

# CURRICULUM VITAE Amanda R. Pahng, PhD

Current Title: Business Add	ress:	Assistant Professor Department of Physiology, CSRB 601F 533 Bolivar Street New Orleans, LA 70112
Business Tele	phone:	504-568-2550
Citizenship:		The United States of America
Education: 2005-2009		<b>BS in Psychology, Minor in Statistics</b> Magna Cum Laude. Phi Beta Kappa Honor Society. GPA: 3.84 The University of Georgia, Athens, GA.
2009-2015		<b>PhD in Neuroscience</b> Neuroscience Program. GPA: 3.856 Tulane University, New Orleans, LA. Dissertation Advisor: Paul J. Colombo, Ph.D.
2015-2020		<b>Postdoctoral Fellow</b> Department of Physiology Mentor: Scott Edwards, Ph.D. LSU Health New Orleans New Orleans, LA.
<b>Academic, Pr</b> 2020-2025	Research Service	<b>Scientist (G2-12)</b> (11F) na Veterans Health Care System
2020-2025	Instructor- Resea Department of Phy LSU Health New O New Orleans, LA.	ysiology
2023-2025	Instructor- Resea Alcohol and Drug LSU Health New ( New Orleans, LA.	Abuse Center of Excellence (ADACE) Orleans
2025	Assistant Profest Department of Phy LSU Health New O New Orleans, LA.	ysiology

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, 31<sup>st</sup> 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<sup>st</sup> Place Presentation, 16<sup>th</sup> 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<sup>th</sup> Annual Scientific Meeting. New Orleans, LA.
- 2017 NIH Travel Award, Volterra Conference, 4<sup>th</sup> International Congress on Alcoholism and Stress. Volterra, Italy.
- 2017 Junior Investigator Award, Research Society on Alcoholism, 40<sup>th</sup> 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<sup>th</sup> Annual Scientific Meeting. San Diego, CA.

## TEACHING EXPERIENCE AND RESPONSIBILITIES

### Formal Course Responsibilities:

Fall 2013 &	<b>Teaching Assistant</b> , <i>Psychopharmacology Laboratory</i>
Fall 2014	Tulane University, New Orleans, LA.
	Instructor: Thomas J. Hebert, Ph.D.
	Students: Undergraduate
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- Spring 2014 & **Teaching Assistant**, *Behavioral Endocrinology Laboratory* Spring 2015 Tulane University, New Orleans, LA. Instructor: Thomas J. Hebert, Ph.D. Students: Undergraduate
- Summer 2015 Laboratory Instructor, Basic Neuroscience Laboratory Tulane University, New Orleans, LA. Students: High school
- Fall 2015 **Course Instructor**, *Neuroanatomy Laboratory* Tulane University, New Orleans, LA. Students: Undergraduate
- Spring 2016 **Course Lecturer**, *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 Lecturer, "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 Co-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 Lecturer**, "Endocrinology I & II", *General and Oral Physiology* LSU Health New Orleans, New Orleans, LA. Instructor: Xingping Yue, Ph.D. Students: Dental hygiene
- Fall 2020
   Course Lecturer, "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-<br/>presentAssistant Course Director, Perspectives in Alcohol Research<br/>LSU Health New Orleans, New Orleans, LA.<br/>Course Director: Robert W. Siggins, Ph.D.<br/>Students: Graduate
- Fall 2023 Fall 2024
   Course Lecturer, "Substance Use Disorder: Opioids & Alcohol", "Stress 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- 10/08/19	<b>Completed Certified Teaching Training Workshop</b> 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	<b>Completed Rigor and Reproducibility Workshop</b> 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):

Undergraduate Students	
2016	Adrianna Jones (Louisiana State University)

2017 2017-2018	Scott Ng (University of Southern California) 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 SCHOLARSHI	<u>P</u>

## 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

# Pending Grants & Submitted Grants:

## Council Review Pending (5/13/25):

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

Impact Score: 25, Percentile: 4

## Submitted (2/14/25):

Role of Alpha-2 Adrenergic Receptor Antagonism in Treating Misuse of Fentanyl Adulterated with Xylazine LA CaTS Center Pilot Grants Program (Round 13) (1 year)

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.

# Submitted (2/18/25):

*Transcriptomic Signatures of Fentanyl and Xylazine Co-Use in the VTA* National Institute of Drug Abuse (R21) (2 years) 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

## Submitted (3/08/25):

Role of Alpha-2 Adrenergic Receptor Antagonism in Fentanyl and Xylazine Co-Use VA Merit Award (4 years) The Department of Veterans Affairs Role: PI Goal: To understand fentanyl and xylazine interactions, and their consequences for human health compared to single drug use and to use potential pharmacotherapies including alpha<sub>2</sub> adrenergic r

compared to single drug use and to use potential pharmacotherapies including alpha<sub>2</sub> adrenergic receptor antagonism and 5-HT<sub>1</sub> receptor agonism to treat misuse of fentanyl adulterated with xylazine and fentanyl alone.

### Journal Publications:

- 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
- 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.
- 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. <u>Current Protocols in Neuroscience.</u> *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:

nonaddictive-analgesics-337075

- i. Science Daily: online July 6, 2020; retrieved from <u>https://www.sciencedaily.com/releases/2020/07/200706140907.htm</u>
   ii. Technology Networks: online July 7, 2020; retrieved from <u>https://www.technologynetworks.com/drug-discovery/news/team-synthesizes-safer-</u>
- 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 <u>https://www.sciencedaily.com/releases/2020/11/201116132248.htm</u>
       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. <u>Alcohol Research: Current Reviews.</u> 41(1):14. PMID: 34976573.
- 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. <u>Neuropharmacology</u>. 208:108976. PMID: 35085583.
- 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.
- 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. <u>Pharmacology, Biochemistry and Behavior</u>. 245. PMID: 39366430.

17. Barattini AE & **Pahng AR** (2025). Interactions of pain and opioids on conditioned place preference in rodents. <u>Psychopharmacology</u>. 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:**

- 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.
- 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</u> <u>Meeting Planner.</u> New Orleans, LA: Society for Neuroscience, 2012. Online.
- 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</u> <u>Neuroscience Meeting Planner</u>. Chicago, IL: Society for Neuroscience, 2015. Online.
- 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.
- 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.
- Pahng AR, McGinn MA, Paulsen RI, Edwards KN, & Edwards S (2017) Neurobiological mechanisms mediating the intersection of pain and drug addiction. <u>NIH 12<sup>th</sup> Annual Pain Consortium Symposium</u> <u>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.
- 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.
- 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</u> <u>Clinical and Experimental.</u> Vol 43, Issue S1, 729. Research Society on Alcoholism, 2019.
- 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 nonopioid analgesic strategy for chronic pain. <u>Annual Biomedical Research Conference for Minority</u> <u>Students Abstracts</u>.
- 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. <u>FASEB</u>. 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.
- 26. 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
11/25/2024 VA: Study Section ZRD1 MHBA-U (01)/ Mental Health and Behavioral Sciences-A; ad hoc

# 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". 12<sup>th</sup> 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." 13<sup>th</sup> 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". 14<sup>th</sup> 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". 15<sup>th</sup> 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". 16<sup>th</sup> Annual Tulane Neuroscience Scientific Retreat. New Orleans, LA
  - Jean Yocum Harlan Award for 1<sup>st</sup> Place Presentation, 16<sup>th</sup> 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 7<sup>th</sup> Scientific Retreat. New Orleans, LA.
- 05/2017 **Pahng AR.** "Neurobiological Mechanisms Underlying the Intersection of Pain and Drug Dependence". Alcohol & Drug Abuse Center of Excellence 8<sup>th</sup> 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 10<sup>th</sup> 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<sup>th</sup> 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/International Presentations

- 04/2018 **Pahng AR.** "Neurobiology of Pain and Negative Reinforcement in Drug Addiction: New Translational Targets". <u>Symposium Session</u>: "Intersectional of Central Pain, Reward Circuitry in CNS Disorders". Experimental Biology meeting. San Diego, CA.
- 06/2018 **Pahng AR.** Co-chair, "Symposium Introduction: Comorbidities Promoting Excessive Alcohol Drinking". Research Society on Alcoholism meeting. San Diego, CA.

#### Canceled Speaker Abstract for Volterra Alcoholism and Stress Conference 2020.

due to **Pahng AR.** "The Role of Nucleus Accumbens Dopamine Deficits in Chronic Inflammatory COVID Pain". <u>Symposium Session</u>: "Intersectional Neurobiology of Pain, Addiction & Negative Affect". Volterra, Italy.

#### Canceled Speaker Abstract for Research Society on Alcoholism Conference 2020.

- due to **Pahng AR.** "Animal Models of Acute Severe Alcohol Withdrawal Syndrome". COVID Alcohol Withdrawal Syndrome". New Orleans. LA.
- 04/2021 **Pahng AR.** "Pramipexole Attenuates Mechanical Hypersensitivity in Rats with Chronic Inflammatory Pain". Pre-recorded presentation. Texas Pain Research Highlights 2021 Conference. Online.
- 06/2021 **Pahng AR.** "Pramipexole Attenuates Mechanical Hypersensitivity in Rats with Chronic Inflammatory Pain". Pre-recorded presentation. International Association for the Study of Pain 2021 Conference. Online.
- 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:**

<u>Reviewer</u> 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

# 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
2021-2024	Member, Diversity, Equity, and Inclusion (DEI) Committee, Department of Physiology, LSU Health New Orleans
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 Activi	
LSU Health Nev Spring 2016	v Orleans Peer Advocate Liaison (PAL) Resource Health Fair, LSU Health New Orleans, New Orleans, LA.
	Peer Advocate Liaison (PAL) Resource Health Fair, LSU Health New Orleans, New
Spring 2016	Peer Advocate Liaison (PAL) Resource Health Fair, LSU Health New Orleans, New Orleans, LA.
Spring 2016 Spring 2016	Peer Advocate Liaison (PAL) Resource Health Fair, LSU Health New Orleans, New Orleans, LA. STEM NOLA, New Orleans, LA.
Spring 2016 Spring 2016 Fall 2016	<ul> <li>Peer Advocate Liaison (PAL) Resource Health Fair, LSU Health New Orleans, New Orleans, LA.</li> <li>STEM NOLA, New Orleans, LA.</li> <li>Underage Drinking Town Hall, Xavier University, New Orleans, LA.</li> <li>Peer Advocate Liaison (PAL) Resource Health Fair, LSU Health New Orleans, New</li> </ul>

- 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 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