleus accumbens pathway: a role in depression. *Biological Psychiatry*, 54, 994-1005.

14. **Bolaños CA**, Perrotti LI, Edwards S, Eisch AJ, Barrot M, Olson VG, Russell DS, Neve RL, Nestler EJ (2003) Viral-mediated gene transfer of phospholipase C-γ in distinct regions of the ventral tegmental area differentially modulates mood-related behaviors. *The Journal of Neuroscience*, 23, 7569-7576.
15. **Bolaños CA**, Barrot M, Berton O, Wallace-Black D, Nestler EJ (2003) Methylphenidate treatment during juvenile period changes behavioral responses to emotional stimuli at adulthood. *Biological Psychiatry*, 54, 2317-1329.
16. **Bolaños CA,** Nestler EJ (2004) Neurotrophic mechanisms in drug addiction. (*Review*) *NeuroMolecular Medicine*, 5, 69-84.
17. **Bolaños CA,** Neve RL, Nestler EJ (2005) Phospholipase Cγ in distinct regions of the ventral tegmental area differentially regulates morphine-induced locomotor activity. *Synapse*, 56, 166-169.
18. Georgescu D, Sears RM, Hommel JD, Barrot M, **Bolaños CA,** Marsh, DJ, Bednarek MA, Bibb JA, Maratos-Flier E, Nesler EJ, DiLeone RJ (2005) The hypothalamic neuropeptide MCH acts in the nucleus accumbens to modulate feeding behavior and forced-swim performance. *The Journal of Neuroscience,* 25, 2933-2940.
19. Perrotti LI, **Bolaños CA**, Choi K-H, Eisch AJ, Wallace-Black D, Self DW, Nestler EJ, Barrot M. (2005) ΔFosB accumulates in a GABAergic cell population in the posterior tail of the VTA after psychostimulant treatment. *European Journal of Neuroscience*, 21, 2817-2824.
20. Olson VG, Zebatian CP, **Bolaños CA**, Edwards S, Barrot M, Eisch AJ, Hughes T, Self DW, Neve RL, Nestler EJ (2005) Regulation of drug reward by camp response element-binding protein: evidence for two functionally distinct subregions of the ventral tegmental area. *The Journal of Neuroscience*, 25, 5553-5562.
21. Barrot M, Wallace-Black D, **Bolaños CA**, Graham D, Perrotti LI, Neve RL, Chambliss H, Yin JC, Nestler EJ (2005). Regulation of anxiety and initiation of sexual anxiety by CREB in the nucleus accumbens. *Proc. Natl. Acad. Sci. USA*, 102, 8357-62.
22. Zachariou V, **Bolaños CA**, Selley DE, Shaw-Lutchmann T, Berton O, Cassidy MP, Kelz MB, Sim-Selley LJ, DiLeone RJ, Kumar A, Nestler EJ (2005) ΔFosB: an essential modulator of morphine addiction. *Nature Neuroscience*, 9, 205-211.
23. Berton O, McClung CA, DiLeone RJ, Renthal W, Russo S, Graham D, Tsankova NM, **Bolaños CA**, Rios M, Monteggia L, Self DW, Nestler EJ (2006) Essential role of BDNF in dopaminergic reward regions in social defeat. *Science*, 311, 864-868.
24. Han MH, **Bolaños CA**, Green TA, Olson VG, Neve RL, Liu RJ, Aghajanian GK, Nestler EJ (2006) Role of cAMP response element-binding protein in the rat locus ceruleus: regulation of neuronal activity and opiate withdrawal behaviors. *The Journal of Neuroscience*, 26, 4624-4629.

25. Lagace DC, Yee KY, **Bolaños CA**, Eisch JE (2006) Juvenile administration of methylphenidate attenuates adult hippocampal neurogenesis. *Biological Psychiatry*, 60, 4624-4629.

26. **§**Russo, SJ, **§Bolaños CA**, Theobald DE, Decarolis NA, Renthal W, Kumar A, Winstanley CA, Renthal NE, Wiley MD*, Self DW, Russell DS, Neve RL, Eisch AJ, Nestler EJ (2006) IRS2-Akt pathway in midbrain dopamine neurons regulates behavioral and cellular responses to opiates. *Nature Neuroscience*, 10, 93-99.

    **§**Authors contributed equally to this work.

27. **Bolaños CA**, Wiley MD*, Maffeo ML†, Kinka DW*, Powers KL*, Grausam KB† and Henderson RP (2008) Chronic antidepressant treatment can normalize adult behavioral deficits induced by early developmental exposure to methylphenidate. *Biological Psychiatry*, 60, 309-316.

28. Krishnan V, Han MH, Mazei-Robison M, Iñiguez SD†, Ables JL, Vialou V, Berton O, Ghose S, Covington HE 3rd, Wiley MD*, Henderson RP, Neve RL, Eisch AJ, Tamminga CA, Russo SJ, **Bolaños CA** and Nestler EJ (2008) Decreased Akt activity within the VTA mediates vulnerability to depression behaviors. *Biological Psychiatry*, 64, 691-700.

29. Wallace DL, Vialou V, Rios L, Carle-Florence TL, Chakravarty S, Kumar A, Graham D, Green TA, Kirk, A, Iñiguez SD†, Perrotti LI, Barrot M, DiLeone RJ, Nestler EJ, **Bolaños-Guzmán CA** (2008) The influence of ΔFosB in the nucleus accumbens on natural reward-related behavior. *The Journal of Neuroscience*, 28, 10272-10277.

30. Iñiguez SD†, Warren BL†, Neve RL, Nestler EJ, Russo SJ, **Bolaños-Guzmán CA** (2008) Insulin receptor substrate-2 in the ventral tegmental area regulates behavioral responses to cocaine. *Behavioral Neuroscience*, 122, 1172-1177.

31. Graham DL, Krishnan V, Larson EB, Graham A, Edwards S, Bachtell RK, Simmons D, Gent LM, Berton O, **Bolaños CA**, Dileone RJ, Parada LF, Nestler EJ, Self DW (**2009**) Tropomyosin-Related Kinase B in the mesolimbic dopamine system: region-specific effects on cocaine reward. *Biological Psychiatry*, 65, 696-701.

32. Wallace DL, Han M-H, Graham DL, Green TA, Vialou V, Iñiguez SD†, Cao J-L, Chakravarty S, Kumar A, Krishnan V, Neve RL, Cooper DC, **Bolaños CA**, Barrot M, McClung CA, Nestler EJ (**2009**) CREB regulation of nucleus accumbens excitability mediates social isolation-induced behavioral deficits. *Nature Neuroscience*, 12, 200-209.

33. Wiley MD*, Poveromo LB*, Antapasis J*, Herrera CM*, **Bolaños-Guzmán CA** (**2009**) κ-Opioid system regulates the long-lasting behavioral adaptations induced by early-life exposure to methylphenidate. *Neuropsychopharmacology*, 34, 1609-1624.

34. Iñiguez SD†, Warren BL†, Parise E*, Alcantara LF*, Schuh B*, Maffeo ML†, Manojlovic Z†, **Bolaños-Guzmán CA** (**2009**) Nicotine exposure during adolescence induces a depression-like state in adulthood. *Neuropsychopharmacology*, 34, 1339-1350.

35. Russo SJ, Wilkinson MB, Mazei-Robison MS, Dietz DM, Maze I, Krishnan V, Renthal W, Graham A, Birnbaum SG, Green TA, Robison B, Lesselyong A, Perrotti LI, **Bolaños CA**, Kumar A, Clark MS, Neumaier JF, Neve RL, Bhakar AL, Barker PA, Nestler EJ (**2009**) Nuclear factor kappa B signaling regulates neuronal morphology and cocaine reward. *The Journal of Neuroscience*, 29, 3529-3537.

36. Iñiguez SD†, Warren BL†, **Bolaños-Guzmán CA** (2010) Short- and long-term functional consequences of fluoxetine exposure during adolescence in male rats. *Biological Psychiatry*, 67, 1057-1066.

37. Iñiguez SD†, Vialou V, Cao J-L, Warren BL†, Manojlovic Z†, Alcantara LF*, Davis LC*, Neve RL, Russo SJ, Han M-H, Nestler EJ, **Bolaños-Guzmán CA** (2010) Extracellular signal-regulated kinase-2 within the ventral tegmental area modulates responses to stress. *The Journal of Neuroscience*, 30, 7652-7663.

38. Iñiguez SD†, Warren BL†, Neve RL, Russo SJ, Nestler EJ, **Bolaños-Guzmán CA** (2010) Viral-mediated expression of extracellular signal-regulated kinase-2 in the ventral tegmental area modulates behavioral responses to cocaine. *Behavioural Brain Research*, *214*, 460-464.

39. Vialou V, Robison AJ, LaPlant QC, Covington HE 3rd, Dietz DM, Ohnishi YN, Mouzon E, Rush AJ 3rd, Watts EL, Wallace DL, Iñiguez SD†, Onishi YH, Steiner MA, Warren BL†, Krishnan V, **Bolaños CA**, Neve RL, Ghose S, Berton O, Tamminga CA, Nestler EJ (2010) ΔFosB in brain reward circuits mediates resilience to stress and antidepressant responses. *Nature Neuroscience*, *13*, 745-752.

40. LaPlant Q, Vialou V, Covington HE III, Dumitriu D, Feng J, Warren BL†, Maze I, Dietz DM, Watts EL, Iñiguez† SD, Wook Koo J, Mouzon E, Renthal W, Hollis F, Wang H, Noonan MA, Ren Y, Eisch AJ, **Bolaños CA**, Kabbaj M, Xiao G, Neve RL, Hurd YL, Oosti RS, Fan G, Morrison JH, Nestler EJ (2010) Dnmt3a regulates emotional behavior and spine plasticity in the nucleus accumbens. *Nature Neuroscience*, *13,* 1137-1143.

41. Warren BL†, Iñiguez SD†, Alcantara LF*, Wright KN*, Parise EM†, Weakley SK*, **Bolaños-Guzmán CA** (2011) Juvenile administration of concomitant methylphenidate and fluoxetine alters behavioral reactivity to reward- and mood-related stimuli and disrupts ventral tegmental area gene expression in adulthood. *The Journal of Neuroscience*, 31, 10347-10358.

42. Iñiguez SD†, Charntikov S, Baella SA, Herbert MS, **Bolaños-Guzmán CA**, Crawford CA (2012) Post-training cocaine exposure facilitates spatial memory consolidation in C57BL/6 mice. *Hippocampus*, 22, 802-813.

43. Warren BL†, Vialou VF, Iñiguez SD†, Alcantara LF†, Wright KN*, Feng J, Kennedy PJ, LaPlant Q, Shen L, Nestler EJ, **Bolaños-Guzmán CA** (2013) Neurobiological sequelae of witnessing stressful events in adult mice. *Biological Psychiatry*, 73, 7-14. **Selected, Faculty of 1000.**

44. Parise EM†, Alcantara LF†, Warren BL†, Wright KN†, Hadad R*, Sial OK*, Kroeck KG*, Iñiguez SD†, **Bolaños-Guzmán CA** (2013) Repeated ketamine exposure induces and enduring resilient phenotype in adolescent and adult rats. *Biological Psychiatry*, 74, 750-759.

45. Iñiguez SD†, Alcantara LF†, Warren BL†, Riggs LM†, Parise EM†, Vialou V, Wright KN†, Dayrit G*, Nieto SJ*, Wilkinson MB, Lobo MK, Neve RL, Nestler EJ, **Bolaños-Guzmán CA** (2014) Fluoxetine exposure during adolescence alters responses to aversive stimuli in adulthood. *The Journal of Neuroscience*, 34, 1007-1021.

46. Alcantara LF†, Warren BL†, Parise EM†, Iñiguez SD†, **Bolaños-Guzmán CA** (2014) Effects of psychotropic drugs on second messenger signaling and preference for nicotine in juvenile male mice. *Psychopharmacology*, 231, 1479-11492.

47. Heinz S, Warren BL†, Waes VV, **Bolaños-Guzmán CA** (2014) Life-long consequences of juvenile exposure to psychotropic drugs on brain and behavior. *Progress in Brain Research*, 211, 13-30.

48. Warren BL†, Sial OK†, Alcantara LF†, Greenwood MA†, Brewer JS†, Rozofsky JP*, Parise EM†, **Bolaños-Guzmán CA** (2014) Altered gene expression and spine density in nucleus accumbens of adolescent and adult male mice exposed to emotional and physical stress. *Developmental Neuroscience*, 36, 250-260.

49. Parise EM†, **Bolaños-Guzmán CA** (2014) Chronic social defeat and intracranial self-stimulation: Unmasking the many faces of depression? *Biological Psychiatry*, 76, 513-514.

50. Hodes GE, Pfau ML, Leboeuf M, Golden SA, Christoffel DJ, Bregman D, Rebusi N, Heshmati M, Aleyasin H, Warren BL†, Lebonté B, Horn S, Lapidus KA, Stelzhammer, V, Wong EH, bahn S, Krishnan V, **Bolaños-Guzmán CA**, Murrough JW, Merad M, Russo SJ (2014) Individual differences in the peripheral immune system promote resilience versus susceptibility to social stress. *Proc. Natl. Acad. Sci. USA*, 111: 16136-16141.

51. Bagot R, Parise EM†, Pena C, Zhang H, Maze I, Chaudhury, Persaud B, Cachope R, **Bolaños-Guzmán CA**, Cheer, J, Deisseroth K, Han M-H, Nestler, EJ (2015) Ventral hippocampus afferents to the nucleus accumbens regulate susceptibility to depression. *Nature Communications,* 6:7062 doi: 10.1038/ncommons8062

52. Sial OK†, Warren BL†, Alcantara LF†, Parise EM†, **Bolaños-Guzmán CA** (2016) Vicarious social defeat stress: Bridging the gap between physical and emotional stress. *Journal of Neuroscience Methods*, 30, 258-294.

53. McHenry JA†, Robison CL†, Bell GA†, Vialou VV, **Bolaños-Guzmán CA**, Nestler EJ, Hull EM (2016) The role of ΔFosB in the medial preoptic area: differential effects of mating and cocaine history. *Behavioral Neuroscience*, 130, 469-478.

54. **Bolaños-Guzmán CA**, Zarate, CA Jr (2016) Underrepresented minorities in science: ACNP strives to increase minority representation and inclusion. *Neuropsychopharmacology*, 41, 2421-2423.

55. Alter D, Beverly JA, Patel R, **Bolaños-Guzmán CA**, Steiner H (2017) The 5-HT1B serotonin receptor regulates methylphenidate-induced gene expression in the striatum: Differential effects on immediate-early genes. *Journal of Psychopharmacology*, 31, 1078-1087.
56. Sial OK†, Parise EM†, Parise LF†, Gnecco T*, **Bolaños-Guzmán CA** (2020) Ketamine: The final frontier or another depressing end? *Behavioural Brain Research*.
57. Saurabh S†, Armant RJ*, **Bolaños-Guzmán CA**, Perrotti LI (2020) Overlap in the neurocircuitry and molecular mechanism underlying ketamine abuse and its use as an antidepressant. *Behavioural Brain Research*.
58. Parise LF†, Sial OK†, Warren BL†, Sattler CR*, Duperrouzel JC*, Parise EM†, **Bolaños-Guzmán CA** (**pending decision; revisions submitted**) Nicotine treatment buffers negative behavioral consequences induced by exposure to physical and emotional stress in adolescent male mice. *Psychopharmacology*.

## JOURNAL ARTICLES (IN PROCESS)

59. Parise LF†, Sial OK†, Parise EM†, Cardona AM†, Hadad R*, **Bolaños-Guzmán CA**. Extracellular-regulated signaling kinase within the lateral habenula mediates stress-related behaviors during adolescence. *Scientific Reports*, submitted.
60. Parise EM†, Sial OK†, Gancarz AM, Alcantara LF†, Dietz DM, **Bolaños-Guzmán CA**. Repeated ketamine exposure during adolescence produces long-lasting changes in reward sensitivity and gene expression in the nucleus accumbens. *Neuropsychopharmacology*, submitted.

## BOOK CHAPTERS

Alcantara LF†, Parise EM†, and **Bolaños-Guzmán CA** (2017) Animal Models of Mood Disorders. In: Charney DS, Buxbaum JD, Sklar P, & Nestler EJ (Eds)., Neurobiology of Mental Illness, 5th Edition. Oxford: New York.

†Graduate student.
*Undergraduate student.

## RESEARCH ABSTRACTS
**(since 2004; chronological order)**

1. Russo SJ, Kumar A, Perrotti LI, **Bolaños CA**, Green TA, Neve RL, Bhakar AL, Barker PA, Nestler EJ (2004) NFkB (nuclear factor kappa B) in the nucleus accumbens regulates the rewarding effects of cocaine. Society for Neuroscience Annual Meeting, San Diego, CA.

2. Kumar A, Neve RL, Nestler EJ, **Bolaños CA** (2004) Viral-mediated regulation of neurotrophic signaling pathways in the VTA: behavioral and cellular role of PLC-γ1 and IRS-2. Society for Neuroscience Annual Meeting, San Diego, CA.
3. Southerland S, Green TA, Kumar A, Neve RL, Nestler EJ, **Bolaños CA** (2004) Viral-mediated expression of extracellular signal-regulated kinase in mesolimbic brain regions regulates responsiveness to drugs of abuse and emotion-eliciting stimuli. Society for Neuroscience Annual Meeting, San Diego, CA.
4. Han M-H, **Bolaños CA**, Kumar A, Neve RL, Liu RJ, Aghajanian GK, Nestler EJ (2004) Regulation of CREB of locus coeruleus neuronal firing in slice cultures. Society for Neuroscience Annual Meeting, San Diego, CA.
5. Zachariou V, **Bolaños CA**, Selley DE, Shaw-Lutchmann T, Sim-Selley LJ, DiLeone RJ, Nestler EJ (2004) ΔFosB mediated downregulation of dynorphin expression in the nucleus accumbens modulates reward, analgesia and tolerance. Society for Neuroscience Annual Meeting, San Diego, CA.
6. Wallace-Black D, Barrot M, **Bolaños CA**, Graham DL, Perrotti LI, Neve RL, Yin JCP, Chambliss H, Nestler EJ (2004) Effects of social isolation, novelty and reduced CREB expression in the nucleus accumbens shell on sexual behavior of male rats. Society for Neuroscience Annual Meeting, San Diego, CA.
7. Berton O, McClung CA, DiLeone RJ, **Bolaños CA**, Graham DL, Self DW, Nestler EJ (2004) Inducible ablation of the BDNF gene in the ventral tegmental area (VTA) causes antidepressant-like effects in a mouse model of stress-induced anhedonia. Society for Neuroscience Annual Meeting, San Diego, CA.
8. Grausam KB†, Herrera CM*, **Bolaños CA** (2005) Chronic antidepressant treatment regulates extracellular signal-regulated kinase signaling in mesolimbic dopamine system and behavioral reactivity in the developing rat. Society for Neuroscience Annual Meeting, Washington DC.
9. **Bolaños CA**, Russo SJ, Theobald DEH, Kumar A, Eisch AJ, Russell DS, Neve RL, Nestler EJ (2005) Neurotrophic signaling pathways in the VTA regulate behavioral and cellular responses to morphine. Society for Neuroscience Annual Meeting, Washington DC.
10. Wallace-Black DL, Sasaki T, Barrot M, **Bolaños CA**, Graham DL, Perrotti LI, Neve RL, Yin JCP, Storm D, McClung CA, Nestler EJ (2005) Effects of social isolation and CREB manipulation in the nucleus accumbens shell on sexual behavior in experienced male rats. Society for Neuroscience, Washington, DC.
11. Maffeo ML†, Doyle M†, Krishnan V, Russo SJ, Russell DS, Berton O, Neve RL, Nestler EJ, **Bolaños CA** (2006) Viral-mediated expression of insulin receptor substrate-2 (IRS2) in the VTA modulates behavioral responses to natural reward and other mood-related stimuli. Society for Neuroscience Annual Meeting, Atlanta, GA.

12. Wiley MD*, Antapasis J*, Herrera CM*, **Bolaños CA** (2006) Adult behavioral alterations induced by early adolescence treatment with methylphenidate: reversal by antidepressant treatment. Society for Neuroscience Annual Meeting, Atlanta, GA.
13. Russo SJ, **Bolaños CA**, Kumar A, Winstanley CA, Renthal N, Self DW, Russell D, Neve RL, Eisch AJ, Nestler EJ (2006) The IRS2-Akt pathway in midbrain dopaminergic neurons regulates behavioral and cellular responses to opiates. Society for Neuroscience Annual Meeting, Atlanta, GA.
14. Graham DL, **Bolaños CA**, Bachtell R, Self DW (2006) Periadolescent MPH administration increases BDNF in the NAc, low-dose cocaine reinforcement, and the propensity for relapse in adult animals. Society for Neuroscience Annual Meeting, Atlanta, GA.
15. **Bolaños CA**, Herrera CM*, Grausam KB†, Wiley MD* (2006) Early-life experience as determinants of adult emotional behavior: Long-term effects of psychotropic drug treatment, and physical and emotional stress. American Psychological Association Annual Meeting, New Orleans LA.
16. **Bolaños CA**, Kinka DW*, Maffeo ML† (2007) Nicotine exposure during adolescence regulates behavioral responsiveness to mood-eliciting stimuli in adulthood. American College of Neuropsychopharmacology. Boca Raton, FL.
17. Graham DL, Vaishnav K, Edwards Scott, **Bolaños CA**, Bachtell RK, Berton O, DiLeone RJ, Parada L, Nestler EJ, Self DW (2007) Differential role of TrkB in mesolimbic dopamine system on cocaine reward. Society for Neuroscience Annual Meeting, San Diego, CA.
18. Maffeo ML†, Kinka DW*, **Bolaños CA** (2007) Nicotine exposure during adolescence regulates behavioral responsiveness to mood-eliciting stimuli in adulthood. Society for Neuroscience Annual Meeting, San Diego, CA.
19. Wallace D, Rios L, Kumar A, Graham DL, Perrotti LI, **Bolaños CA**, Nestler EJ (2007) The influence of DeltaFosB in the nucleus accumbens on natural reward behavior. Society for Neuroscience Annual Meeting, San Diego, CA.
20. Russo SJ, Renthal W, Kumar A, Neve RL, **Bolaños CA**, Nestler EJ (2007) NFkB signaling regulates cocaine-induced behavioral and cellular activity. Society for Neuroscience Annual Meeting, San Diego, CA.
21. Parise EM*****, Schuh B*****, Warren BL†, Iñiguez SD†, **Bolaños-Guzmán CA** (2008) Early-life exposure to methamphetamine results in dysregulated behavioral responsiveness to mood-eliciting stimuli in adulthood. Society for Neuroscience Annual Meeting, Washington, DC.
22. Iñiguez SD†, Warren BL†, **Bolaños-Guzmán CA** (2008). Neurobiological consequences of fluoxetine treatment during adolescence in male rats. American College of Neuropsychopharmacology (ACNP), Scottsdale, AZ.

23. Warren BL†, Iñiguez SD†, **Bolaños-Guzmán CA** (2008) Short- and long-term neurobiological consequences of fluoxetine treatment during adolescence in male rats. Society for Neuroscience Annual Meeting, Washington, DC.
24. Iñiguez SD†, Nestler EJ, Neve RL, Warren BL†, **Bolaños-Guzmán CA** (2008) Viral-mediated expression of extracellular signal-regulated kinase (ERK) in the ventral tegmental area regulates responsiveness to cocaine and other emotion-eliciting stimuli. Society for Neuroscience Annual Meeting, Washington, DC.
25. Waren BL†, LaPlant Q, Iñiguez SD†, Nestler EJ, **Bolaños-Guzmán CA** (2009) Long-lasting neurobiological effects of nicotine exposure during adolescence in male rats. Society for Neuroscience Annual Meeting, Chicago, IL.
26. Iñiguez SD†, Vialou V, Wilkinson MB, Warren BL†, Lobo MK, Neve RL, Russo SJ, Nestler EJ, **Bolaños-Guzmán CA** (2009) Fluoxetine exposure during Adolescence regulates behavioral and extracellular signal-regulated kinase (ERK) activity in the ventral tegmental area of male rats. Society for Neuroscience Annual Meeting, Chicago, IL.
27. Davis LC*, Alcantara LF*, Warren BL†, Iñiguez SD†, **Bolaños-Guzmán CA** (2009) Short- and long-term neurobiological effects of concomitant methylphenidate and fluoxetine exposure during adolescence in male rats. Society for Neuroscience Annual Meeting, Chicago, IL.
28. Iñiguez SD†, Warren BL†, **Bolaños-Guzmán CA** (2009) Fluoxetine exposure during adolescence regulates behavioral and extracellular signal-regulated kinase (ERK) activity in the Ventral Tegmental Area in Adulthood. American College of Neuropsychopharmacology, Hollywood, FL.
29. Warren BL†, Iñiguez SD†, LaPlant Q†, Alcantara LF†, Weakley S*, Nestler EJ, **Bolaños-Guzmán CA** (2010) Emotional Stress Induces an Anxiety- and Depression-like State in Adult Mice. Society for Neuroscience Annual Meeting, San Diego, CA.
30. Iñiguez SD†, Vialou V, Warren BL†, Alcantara LF*, Cao J-L, Neve RL, Russo SJ, Han M-H, Nestler EJ, **Bolaños-Guzmán CA** (2010) Regulation of Extracellular Signal-regulated Kinase-2 within the Ventral Tegmental Area Modulates Drug- and Mood-related Comorbid Behaviors. Society for Neuroscience Annual Meeting, San Diego, CA.
31. Parise, EM†, Kroeck KG*, Alcantara LF†, Iñiguez SD†, Warren BL†, Wright KN*, **Bolaños-Guzmán CA** (2011) Long-lasting functional consequences of ketamine exposure during adolescence in male and female rats. Society for Neuroscience Annual Meeting, Washington, DC.
32. Alcantara LF†, Iñiguez SD†, Warren BL†, Wright KN†, Dennis TS†, Bobzean SM†, Perrotti LI, **Bolaños-Guzmán CA** (2011) Lasting changes in extracellular signal-regulated kinase signaling within the ventral tegmental area as a consequence of juvenile exposure to combined methylphenidate and fluoxetine in C57BL/6J mice. Society for Neuroscience Annual Meeting, Washington, DC.

33. Wright KN†, Warren BL†, Alcantara LF†, Iñiguez SD, **Bolaños-Guzmán CA** (2011) Juvenile administration of concomitant methylphenidate and fluoxetine alters behavioral reactivity to reward- and mood-related stimuli and disrupts ventral tegmental area gene expression in adulthood. Society for Neuroscience Annual Meeting, Washington, DC.
34. Warren BL†, Alcantara LF†, Wright KN†, Vialou V, Iñiguez SD†, Nestler EJ, **Bolaños-Guzmán CA** (2011) Anxiety- and depression-like state induced by vicarious social defeat can be rescued by chronic fluoxetine exposure. Society for Neuroscience Annual Meeting, Washington, DC.
35. Iñiguez SD†, Wright KN†, Alcantara LF†, Parise, EM†, Warren BL†, Neve RL, Nestler EJ, **Bolaños-Guzmán CA** (2011) Viral-mediated expression of extracellular signal-regulated kinase (ERK) in the nucleus accumbens regulates responsiveness to cocaine and behavioral despair. Society for Neuroscience Annual Meeting, Washington, DC.
36. Alcantara LF†, Warren BL†, Parise EM†, Iñiguez SD†, Wright KN†, **Bolaños-Guzmán CA** (2012). Nicotine exposure during adolescence alters long-term expression of ventral tegmental area extracellular signal-regulated kinase (ERK 1/2) in adulthood. Society for Neuroscience, New Orleans, LA.
37. Warren BL†, Alcantara LF†, Vialou VF, Wright KN†, Iñiguez SD, Nestler EJ, Russo SJ, **Bolaños-Guzmán CA** (2012) Witnessing social defeat of other animals induces an anxiety and depression-like state and increases nicotine consumption. Society for Neuroscience Annual Meeting, New Orleans, LA.
38. Iñiguez SD†, Stone MJ*, Rodriguez R*, Dayrit G*, Alcantara LF†, Warren BL†, Parise, EM†, Wright KN†, **Bolaños-Guzmán CA** (2012) Effects of fluoxetine exposure during adolescence on spatial memory performance in adulthood. Society for Neuroscience Annual Meeting, New Orleans, LA.
39. Parise EM†, Alcantara LF†, Warren BL†, Iniguez SD, Wright KN†, **Bolaños-Guzmán CA** (2012) Chronic exposure to ketamine during adolescence induces a persistent stress-resistant phenotype in adolescent and adult male rats. Society for Neuroscience Annual Meeting, New Orleans, LA.
40. Hodes GE, Golden SA, Christoffel DJ, Magida J, Pfau M, Heshmati M, Warren BL†, **Bolaños-Guzmán CA**, Russo SJ (2012) Innate peripheral immune responses predispose mice to susceptibility to repeated social defeat stress. Society for Neuroscience Annual Meeting, New Orleans, LA.
41. Parise EM†, Alcantara LF†, Warren BL†, Gonzalez N*, Greenwood MA†, **Bolaños-Guzmán CA** (2013) Repeated exposure to ketamine during adolescence increases sensitivity to ketamine in adulthood. Society for Neuroscience Annual Meeting, San Diego, CA.
42. Alcantara LF†, Warren BL†, Parise EM†, **Bolaños-Guzmán CA** (2013) Neurobiological consequences of concurrent chronic stress and nicotine exposure in adult rats previously

treated with nicotine during adolescence. Society for Neuroscience Annual Meeting, San Diego, CA.

43. Warren BL†, Alcantara LF†, Parise EM†, Vialou V, Nestler, EJ, **Bolaños-Guzmán CA** (2013) Neurobiological of physical versus emotional stress in adolescent male mice. Society for Neuroscience Annual Meeting, San Diego, CA.
44. Parise EM†, Alcantara LF†, Warren BL†, Wright KN†, Nestler, EJ, Iñiguez SD†, **Bolaños-Guzmán CA** (2013) Repeated ketamine exposure during adolescence produces long lasting stress resistance in adulthood. American College of Neuropsychopharmacology, Hollywood, FL.
45. Greenwood MA†, Volpe S*, Sial OK†, Alcantara LF†, Parise EM†, **Bolaños-Guzmán CA** (2014) Chronic opioid exposure during adolescence results in persistent behavioral and neurochemical changes into adulthood. Society for Neuroscience Annual Meeting, Washington, DC.
46. Sial OK†, Parise EM†, Alcantara LF†, Hadad R*, Volpe S*, Ayeni C*, **Bolaños-Guzmán CA** (2014) Repeated ketamine treatment produces a stress-resistant phenotype in adult male mice. Society for Neuroscience Annual Meeting, Washington, DC.
47. Volpe S*, Warren BL†, Sial OK†, Parise EM†, Alcantara LF†, **Bolaños-Guzmán CA** (2014) Depression-like state and deficits in granule cells induced by witnessing social defeat of other animals can be rescued by chronic fluoxetine treatment. Society for Neuroscience Annual Meeting, Washington, DC.
48. Alcantara LF†, Warren BL†, Sattler CR*, Duperrouzel JC*, Parise EM†, Sial OK†, **Bolaños-Guzmán CA** (2014) Nicotine treatment buffers the negative functional consequences induced by exposure to physical and emotional stress in adolescent male mice. Society for Neuroscience Annual Meeting, Washington, DC.
49. Parise EM†, Alcantara LF†, Sial OK†, Ayeni C*, Volpe S*, Nestler EJ, **Bolaños-Guzmán CA** (2014) Akt signaling within the nucleus accumbens regulates functional reactivity to chronic social defeat stress in male mice. Society for Neuroscience Annual Meeting, Washington, DC.
50. Hodes GE, Pfau ML, Leboeuf MC, Golden SA, Christoffel DJ, Meshmati M, Aleyasin H, Wong EHF, **Bolaños-Guzmán CA**, Merad M, Russo SJ (2014) Bone marrow derived leukocytes underlie susceptibility and resilience to social stress. Society for Neuroscience Annual Meeting, Washington, DC.
51. Parise EM†, Alcantara LF†, Sial OK†, Nestler EJ, **Bolaños-Guzmán CA** (2014) Akt signaling within the nucleus accumbens regulates functional reactivity to chronic social defeat stress in male mice. American College of Neuropsychopharmacology, Phoenix, AZ.
52. Parise EM†, Alcantara LF†, Sial OK†, Gonzalez AI*, Hardiman NJ*, **Bolaños-Guzmán CA** (2015) Repeated Ketamine treatment produces a stress-resistant phenotype in

adolescent mice. Society for Neuroscience Annual Meeting, Chicago, IL.

53. Greenwood MA†, Alcantara LF†, Parise EM†, Piekarski C*, Sial OK†, Beverly J, Steiner H, **Bolaños-Guzmán CA** (2015) Oxycodone exposure during adolescence and adulthood dysregulates striatal gene expression and facilitates hydrocodone-seeking in rats. Society for Neuroscience Annual Meeting, Chicago, IL.
54. Sial OK†, Parise EM†, Gancarz AM, Alcantara LF†, Gonzalez AI*, Gnecco T*, Dietz DM, **Bolaños-Guzmán CA** (2015) Repeated ketamine exposure during adolescence produces long-lasting changes in reward sensitivity to drugs of abuse and gene expression in the nucleus accumbens in adulthood. Society for Neuroscience Annual Meeting, Chicago, IL.
55. Alcantara LF†, Parise EM†, Sial OK†, Greenwood MA†, Gnecco T*, Hardiman NJ*, **Bolaños-Guzmán CA** (2015) Unpredictable chronic mild stress during adolescence shifts preference for nicotine and alters gene expression in the ventral tegmental area. Society for Neuroscience Annual Meeting, Chicago, IL.
56. Parise EM†, Sial OK†, Gancarz AM, Alcantara LF†, Dietz DM, **Bolaños-Guzmán CA** (2015) Repeated ketamine exposure during adolescence produces long-lasting changes in reward sensitivity and gene expression in the nucleus accumbens. American College of Neuropsychopharmacology, Hollywood, FL.
57. Alcantara LF†, **Bolaños-Guzmán CA** (2016) Chronic exposure to nicotine during adolescence, not adulthood, triggers long-term changes in mesolimbic expression of stress-related genes. Society for Neuroscience Annual Meeting, San Diego, CA.
58. Alcantara LF†, **Bolaños-Guzmán CA** (2017) Mutually experienced stress during adolescence buffers against social defeat-induced avoidance in physically stressed mice. Society for Neuroscience Annual Meeting, Washington, DC.
59. Cardona-Acosta AM*, Alcantara LF†, Rozofsky JP*, **Bolaños-Guzmán CA** (2018) Lasting neurobiological Consequences of Alprazolam exposure in adolescent C57BL/6J mice. National Hispanic Science Network on Drug Abuse Annual Meeting, Baltimore, MD.
60. Parise LF†, Sial OK†, Cardona-Acosta AM*, **Bolaños-Guzmán CA** (2018) Extracellular-regulated kinase 2 in the lateral habenula regulates reactivity to stress in adolescent male rats. American College of Neuropsychopharmacology, Hollywood, FL.
61. Sial OK†, Parise LF†, Skansi PN*, Cardona-Acosta AM*, Vieregg EL*, Gnecco T*, **Bolaños-Guzmán CA** (2018) Social stress during adolescence followed by western-style diet leads to physiological dysregulation, depressive phenotype, and decreases in reward sensitivity in adulthood. Society for Neuroscience Annual Meeting, San Diego, CA.
62. Cardona-Acosta AM*, Parise LF†, Sial OK†, Vieregg EL*, Rozofsky JP*, **Bolaños-Guzmán CA** (2018) Alprazolam exposure during adolescence dysregulates reward sensitivity and second messenger signaling in adulthood. Society for Neuroscience Annual Meeting, San Diego, CA.
63. Parise EM, Parise LF†, Lorsch ZS, Hamilton PJ, LaBonté B, **Bolaños-Guzmán CA**,

Nestler EJ (2018) Brain extracellular matrix genes dysregulated in major depressive disorder. American College of Neuropsychopharmacology, Hollywood, FL.

64. Parise LF†, Sial OK†, Cardona-Acosta AM*, Vieregg EL*, Skansi PN*, **Bolaños-Guzmán CA** (2018) Extracellular-regulated kinase 2 in the lateral habenula regulates reactivity to stress in adolescent male rats. Society for Neuroscience Annual Meeting, San Diego, CA.
65. Parise EM, Parise LF†, Lorsch ZS, Hamilton PJ, LaBonté B, **Bolaños-Guzmán CA**, Nestler EJ (2018) Brain extracellular matrix genes dysregulated in major depressive disorder. Society for Neuroscience Annual Meeting, San Diego, CA.
66. Sial OK†, Parise LF†, Skansi PN*, Cardona-Acosta AM*, Vieregg EL*, Gnecco T*, **Bolaños-Guzmán CA** (2019) Early-life adversity followed by western-style diet leads to physiological dysregulation, depressive phenotype, decreases in reward sensitivity, and treatment resistance in adulthood. Behavioral, Biology and Chemistry: Translational Research in Addiction (BBC) Annual Meeting, San Antonio, TX.
67. Sial OK†, Parise LF†, Gnecco T*, Cardona-Acosta AM*, **Bolaños-Guzmán CA** (2019) Social stress during adolescence followed by western-style diet leads to depressive phenotype and decreases in reward sensitivity in adulthood. National Hispanic Science Network on Drug Abuse Annual Meeting, New Orleans, LA.
68. Parise LF†, Sial OK†, **Bolaños-Guzmán CA** (2019) Extracellular-regulated kinase 2 in the lateral habenula regulates reactivity to stress in adolescent male rats. American College of Neuropsychopharmacology, Orlando, FL.
69. Sial OK†, Parise LF†, Skansi PN*, Cardona-Acosta AM*, Vieregg EL*, Gnecco T*, **Bolaños-Guzmán CA** (2019) Early-life adversity followed by western-style diet leads to physiological dysregulation, depressive phenotype, decreases in reward sensitivity, and treatment resistance in adulthood. International Behavioral Neuroscience Society (IBNS) Annual Meeting, Cairns, Australia.

†Graduate student
*****Undergraduate student

## INVITED TALKS

2020: Department of Psychiatry, Dartmouth College, Hanover, NH.
2020: Dopamine Society Meeting, Montreal, Canada.
2020: Department of Neuroscience, The University of Arizona, Tucson, AZ.
2019: Department of Biology, Chemistry and Environmental Science, Northern New Mexico College, Española, NM.
2018: Department of Psychology, University of Texas at Arlington.
2017: Department of Psychology, California State University Long Beach, CA.
2017: Texas A&M Neuroscience Institute, College Station, TX.

2016: Department of Biology, Chemistry and Environmental Science, Northern New Mexico College, Española, NM.
2016: Department of Psychology, University of California, Los Angeles.
2015: American College of Neuropsychopharmacology (ACNP), Hollywood, FL.
2015: Mount Sinai, Brain Institute, Department of Neuroscience, New York, NY.
2015: Department of Psychology, Texas A&M University, College Station, TX.
2015: National Hispanic Science Network on Drug Abuse, San Antonio, TX.
2015: International Behavioral Neuroscience Society (IBNS), Vancouver, BC, Canada.
2015: Health Sciences Center, Louisiana State University, New Orleans, LA.
2015: Department of Psychology, University of Texas at El Paso.
2015: Department of Psychology, University of Texas at Arlington.
2014: Martinez/Townsel Endowed Speaker: Summer Program in Neuroscience Ethics, and Survival (SPINES). Marine Biological Laboratory (MBL), Woods Hole, Massachusetts.
2014: National Hispanic Science Network on Drug Abuse, El Paso, TX.
2013: Pharmacology & Toxicology, University of Buffalo Medical School, Buffalo, NY.
2013: 50th Dopamine Society Meeting. Sardinia, Italy.
2012: 45th Winter Conference on Brain Research (WCBR).
2011: University of Texas at El Paso, Department of Psychology, El Paso, TX.
2011: Department of Biology, University of Wisconsin Eau Claire, Eau Claire, WI.
2010: California State University – San Bernardino, San Bernardino, CA.
2010: Department of Psychology, California State University, Long Beach, CA.
2008: Mount Sinai, Medical School and Neuroscience Department, New York, NY.
2007: College of Medicine, Florida State University: Biomedical Sciences Seminar Series. Tallahassee, FL.
2007: National Institute on Drug Abuse (NIDA) Workshop: Biological Basis for Co-Occurrence of Substance Abuse and Other Psychiatric Disorders. Bethesda, MD.
2006: 39th Winter Conference on Brain Research (WCBR), Steamboat Springs, CO.
2006: Society for the Advancement of Chicanos and Native Americans in Science (SACNAS): Recent Advancements in Psychological Research. Tampa, FL.
2005: Neuroscience Colloquium, Florida State University, Tallahassee, FL.
2005: Department of Psychology, Florida State University, Tallahassee, FL.
2005: Department of Psychiatry, Harvard Medical School. McLean Hospital, Belmont, MA.
2005: National Hispanic Science Network on Drug Abuse. Miami, FL.
2005: Career Opportunities in Research Education and Training: COR/NIH. Atlanta, GA.
2004: Winter Conference on Neural Plasticity (WCNP). 16th Annual Meeting, St. Lucia, West Indies.

## SERVICE AND OTHER PROFESSIONAL ACTIVITIES

**Editorial Service** Neuroscience Letters (2016–2020).
**Editorial Board** Neuropsychopharmacology (2012–present).

**Ad-hoc Journal Review**

Neuropsychopharmacology; Biological Psychiatry; The Journal of Neuroscience; Behavioural Brain Research; Pharmacology Biochemistry & Behavior; International Developmental Neuroscience; Journal of Neurochemistry; Psychopharmacology; Brain Research; Developmental Brain Research; Neuroscience; Neuroscience Letters; Genes, Brain & Behavior; Neurotoxicology & Teratology; European Journal of Neuropsychopharmacology; Psychoneuroendocrinology; Progress in Neuropsychopharmacology & Biological Psychiatry; Hormones & Behavior; Journal of Neurotransmission; PLoS ONE; Physiology & Behavior; Progress in Neurobiology; Journal of Clinical Investigations; Frontiers in Biology, Journal of Psychopharmacology; Proceedings of the National Academy of Sciences; Frontiers in Neuroendocrinology; Social Neuroscience; Scientific Reports

**Departmental and University Service**

**Department:**

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| 2016–18 | **Member**, Undergraduate Curriculum Committee, Department of Psychology, Texas A&M University. |
| 2016 | **Member**, Affective Science Search Committee, Department of Psychology, Texas A&M University. |
| 2017–present | **Member**, Diversity and Inclusion Committee, Department of Psychology, Texas A&M. |
| 2017–present | **Member**, Promotion and Tenure Review Committee, Department of Psychology, Texas A&M University. |
| 2015–16 | **Member**, Space Committee, Department of Psychology, Florida State University. |
| 2014–16 | **Chair**, Facilities Committee, Department of Psychology, Florida State University. |
| 2005–14 | **Membe**r, Facilities Committee, Department of Psychology, Florida State University. |

**College and University:**

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| 2019– | **Member**, Distinguished Professor Task Force, Texas A&M University. |
| 2019 | **Member**, Search Committee, Director ADVANCE Center, Dean of Faculties, Texas A&M University. |
| 2018–2020 | **Assistant Provost** for Diversity, Texas A&M University. |
| 2018–2020 | **Director**, Accountability, Climate, Equity, and Scholarship (ACES) Fellows Program, Texas A&M University. |
| 2018–2020 | **Director**, ADVANCE Scholars Program, Texas A&M University. |

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| 2017–present | **Reviewer**, Graduate Diversity Excellence Fellowship, Texas A&M University. |
| 2015–16 | **Reviewer**, Wilson-Auzenne University Fellowship, Florida State University. |
| 2015–16 | **Member**, University Diversity & Inclusion Committee, Florida State University. |
| 2013–16 | **Member**, Faculty Senate, Florida State University. |
| 2013–14 | **Member**, Graduate Student Training, Neuroscience Program, Florida State University. |
| 2011–15 | **Treasurer**, Society for Neuroscience Chapter, Florida State University. |
| 2010–14 | **Member**, Animal Care and Use Committee, Florida State University. |
| 2005–14 | **Chair**, Graduate Admissions Committee, Neuroscience Program, Florida State University. |

**Service to the Profession:**

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| 2019–2021 | **Member**, Constitution and Rules Committee, American College of Neuropsychopharmacology (ACNP). |
| 2019 | **Chair**, Scientific Program Committee, National Hispanic Science Network on Drug Abuse (NHSN). |
| 2017–2018 | **Member**, Planning Committee, International Behavioral Neuroscience Society (IBNS). |
| 2017–present | **Member**, Scientific Program Committee, National Hispanic Science Network on Drug Abuse (NHSN). |
| 2016–present | **Member**, National Steering Committee, National Hispanic Science Network on Drug Abuse (NHSN). |
| 2016– present | **Reviewer**, Travel Award Applications, American College of Neuropsychopharmacology (ACNP). |
| 2016–2019 | **Member**, Education and Training Committee, American College of Neuropsychopharmacology (ACNP). |
| 2015–16 | **Chair**, Minority Recruitment Taskforce, American College of Neuropsychopharmacology (ACNP). |
| 2014–2020 | **Member**, Biobehavioral Regulation, Learning ad Ethology (BRLE) NIH Study Section. |
| 2013–17 | **Member**, Scientific Program Committee, American College of Neuropsychopharmacology. |
| 2012–present | **Member,** Editorial Board, Neuropsychopharmacology. |
| 2012–14 | **Member**, Minority Recruitment Taskforce, American College of Neuropsychopharmacology (ACNP). |
| 2010–12 | **Member**, Membership Taskforce, American College of Neuropsychopharmacology (ACNP). |

**Grant Review Committees:**

2020 Research Grants and Scholarships, Natural Sciences and Engineering Research Council of Canada.
2019 NIHCSR – Special Emphasis Panel: ZDA1 HXO-H (26) R25.
2019 European Research Council.
2019 NIHCSR – Special Emphasis Panel: ZNS1 SRB-X(03) T32.
2018 NIHCSR – BRLE, Study Section (NIH); ZRG1 F02A-J (F31s and F32s) L.
2017 NIHCSR – BRLE, Study Section (NIH); ZRG1 F02A-J (F31s and F32s) L.
2016 NIHCSR – BRLE, Study Section (NIH); ZRG1 F02A-J (F31s and F32s) L.
2015 NIHCSR, ETTN - ZRG1 F02A-J (F31s and F32s) L, Study Section.
2014 NIHCSR – BRLE, Study Section (NIH)
2014 NIHCSR – ZRG1-J (20) L, Study Section (NIMH/NIDA)
2013 NIHCSR – Biobehavioral Regulation, Learning ad Ethology (BRLE), Study Section
2013 NIHCSR – BRLE, Study Section (NIH)
2013 NIHCSR – ZRG1-J (20) L, Study Section (NIMH/NIDA)
2012 National Hispanic Science Network on Drug Abuse (NHSN)
2012 National Center for Complementary and Alternative Medicine (NCCAM) –ZAT1-PK24
2012 NIHCSR – ZRG1-J (F31s and F32s) L, Study Section (NIMH/NIDA)
2011 NIHCSR, Special Emphasis Panel ZRG1 F02A-J 20L, (F31s and F32s).
2011 NIHCSR, ETTN - ZRG1 F02A-J (F31s and F32s) L, Study Section.
2010 NIMH, Special Emphasis Panel ZMH1 ERB-L (03).
2009 U.S. Civilian & Development Foundation (CRDF) for the Independent States of the Former Soviet Union (STCU #5008)
2009 NCAM-NIH, National Center for Complementary and Alternative Medicine (NCCAM) Special Emphasis Panel ZAT1 PK (09).
2007 NIMH, Special Emphasis Panel ZMH1SRC (99).

## CLASSROOM TEACHING

**Texas A&M University:**

Spring 2020 Clinical Psychopharmacology (PSYC 650), Graduate
Fall 2018 Clinical Psychopharmacology (PSYC 650), Graduate
Spring 2018 Biology of Psychological Disorders (PSYC 333; NRSC333) – Undergraduate
Spring 2018 Clinical Psychopharmacology (PSYC 489A; C) – Undergraduate
Spring 2017 Clinical Psychopharmacology (PSYC 650) – Graduate

**Florida State University:**

Biological Psychology (PSB 5056) – Graduate
Brain and Behavior (PSY 2000) –Undergraduate
Special topics in Psychology (PSY 4930) – Undergraduate

Drugs, Brain and Behavior (PSY 4930) – Undergraduate (developed course in 2006)
Clinical Psychopharmacology (PSB 4447) – Undergraduate (developed course in 2009)
Neuropharmacology (PSB 5347) – Graduate (developed course in 2009)
Neurobiology of Brain Dysfunction (PSB 4240) – Undergraduate (developed course in 2011)

## RESEARCH MENTORING

### Graduate Students

**Texas A&M University (chair):**

2019 **Astrid Cardona,** Department of Psychological and Brain Sciences.
2019 **Ernesto Cardoso,** Department of Psychological and Brain Sciences.
2016 **Omar K. Sial,** Department of Psychological and Brain Sciences.
2016–18 **Lyonna F. Parise, PhD,** Department of Psychological and Brain Sciences, "Role of extracellular regulated kinase 2 within lateral habenula in mediating antidepressant response and resilience during adolescence."
**Current position:** Postdoctoral Fellow, Mount Sinai School of Medicine.

**Florida State University (chair):**

2011–2016 **Eric M. Parise*, PhD,** Department of Psychology, "Neurocircuitry underlying ketamine-induced antidepressant effects during adolescence."
**Current position:** Postdoctoral Fellow, Mount Sinai School of Medicine.
*Awarded Predoctoral NRSA 2014–2016.
2008–2013 **Brandon L. Warren, PhD,** Department of Psychology, "Neurobiological sequelae of emotional and physical stress during adolescence in male mice."
**Current position:** Assistant Professor, Department of Pharmacodynamics, University of Florida, Gainesville, FL.
2007–2011 **Sergio D. Iñiguez*, PhD,** Department of Psychology, "Neurobiological consequences of fluoxetine exposure during adolescence." *Awarded Predoctoral NRSA 2009–2011. **Current position:** Associate Professor, Department of Psychology, University of Texas, El Paso.
2013–2016 **Lyonna F. Alcantara, MA**, Department of Psychology, "Combined methylphenidate and fluoxetine or cocaine exposure during adolescence alters ERK2-related signaling in the VTA and increase sensitivity to nicotine reward in adulthood."
2014–2016 **Omar K. Sial, BS**, Department of Psychology, "New model to understanding metabolic syndrome and depression comorbidity."
2013–2015 **Maria A. Greenwood**, **MS,** Department of Psychology, "Ontogeny of drug exposure and mood dysregulation."
2013–2016 **Jacob S. Brewer, MA,** Department of Psychology, "Behavioral and genetic profiles of mice witnessing stressful events."

2005–2008 **Melissa Maffeo, MA**, Department of Psychology, "Nicotine exposure during adolescence regulates behavioral responsiveness to mood-eliciting stimuli in adulthood."

**Doctoral and Master Students (committee member)**

**Texas A&M University:**

2020– Sehar S. Jewanee, Master's Thesis Committee (Biomedical Sciences)
2019– Himanshu Gangal, Ph.D. Dissertation Committee, (College of Medicine)
2019– Komali Vykuntam, Master's Thesis Committee (Biotechnology)
2019– Megan Davis, Master's Thesis Committee (College of Medicine)

**Florida State University:**

2013–2016 Mandy Dossat, Ph.D. Dissertation Committee, (College of Medicine)
2013–2016 Katherine Wright, Ph.D. Dissertation Committee, (College of Medicine)
2010–2014 Jenna McHenry, Ph.D. Dissertation Committee, (Department of Psychology)
2011–2016 Samantha Saland, Ph.D. Dissertation Committee, (College of Medicine)
2011–2016 Michael Dentzau, Ph.D. Dissertation Committee, (College of Education)
2008–2010 Michael Darcy, Ph.D. Dissertation Committee, (College of Medicine)
2009–2011 Fiona Smyth, Ph.D. Dissertation Committee, Fiona Smyth (College of Medicine)
2009–2013 Adam Smith, Ph.D. Dissertation Committee (Neuroscience Program)
2009–2011 Samantha Saland, Master's Thesis Committee, (Department of Psychology)

**Undergraduate Honor's Thesis (chair; committee member**)

**Chair**, John Antapasis, 2005-2007
**Chair**, Daniel W. Kinka, 2006-2008
**Chair**, Kyle Powers, 2006-2008
**Member**, Darleine Arce, 2008-2010
**Chair**, Lindsey C. Davis, 2006-2010
**Chair**, Kyle G. Kroeck, 2008-2011
**Chair**, Pedro Torrez, 2011-2013
**Chair**, Jacqueline Duperrouzel, 2011-2013
**Chair**, Leah Weinstein, 2011-2013
**Chair**, Carley Sattler, 2011-2014
**Member**, Corinne Bunn, 2011-2013
**Member**, Sarah Labat, 2011-2013

## PROFESSIONAL MEMBERSHIPS

Society for Neuroscience (Member).
American College of Neuropsychopharmacology (Fellow).

Society for the Advancement of Chicanos and Native Americans in Science (Life Member).
National Hispanic Science Network on Drug Abuse (Member).
International Behavioral Neuroscience Society (Member).