

CURRICULUM VITAE

Sydney M. Vita

Current Title: Postdoctoral Fellow, Department of Physiology

Business Address: Department of Physiology
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Education:

Undergraduate: Community College of Denver, Denver, CO (2012-2013)
AA Psychology, 2013

University of Colorado Denver, Denver, CO (2013-2015)
BA Psychology, 2015

Graduate: University Mississippi Medical Center, Jackson, MS (2015 - 2020)
PhD Neuroscience, 2020

Postdoctoral: Louisiana State University Health Sciences Center, New Orleans, LA (2020 - Present)
Physiology

Certifications and Credentials:

2019 – Present Adult CPR, AED, and First Aid - FirstAidforFree.com

Academic, Professional, and Research Appointments:

2015-2018 Neuroscience Laboratory Graduate Research Assistant
University of Mississippi Medical Center
Jackson, MS

2018-2020 Neuroscience Laboratory Graduate Research Assistant
University of Texas Health Sciences
Houston, TX

2020-Present Department of Physiology Postdoctoral Fellow
Louisiana State University Health
Sciences Center, New Orleans, LA

Membership in Professional Organizations:

2016 – present Society for Neuroscience (SfN)
2016 – 2017 Mississippi Academy of Sciences
2017 – present National Neurotrauma Society (NNS)
2017 – present Women in Neurotrauma
2017 – 2018 International Brain Injury Association (IBIA)
2021 – present Postdoctoral Association, LSUHSC

- 2021 - present: Vice President
- 2021 – present American Physiological Society (APS)
 2021 – present Research Society on Alcoholism (RSA)
 2021 – present Diversity, Equity, and Inclusion Committee; LSUHSC Grad School
 2021 – present Diversity, Equity, and Inclusion Committee; Physiology Department
 2022 – present ATHENA By Women In STEM (ABWIS)

Awards and Honors:

- 2013 Graduated Cum Laude
 2013 College Responsibility Grant (\$2000)
 2015 Graduated Magna Cum Laude
 2016 School of Graduate Studies Research Day, Poster Presentation Award
 2017 Mississippi Academy of Sciences Research Day, Graduate Student Poster Award (\$100)
 2017 Neuroscience Research Day, Poster Presentation Award
 2017 Graduate School Honors Day
 2017 School of Graduate Studies Research Day, Poster Presentation Award
 2018 Neuroscience Research Day, Poster Presentation Award
 2018 Graduate School Honors Day
 2018 School of Graduate Studies Research Day, Poster Presentation Award
 2018 Mission Connect, Best Graduate Student Poster Award (\$100)
 2018 Dee S. and Patricia Osborne Endowed Scholarship in the Neurosciences (\$2000)

TEACHING EXPERIENCE AND RESPONSIBILITIES

Formal Course Responsibilities:

Semester	Course Title	Number of Students
LSUHSC		
Spring 2021	PREP Skills Workshop (Facilitated 1 hour on whistle blowing and research ethics)	12
Summer 2021	PREP Skills Workshop (Facilitated 1 hour on Well-being and Resiliency)	24
Fall 2021	Nursing Pathophysiology (2 lectures: Disorders of Brain Function; Disorders of the Spinal Cord)	50
Spring 2022	Dental Hygiene: Gen & Oral Physiology (2 lectures: Endocrine Mechanisms 1 & 2)	40
Spring 2022	CARE Pathophysiology (1 lecture: Disorders of Brain Function)	50
Spring 2022	PREP Skills Workshop (Facilitated 1 hour on whistle blowing and research ethics)	6
Spring 2022	Nursing Pathophysiology (2 lectures: Disorders of Brain Function; Disorders of the Spinal Cord)	60
Fall 2022	PREP Skills Workshop (Facilitated 1 hour on Well-being and Resiliency)	1
Fall 2022	Nursing Pathophysiology (2 lectures: Disorders of Brain Function; Disorders of the Spinal Cord)	60

Students and Faculty Trained

Undergraduate:

Spring 2021 Ra'Janae Morris, ENDURE Program Undergraduate

Summer 2021 Shannon Sullivan, T35 Summer Student, Research Experiences for Undergraduates (REU)
Elizabeth Odynocki, T35 Summer Student, Research Experiences for Undergraduates (REU)

Masters:

Fall 2022 Abigail Jahnke, MS Tulane University, Graduate Laboratory Volunteer

Graduate:

Fall 2021 Derek Wiltz, Rotating first year graduate student in Interdisciplinary Studies

Faculty:

April 2022 Elizabeth Delery, PhD, of Marian University; Indianapolis, IN

RESEARCH AND SCHOLARSHIP

Grants and Contracts:

ACTIVE:

F32 1F32AA030496-01A1 12/01/2023 – 11/30/2026
Ruth L. Kirschstein NRSA Postdoctoral Fellowship \$67,174/year
NIH/NIAAA

Alcohol exposure exacerbates inflammation and anxiety-like behavior induced by repeated mild TBI during adolescence

The goal is to investigate the combinant roles of TBI and alcohol exposure on neuroinflammation and the development of anxiety during adolescence.

Role: Principal Investigator

1L40AA030413-01 07/01/2022- 06/30/2024
Loan Repayment Program (LRP) \$81,146.15
NIH/NIAAA

The goal is to retain highly qualified health professionals into biomedical research careers by repaying a portion of qualified educational debt in exchange for a commitment to NIH mission-relevant research.

Role: Principal Investigator

COMPLETE:

T32 AA007577 (Molina) 09/01/2009–11/30/2024
NIH/NIAAA \$402,449/year

Biomedical Alcohol Research Training Program

The goal is to educate and train pre and postdoctoral fellows for careers as independent scientists in the field of alcohol research.

Role: Postdoctoral Trainee, November 2020 – present

NOT FUNDED:

F32 AA030496-01 09/01/2022 – 09/01/2025
Ruth L. Kirschstein NRSA Postdoctoral Fellowship \$204,558
NIH/NIAAA

Alcohol exposure exacerbates inflammation and anxiety-like behavior induced by repeated mild TBI during adolescence

The goal is to investigate the combinant roles of TBI and alcohol exposure on neuroinflammation and the development of anxiety during adolescence.

Role: Principal Investigator

APS Postdoctoral Fellowship Grant 11/01/2021-10/31/2022
The American Physiological Society \$50,000
Binge alcohol and traumatic brain injury effects on the adolescent brain

The goal of this project was to assess whether binge alcohol exposure during adolescence exacerbated the inflammatory response and an anxiety-like phenotype caused by repeated mild traumatic brain injury.

Role: Principal Investigator

Publications:

Journal Articles (Refereed)

1. **Vita, S.M.**; Dulin, J.N. In Memoriam: Ray Grill (1966-2018). *Neural Regen Res* 2018; 13: 1488.
2. Maynard, M.E.; Redell, J.B.; Zhao, J.; Hood, K.N.; **Vita, S.M.**; Kobori, N.; Dash, P.K. Sarm1 loss reduces axonal damage and improves cognitive outcome after repetitive mild closed head injury. *Experimental Neurology*, 327, 113207. <https://doi.org/10.1016/j.expneurol.2020.113207>
3. Redell, J. B., Maynard, M. E., Underwood, E. L., **Vita, S. M.**, Dash, P. K., & Kobori, N. (2020). Traumatic brain injury and hippocampal neurogenesis: Functional implications. *Experimental Neurology*, 331, 113372. <https://doi.org/10.1016/j.expneurol.2020.113372>
4. **Vita SM**, Grayson BE, Grill RJ. Acute damage to the blood-brain barrier and perineuronal net integrity in a clinically-relevant of rat model traumatic brain. *Neuroreport*. 2020;31: 1167–1174. doi:10.1097/WNR.0000000000001531
5. **Vita SM**, Redell JB, Maynard ME, Zhao J, Grill RJ, Dash PK, et al. P-glycoprotein Expression Is Upregulated in a Pre-Clinical Model of Traumatic Brain Injury. *Neurotrauma Rep*. 2020;1: 207–217. doi:10.1089/neur.2020.0034

Book Chapters:

1. **Vita, S. M.**, Smith, A. M., Ray, T. & Grayson, B. E. Blood–brain barrier damage following mild traumatic brain injury. in *Handbook of Animal Models in Neurological Disease* (Martin, Patel, & Preedy).

Peer-Reviewed Abstracts (poster presentation unless noted; **mentee presenter):

1. **Vita, S.M.**; K.R. Clark, R.J. Grill. Acute pathophysiologies associated with mild, “head on” concussion injury in the Sprague-Dawley [abstract]. Program No. 322.07/Y8. 2016 Neuroscience Meeting Planner. San Diego, CA: Society for Neuroscience, 2016. Online.
2. **Vita, S.M.**; Grill, R.J. Pathophysiologies associated with cTBI in the Sprague-Dawley rat. Presented at the Mission Connect Symposium, Houston, TX, December 2, 2016 (Poster and Podium Presentations)
3. **Vita, S.M.**; Grill, R.J. Acute pathophysiologies associated with mild, “head on” concussion injury in the Sprague-Dawley rat. Presented at the Mississippi Academy of Sciences, Oxford, MS. February 23, 2017. *Received “Best Graduate Student Poster Presentation” Award
4. **Vita, S.M.**; R.J. Grill. Concussive TBI produces deficits to the blood–brain barrier and perineuronal nets in rats [abstract 0526]. (2017) Accepted Abstracts from the International Brain Injury Association’s 12th World Congress on Brain Injury, *Brain Injury*, 31:6-7, 719-1017, DOI:10.1080/02699052.2017.1312145
5. **Vita, S.M.**; Grill, R.J. mTBI and Neurovasculature. Presented at the Mission Connect Symposium. Houston, TX. November 30, 2019. (Poster Presentation) *Received “Best Graduate Student Poster Presentation” Award
6. **Vita, S.M.**; Grill, R.J. mTBI and Neurovasculature. Presented at 25th Annual Neuroscience Poster Session. Houston, TX. December 1, 2019. (Poster Presentation) *Received the “Dee S. and Patricia Osborne Endowed Scholarship in the Neurosciences” for best overall poster
7. Odynocki, E., **Vita, S.M.**, Molina, P.E. Examining the Blood-Brain Barrier Following Mild Traumatic Brain Injury. Presented at Summer Research Internship Program Virtula Poster Session, LSUHSC, New Orleans, LA, 2021. (**mentee presenter) 3rd Place Winner, Undergraduate Category
8. Sullivan, S., Schwartzenburg, J., **Vita, S.M.**, Molina, P.E. The Effect of Moderate TBI on Neuronal Degradation in the Spinal Cord. Presented at Summer Research Internship Program Virtula Poster Session, LSUHSC, New Orleans, LA, 2021. (**mentee presenter)

9. **Vita, S.M.**, Gilpin, N.W., Molina, P.E. Alcohol exposure exacerbates hippocampal inflammation induced by repeated mild TBI during adolescence. Presented at Research Society on Alcoholism, Orlando, FL, June 29, 2022

Conference Participation:

1. Oral presenter. *Pathophysiologies associated with cTBI in the Sprague-Dawley rat*. 2016 Mission Connect Symposium - Houston, TX
2. Round Table Panelist. Disparities in Grant Funding and Health. Spring 2021 Alcohol and Drug Abuse Center of Excellence (ADACE) Retreat – New Orleans, LA

Invited Seminars and Talks:

1. “Comparing preclinical models of traumatic brain injury”, Greater New Orleans Society for Neuroscience Chapter, LSUHSC, New Orleans, LA, May 5, 2022

Continuing professional education, refresher courses, & workshops at professional meetings/symposia:

1. Perspectives in Alcohol Research (PAR), Louisiana State University Health Sciences Center, Fall 2020-present.
For one hour each week during long semesters, trainees and faculty members in the alcohol research field discuss relevant topics including recently published alcohol-related literature, model systems and techniques, and research ethics. This elective is discussion-based and trainees lead the majority of sessions. 15 hours per semester, Instructors: Robert Siggins, PhD
2. Breaking the Glass Ceiling in Leadership Positions, Webinar organized by the American Physiological Society’s DEI Committee, January 19, 2022; online
3. New Reviewer Training Session, an on-demand webinar by the American Physiological Association. Watched March 9, 2022; online
4. Mitigating Implicit Bias/Microaggressions in Mentoring: A DEI Workshop, RSA 45th Annual Scientific Meeting, June 25, 2022; Orlando, Florida
5. NIAAA-Supported Research: A Grants Skills Workshop organized by the RSA Education Committee, RSA 45th Annual Scientific Meeting, June 28, 2022; Orlando, Florida
6. Importance of Mentorship at All Career Levels APS DEI Webinar, organized by American Physiological Society’s DEI Committee, October 24, 2022; online

SERVICE ACTIVITIES

University/Institutional Service:

2016	<u>Volunteer</u> , Discovery U, Mississippi Children’s Museum, Jackson, MS
2019	<u>Volunteer</u> , Brain Night for Kids, McGovern Museum of Health & Medical Science, Houston, TX
March 2021	<u>Volunteer Interviewer</u> , Mock Job Interviews, Association of Women in Science – Southern Louisiana Chapter, LSUHSC, New Orleans, LA
April 2021	<u>Judge</u> , Trainee Talks, Alcohol and Drug Abuse Center of Excellence (ADACE) Retreat, LSUHSC, New Orleans, LA
2021 – Present	<u>Member</u> , Graduate School Diversity, Equity and Inclusion Committee, LSUHSC, New Orleans, LA
2021 – Present	<u>Member</u> , Department of Physiology Diversity, Equity and Inclusion Committee, LSUHSC, New Orleans, LA
Winter 2021	<u>Organizing Committee member</u> , Alcohol and Drug Abuse Center of Excellence (ADACE) Spring Retreat, LSUHSC, New Orleans, LA

National Service:

2016 – 2018	<u>Volunteer Fundraiser & Participant</u> , Walk to Defeat ALS
2017 – 2018	<u>Volunteer</u> , Crisis Text Line

Summer 2022 Volunteer Mentor, Talaria Summer Institute. Talaria Summer Institute (TSI) is a free STEM research mentorship summer program for female and genderqueer high school students (rising high school freshmen to rising college freshmen).

Community Service and Outreach Activities:

March 2017 Cheerleader (Krewe de Wonder Women), Youth Run NOLA, New Orleans, LA

February 2018 Judge, VEX Robotics Tournament, Jackson, MS

2021 – 2022 Volunteer, School Gardening Project, Homer Plessy Community School, Treme, New Orleans, LA

February 2021 Judge, Greater New Orleans Science and Engineering Fair, Senior Division of Biomedical Health and Translational Sciences; Senior Division of Computational Biology, Bioinformatics and Biomedical Engineering, New Orleans, LA

2021 – present Board Member, Historic Fauberg Tremé Association (HFTA), New Orleans, LA

March 2022 Volunteer, Bookfest with Books and Brains, Tulane University, New Orleans, LA