

CURRICULUM VITAE
Scott Edwards, PhD

Current Title: Tenure-Track Assistant Professor
Business Address: Louisiana State University Health Sciences Center
Department of Physiology
1901 Perdido St. New Orleans, LA 70112

Business Telephone: (619) 241-3380
Business Fax: (504) 568-6174
Business Email Address: sedwa5@lsuhsc.edu

Birthdate and Birthplace: December 28, 1976, Abilene, TX
Spouse: Kimberly Edwards
Citizenship: United States of America

Education:

1995-2000 Bachelor of Science Degree in Biochemistry
College of Natural Sciences
The University of Texas, Austin, TX

2000-2007 Doctor of Philosophy Degree in Neuroscience
Laboratory of David W. Self
Department of Psychiatry and Center for Basic Neuroscience
The University of Texas Southwestern Medical Center, Dallas, TX

2007-2013 Post-Doctoral Fellowship
Laboratory of George F. Koob
Committee on the Neurobiology of Addictive Disorders
The Scripps Research Institute, La Jolla, CA

Academic, Professional, and Research Appointments:

2013-Present Tenure-Track Assistant Professor
Department of Physiology
LSU Health Sciences Center, New Orleans, LA

2013-Present Alcohol and Drug Abuse Center of Excellence
LSU Health Sciences Center, New Orleans, LA

2014-Present Neuroscience Center of Excellence
LSU Health Sciences Center, New Orleans, LA

Membership in Professional Organizations:

1999-Present	Member, Society for Neuroscience (SFN)
2009-Present	Member, Research Society on Alcoholism (RSA)
2013-Present	RSA Animal Research and Ethics Committee
2014-Present	Member, American Physiological Society (APS)
2014-Present	Member, American Pain Society
2015	RSA Conference Program Committee
2017-2019	APS Conference Committee
2017-2019	APS Central Nervous System Section Steering Committee

Awards and Honors:

1998-1999	Undergraduate Research Fellowship The University of Texas at Austin
1999	ASPET Summer Undergraduate Research Fellowship Department of Pharmacology, Vanderbilt University
1999	Microscopy Society of America Undergraduate Research Fellowship
2011	NIH/NIAAA Travel Award Second International Congress on Alcoholism and Stress, Volterra, Italy
2011	NIAAA Training Directors Meeting and Trainee Workshop Travel Award Center for Alcohol and Addiction Studies, Brown University
2013	Winter Conference on Brain Research Travel Fellowship 46 th Annual Meeting, Breckenridge, Colorado
2014	NIH/NIAAA Young Investigator Award Third International Congress on Alcoholism and Stress, Volterra, Italy
2015	American College on Neuropsychopharmacology (ACNP) Travel Award
2016	LSU School of Medicine Faculty Assembly Outstanding Accomplishments by a Junior Faculty Member Award

TEACHING EXPERIENCE AND RESPONSIBILITIES

Creation of Enduring Teaching Materials

English R, **Edwards S**, Armstrong M, McDonough K, Molina P.
Alcohol use disorder: An interprofessional case-based exercise. MedEdPORTAL; 2014.
Available from: www.mededportal.org/publication/9916

Edwards S, Molina PE, McDonough KH, Mercante DE, Gualdo TP.
Integrating an interprofessional education experience for physician assistant students into a human physiology course. *Submitted to The Journal of Physician Assistant Education*

Formal Course Responsibilities

- 2002 The University of Texas at Dallas, Richardson, TX
Course Director: Neuroscience of Drug Addiction
- 2014-2017 LSU Health Sciences Center, New Orleans, LA
Course Co-Instructor: Biological Systems (INTER 132)
Endocrine Physiology Section
Experimental Design & Analysis Section
Interdisciplinary Graduate/Physical Therapy/Physician's Assistant Programs
- 2015-2016 LSU Health Sciences Center, New Orleans, LA
Course Co-Instructor: General and Oral Physiology (DHY 3202)
Dental Hygiene Program
- 2015 LSU Health Sciences Center, New Orleans, LA
Course Co-Director and Co-Instructor: Endocrinology (PHYSIO 216)
Physiology Graduate Program
- 2015-2016 LSU Health, New Orleans, LA
Course Co-Instructor: Nursing Pathophysiology (HS 3410)
School of Nursing
- 2015 LSU Health, New Orleans, LA
Course Co-Instructor: Ethics in the Biomedical Sciences (INTER 220)
Interdisciplinary Graduate Program
- 2016 LSU Health, New Orleans, LA
Course Co-Instructor: Molecular Neurobiology (NEURO 250)
Neuroscience Graduate Program
- 2016 LSU Health, New Orleans, LA
Course Co-Instructor: Nursing Physiology
School of Nursing

Undergraduate, Medical, or Graduate Students Trained (2013-Present):

Undergraduate Students

- 2014 Meghan Blackwell (Howard University)
2015 Jonathan Reppel (Louisiana Tech University)
2016 Adrianna Jones (Louisiana State University)

Medical Students

- 2015-Present Brooke Towne (LSUHSC School of Medicine)
2016 Maggie Coleman (LSUHSC School of Medicine)

Graduate Students

2014-Present Dissertation Mentor - M. Adrienne McGinn (LSUHSC-NO Physiology)
2015-Present NIH/NIAAA F30 Co-Sponsor - Allyson Schreiber (LSUHSC-NO Physiology)
2016-Present Thesis Mentor - Rod I. Paulsen (LSUHSC-NO Master's Program)
2017-Present Dissertation Co-Mentor - Robby Fuchs (LSUHSC-NO Physiology)

Thesis and Dissertation Committees:

2014 Thesis Committee Member - Brittni B. Baynes (LSUHSC-NO Physiology)
2014-2016 Dissertation Committee Member - Jacques P. Mayeux (LSUHSC-NO Physiology)
2014-Present Dissertation Committee Member - John K. Maxi (LSUHSC-NO Physiology)
2015-Present Dissertation Committee Member - Allyson Schreiber (LSUHSC-NO Physiology)
2015-Present Dissertation Committee Member - Alyssa Fournett (LSUHSC-NO Pharmacology)
2015-Present Dissertation Committee Member - Van K. Ninh (LSUHSC-NO Physiology)

Post-Doctoral or Post-Residency Fellows Trained:

2014-2015 Dr. Dana M. LeBlanc (LSUHSC-NO Pediatrics/Hematology/Oncology Fellow)
2015-Present Dr. Amanda R. Pahng (LSUHSC-NO Physiology)

RESEARCH AND SCHOLARSHIP

Grants and Contracts:

Funded

2003-2006 NIH Ruth L. Kirchstein Individual National Research Service Award
Protein Phosphorylation States in Drug Addiction
National Institute on Drug Abuse (F31DA016472)

2009-2011 NIH Ruth L. Kirchstein Individual National Research Service Award
Role of Vasopressin/ERK Signaling in Ethanol Dependence
National Institute on Alcohol Abuse and Alcoholism (F32AA018250)

2012-2017 NIH Pathway to Independence Award
Intersection of Pain and Ethanol-Seeking Mechanisms in Ethanol Dependence
National Institute on Alcohol Abuse and Alcoholism (K99/R00AA020839)

2014-2015 LSUHSC Department of Pediatrics Intramural Clinical and Translational Grants Program
Neuronal ERK/MAPK Signaling in a Mouse Model of Sickle Cell Disease Pain
PI: LeBlanc; Research Mentor: Edwards \$25,000

2015 LSUHSC Alcohol and Drug Abuse Center of Excellence Pilot Grant Program
Combinations of Levomepromazine and Morphine for Analgesia in Recovered Addicts
PIs: Paul, Edwards \$15,000

2016-2019 LSUHSC Comprehensive Alcohol-HIV/AIDS Research Center
National Institute of Alcoholism and Alcohol Abuse (2P60AA009803-22-Sub 7717)
PI of Outreach and Information Dissemination Core

Journal Publications (48 Refereed):

- Edwards S**, Simmons DL, Galindo DG, Doherty JM, Scott AM, Hughes PD, Wilcox RE. Antagonistic effects of dopaminergic drugs and ethanol on PKA-mediated phosphorylation of DARPP-32 and the NR1 subunit of the NMDA receptor. Alcoholism: Clinical and Experimental Research 2002 26(2): 173-80.
- Choi KH, Rahman Z, **Edwards S**, Hall S, Neve RL, Self DW. Opposite effects of GluR1 and PKA-resistant GluR1 overexpression in the ventral tegmental area on cocaine reinforcement. Annals of the New York Academy of Sciences 2003 1003: 372-4.
- Bolaños CA, Perrotti LI, **Edwards S**, Eisch AJ, Barrot M, Olson VG, Russell DS, Neve RL, and Nestler EJ. Phospholipase C in distinct regions of the ventral tegmental area differentially modulates mood-related behaviors. The Journal of Neuroscience 2003 23: 7569-7576.
- Perrotti LI, Bolaños CA, Choi KH, Russo SJ, **Edwards S**, Ulery PG, Wallace DL, Self DW, Nestler EJ, and Barrot M. Delta FosB accumulates in a GABAergic cell population in the posterior tail of the ventral tegmental area after psychostimulant treatment. European Journal of Neuroscience 2005 21: 2817-2824.
- Olson VG, Zabetian CP, Bolaños CA, **Edwards S**, Barrot M, Eisch AJ, Hughes T, Self DW, Neve RL, and Nestler EJ. Regulation of drug reward by CREB: Evidence for two functionally distinct subregions of the ventral tegmental area. The Journal of Neuroscience 2005 25: 5553-5562.
- Edwards S**, Self DW. Monogamy: Dopamine ties the knot. Nature Neuroscience 2006 9(1): 7-8.
- Edwards S**, Whisler KN, Fuller D, Orsulak PJ, Self DW. Addiction-related alterations in D1 and D2 dopamine receptor responsiveness following chronic cocaine self-administration. Neuropsychopharmacology 2007 32: 354-366.
- Edwards S**, Graham DL, Bachtell RK, Self DW. Region-specific tolerance to cocaine-regulated cAMP-dependent protein phosphorylation following chronic cocaine self-administration. European Journal of Neuroscience 2007 25: 2201-2213.
- Graham DL, **Edwards S**, Bachtell RK, DiLeone RJ, Rios M, Self DW. Dynamic BDNF activity in nucleus accumbens with cocaine use increases self-administration and relapse. Nature Neuroscience 2007 10(8): 1029-1037.
- Graham DL, Krishnan V, Larson EB, Graham A, **Edwards S**, Bachtell RK, Simmons D, Gent LM, Berton O, Bolanos CA, DiLeone RJ, Parada LF, Nestler EJ, Self DW. Tropomyosin-Related Kinase B in the mesolimbic dopamine system: region-specific effects on cocaine reward. Biological Psychiatry 2009 65(8): 696-701.
- Edwards S**, Graham DL, Whisler KN, Self DW. Phosphorylation of GluR1, ERK, and CREB following spontaneous withdrawal from chronic heroin self-administration. Synapse 2009 63(3): 224-235.
- Orio L, **Edwards S**, George O, Parsons L, Koob GF. A role for the endocannabinoid system in the increased motivation for cocaine in dependence. The Journal of Neuroscience 2009 29(15): 4846-4857.

- Enwright JF, Wald M, Paddock M, Hoffman E, Arey R, **Edwards S**, Spencer S, Nestler EJ, McClung CA. Δ FosB indirectly regulates CCK promoter activity. Brain Research 2010 1329: 10-20.
- Taffe MA, Kotzebue RW, Crean RD, Crawford EF, **Edwards S**, Mandyam CD. Long-lasting reduction in hippocampal neurogenesis by alcohol consumption in adolescent nonhuman primates. Proceedings of the National Academy of Sciences U.S.A. 2010 107(24): 11104-11109.
- Edwards S**, Koob GF. The neurobiology of dysregulated motivational systems in drug addiction. Future Neurology 2010 5(3): 393-410.
- Larson EB, Akkentli F, **Edwards S**, Graham DL, Simmons DL, Alibhai IN, Nestler EJ, Self DW. Striatal regulation of DeltaFosB, FosB, and cFos during cocaine self-administration and withdrawal. Journal of Neurochemistry 2010 115(1): 112-122.
- Edwards S**, Whisler KN, Bachtell RK, Guzman D, Self DW. Emergence of context-associated GluR1 and ERK phosphorylation in the nucleus accumbens core during withdrawal from cocaine self-administration. Addiction Biology 2011 16(3): 450-7.
- Choi KH, **Edwards S**, Graham DL, Han MH, Larson EB, Whisler KN, Simmons D, Rahman Z, Monteggia LM, Eisch AJ, Neve RL, Nestler EJ, Self DW. Reinforcement-related regulation of AMPA glutamate receptor subunits in the ventral tegmental area enhances cocaine reinforcement. The Journal of Neuroscience 2011 31(21): 7927-7937.
- Stowe GN, Schlosberg JE, Vendruscolo LF, **Edwards S**, Misra KK, Schulteis G, Mayorov AV, Zakhari JS, Koob GF, Janda KD. Developing a vaccine against multiple psychoactive targets: a case study of heroin. Current Drug Targets-CNS and Neurological Disorders 2011 10(8): 865-875.
- Stowe GN, Vendruscolo LF, **Edwards S**, Schlosburg JE, Misra KK, Schulteis G, Mayorov AV, Zakhari JS, Koob GF, Janda KD. A vaccine strategy that induces protective immunity against heroin. Journal of Medicinal Chemistry 2011 54(14): 5195-204.
- Edwards S**, Guerrero M, Ghoneim O, Roberts E, Koob GF. Evidence that vasopressin V1b receptors mediate the transition to excessive drinking in ethanol-dependent rats. Addiction Biology 2012 17(1): 76-85.
- Edwards S**, Vendruscolo LF, Schlosburg JE, Misra KK, Wee S, Park PE, Schulteis G, Koob GF. Development of mechanical hypersensitivity during ethanol dependence and extended access to heroin self-administration: alleviation by CRF1 receptor antagonism. Neuropharmacology 2012 62(2): 1142-1151.
- Recinto P, Samant ARH, Chavez G, Kim A, Yuan CJ, Soleiman M, **Edwards S**, George O, Grant Y, Wee S, Koob GF, Mandyam CD. Levels of neural progenitors in the hippocampus predict memory impairments and relapse to drug seeking as a function of excessive methamphetamine self-administration. Neuropsychopharmacology 2012 37(5): 1275-1287.
- Egli M, Koob GF, **Edwards S**. Alcohol dependence as a chronic pain disorder. Neuroscience and Biobehavioral Reviews 2012 36: 2179-2192.

- Barbier E, Vendruscolo LF, Schlosburg JE, **Edwards S**, Park PE, Misra KK, Cheng K, Rice K, Schank J, Schulteis G, Koob GF, Heilig M. The NK1 receptor antagonist L822429 reduces heroin reinforcement. Neuropsychopharmacology 2013 38(6): 976-984.
- Schlosburg JE, Vendruscolo LF, Bremer P, Lockner JW, Nunes AA, Stowe GN, **Edwards S**, Janda KD, Koob GF. Heroin vaccine blocks relapse and compulsive intake of heroin. Proceedings of the National Academy of Sciences U.S.A. 2013 110(22): 9036-41.
- Park PE, Vendruscolo LF, Schlosburg JE, **Edwards S**, Schulteis G, Koob GF. Corticotropin-releasing factor (CRF) and alpha2-adrenergic receptors mediate heroin withdrawal-potentiated startle in rats. The International Journal of Neuropsychopharmacology 2013 16: 1867-75.
- Kallupi M, Wee S, **Edwards S**, Whitfield TW Jr, Oleata CS, Luu G, Schmeichel BE, Koob GF, Roberto M. Kappa opioid receptor-mediated dysregulation of gamma-aminobutyric acidergic transmission in the central amygdala in cocaine addiction. Biological Psychiatry 2013 74(7): 520-528.
- Edwards S**, Baynes BB, Carmichael C, Zamora-Martinez ER, Koob GF, Gilpin NW. Traumatic stress reactivity promotes excessive alcohol drinking and alters the balance of prefrontal cortex-amygdala activity. Translational Psychiatry 2013 3:e296.
- Apkarian AV, Neugebauer V, Koob GF, **Edwards S**, Levine J, Egli M, Regunathan S. Neural mechanisms of pain and alcohol dependence. Pharmacology, Biochemistry, and Behavior 2013 112: 34-41.
- Edwards S**, Koob GF. Escalation of drug self-administration as a hallmark of addiction liability. Behavioural Pharmacology 2013 24 (5-6): 356-362.
- Koob GF, Buck C, Cohen A, **Edwards S**, Park PE, Schlosburg JE, Schmeichel BE, Vendruscolo LF, Wade CL, Whitfield TW Jr, George O. Addiction as a stress surfeit disorder. Neuropharmacology 2014 76: 370-82.
- Zamora-Martinez ER, **Edwards S**. Neuronal extracellular signal-regulated kinase (ERK) signaling as marker and mediator of alcohol and opioid dependence. Frontiers in Integrative Neuroscience 2014 8:24.
- Mazei-Robison MS, Appasani R, **Edwards S**, Wee S, Taylor SR, Picciotto MR, Koob GF, Nestler EJ. Self-administration of ethanol, cocaine, or nicotine does not decrease the soma size of ventral tegmental area dopamine neurons. PLoS One 2014 9(4):e95962.
- Whitaker AM, Gilpin NW, **Edwards S**. Animal models of post-traumatic stress disorder and recent neurobiological insights. Behavioural Pharmacology 2014 25:398-409.
- Cohen A, Treweek J, **Edwards S**, Molini R, Schulteis G, Koob GF, George O. Abstinence-induced CRF1R-dependent anxiety-like behavior and hyperalgesia only occurs in rats with long but not short access to nicotine self-administration. Addiction Biology 2015 20:56-68.
- Park PE, Schlosburg JE, Vendruscolo LF, Schulteis G, **Edwards S**, Koob GF. Chronic CRF1 receptor blockade reduces heroin intake escalation and dependence-induced hyperalgesia. Addiction Biology 2015 20:275-284.

- Whitfield TW Jr, Schlosburg JE, Wee S, Gould A, George O, Grant Y, Zamora-Martinez ER, Crawford E, **Edwards S**, Vendruscolo LF, Koob GF. Kappa opioid receptors in the nucleus accumbens shell mediate escalation of methamphetamine intake. The Journal of Neuroscience 2015 35:4296-4305.
- Helms CM, Anderson SM, Bell RL, Bennett AJ, Davies DL, Kosten TA, Leeman R, Panicker S, Platt DM, Weiner JL, **Edwards S**. The importance of animals in advancing research on alcohol use disorders. Alcoholism: Clinical and Experimental Research 2015 39:575-578.
- Kim A, Zamora-Martinez ER, **Edwards S**, Mandyam CD. Structural reorganization of pyramidal neurons in the medial prefrontal cortex of alcohol-dependent rats is associated with altered glial plasticity. Brain Structure and Function 2015 220:1705-1720.
- LeBlanc D, McGinn MA, Itoga CA, **Edwards S**. The affective dimension of pain as a risk factor for drug and alcohol addiction. Alcohol 2015 49:803-809.
- Edwards S**, Little HJ, Richardson HR, Vendruscolo LF. Divergent regulation of distinct glucocorticoid systems in alcohol dependence. Alcohol 2015 49:811-816.
- Vendruscolo LF, Estey D, Goodell V, Macshane LG, Logrip ML, Schlosburg JE, McGinn MA, Zamora-Martinez ER, Belanoff JK, Hunt HJ, Sanna PP, George O, Koob GF, **Edwards S**, Mason BJ. Glucocorticoid receptor antagonism decreases alcohol seeking in alcohol-dependent individuals. Journal of Clinical Investigation 2015 125:3193-3197.
- Whitaker AM, Farooq MA, **Edwards S**, Gilpin NW. Post-traumatic stress avoidance is attenuated by corticosterone and associated with brain levels of steroid receptor co-activator-1 in rats. Stress 2016 19:69-77.
- Somkuwar SS, Staples MC, Fannon M, Zamora-Martinez ER, Kim A, Navarro AI, **Edwards S**, Mandyam CD. Alcohol dependence-induced regulation of the proliferation and survival of adult brain progenitors is associated with altered BDNF-TrkB signaling. Brain Structure and Function 2016 221:4319-4335.
- Mayeux J, Katz P, **Edwards S**, Middleton J, Molina P. Inhibition of endocannabinoid degradation improves outcomes from mild traumatic brain injury: a mechanistic role for synaptic hyperexcitability. Journal of Neurotrauma 2016 Jun 27 [Epub ahead of print].
- McGinn MA, Paulsen RI, Itoga CA, Farooq MA, Reppel JE, Edwards KN, Whitaker AM, Gilpin NW, **Edwards S**. Withdrawal from chronic nicotine exposure produces region-specific tolerance to alcohol-stimulated GluR1 phosphorylation. Alcoholism: Clinical & Experimental Research 2016 Oct 31 [Epub ahead of print].
- Pahng AR, McGinn MA, Paulsen RI, **Edwards S**. The prefrontal cortex as a critical gate of negative affect in alcohol use disorder. *Submitted to Current Opinion in Behavioral Sciences*.
- Juarez B, Morel C, Ku SM, Ribeiro E, Zhang H, Crumiller M, Jackson K, Roman-Ortiz C, Croote D, Calipari ES, Zhang S, Hodes G, Lu Y, Cederbaum AI, Vendruscolo LF, **Edwards S**, Roberts A, Chaudhury D, Friedman AK, Koob GF, Han MH. Midbrain circuit regulation of individual alcohol drinking behaviors. *Submitted to Nature Communications*.

Book Chapters (5):

Edwards S, Koob GF. Experimental psychiatric illness and drug abuse models: from human to animal – an overview. In: Kobeissy FH (Ed.) Psychiatric Disorders: Methods and Protocols (series title: Methods in Molecular Biology) 2012 829: 31-48. Humana Press: New York.

Katz PS, **Edwards S**, Molina PE. Cannabinoids. In: Peterson PK and Toborek M (Eds.) Neuroinflammation and Neurodegeneration. 2014 XVII: 487-510. Springer: New York.

Edwards S. Reinforcement principles for addiction medicine; from recreational drug use to psychiatric disorder. In: Ekhtiari H and Paulus M (Eds.) Progress in Brain Research 2016 223: 77-89. Elsevier: Amsterdam.

McGinn MA, **Edwards S**. CRF1 receptor signaling at the intersection of pain and opioid addiction. In: Preedy V (Ed.) The Neuropathology of Drug Addictions and Substance Misuse 2016 1: 891-896. Academic Press

Whitaker AM, Priddy B, **Edwards S**, Vendruscolo LF. The role of brain stress systems in alcohol dependence. In: Preedy V (Ed.) The Neuropathology of Drug Addictions and Substance Misuse 2016 1: 610-614. Academic Press

Abstracts:

Pahng AR, Paulsen RI, Farooq MA, Edwards KN, **Edwards S**. Dysregulation of hippocampal and frontocortical JNK signaling in alcohol dependence. *Volterra Alcoholism and Stress Conference Abstracts (2017)*.

McGinn MA, Pahng AR, Edwards KN, **Edwards S**. Neuroadaptations in cingulate cortex glucocorticoid signaling in alcohol dependence. *Volterra Alcoholism and Stress Conference Abstracts (2017)*.

Blackwelder CG, Stielper Z, Sayde P, Mayeux J, Gilpin NW, **Edwards S**, Molina PE. Ceftriaxone attenuates alcohol-drinking and anxiety-like behavior following mild traumatic brain injury in rats. *IBIA Abstract (2017)*.

Stielper ZF, Mayeux JP, **Edwards S**, Gilpin NW, Molina PE. Post-traumatic brain injury (TBI) cannabinoid receptor expression downregulation in basolateral amygdala of alcohol-drinking rats. *IBIA Abstract (2017)*.

Mayeux J, Gilpin N, **Edwards S**, Molina P. Mild traumatic brain injury increases alcohol drinking: A potential mechanistic role for brain stress systems. *Research Society on Alcoholism Meeting (2016)*.

Pahng AR, Farooq MA, Edwards KN, **Edwards S**. Neuroadaptations associated with excessive alcohol seeking-behavior in dependent rats. *Research Society on Alcoholism Meeting (2016)*.

McGinn MA, Whitaker AM, Itoga CA, Farooq MA, Paulsen RI, Reppel JE, Gilpin NW, **Edwards S**. Region-specific tolerance to alcohol-stimulated glutamate receptor phosphorylation in the context of nicotine dependence. *Research Society on Alcoholism Meeting (2016)*.

- Middleton J, Simon L, Maxi J, Schumacher J, **Edwards S**, Birke L, Molina P. Physiological synaptic changes in the caudate nucleus of acute alcohol-administered SIV-infected macaques. *Research Society on Alcoholism Meeting (2016)*.
- McGinn MA, Itoga CA, Paulsen RI, Reppel JE, Farooq MA, Gilpin NW, **Edwards S**. Tolerance to alcohol-stimulated glutamate channel phosphorylation in the central amygdala and prefrontal cortex after chronic nicotine exposure. *Experimental Biology Meeting (2016)*.
- Towne BV, LeBlanc DM, Paul JA, Gupta K, **Edwards S**. Reduced glutamate channel phosphorylation in pain-related brain areas in a transgenic model of sickle cell disease. *Experimental Biology Meeting (2016)*.
- Byerley LO, Reppel JE, Pahng AR, **Edwards S**. Omega-3 dietary fatty acids improve spatial learning and memory but do not alter the escalation of alcohol drinking. *Experimental Biology Meeting (2016)*.
- Itoga CA, McGinn MA, Paulsen RI, Reppel JE, Farooq MA, Gilpin NW, **Edwards S**. Tolerance to alcohol-stimulated glutamate channel phosphorylation in the central amygdala and prefrontal cortex after chronic nicotine exposure. *Gordon Research Conference: Alcohol & the Nervous System (2016)*.
- McGinn MA, Farooq MA, Reppel JE, Gilpin NW, **Edwards S**. Tolerance to alcohol-stimulated GluR1 phosphorylation in the amygdala in the context of nicotine dependence. *American College of Neuropsychopharmacology Meeting (2015)*.
- Whitaker AM, Farooq MA, **Edwards S**, Gilpin NW. Post-traumatic stress avoidance is attenuated by corticosterone and associated with brain levels of steroid receptor co-activator-1 in rats. *American College of Neuropsychopharmacology Meeting (2015)*.
- McGinn MA, Farooq M, Edwards KN, Gilpin NW, **Edwards S**. Tolerance to alcohol-stimulated GluR1 phosphorylation in the amygdala in the context of nicotine dependence. *Alcoholism-Clinical and Experimental Research* 39 (2015) 123A.
- Mayeux JP, **Edwards S**, Gilpin NW, Molina PE. Traumatic brain injury to the prefrontal cortex (PFC) transiently increases alcohol self-administration. *Alcoholism-Clinical and Experimental Research* 39 (2015) 58A.
- Vendruscolo LF, Macshane LG, Zamora-Martinez ER, Schlosburg JE, Belanoff JK, Hunt HJ, Sanna PP, Koob GF, **Edwards S**. Glucocorticoid receptor dysregulation in alcohol dependence. *Alcoholism-Clinical and Experimental Research* 38 (2014) 335A.
- Edwards S**. Excessive alcohol drinking in the context of sensitized stress signaling. Program No. S47. Volterra Alcoholism and Stress Conference Abstracts. *Alcohol* 48 (2014) 159-178.
- Edwards S**, Zamora-Martinez ER, Schlosburg JE, Logrip ML, Koob GF, Vendruscolo LF. Functional recruitment of central amygdala glucocorticoid receptor signaling in alcohol-dependent rats. Program No. S11. Volterra Alcoholism and Stress Conference Abstracts. *Alcohol* 48 (2014) 159-178.

- Vendruscolo LF, Macshane LG, Schlosburg JE, Buck CL, Malavar JC, Belanoff JK, Hunt HJ, **Edwards S**, Koob GF. Selective glucocorticoid receptor (GR) antagonism blocks compulsive alcohol drinking in rats. Volterra Alcoholism and Stress Conference Abstracts. Alcohol 48 (2014) 159-178.
- Edwards S**, Inceoglu B, Hammock BD, Koob GF. Reduction of excessive drinking in alcohol-dependent rats via soluble epoxide hydrolase inhibition. Journal of Neuroimmune Pharmacology 9 (2014) 15.
- Vendruscolo LF, **Edwards S**, MacShane LG, Logrip ML, Schlosburg JE, Zamora-Martinez ER, Whitfield Jr TW, Sanna PP, Koob GF. Glucocorticoid receptors in the central amygdala mediate compulsive-like alcohol drinking. Program No. 349.18. 2013 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2013. Online.
- You IJ, Wright SR, **Edwards S**, Mandyam CD, Koob GF, Wee S. A 5-HT1A receptor-mediated mechanism in addiction-like cocaine self-administration behavior in rats. Program No. 350.18. 2013 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2013. Online.
- Mandyam CD, Kim A, Zamora-Martinez ER, **Edwards S**. Morphological reorganization of rat hippocampal neurons in alcohol dependence. Program No. 705.14. 2013 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2013. Online.
- Kallupi M, **Edwards S**, Wee S, Whitfield Jr. TW, Oleata CS, Luu G, Schmeichel BE, Koob GF, Roberto M. Kappa opioid receptor-mediated dysregulation of GABAergic transmission in the central amygdala in cocaine addiction. Program No. 820.16. 2013 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2013. Online.
- Kim A, Zamora-Martinez ER, **Edwards S**, Mandyam CD. Morphological reorganization of rat hippocampal neurons in alcohol dependence. Alcoholism-Clinical and Experimental Research 37 (2013) 189A.
- Gilpin NW, **Edwards S**, Koob GF. Exposure to traumatic stress in rats differentially affects alcohol drinking and neuronal ERK phosphorylation. Program No. 126.08. 2012 Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012. Online.
- Park P, Vendruscolo L, Schlosburg J, **Edwards S**, Schulteis G, Koob GF. Reduction of acute heroin withdrawal-potentiated startle by clonidine or the CRF1R antagonist MPZP in rats. Program No. 171.03. 2012 Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012. Online.
- Schlosburg JE, Vendruscolo LF, Bremer P, Lockner J, Nunes A, Stowe N, **Edwards S**, Janda KD, Koob GF. Use of vaccine immunotherapy targeting heroin and its metabolites for treatment against relapse of heroin seeking behaviors. Program No. 668.07. 2012 Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012. Online.
- Kallupi M, Wee S, **Edwards S**, Whitfield T, Oleata CS, Luu G, Koob GF, Roberto M. Role of the kappa opioid system in the modulation of CeA GABAergic transmission in rats following extended access to cocaine self-administration. Program No. 872.10. 2012 Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012. Online.

- Homberg JR, Verheij M, Nonkes L, Latour J, Hanisch J, Vendruscolo L, **Edwards S**, Contet C, Koob G. Serotonin transporter gene variation and compulsive cocaine self-administration in rats. Program No. 873.05. 2012 Neuroscience Meeting Planner. New Orleans, LA: Society for Neuroscience, 2012. Online.
- Edwards S**, Vendruscolo LF, Schlosburg JE, Cohen A, Park PE, Wee S, George O, Schulteis G, Koob GF. Hyperalgesia during ethanol dependence and following extended access to heroin or nicotine self-administration: alleviation by CRF1 receptor antagonism. Program No. 67.07. 2011 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2011. Online.
- Cohen A, Koob GF, **Edwards S**, George O. Heightened anxiety and hyperalgesia following abstinence from extended access to nicotine predicts increased nicotine intake in rats: mediation by CRF-CRF1R activity and CREB phosphorylation in the extended amygdala. Program No. 370.04. 2011 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2011. Online.
- Edwards S**, Misra K, Vendruscolo LF, Wee S, Schulteis G, Koob GF. Development of mechanical allodynia during ethanol dependence and following extended access to heroin but not cocaine self-administration in rats. Program No. 266.12. 2010 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2010. Online.
- Mandyam CD, Wee S, Samant A, Chavez G, Muhlfeld C, **Edwards S**, George O, Koob GF. Intermittent versus compulsive self-administration of methamphetamine produce differential behavioral phenotypes: Analyses of spatial and working memory, and reinstatement of drug-seeking behaviors. Program No. 669.14. 2010 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2010. Online.
- You IJ, Tian YH, Lee KW, Kwon SH, Jung YH, Lee HK, Nguyen TL, Lee SY, **Edwards S**, Jang CG. Behavioral phenotype of transient receptor potential vanilloid type 1 receptor-deficient mice. Program No. 342.5. 2009 Neuroscience Meeting Planner. Chicago, IL: Society for Neuroscience, 2009. Online.
- Orio L, **Edwards S**, Parsons LH, Koob GF. Upregulation of the endocannabinoid system in cocaine dependence. Program No. 359.30. 2008 Neuroscience Meeting Planner. Washington, DC: Society for Neuroscience, 2008. Online.
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Research Review Committees:

2014	Medical Research Council (UK) Grant Reviewer
2014-Present	NIH CSR Early Career Reviewer Program
2015	NIAAA Study Section ZAA1 DD (54) Special Emphasis Panel, Ad hoc NIAAA Study Section ZAA1 DD (04) Special Emphasis Panel, Ad hoc
2016	NIAAA Study Section ZAA1 JJ (01) Special Emphasis Panel, Ad hoc NIAAA Study Section ZAA1 DD (04) Special Emphasis Panel, Ad hoc

Scientific Presentations:

Local/State

Date: May 18, 2017

Venue: LSU Health New Orleans, Department of Physiology Seminar Series

Title TBD

Date: June 25, 2016

Venue: LSU Health New Orleans, Alcohol Abuse Comorbidities & Triggers for Addiction Satellite Symposium to the 2016 Research Society on Alcoholism Meeting

Pain in the Context of Drug and Alcohol Addiction

Date: February 11, 2016

Venue: LSU Health New Orleans, Department of Physiology Seminar Series

Neurobiological Tolerance to Alcohol in the Nicotine-Dependent State

Date: November 9, 2015

Venue: LSU Health New Orleans, Neuroscience Center of Excellence Seminar Series

Dysregulation of Glucocorticoid Receptor Signaling in Alcohol Dependence

Date: September 14, 2015

Venue: LSU Health New Orleans, Department of Cell Biology & Anatomy Seminar Series

Dysregulation of Glucocorticoid Receptor Signaling in Alcohol Dependence

Date: June 3, 2015

Venue: LSUHSC-New Orleans, Department of Physiology Seminar Series

GluR1 Subunit Phosphorylation as Marker and Mediator of Drug Addiction

Date: May 22, 2015

Venue: LSUHSC-New Orleans, Alcohol and Drug Abuse Center of Excellence Retreat
Combinations of Levomepromazine and Morphine for Analgesia in Recovered Addicts

Date: September 8, 2014

Venue: The University of New Orleans, Department of Biological Sciences
The Neurobiology of Dysregulated Motivational Systems in Drug Addiction
Host: Dr. Zhengchang Liu, UNO

Date: September 2, 2014

Venue: LSUHSC-Shreveport, Department of Pharmacology, Toxicology, and Neuroscience
The Neurobiology of Dysregulated Motivational Systems in Drug Addiction
Host: Dr. Nicholas Goeders, LSUHSC-Shreveport

Date: May 23, 2014

Venue: LSUHSC-New Orleans, Alcohol and Drug Abuse Center of Excellence Retreat
Dysregulation of Glucocorticoid Receptor Signaling in Alcohol Dependence

Date: May 20, 2014

Venue: LSUHSC-New Orleans, Department of Physiology Seminar Series
Dysregulation of Glucocorticoid Receptor Signaling in Alcohol Dependence

Date: February 4, 2014

Venue: LSUHSC-New Orleans, Department of Pharmacology Seminar Series
Neurobiological Changes Associated with Dysregulated Motivational Systems in Drug Addiction

Date: October 26, 2001

Venue: The University of Texas at Dallas, School of Behavioral and Brain Sciences
Regulation of Addictive Behavior by Dopamine Signaling
Host: Dr. Tres Thompson, UT-Dallas

National

Date: May, 2017

Venue: American Pain Society Meeting, Pittsburg, PA

Title: TBD

Symposium Title: Neurobiological Mechanisms Mediating the Interaction of Chronic Pain and Alcohol Abuse

Symposium Organizer: Dr. Scott Edwards, LSU Health

Date: January, 2017

Venue: Winter Conference on Brain Research, Big Sky, MT

Title: TBD

Symposium Title: The Opioid Epidemic: Moguls, Models and Molecules

Symposium Organizer: Dr. Amy Newman, NIH/NIDA

Date: April 19, 2016

Venue: Mt. Sinai School of Medicine, Department of Pharmacology & Systems Therapeutics
Glucocorticoid Receptor Signaling in Alcoholism

Host: Dr. Ming-Hu Han

Date: September 1, 2015

Venue: Texas Tech University HSC Translational Neuroscience and Pharmacology Lecture Series
Dysregulation of Glucocorticoid Receptor Signaling in Alcohol Dependence

Host: Dr. Volker Neugebauer, TTUHSC

Date: March 28, 2014

Venue: Twentieth Annual Society on Neuroimmune Pharmacology Meeting

Reduction of Excessive Drinking in Alcohol-Dependent Rats via Soluble Epoxide Hydrolase Inhibition

Symposium Title: Inflammation: At the Core of Substance Abuse-Disease Spectrum Interaction

Symposium Organizer: Dr. Patricia E. Molina, LSUHSC-New Orleans

Date: March 12, 2014

Venue: Fifteenth International Winter Eicosanoid Conference

Eicosanoids and Alcohol Dependence

Symposium Title: Eicosanoids and Pain

Symposium Organizer: Dr. Bruce Hammock, UC-Davis

Date: March 6, 2013

Venue: Louisiana State University Health Sciences Center, Department of Physiology

Neurobiological Changes Associated with Dysregulated Motivational Systems in Drug Addiction

Host: Dr. Patricia E. Molina, LSUHSC-NO

Date: February 28, 2013

Venue: University of Alabama-Birmingham, Department of Psychology

Neurobiological Changes Associated with Dysregulated Motivational Systems in Drug Addiction

Host: Dr. Franklin Amthor, UAB

Date: January 31, 2013

Venue: Winter Conference on Brain Research, Breckenridge, CO

Intersection of Pain and Negative Affect: Potential Role in Alcoholism

Symposium Title: Evidence for Perturbation of Reward Circuitry by Pain and Affective Disorders

Symposium Organizer: Dr. Catherine Cahill, UC-Irvine

Date: January 15, 2013

Venue: University of Washington, Department of Psychology

Neurobiological Changes Associated with Dysregulated Motivational Systems in Drug Addiction

Host: Dr. Jeansok Kim, UW

Date: January 3, 2013

Venue: Medical College of Wisconsin, Neuroscience Research Center

Neurobiological Changes Associated with Dysregulated Motivation Systems in Drug Addiction

Host: Dr. Cecilia J. Hillard, MCW

Date: December 16, 2011

Venue: UC-Santa Barbara, Department of Psychological and Brain Sciences

Pain as a Negative Motivational State Underlying Drug Addiction

Host: Dr. Karen Szumlinski, UC-Santa Barbara

Date: August 24, 2011

Venue: National Hispanic Science Network on Drug Abuse Meeting, Miami, FL
Pain as a Negative Motivational State Underlying Drug Addiction

Symposium Title: Negative Motivational States and Addiction

Symposium Organizer: Dr. Nicholas Gilpin, LSUHSC-New Orleans

Date: June 23, 2009

Venue: Research Society on Alcoholism Annual Meeting, San Diego, CA

V1b Vasopressin Receptor Antagonism Reduces Ethanol Drinking in Ethanol-Dependent Animals

Symposium Organizer: Dr. Todd Thiele, UNC-Chapel Hill

Date: January 30, 2009

Venue: The University of Arizona at Tucson, Department of Pharmacology

The Dark Side of Drug Addiction

Host: Dr. Frank Porreca, University of Arizona-Tucson

International

Date: May, 2017

Venue: Fourth International Congress on Alcoholism and Stress, Volterra (Pisa), Italy

Title: *TBD*

Symposium Title: Chronic Pain and Alcohol Dependence

Symposium Organizer: Dr. Igor Spigelman, UCLA

Date: May 8, 2014

Venue: Third International Congress on Alcoholism and Stress, Volterra (Pisa), Italy

Title: *Excessive Alcohol Drinking in the Context of Stress Sensitization*

Symposium Title: Young Investigator Award Symposium

Symposium Organizers: Dr. Antonio Noronha, NIAAA and Dr. Fulton Crews, UNC-Chapel Hill

Date: May 6, 2014

Venue: Third International Congress on Alcoholism and Stress, Volterra (Pisa), Italy

Title: *Functional Recruitment of Central Amygdala Glucocorticoid Receptor Signaling in Alcohol-Dependent Rats*

Symposium Title: Central vs. Systemic Stress Systems in Alcohol Dependence

Symposium Organizer: Dr. Scott Edwards, LSUHSC-New Orleans

Date: May 6, 2011

Venue: Second International Congress on Alcoholism and Stress, Volterra (Pisa), Italy

Title: *Development of Allodynia during Ethanol Dependence in Rats and Mice*

Symposium Title: Alcohol Gets on my Nerves

Symposium Organizer: Dr. Robert Messing, UC-San Francisco

Editorial Posts and Activities:

Editorial Board

2014-Present Editorial Board, *Pharmacology, Biochemistry, and Behavior*
2016-2017 Co-Guest Editor, *Current Opinion in Behavioral Sciences*

Reviewer

2007-Present *Pharmacology, Biochemistry, and Behavior*
2009-Present *Neuropharmacology; Neuroscience Letters*
2012-Present *PLoS ONE*
2013-Present *Pain Research & Management; Behavioural Processes; Frontiers in Psychiatry*
Frontiers in Integrative Neuroscience
2014-Present *Neuroreport; Addiction Biology; Behavioral Brain Research*
Neuroscience and Biobehavioral Reviews
2015-Present *Journal of Neurophysiology; Neuropeptides; Stress*
2016-Present *Neuroscience; Alcoholism: Clinical & Experimental Research; Pain*

SERVICE ACTIVITIES

University/Institutional Service:

2009-2013 The Scripps Research Institute (TSRI) Council of Scientific Editors
2012-2013 TSRI Society of Fellows Travel Award Selection Committee

2013-Present LSUHSC Graduate Research Day Judge
2014-Present LSUHSC Medical Student Research Day Judge
2014 LSUHSC Perspectives in Alcohol Research (PAR) Course Facilitator
2014-Present LSUHSC Department of Physiology Works-in-Progress Facilitator
2014-Present LSUHSC Graduate Advisory Council
2013-Present Faculty Research Development Committee (Dr. Nicholas W. Gilpin)
2014-Present Faculty Research Development Committee (Dr. Stefany D. Primeaux)
2014-Present Department of Physiology Faculty Search Committee (Chair, 2016-Present)
2015-Present Department of Physiology Graduate Program Coordinator
2016-Present Department of Physiology Postdoc Development Committee
2016-Present LSUHSC School of Medicine Internal Funding Review Panel

Community Service Activities:

2014-Present Greater New Orleans Science and Engineering Fair (GNOSEF) Judge
2016 GNOSEF Board Member