

TAYLOR MARCUS

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828 Third Street
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EDUCATION

PhD	Tulane University, Neuroscience <i>Mentor: Dr. Julie Markant, Ph.D</i>	Expected May 2025
BS	Louisiana State University, Biological Sciences <i>Ogden Honors College</i>	May 2018
BS	Louisiana State University, Psychology <i>Ogden Honors College</i>	May 2018

HONORS AND AWARDS

LSU Academic Nonresident Award	2014
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RESEARCH EXPERIENCE

Graduate Student , Tulane University, New Orleans, LA Advisor: Dr. Julie Markant	2019 to 2020
<ul style="list-style-type: none">• Projects:<ul style="list-style-type: none">○ fNIRS Studies of Attention and Learning Across Development○ Attention, Learning, and Memory in Adulthood• Role: Manage all aspects of two research projects using eye tracking and functional near-infrared spectroscopy (fNIRS) methods. Develop study protocols and data processing pipelines. Coordinate and oversee research assistants' roles in recruitment, data collection and processing.	
Clinical Research Coordinator , Tulane University, New Orleans, LA Advisor: Dr. Katherine Mills	2019 to 2020
<ul style="list-style-type: none">• Projects:<ul style="list-style-type: none">○ Sodium Lowering and Urinary Protein Reduction (SUPER) Trial○ Vascular Effects of Dietary Sodium Reduction in Patients with Chronic Kidney Disease (SOLVE) Trial• Role: Managed all aspects of the SUPER and SOLVE clinical trials, developed an in-depth knowledge of protocol requirements and good clinical practices. Acted as the liaison between patient, investigator, collaborators, IRB and sponsor. Responsible for recruitment, data collection, entry and quality control activities and ensured protocol compliance and patient monitoring.	

Clinical Protocol Technician, Tulane University, New Orleans, LA 2018 to 2019
Advisor: Dr. Jiang He

- Projects:
 - Chronic Renal Insufficiency Cohort
 - Low-Carbohydrate Dietary Pattern on Glycemic Outcomes Trial
 - Sodium Lowering and Urinary Protein Reduction Trial
 - Vascular Effects of Dietary Sodium Reduction in Patients with Chronic Kidney Disease
- Role: Responsible for conducting the physiological assessments, lab testing and recruitment of participants for several active clinical research studies in the Tulane Office of Health Research.

Laboratory Assistant, Baton Rouge LA 2017 to 2018
Advisor: Dr. Brant Faircloth

- Project:
 - Genome Assemblies for Two Neotropical Trees: *Jacaranda copaia* and *Handroanthus guayacan*
- Role: Assist in evolutionary biology research efforts. Updated GenBank databases, isolated and quantified DNA samples, and prepare DNA libraries of various organisms.

Research Assistant, Baton Rouge LA 2015 to 2017
Advisor: Dr. George Noell

- Projects:
 - Promoting Literacy Development in the Early Childhood Classroom
 - Teaching children with autism to tie their shoes using video prompt-models and backward chaining.
- Role: Responsible for conducting data collection and processing for various research studies in the lab.

Honors Students Advised

Anna Wood, *Biased Attention Orienting to the Self-Face during an Attention Capture Task*, Expected Graduation Spring 2023

Undergraduate Students Advised

Sam Spirt, Expected Graduation Spring 2023
Sophia Nahabedian, Expected Graduation Spring 2023
Keerthana Krishnan, Expected Graduation Spring 2024
Sarah Bender, Expected Graduation Fall 2022
Carson Heward, Expected Graduation Spring 2023

TEACHING EXPERIENCE

Tulane University, New Orleans, LA

Expected Fall 2023

Graduate Pedagogy Program

- Three-Semester Graduate Pedagogy Program designed to train and prepare graduate students to be an instructor of record.
 - CELT 7010 The Essentials of Teaching & Learning: Completed Spring 2022
 - CELT 7020 Practical Course Design & Teaching Skills: Completed Fall 2022
 - CELT 7030 Teaching Practicum: Expected Spring 2023

Tulane University, New Orleans, LA

August 2020 to present

Teaching Assistant, Neuroscience and Psychology

- Brain and Behavior, Fall 2020
- Biological Psychology, Spring 2021
- Psychopharmacology Lab, Fall 2021
- Neuroanatomy Lab, Spring 2022
- Applied Neuroscience, Spring 2022
- Sensation and Perception Lab, Fall 2022
- Cognitive Neuroscience, Spring 2023

PUBLICATIONS

King, J., Marcus, T., & Markant, J. Individual differences in selective attention and engagement shape students' learning from visual cues and instructor presence during online lessons. *Sci Rep* 13, 5075 (2023). <https://doi.org/10.1038/s41598-023-32069-7>.

Journal Papers in Preparation

Marcus, T., Hodel, A., Thomas, K.M., & Markant, J. (in preparation). Inhibition of return at 7 months predicts inhibitory control in early childhood.

Marcus, T., King, J., & Markant, J. (in preparation). Attending to visual cues and peer videos differentially affects college students' learning during online lessons.

PRESENTATIONS AND INVITED LECTURES

Presentation, "Attending to visual cues and peer videos differentially affects college students' learning during online lessons," Greater New Orleans Society for Neuroscience, June 2nd, 2022.

Presentation, "Investigating the role of motivational salience in online learning environments," Tulane DUNNK, September 23rd, 2022

Poster, “Attending to Visual Cues and Peer Videos Differentially Affects College Students’ Learning During Online Lessons,” Psychonomics Annual Meeting, November 18th, 2022.

Poster, “Attending to Visual Cues and Peer Videos Differentially Affects College Students’ Learning During Online Lessons,” Greater New Orleans Society for Neuroscience Annual Retreat, December 6th, 2022.

PROFESSIONAL TRAINING

NIRx Virtual fNIRS Training Course

NirX, Virtual, January 25th-February 6th, 2021

Description: This training course provided a solid foundation of the fNIRS technology. This event provided a thorough understanding of how to run a successful fNIRS experiment from selecting hypotheses and designing experiments, to analyzing results and publication.

Asynchronous Online Teaching Workshop

Tulane CELT, Virtual, April 5th, 2022

Developing Anti-Racist Curricula across the Arts, Humanities, Health Sciences, and Social Sciences Workshop

Tulane CELT, Virtual, April 6th, 2022

PROFESSIONAL AFFILIATIONS

Society for Research in Child Development, 2022-Present

Psychonomic Society, 2021-Present

PROFESSIONAL SERVICE

Seminar Co-Organizer

Greater New Orleans Society for Neuroscience, 2022- Present

Student Representative

Tulane University Neuroscience Program, 2023- Present

COMMUNITY SERVICE

No Days Offline

Event Volunteer, New Orleans, LA, 2018-present

Relay for Life

Fundraising Director, Baton Rouge, LA, 2017

Emerge Center

Volunteer, Baton Rouge, LA 2016-2017

LANGUAGES

English: Native Language

COMPUTER SKILLS

Programming: MATLAB, Python

Applications: PsychoPy, SR-Research Experiment Builder and Data Viewer, NIRStar, NIRSite, NIRSLab

REFERENCES

Dr. Julie Markant, Principal Investigator

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Tulane University
2007 Percival Stern Hall
Phone: 504-862-3312
Email: jmarkant@tulane.edu

Dr. Katherine Mills, Principal Investigator

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Tulane University School of Public Health and Tropical Medicine
1440 Canal St. Suite 2001 New Orleans, LA 70112
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Dr. Jiang He, Principal Investigator

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