

CURRICULUM VITAE Amanda R. Pahng, PhD

Current Title: Assistant Professor

Business Address: Department of Physiology, CSRB 601F

533 Bolivar Street

New Orleans, LA 70112

Business Telephone: 504-568-2550

Citizenship: The United States of America

Education:

2005-2009 BS in Psychology, Minor in Statistics

Magna Cum Laude. Phi Beta Kappa Honor Society. GPA: 3.84

The University of Georgia, Athens, GA.

2009-2015 PhD in Neuroscience

Neuroscience Program. GPA: 3.856 Tulane University, New Orleans, LA.

Dissertation Advisor: Paul J. Colombo, Ph.D.

2015-2020 Postdoctoral Fellow

Department of Physiology Mentor: Scott Edwards, Ph.D. LSU Health New Orleans

New Orleans, LA.

Academic, Professional, and Research Positions:

2020-2025 Research Health Scientist

Research Service (11F)

Southeast Louisiana Veterans Health Care System

New Orleans, LA.

2020-2025 Instructor- Research (gratis)

Department of Physiology LSU Health New Orleans

New Orleans, LA.

2023-2025 Instructor- Research (gratis)

Alcohol and Drug Abuse Center of Excellence (ADACE)

LSU Health New Orleans

New Orleans, LA.

2025- Research Associate

Research Service (11F)

Southeast Louisiana Veterans Health Care System

New Orleans, LA.

2025- Assistant Professor- Research

Department of Physiology LSU Health New Orleans

New Orleans, LA.

2025- Assistant Professor- Research

Alcohol and Drug Abuse Center of Excellence (ADACE)

LSU Health New Orleans

New Orleans, LA.

Membership in Professional Organizations:

2006-2009 Member, National Society of Collegiate Scholars Honor Society, The University of Georgia

Chapter

2006-2009 Member, Sigma Alpha Lambda National Honor Society, The University of Georgia Chapter

2008-2009 Member, Psi Chi Honors Society in Psychology, The University of Georgia Chapter

2009-present Member, Phi Beta Kappa Honor Society

2009-2016 Member, Society for Neuroscience (SFN)

2016-2020 Member, American Physiological Society (APS)

2016-2020 Member, Research Society on Alcoholism (RSA)

2017-present Member, Association for Women in Science (AWIS) Southern Louisiana Chapter

2018-2019 Treasurer, Postdoctoral Association, LSU Health New Orleans Chapter

2021 Member, International Association for the Study of Pain (IASP)

Awards and Honors:

2005-2009 HOPE Scholarship, The University of Georgia, Athens, GA.

Spring 2006 Dean's List, The University of Georgia, Athens, GA.

Fall 2006 Presidential Scholar, The University of Georgia, Athens, GA

Fall 2007 Presidential Scholar, The University of Georgia, Athens, GA

Spring 2008 Dean's List, The University of Georgia, Athens, GA.

2008 Neuroscience Student Association—Brain Awareness Symposium Award for the Best

Undergraduate Poster, 31st Annual Convention of the Behavioral Sciences, The University

of Georgia, Athens, GA.

2009 Phi Beta Kappa Honor Society, The University of Georgia, Athens, GA.

2009 Graduated Magna Cum Laude, The University of Georgia, Athens, GA.

2009-2013	Louisiana Board of Regents Scholarship, Tulane University, New Orleans, LA.
2015	Jean Yocum Harlan Award for 1 st Place Presentation, 16 th Annual Neuroscience Retreat, Tulane University, New Orleans, LA.
2015	The School of Science and Engineering Research Day Award Finalist for Posters by Graduate Student or Post-Doctoral Fellow, Tulane University, New Orleans, LA.
2016	Junior Investigator Award, Research Society on Alcoholism, 39 th Annual Scientific Meeting. New Orleans, LA.
2017	NIH Travel Award, Volterra Conference, 4^{th} International Congress on Alcoholism and Stress. Volterra, Italy.
2017	Junior Investigator Award, Research Society on Alcoholism, 40 th Annual Scientific Meeting. Denver, CO.
2017	Outstanding Young Scientist Travel Award, Association for Women in Science, Southern Louisiana Chapter, New Orleans, LA.
2018	Central Nervous System Section Research Recognition Award for a Post-doctoral Fellow, American Physiological Society, Experimental Biology 2018 Meeting. San Diego, CA.
2018	Junior Investigator Award, Research Society on Alcoholism, 41 th Annual Scientific Meeting. San Diego, CA.

TEACHING EXPERIENCE AND RESPONSIBILITIES

Formal Course Fall 2013 & Fall 2014	Responsibilities: Teaching Assistant, Psychopharmacology Laboratory Tulane University, New Orleans, LA. Instructor: Thomas J. Hebert, Ph.D. Students: Undergraduate
Spring 2014 & Spring 2015	Teaching Assistant , Behavioral Endocrinology Laboratory Tulane University, New Orleans, LA. Instructor: Thomas J. Hebert, Ph.D. Students: Undergraduate
Summer 2015	Laboratory Director , <i>Basic Neuroscience Laboratory</i> Tulane University, New Orleans, LA. Students: High school
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Fall 2015 **Course Director**, *Neuroanatomy Laboratory* Tulane University, New Orleans, LA.

Students: Undergraduate

Spring 2016 **Course Instructor**, *Dental Hygiene: General and Oral Physiology* Lectures: "Nerve Excitation", "Sensory Physiology"

LSU Health New Orleans, New Orleans, LA.

Instructor: Robert W. Siggins, Ph.D.

Students: Dental hygiene

Fall 2016- Course Instructor, "Addiction", Nursing Pathophysiology

Spring 2017 LSU Health New Orleans, New Orleans, LA.

Instructor(s): Barry Potter, Ph.D, Stefany D. Primeaux, Ph.D.

Students: Nursing

Fall 2017 Course Instructor, Physiology of Neuronal Circuits Underlying Brain Disorders

Lectures: "Affective Disorders", "Alzheimer's Disease and Cognitive Impairment"

LSU Health New Orleans, New Orleans, LA.

Director: Scott Edwards, Ph.D.

Students: Graduate

Spring 2018 Course Instructor, "Endocrinology I & II", Dental Hygiene: General and Oral Physiology

LSU Health New Orleans, New Orleans, LA.

Instructor: Xingping Yue, Ph.D. Students: Dental hygiene

Fall 2020 Course Instructor, "Basic Mechanisms and Motivational Aspects of Pain", Special Topics

in Physiology: Physiological Basis of Behavior LSU Health New Orleans, New Orleans, LA.

Instructor: Rajani Maiya, Ph.D.

Students: Graduate

Fall 2022- Assistant Course Director, Perspectives in Alcohol Research

present LSU Health New Orleans, New Orleans, LA.

Course Director: Robert W. Siggins, Ph.D.

Students: Graduate

Fall 2023- Course Instructor, "Substance Use Disorder: Opioids & Alcohol", "Stress

Fall 2024 Pathophysiology", *Nursing Pathophysiology*

LSU Health New Orleans, New Orleans, LA.

Instructors: Stefany D. Primeaux, Ph.D. & Flavia Souza-Smith, Ph.D.

Students: Nursing

Additional Training Experience:

10/07/19- Completed Certified Teaching Training Workshop

10/08/19 Workshop led by Dr. Robert G. Carroll, Ph.D., Associate Dean for Medical Student

Education, Professor of Physiology

Session 1: Are we really teaching adults, and if so, so what?

Session 2: How to avoid "Death by Lecture"

Session 3: Design and evaluation of multiple-choice questions

Location: LSU Health New Orleans, New Orleans, LA

10/04/21 Completed Rigor and Reproducibility Workshop

All day workshop organized by the Gulf Coast Consortia for Quantitative Biomedical

Sciences

Location: Virtual

Assisted in Training Students as a Postdoctoral Fellow (2016-2020):

<u>Undergraduate Students</u>

2016 Adrianna Jones (Louisiana State University)
2017 Scott Ng (University of Southern California)
2017-2018 Mackenzie Schindler (Tulane University)

Post-Baccalaureate Students

2019-2020 Chelsea Callicoatte (LSU Health New Orleans PREP Scholar)

Master's Students

2016-2017 Rod Paulsen (LSU Health New Orleans Master's Program)

RESEARCH AND SCHOLARSHIP

Past Funded Grants:

10/15/2015-10/18/2017

Biomedical Alcohol Research Training Program

National Institute of Alcohol Abuse and Alcoholism (T32 AA007577)

Role: Postdoctoral trainee

Goal: To prepare graduate students and postdoctoral fellows interested in careers as independent scientists investigating the biomedical consequences of alcohol consumption and abuse.

PI: Dr. Patricia Molina, MD, PhD

5-Year Funding \$2,109,833 direct costs (stipend \$88,284 for 2-year period of the grant 2015-2017)

04/01/2020-03/31/2025

The Role of Mesoaccumbens Dopamine in Pain and Prescription Opioid Addiction

Career Development Award-2 (IK2 BX004334-01A2)

The Department of Veterans Affairs

Role: PI

Goal: To understand the overlapping brain biochemical mechanisms of chronic pain and opioid dependence that may contribute to the worsening and potential interdependence of these two disorders.

\$1,030,244 direct costs for 5 years

Current Funded Grants:

04/2025-04/2026

A Non-Opioid and Non-Hepatotoxic Analgesic for the Treatment of Pain in the Context of Alcohol Use Disorder

School of Medicine Research Enhancement Program (REP) Bridge Grant

Role: Co-L

Goal: This collaborative work also seeks to maintain a successful investigative bridge between the Alcohol & Drug Abuse Center of Excellence and the Neuroscience Center of Excellence, and directly supports institutional research priorities as communicated in the recent School of Medicine Strategic Plan (2025-2030), including a focus on alcohol use, addiction, and pain.

\$75,000 direct costs for 1 year

Pending Grants:

Impact Score: 50, Percentile: 54

Notice of Award (07/03/25):

09/2025-08/2026

Role of Alpha-2 Adrenergic Receptor Antagonism in Treating Misuse of Fentanyl Adulterated with Xylazine LA CaTS Center Pilot Grants Program (Round 13)

Role: PI

Goal: This work directly addresses an urgent clinical need of Louisiana residents as it may rapidly identify novel medication strategies to reduce fentanyl misuse. Funding for this application will also be used to collect critical data needed to generate competitive extramural funding at the levels of the NIH and VA. \$50,000 direct costs for 1 year

Notice of Award (08/07/25):

09/2025-08/2027

Targeting the Renin System for the Treatment of Pain and Opioid Use Disorder

National Institute of Drug Abuse (R21)

Role: MPI

Goal: To examine an FDA-approved therapeutic strategy (direct renin inhibition) to target an understudied molecule (renin receptor) as a novel therapeutic avenue for the treatment of OUD and pain.

Pls: Dr. Scott Edwards, PhD & Dr. Amanda Pahng, PhD

\$402,617 direct costs for 2 years

Council Review Pending (10/25):

Transcriptomic Signatures of Fentanyl and Xylazine Co-Use in the VTA

National Institute of Drug Abuse (R21)

Role: MPI

Goal: To examine the effects of repeated fentanyl and xylazine co-use on the transcriptomes of VTA GABA neurons at single nuclei resolution compared to single repeated drug use of fentanyl or xylazine alone.

Pls: Dr. Rajani Maiya, PhD & Dr. Amanda Pahng, PhD

\$406,646 direct costs for 2 years

Submitted (06/25):

Investigation of the Mesoamygdala Circuit in the Context of Pain and Opioid Use Disorder National Institute of Drug Abuse (R21) (2 years)

Role: MP

Goal: To test whether the VTA-CeA circuit is activated during the transition to opioid dependence and to determine the role of opioid-induced VTA-CeA plasticity in mediating fentanyl WD-induced increases in nociception and IVSA of fentanyl.

Pls: Dr. Elizabeth Avegno, PhD & Dr. Amanda Pahng, PhD

Journal Publications:

- 1. Kathirvelu B, East BS, **Hill AR***, Smith CA, and Colombo PJ (2013). Lentivirus-mediated chronic expression of dominant-negative CREB in the dorsal hippocampus impairs memory for place learning and contextual fear conditioning. <u>Neurobiology of Learning and Memory.</u> 99: 10-16. PMID: 23110949. ***Hill AR = Pahng AR**
- 2. Yang H, *Hou H, *Pahng AR, Gu H, Nairn AC, Tang Y, Colombo PJ, & Xia H (2015). Protein phosphatase-1 inhibitor-2 is a novel memory suppressor. <u>The Journal of Neuroscience.</u> 35(45): 15082-15087. *H.H. and A.P. contributed equally to this work. PMID: 26558779.

- McGinn MA & Pahng AR (2017). Pathophysiology of affective disorders: Functional interaction of stress hormones and hippocampal excitation. <u>Journal of Neurophysiology</u>. 117: 477-479. PMID: 27169510.
- 4. **Pahng AR** & Colombo PJ (2017). Phosphorylation of tyrosine receptor kinase B in the dorsal striatum and dorsal hippocampus is associated with response learning in a water plus maze. <u>Behavioral Neuroscience</u>. 131(1): 33-41. PMID: 28004953.
- 5. **Pahng AR,** McGinn MA, Paulsen RI, & Edwards S (2017). The prefrontal cortex as a critical gate of negative affect in alcohol use disorder. <u>Current Opinion in Behavioral Sciences.</u> 13: 139-143. PMID: 28111628.
- Pahng AR, Paulsen RI, McGinn MA, Edwards KN, & Edwards S (2017). Neurobiological correlates of pain avoidance-Like behavior in morphine-dependent and non-dependent rats. <u>Neuroscience</u>. 366: 1-14. PMID: 29024786.
- 7. **Pahng AR**, & Edwards S (2018). Measuring pain avoidance-like behavior in drug-dependent rats. Current Protocols in Neuroscience. 85(1), e53. PMID: 30248240.
- 8. **Pahng AR**, Paulsen RI, McGinn MA, Farooq MA, Edwards KN, & Edwards S (2019). Dysregulation of c-jun n-terminal kinase phosphorylation in alcohol dependence. <u>Alcohol.</u> 75: 11-18. PMID: 30321699.
- Bazan HA*, Bhattacharjee S*, Burgos C, Recio J, Abet V, Pahng AR, Jun B, Heap J, Ledet AJ, Gordon WC, Edwards S, Paul D, Alvarez-Builla J, & Bazan NG (2020). A novel pipeline of 2-(benzenesulfonamide)-N-(4-hydroxyphenyl) acetamide analgesics that lack hepatotoxicity and retain antipyresis. <u>European Journal of Medicinal Chemistry.</u> 202:112600. *B.H. and S.B. contributed equally to this work. PMID: 32629335.
 - a. Press release by LSU Health New Orleans published in:
 - i. *Science Daily:* online July 6, 2020; retrieved from https://www.sciencedaily.com/releases/2020/07/200706140907.htm
 - ii. Technology Networks: online July 7, 2020; retrieved from https://www.technologynetworks.com/drug-discovery/news/team-synthesizes-safernonaddictive-analgesics-337075
- Patel RR, Wolfe SA, Bajo M, Abeynaike S, Pahng AR, Nikzad R, Edwards S, Paust S, Roberts AJ, & Roberto M (2021). IL-10 normalizes aberrant amygdala GABA transmission and reverses anxiety-like behavior and dependence-induced escalation of alcohol intake. <u>Progress in Neurobiology</u>. 199:101952. PMID: 33197496.
 - a. Press release by Scripps Research Institute published in:
 - i. *Science Daily:* online November 16, 2020; retrieved from https://www.sciencedaily.com/releases/2020/11/201116132248.htm
 - ii. *Neuroscience News:* online November 16, 2020; retrieved from https://neurosciencenews.com/immune-cell-alcohol-anxiety-17280/
- 11. **Pahng AR** & Edwards S (2021). The convergent neuroscience of affective pain and substance use disorder. Alcohol Research: Current Reviews. 41(1):14. PMID: 34976573.

- 12. Edwards S, Callicoatte CN, Barattini AE, Cucinello-Ragland JA, Melain A, Edwards KN, Gilpin NW, Avegno EM, & **Pahng AR** (2022). Pramipexole treatment attenuates mechanical hypersensitivity in male rats experiencing chronic inflammatory pain. Neuropharmacology. 208:108976. PMID: 35085583.
- 13. Varodayan FP, **Pahng AR**, Davis TD, Gandhi P, Bajo M, Steinman MQ, Kiosses WB, Blednov YA, Burkart MD, Edwards S, Roberts AJ, & Roberto M (2023). Chronic ethanol induces a pro-inflammatory switch in interleukin-1β regulation of GABAergic signaling in the medial prefrontal cortex of male mice. Brain Behavior and Immunity. 110: 125-139. PMID: 36863493.
- 14. Barattini AE, Montanari C, Edwards KN, Gilpin NW, Edwards S, & **Pahng AR** (2023). Chronic inflammatory pain promotes place preference for fentanyl in male rats but does not change fentanyl self-administration in male and female rats. <u>Neuropharmacology</u>. 231:109512. PMID: 36948356.
- 15. Siddiqi MT, Podder D, **Pahng AR**, Athanason AC, Nadav T, Cates-Gatto C, Kreifeldt M, Contet C, Roberts AJ, Edwards S, Roberto M, Varodayan FP (2023). Prefrontal cortex glutamatergic adaptations in a mouse model of alcohol use disorder. <u>Addiction Neuroscience</u>. 9. PMID: 38152067.
- 16. Barattini AE, Gilpin NW, & **Pahng AR** (2024). Chronic inflammatory pain reduces fentanyl intake during early acquisition of fentanyl self-administration, but does not change motivation to take fentanyl in male and female rats. Pharmacology, Biochemistry and Behavior. 245. PMID: 39366430.
- 17. Barattini AE & **Pahng AR** (2025). Interactions of pain and opioids on conditioned place preference in rodents. Psychopharmacology. 242(1):1-26. PMID: 39562334.

Published Book Chapters:

Colombo PJ, East BS Jr, Crawley ME, & Hill AR* (2012). Aging and the Brain. In V.S. Ramachandran (Ed.) <u>Encyclopedia of Human Behavior</u>, 2nd Edition, London: Elsevier.
 *Hill AR = Pahng AR

Published Abstracts:

- 1. Kathirvelu B, Hill GS, East BS Jr, **Hill AR***, Smith CA, & Colombo PJ (2010). Lentivirus overexpression of mutant CREB in the dorsal hippocampus impairs long-term memory retention of place learning and contextual fear conditioning. Program No 202.18. <u>2010 Neuroscience Meeting Planner.</u> San Diego, CA: Society for Neuroscience, 2012. Online.
- 2. East BE Jr, Crawley ME, **Hill AR***, Winsauer PJ, & Colombo PJ (2012). The rodent simon task as a tool for investigating cognitive control and conflict adaptation. Program No 697.21. <u>2012 Neuroscience Meeting Planner</u>. New Orleans, LA: Society for Neuroscience, 2012. Online.
- 3. **Hill AR***, Britton R, Zambratto J, Charles D, & Colombo PJ (2012). Individual differences in phosphorylated tyrosine kinase b levels in the dorsal striatum and dorsal hippocampus are positively correlated with the duration of training on a response task: Evidence for a competitive interaction between the striatum and the hippocampus. Program No 104.20. <u>2012 Neuroscience Meeting Planner.</u> New Orleans, LA: Society for Neuroscience, 2012. Online.

 *Hill AR = Pahng AR
- 4. **Pahng AR,** Yang H, Xia H, & Colombo PJ (2015). Lentiviral knock down of inhibitor-2 in the dorsal hippocampus enhances spatial memory and contextual fear conditioning. Program No 536.07. <u>2015 Neuroscience Meeting Planner.</u> Chicago, IL: Society for Neuroscience, 2015. Online.

- 5. Byerley LO, Reppel JE, **Pahng AR**, & Edwards S (2016). Omega-3 dietary fatty acids improve spatial learning and memory but do not alter the escalation of alcohol drinking. <u>FASEB.</u> Vol 30, 1_supplement: 679.5. Experimental Biology, 2016.
- 6. **Pahng AR,** Farooq MA, Edwards KN, & Edwards S (2016). Neuroadaptations associated with excessive alcohol-seeking behavior in dependent rats. <u>Alcoholism Clinical and Experimental.</u> Vol 40, Issue S1, 734. Research Society on Alcoholism, 2016.
- 7. **Pahng AR,** Paulsen RI, Farooq MA, Edwards KN, & Edwards S (2016). Dysregulation of hippocampal and frontocortical JNK signaling in alcohol dependence. Program No 826.14. <u>2016 Neuroscience Meeting Planner.</u> San Diego, CA: Society for Neuroscience, Online.
- 8. **Pahng AR**, McGinn MA, Paulsen RI, Edwards KN, & Edwards S (2017) Neurobiological mechanisms mediating the intersection of pain and drug addiction. <u>NIH 12th Annual Pain Consortium Symposium Abstracts.</u>
- 9. **Pahng AR**, Paulsen RI, Farooq MA, Edwards KN, & Edwards S (2017). Dysregulation of hippocampal and frontocortical JNK signaling in alcohol dependence. <u>Alcohol.</u> Volterra Alcoholism and Stress Conference, 2017.
- 10. McGinn MA, **Pahng AR**, Edwards KN, & Edwards S (2017). Neuroadaptations in cingulate cortex glucocorticoid signaling in alcohol dependence. <u>Alcohol.</u> Volterra Alcoholism and Stress Conference, 2017.
- 11. **Pahng AR,** Farooq MA, Edwards KN, & Edwards S (2017). Impaired spatial memory and dysregulation of hippocampal JNK signaling in alcohol dependence. <u>Alcoholism Clinical and Experimental.</u> Vol 41, Issue S1, 60. Research Society on Alcoholism, 2017.
- 12. McGinn MA, **Pahng AR**, Edwards KN, & Edwards S (2017). Neuroadaptations in cingulate cortex glucocorticoid signaling in alcohol dependence. <u>Alcoholism Clinical and Experimental.</u> Vol 41, Issue S1, 742. Research Society on Alcoholism, 2017.
- 13. Jones A, **Pahng AR**, Edwards S. Dysregulation of Hippocampal and Dorsomedial Prefrontal JNK Phosphorylation in Alcohol Dependence is not Mediated by SEK1/MKK4 Activation (2017). <u>Annual Biomedical Research Conference for Minority Students Abstracts</u>.
- 14. **Pahng AR,** Paulsen RI, McGinn MA, Schindler ME, Edwards KN, & Edwards S (2018). Neurobiological correlates of pain avoidance behavior in opioid vs. alcohol dependence. <u>FASEB.</u> Vol 32, 1_supplement: 878.1. Experimental Biology, 2018.
- 15. **Pahng AR,** Paulsen RI, McGinn MA, Schindler ME, Edwards KN, & Edwards S (2018). Neurobiological correlates of pain avoidance behavior in opioid vs. alcohol dependence. <u>Alcoholism Clinical and Experimental</u>. Vol 42, Issue S1, 818. Research Society on Alcoholism, 2018.
- 16. Weera MM, **Pahng AR**, Whitaker AM, & NW Gilpin (2018). Stress-induced brain activation in avoider rats. <u>Alcoholism Clinical and Experimental.</u> Vol 42, Issue S1, 64. Research Society on Alcoholism, 2018.

- 17. Varodayan P, **Pahng AR**, Davis TD, Nadav T, Bajo M, Burkart MD, Edwards S, Roberts AJ, Roberto M (2019). The role of the interleukin-1 system in alcohol-induced cortical dysfunction. <u>Alcoholism Clinical and Experimental.</u> Vol 43, Issue S1, 729. Research Society on Alcoholism, 2019.
- 18. McGinn MA, **Pahng AR**, Edwards KN, & Edwards S (2019). Dysregulated cingulate cortex glucocorticoid signaling in alcohol use disorder. <u>Alcoholism Clinical and Experimental.</u> Vol 43, Issue S1, 279. Research Society on Alcoholism, 2019.
- Cucinello JA, Berner ME, Pahng AR, Edwards KN, & Edwards S (2019). Differential effects of opioid versus alcohol dependence on pain avoidance behavior and regional endocannabinoid system deficiency. Program No 484.01. <u>2019 Neuroscience Meeting Planner.</u> Chicago, IL: Society for Neuroscience, Online.
- 20. Callicoatte C, **Pahng AR,** Johnson A, Edwards KN, Edwards S (2019). Dopamine signaling as a non-opioid analgesic strategy for chronic pain. <u>Annual Biomedical Research Conference for Minority</u> Students Abstracts.
- 21. Cucinello JA, Berner ME, **Pahng AR**, Edwards KN, Edwards S (2020). Differential effects of opioid versus alcohol dependence on pain avoidance behavior and regional endocannabinoid system deficiency. FASEB. Vol 34, 1. Experiment Biology Meeting, 2020.
- 22. Delery E, **Pahng AR**, Stiepler Z, Fucich E, Gilpin NW, Molina P, Edwards S (2020). Hyperalgesia and neuroadaptations in glucocorticoid signaling in the context of traumatic brain injury and alcohol dependence. <u>Alcoholism Clinical and Experimental.</u> Vol 44, Issue S1, 90. Research Society on Alcoholism, 2020.
- 23. Edwards S, Callicoatte CN, Barattini AE, Avegno EA, Edward KN, Cucinello-Ragland J, Melain A, Gilpin NW, & **Pahng AR** (2021). Pramipexole treatment attenuates mechanical hypersensitivity in rats with chronic inflammatory pain. Texas Pain Research Highlights Abstracts, 2021.
- 24. Edwards S, Callicoatte CN, Barattini AE, Avegno EA, Edward KN, Cucinello-Ragland J, Melain A, Gilpin NW, & **Pahng AR** (2021). Pramipexole treatment attenuates mechanical hypersensitivity in rats with chronic inflammatory pain. IASP Virtual Conference on Pain, 2021.
- 25. Varodayan FP, **Pahng AR**, Davis TD, Gandhi P, Bajo M, Steinman MQ, Kiosses WB, Blednov YA, Burkart MD, Edwards S, Roberts AJ, & Roberto M (2023). Interleukin-1 mechanisms of ethanol-induced dysfunction in the medial prefrontal cortex. Abstract #364. <u>Alcoholism Clinical and Experimental</u>. Research Society on Alcoholism, 2023.
- Jones AJ, Barattini AE, Wang Q, Roberts J, Milchan E, Long SK, Pahng AR, & Gilpin NW (Submitted). Inflammatory pain effects on melanocortin-4 and AMPA receptor expression are modulated by sex and age. United States Association for the Study of Pain Meeting, 2025.

Research Grant Review Committees:

- 11/21/2022 NIH: Study Section ZRG1 NV-U (91)/ USU-AFRRI Intramural Research Program; ad hoc
- 10/25/2023 NIH: Study Section ZRG1 NV-U (94)/ Center for Scientific Review Special Emphasis Panel; ad hoc
- 11/28/2023 VA: Study Section ZRD1 NURA-U (01)/ Neurobiology-A; ad hoc

- 5/14/2024 VA: Study Section ZRD1 MHBA-U (01)/ Mental Health and Behavioral Sciences-A; ad hoc
- 11/25/2024 VA: Study Section ZRD1 MHBA-U (01)/ Mental Health and Behavioral Sciences-A; ad hoc

Invited Scientific Presentations:

Local/State/Departmental Presentations

- 02/2011 **Hill AR.** "Initial characterization *in vivo* of lentiviral overexpression of the TrkB.T1 protein in the dorsal hippocampus and its effect on long-term memory". 12th Annual Tulane Neuroscience Scientific Retreat. New Orleans, LA
- 02/2012 **Hill AR.** "Individual differences in phosphorylated tyrosine receptor kinase B levels in the dorsal striatum are related to response learning." 13th Annual Tulane Neuroscience Scientific Retreat. New Orleans, LA
- 02/2013 **Hill AR.** "Infusing lentiviral I2-shRNA into the dorsal hippocampus of rats enhances spatial memory and contextual fear conditioning". 14th Annual Tulane Neuroscience Scientific Retreat. New Orleans, LA
- 02/2014 **Pahng AR.** "Lentiviral knock down of inhibitor-2 in the dorsal hippocampus of rats enhances spatial memory and contextual fear conditioning". 15th Annual Tulane Neuroscience Scientific Retreat. New Orleans, LA
- 02/2015 **Pahng AR.** "Infusion of GABA agonist muscimol disrupts the relationship between spatial memory and signaling proteins in the hippocampus". 16th Annual Tulane Neuroscience Scientific Retreat. New Orleans, LA
 - Jean Yocum Harlan Award for 1st Place Presentation, 16th Annual Neuroscience Retreat, Tulane University, New Orleans, LA.
- 05/2016 **Pahng AR.** "Dysregulation of Hippocampal JNK Signaling in Alcohol Dependence". Alcohol & Drug Abuse Center of Excellence 7th Scientific Retreat. New Orleans, LA.
- O5/2017 **Pahng AR.** "Neurobiological Mechanisms Underlying the Intersection of Pain and Drug Dependence". Alcohol & Drug Abuse Center of Excellence 8th Scientific Retreat. New Orleans, LA.
- 12/2018 **Pahng AR.** "The Intersection of Pain and Negative Reinforcement in Opioid Addiction". Alcohol & Drug Abuse Center of Excellence 10th Scientific Retreat. New Orleans, LA.
- 11/2019 **Pahng AR.** "Cellular Mechanisms Underlying the Intersection of Pain and Opioid Dependence". Perspectives on Alcohol Research Seminar. LSU School of Medicine. New Orleans, LA.
- 12/2019 **Pahng AR.** "Cellular Mechanisms Underlying the Intersection of Pain and Opioid Dependence". Neuroscience Center of Excellences. LSU School of Medicine. New Orleans, LA.
- 10/2021 **Pahng AR.** Carol Ashton D'Angelo Workshop on Mental Health Neuroscience. New Orleans, LA.

03/2022	Pahng AR. "Investigating Non-Opioid Pharmacotherapies for the Treatment of Chronic Inflammatory Pain". Carol Ashton D'Angelo New Orleans Neuroscience Retreat. LSU School of Medicine. New Orleans, LA.
06/2022	Pahng AR. "Junior Faculty Perspective on Overcoming Career and Work-life Balance Obstacles". Department of Physiology 2022 Summer Series. Near-Peer Panel. LSU School of Medicine. New Orleans, LA.
01/2023	Pahng AR. "Ethics in Research: Academic Retractions". Perspectives on Alcohol Research Seminar. LSU School of Medicine. New Orleans, LA.
09/2023	Pahng AR. "Investigating the Intersection of Chronic Inflammatory Pain and Opioid Use Disorder". Department of Physiology 2023 Fall Seminar Series. LSU School of Medicine. New Orleans, LA.
12/2023	Pahng AR . "Investigating the Effects of Chronic Inflammatory Pain on Fentanyl-Related Behaviors". Alcohol & Drug Abuse Center of Excellence 18 th Scientific Retreat. New Orleans, LA.
03/2023	Pahng AR. "Grant Writing: Creating a VA Budget for CDAs and Merit Awards". Perspectives on Alcohol Research Seminar. LSU School of Medicine. New Orleans, LA.
02/2025	Pahng AR. Investigating the Intersection of Chronic Inflammatory Pain, Fentanyl Misuse, and Fentanyl Adulterants.
National/Intern 04/2018	Pahng AR. "Neurobiology of Pain and Negative Reinforcement in Drug Addiction: New Translational Targets". Symposium Session: "Intersectional of Central Pain, Reward Circuitry in CNS Disorders". Experimental Biology meeting. San Diego, CA.
	Pahng AR. "Neurobiology of Pain and Negative Reinforcement in Drug Addiction: New Translational Targets". Symposium Session: "Intersectional of Central Pain, Reward Circuitry
04/2018	 Pahng AR. "Neurobiology of Pain and Negative Reinforcement in Drug Addiction: New Translational Targets". Symposium Session: "Intersectional of Central Pain, Reward Circuitry in CNS Disorders". Experimental Biology meeting. San Diego, CA. Pahng AR. Co-chair, "Symposium Introduction: Comorbidities Promoting Excessive Alcohol
04/2018 06/2018 Canceled due to	Pahng AR. "Neurobiology of Pain and Negative Reinforcement in Drug Addiction: New Translational Targets". Symposium Session: "Intersectional of Central Pain, Reward Circuitry in CNS Disorders". Experimental Biology meeting. San Diego, CA. Pahng AR. Co-chair, "Symposium Introduction: Comorbidities Promoting Excessive Alcohol Drinking". Research Society on Alcoholism meeting. San Diego, CA. Speaker Abstract for Volterra Alcoholism and Stress Conference 2020. Pahng AR. "The Role of Nucleus Accumbens Dopamine Deficits in Chronic Inflammatory Pain". Symposium Session: "Intersectional Neurobiology of Pain, Addiction & Negative
04/2018 06/2018 Canceled due to COVID Canceled due to	Pahng AR. "Neurobiology of Pain and Negative Reinforcement in Drug Addiction: New Translational Targets". Symposium Session: "Intersectional of Central Pain, Reward Circuitry in CNS Disorders". Experimental Biology meeting. San Diego, CA. Pahng AR. Co-chair, "Symposium Introduction: Comorbidities Promoting Excessive Alcohol Drinking". Research Society on Alcoholism meeting. San Diego, CA. Speaker Abstract for Volterra Alcoholism and Stress Conference 2020. Pahng AR. "The Role of Nucleus Accumbens Dopamine Deficits in Chronic Inflammatory Pain". Symposium Session: "Intersectional Neurobiology of Pain, Addiction & Negative Affect". Volterra, Italy. Speaker Abstract for Research Society on Alcoholism Conference 2020. Pahng AR. "Animal Models of Acute Severe Alcohol Withdrawal Syndrome".

01/2024 Pahng AR. "Sex differences in fentanyl reinforcement and activation of VTA neurons

following fentanyl challenge in rats". <u>Symposium Session</u>: "Sex Differences in Pain and Negative Affect and Implications for Alcohol and Opioid Use Disorder Risk". Winter

Conference on Brain Research. Breckenridge, Colorado.

Editorial Activities:

Reviewer

2016 Journal of Neurochemistry

2018-present Pharmacology, Biochemistry, and Behavior

2020-2021 Physiology & Behavior

2020-present Behavioural Pharmacology

2023-present Neuroscience Letters

2023-present European Journal of Neuroscience

2024-present IBRO Neuroscience Reports

2024-present British Journal of Pharmacology

2024-present Neuropharmacology

2024-present *Psychopharmacology*

2024-present PAIN

2024-present Behavioral Brain Research

2025 Pharmacological Research - Reports

SERVICE AND OUTREACH ACTIVITIES:

Service Activities:

LSU Health New Orleans

Fall 2017 Judge, Graduate Research Day 2017, LSU Health New Orleans, New Orleans, LA.

Fall 2018 Judge, Graduate Research Day 2018, LSU Health New Orleans, New Orleans, LA

Fall 2019 Judge, Graduate Research Day 2019, LSU Health New Orleans, New Orleans, LA

2018-2019 Treasurer, Postdoctoral Association, LSU Health New Orleans Chapter, New Orleans, LA

Fall 2022 Judge, Graduate Research Day 2022, LSU Health New Orleans, New Orleans, LA

Fall 2024 Judge, Graduate Research Day 2024, LSU Health New Orleans, New Orleans, LA

Outreach Activities:

LSU Health New Spring 2016	Peer Advocate Liaison (PAL) Resource Health Fair, LSU Health New Orleans, New Orleans, LA.
Spring 2016	STEM NOLA, New Orleans, LA.
Fall 2016	Underage Drinking Town Hall, Xavier University, New Orleans, LA.
Spring 2017	Peer Advocate Liaison (PAL) Resource Health Fair, LSU Health New Orleans, New Orleans, LA
Spring 2017	Judge, Senior Division Greater New Orleans Science and Engineering Fair, New Orleans, LA.
Spring 2017	Wellness Health Blitz, Xavier University, New Orleans, LA
Spring 2017	Sci-Fly Speed Mentoring Event for High School & Undergraduate Student Summer Researchers, Association of Women in Science-Southern Louisiana (AWIS-SL), New Orleans, LA.
Fall 2017	Organizer, American Physiological Society (APS) sponsored PhUn week event, St. Scholastica Academy, Covington, LA.
Spring 2018	Peer Advocate Liaison (PAL) Resource Health Fair, LSU School of Dentistry, New Orleans, LA.
Spring 2018	Sci-Fly Speed Mentoring Event for High School & Undergraduate Student Summer Researchers, Association of Women in Science-Southern Louisiana (AWIS-SL), New Orleans, LA.
Spring 2021	Judge, Junior Division, Greater New Orleans Science and Engineering Fair, New Orleans, LA.

Service Activities:

Southeast Louisiana Veterans Health Care System

Fall 2020	Member, Equipment Committee, Southeast Louisiana Veterans Health Care System,
	New Orleans, LA

2020-present	Member, Space Committee, Southeast Louisiana Veterans Health Care System, New
	Oulogno I A

Orleans, LA

2020-present Primary Voting Member (Scientific Member), IACUC, Research Committee, Southeast

Louisiana Veterans Health Care System, New Orleans, LA

Fall 2023-2024 Office of Research & Development (ORD) Career Development Award (CDA) Council

Member, Department of Veterans Affairs, Directive: plan and develop an ORD-wide CDA

in-person meeting for all CDA-awardees.

Outreach Events:

Southeast Louisiana Veterans Health Care System

Spring 2022	Invited Panelist, Careers in Neuroscience Panel, Tulane University, New Orleans, LA.
Spring 2023	Invited Panelist, Grant Writing Workshop, Greater New Orleans Society for Neuroscience (GNOSN) Seminar Series, New Orleans, LA