CURRICULUM VITA

FELICIA M. CHAISSON, Ph.D.

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EDUCATION

Ph.D. **Psychology, Cognitive and Brain Science** | Louisiana State University **2021 – 2024**

M.A. **Psychology** | Louisiana State University **2018 – 2021**

B.S. **Psychology** | Louisiana State University **2014 – 2017**

B.A. **Sociology** | Louisiana State University **2014 – 2017**

Modern Standard Arabic | Defense Language Institute Foreign Language Center **2009 – 2011**

PROFESSIONAL SUMMARY

Dr. Chaisson is a cognitive scientist and applied human-performance researcher specializing in how acute stress, anxiety, and physiological arousal shape learning, memory, and cognitive control in high-demand environments. Her research integrates behavioral experimentation, psychophysiological and neurocognitive measurement (e.g., EEG/ERP, EDA, heart-rate monitoring, pupillometry), and quantitative modeling to examine how emotional and physiological states influence information processing, strategy use, and decision-making.

Drawing on interdisciplinary training in cognitive psychology, neuroscience, human-factors research, and military intelligence analysis, her work elucidates brain–behavior mechanisms through which stress constrains adaptive encoding and recall, with implications for performance, readiness, and intervention design.

Dr. Chaisson's research portfolio spans basic, translational, and embedded applied science. Her work includes electrophysiological studies of semantic processing under stress, human-factors and cognitive-performance research conducted in operationally relevant contexts, and interdisciplinary projects translating behavioral science into technology-delivered assessments and interventions. She currently serves as a Research Scientist in the Behavior Technology Laboratory at the Pennington Biomedical Research Center, where she contributes to Department of Defense– and Pennington-funded programs focused on performance readiness, resilience, and stress-responsive behavior across military, athletic, and youth populations. Previously, she conducted applied human-factors research as an Engineer Psychologist at the United States Naval Research Laboratory, designing and modeling studies of cognitive workload, performance, and physiological response during complex task demands.

She is committed to collaborative, evidence-based approaches that address the complex social, cognitive, and physiological stressors affecting diverse populations, with particular investment in supporting military communities, adolescents, and individuals functioning under acute or sustained strain. Across roles, her work emphasizes translating rigorous science into practical insight to inform real-world systems, programs, and person-centered solutions.

RESEARCH SKILLS & INTEREST

SKILLS

- Advanced training in cognitive mechanisms of learning and memory, including semantic organization, narrative-based encoding, elaborative strategies, and cognitive control
- Expertise in psychophysiological and neurocognitive measurement, including EEG/ERP, pupillometry, electrodermal activity (EDA), and heart-rate variability
- Experience integrating subjective, behavioral, and physiological indicators of stress, anxiety, resilience, readiness, and performance
- Programming, statistical analysis, and quantitative data workflows in MATLAB, R, and Python
- Study and program implementation, curriculum development, intervention delivery, facilitator coordination, data collection, and multi-stakeholder project oversight

- Evidence synthesis, scientific manuscript development, grant writing, research translation, and communication of complex findings to multidisciplinary audiences
- Human-factors and user-centered research; usability testing; technology-enabled assessment and intervention development
- Proficient in Microsoft Office, IBM i2 Analyst Notebook, ArcGIS, Adobe Illustrator, Inkscape, Prolific, Google Forms, Figma, ClickUp, and Canva

INTERESTS

***Broad*:** Human performance; psychological resilience; stress and adaptation; learning and memory; cognitive control; technology-enabled behavior change

***Specific*:** Evidence-based, modifiable factors of resilience and performance in military, athletic, female, and adolescent populations; the effects of acute stress on learning and memory; translating behavioral science into practical interventions and technology

PEER REVIEWED PUBLICATIONS

Stewart, T.M., Woolf, E.K., Cabre, H.E., Lowe, A.C., Applebaum, L.G., Arent, S.M., Burke, L.M., Connaboy, C., Goodson, M.S., Hackney, A.C., Ivkovic, V., Lee, S.M.C., Macias, B.R., McClung, J.P., Pasiakos, S.M., Popp, K.L., Ploutz-Snyder, L.L., Rapley, S.E., Trappe, S., Allaway, H.C.M., McKay, A., Johannsen, N., Irving, B.A., **Chaisson, F.**, Varzeas, K.A., Wesley, N.Y., & Spielmann, G. (2025). Optimization of health, performance, and resilience: Courtside, warside, and spaceside *(Accepted October 2026).*

Stewart, T. M., Wesley, N. Y., Hazzard, V. M., & **Chaisson, F.**, Sokolowski, S. L., Searcy, J., & Dulal A. (2026). More than miles: The influence of goal-oriented training on runners' perceptions of body image. (*in prep*)

Stewart, T. M., Wesley, N. Y., Hazzard, V. M., & **Chaisson, F.** (2026). Four pillars of defense: A whole health approach to the military. (*in prep*)

Stewart, T. M., Wesley, N. Y., Broyles, S., **Chaisson, F.**, Varzeas, K. A., & Staiano, A. E. (2026). Growing Through It: A Longitudinal Examination of Body Dissatisfaction, Mental Health, and Resilience During Adolescence. Journal of Adolescence 0: 1–11. https://doi.org/10.1002/jad.70300

Chaisson, F. M., Cox, C. R., Alford, A. M., Burleigh, L. M., Greening, S. G., & Lucas, H. D. (2024). The impact of threat of shock on memory for threat-irrelevant information: Evidence for a role of reduced semantic organization. Biological psychology, 193, 108877

Saltzmann, S. M., Moen, K. C., Eich, B., **Chaisson, F. M.**, Fan, G., Goldstein, R. R., Beck, M. R., & Lucas, H. D. (2023). Behavioral and electrophysiological evidence for the flexible recruitment of feature- and object-based processing in visual working memory comparison. Biological Psychology, 178, 108528. https://doi.org/10.1016/J.BIOPSYCHO.2023.108528

BOOK CHAPTERS

Cairney, B. E., **Chaisson, F.**, & Papesh, M. H. (2024). Pupillometry and Declarative Long-Term Memory. Modern Pupillometry: Cognition, Neuroscience, and Practical Applications, 181-199.

DISSERTATION & THESIS

Chaisson, F. M., "Stress on the Brain: An Investigation into the Impact of Stress on Learning, Memory, And Metamemory Processes" (2024). LSU Doctoral Dissertations. 6615

Chaisson, F.M. (2021). Neurocognitive Interactions Between Anticipatory Anxiety and Memory Encoding. LSU Master's Theses. https://digitalcommons.lsu.edu/gradschool_theses/5263

CONFERENCE PRESENTATIONS

Stewart, T.M., Wesley, N.Y., Varzeas, K.A., & **Chaisson, F.** (2025). Identifying modifiable factors of psychological resilience in high performance populations: Implications for intervention. Poster presented at the Female Athlete Research Meeting, Stanford University, Stanford, CA.

Chaisson, F.M., Alford, A., Lucas, H.D., Cox, C.R. (2024, April). *Semantic clustering and semantic path length: Two measures of free recall organization with different functional properties*. Poster presented at the annual meeting of the Cognitive Neuroscience Society, Toronto, Canada.

Saltzmann, S. M., Moen, K. C., **Chaisson, F.**, Eich, B. J., Fan, G., Beck, M. R., & Lucas, H. D. (2022, May). *Neural Correlates of Task-Irrelevant Feature Processing in Visual Working Memory.* Poster presentation at The Annual Meeting of the Vision Science Society, St. Pete Beach, FL.

Chaisson, F.M., Cox C. R., Alford, A., Lucas, H.D. (2022, April). *Acute anxiety reduces behavioral and electrophysiological measures of semantic processing during memory formation*, Poster presented at the annual meeting of the Cognitive Neuroscience Society, San Fransisco, CA.

Alford, A., **Chaisson, F.M.**, Lucas, H.D. (2022, March). *An investigation of the effects of acute stress on elaborative encoding strategies*. Poster presented virtually at the annual meeting of the Society for Affective Science.

Alford, A., **Chaisson, F.M.**, Lucas, H.D. (2021). *Examining the Effects of Acute Anxiety on Memory Strategies*. Poster presented virtually at Louisiana State University's annual Discover Day.

Chaisson, F.M., Burleigh, L.M., Greening, S.G., & Lucas, H.D. (2021, October). *Learning under stress: Electrophysiological evidence that acute stress impairs strategic encoding processes*. Presentation given virtually at the annual meeting of the Society for Psychophysiological Research.

Chaisson, F. M., Burleigh, L., Greening, S.G., Lucas, H. (2021, April). *Distinct effects of acute anxiety on memory and metamemory*. Oral presentation given virtually at the annual meeting of the Southeastern Psychological Association.

Chaisson, F. M., Burleigh, L., Greening, S.G., Lucas, H. D. (2020, March). *An ERP investigation of the effects of acute stress on memory formation and judgments of learning (JOLs)*. Poster presented virtually at the annual meeting of the Cognitive Neuroscience Society.

Chaisson, F. M., Burleigh, L., Greening, S.G., Lucas, H. (2019, October). *Acute anxiety impairs memory formation but does not impact judgements of learning*. Poster presented at the annual meeting of the Southwest Cognition and Cognitive Neuroscience Society, San Antonio, TX.

Burleigh, L., Owens-French, J., Traylor, Z., **Chaisson, F. M.**, Madden, A., Raggio, L. Greening, S.G. (2018, November). *Fear conditioning in the theatre of the brain: elucidating the neural mechanisms of fear generalization from viewed and imagined percepts.* Poster presented at the annual meeting of the Society for Neuroscience, San Diego, CA.

MILITARY SERVICE

UNITED STATES MARINE CORPS **2008 – 2013**

SIGINT Geospatial Analyst

- Established the deployment support process for providing SIGINT Geospatial Analysis Support Packages to the Marine Intelligence Center
- Utilized intricate tools and procedures for developing and manipulating data, enabling the successful identification and reporting of critical information

Analyst Instructor

- Cultivated a thorough curriculum and lesson plans to provide primary-level data analytic education
- Developed and delivered geospatial-analytic training that required decoding patterns, rhythm, and temporal/spatial signal structures
- Applied dynamic teaching techniques and personal experience to successfully train personnel, producing over 100 trained analysts

- Provided low to high-difficulty practical application instruction, resulting in the recognition and improvement of problems and gaps in the knowledge base of training personnel
- Provided detailed evaluation and critiques for Unit Deployment Exercises, resulting in the identification and correction of unit weaknesses in analytical operations prior to deployments

PROFESSIONAL & APPLIED EXPERIENCE

PENNINGTON BIOMEDICAL RESEARCH CENTER: Behavior Technology Lab **May 2025 – Present**

Research Scientist

- Conduct interdisciplinary research examining behavioral, physiological, and cognitive mechanisms underlying resilience, readiness, and stress in high-performance populations, including professional athletes and service members
- Lead project planning and execution for multi-year Department of Defense funded initiatives, including study design development, program implementation, intervention creation and delivery, personnel management, data acquisition, quantitative and psychophysiological analysis, and research translation
- Integrate behavioral science with physiological measurement (heart rate, cortisol, EEG/EDA) to understand brain–body processes relevant to resilience, stress, and adaptive functioning
- Contribute to scientific manuscript and grant development across high-performance populations, with particular emphasis on female and adolescent populations
- Collaborate across behavioral science, clinical, computational, and human-performance disciplines to translate evidence and data-identified needs into applied programs and technology

UNITED STATES NAVAL RESEARCH LAB **May 2022 – May 2025**

Engineer Psychologist

- Designed and executed basic and applied human-factors and cognitive-performance studies focused on behavioral and physiological responses during complex tasks
- Conducted advanced quantitative modeling linking cognitive performance, workload, and psychophysiological indicators
- Collaborated with interdisciplinary teams to integrate cognitive science findings into user-centered system development

LSU COGNITIVE & BRAIN SCIENCE RESEARCH **August 2018 – December 2024**

Graduate Researcher

- Demonstrated that learners naturally rely on narrative-building (semantic clustering, story formation) during encoding to organize information, but that acute anxiety/stress selectively disrupts access to this strategy
- Showed that threat-evoked anxiety reduces semantic organization during learning—evidence that story-based/elaborative encoding is a key mechanism impaired under stress
- Used EEG/ERP and behavioral measures to reveal diminished semantic processing during memory formation under acute anxiety, indicating decreased recruitment of narrative/elaborative strategies at encoding
- Identified that participants spontaneously employed narrative scaffolds (semantic clustering/path length) to support memory; acute stress constrained that narrative scaffolding, yielding less organized recall
- Linked changes in electrophysiological markers of elaboration with reduced story-based encoding under threat, clarifying a brain–behavior pathway by which stress degrades learning
- Clarified a practical mechanism for arts-adjacent interventions: when rhythm, imagery, or narrative can externally scaffold elaboration, learners may better preserve organization under stress

HEALINGHAND TECH **January 2024 – May 2024**

User Experience Researcher

- Utilized human-centered research methods to examine sensory-motor interaction, emotional engagement, and user experience in a rehabilitation context

- Designed and implemented usability tests to gather feedback on game mechanics and user interface design
- Collaborated with multidisciplinary teams, including developers, designers, and stroke patients, to ensure the game's effectiveness in rehabilitation

EAST BATON ROUGE DISTRICT ATTORNEY'S OFFICE **October 2017 – August 2018**

Criminal Analyst

- Generated evidence-based intelligence briefings for local and federal law enforcement officials
- Formulated standard operating procedures and guidelines for the Crime Strategies Unit Internship Program while providing oversight and guidance to over 15 Sociology student interns

COGNITIVE NEUROSCIENCE OF AFFECT PSYCHOPATHOLOGY LAB **January – May 2017**

Research Assistant

Supervisor: Dr. Steven Greening

- Conducted experiments for the research of cognitive processes associated with emotion and fear

SUPPLEMENTAL RESEARCH TRAINING

NEUROMATCH ACADEMY **July 2021**

Computational Neuroscience Course

- Successfully completed the interactive track and course project consisting of 4 weeks of novel coursework aimed at understanding computational modeling of neuroscience data such as EEG, fMRI, and ECoG
- Received hands-on experience integrating foundational mathematics with advanced model scripting in Python

TEACHING EXPERIENCE

TEACHING ASSISTANT

- Topic – Neurocognitive Bases of Behavior **Spring 2024**
- Topic – Memory & Forgetting **Spring 2024**
- Topic – Sensory and Perceptual Processes **Fall 2018**
- Topic – Psychology Capstone **Fall 2018 – Spring 2020**

GUEST LECTURER

- Topic – "Memory" **Spring 2024**
  - LSU, Department of Psychology, Graduate Course PSYC 7030: Neurocognitive Bases of Behavior
- Topic – "Degrees in Psychology" **Spring 2021**
  - LSU, Department of Humanities, Science, & Education

SCIENCE COMMUNICATION

Skype a Scientist

- Engaged in open dialogue focused on science education, literacy, and experience with students from:
  - Vistamar High School **Spring 2024, Fall 2024**
  - Ridgewood High School **Spring 2021**

HONORS AND AWARDS

Graduate Research Fellowship Program, National Science Foundation

Fall 2020 – Spring 2023

- Selected through a highly competitive national peer-review process to support independent graduate research on the neurocognitive mechanisms of stress and memory; fully funded three years of doctoral training and research.

United States Marine Corps - Navy and Marine Corps Achievement Medal

May 2013

- Led analyst training for 1st Radio Battalion, developing signals intelligence geospatial analysis courses to train and certify nearly 100 Marines, enhancing deployment readiness, and strengthening unit cohesion through several volunteer and morale-building initiatives

SERVICE & MENTORSHIP

ROTARY CLUB OF BATON ROUGE **2025 – Present**

Member

- Participate in community service initiatives supporting local health, food security, and community well-being.
- Engage with local nonprofit organizations and community leaders through regular club meetings and outreach initiatives.

FIRST- GEN STUDENT MENTOR PROGRAM **Fall 2020 – Spring 2026**

Professional Mentor

- Provided bi-monthly academic and career mentorship to first-generation undergraduate psychology students
- Curated and maintained an open, career-focused relationship aimed at providing professional development resources

MISSION FOR MOVEMENT: PARKINSON'S FOUNDATION GRANT SERIES **Spring 2024**

Invited Speaker

- Delivered an invited presentation on the intersection of interoception, Parkinson's disease, and motor regulation, translating contemporary neuroscience into accessible, applied insights for patient-focused programming
- Provided evidence-based education to community members, caregivers, and practitioners, emphasizing how internal bodily awareness mechanisms influence symptom experience and quality of life in Parkinson's populations
- Supported the foundation's mission by integrating scientific research with practical recommendations for movement-based interventions and patient well-being

LSU DISCOVER DAY **Spring 2024**

Presentation Judge & Coordinator

- Served as a judge for the Undergraduate Research Symposium, evaluating over 300 student poster and oral presentations, providing constructive feedback and contributing to the recognition of exceptional research efforts.

COMMITTEE ON DIVERSITY AND OUTREACH IN PSYCHOLOGY **Fall 2021 – Fall 2024**

Graduate Peer Mentor Coordinator

- Co-designed an effective peer-level mentorship program for graduate students within the psychology department
- Hosted multiple mentor-mentee socials to promote open communication and networking
- Provided peer-level mentorship to upper-level graduate students on both academic and career-oriented topics
- Provided structured co-work sessions for peer-guided professional development
- Host and maintain virtual and in-person workspaces for graduate students to collaborate, co-work, and socialize in order to promote peer networking and growth

DIRECT MENTORSHIP **Fall 2018 – Spring 2021**

Amber Alford, LSU McNair Scholar & Discover Grant Recipient

Co-mentor with Dr. Heather Lucas

Project Title: "Examining the Effects of Acute Anxiety on Memory Strategies"

Responsibilities: Provided academic guidance on initiating and carrying out a collaborative research project, including experimental design, data collection, analysis, technical writing, and project presentation

Rebecca Wallace, LSU Honors Thesis Student

Co-mentor with Dr. Heather Lucas

Thesis Title: "The Effects of Threat-Evoked Anxiety on Visuospatial Memory Encoding"
Nominated for the 2019 Ogden Honors College Outstanding Thesis Award
Responsibilities: Guided the execution of an independent research project by instructing Rebecca in participant recruitment, data collection methods, and data analysis

UNDERGRADUATE ADVISING **Spring 2019**

Student Advisor

- Advised undergraduate students within the Department of Psychology and College of Humanities and Social Sciences on course scheduling and academic progression

VETERAN AND MILITARY STUDENT SERVICES **2016 – 2017**

Student Aide

- Directly assisted incoming student veterans and dependents with university enrollment processes
- Organized and held veteran-specific outreach events to promote support and involvement
- Collected and analyzed data regarding the student veteran population at LSU

CENTER FOR ACADEMIC SUCCESS **Spring – Fall 2016**

Supplemental Instructor

Course: PSYC 2017

- Developed lesson plans and conducted supplemental instruction to coincide with LSU's experimental psychology course
- Compile, provide, and maintain a variety of study resources for students

PROFESSIONAL AFFILIATIONS

- Rotary of Baton Rouge
- Forum 225
- Society for Psychophysiological Research
- Cognitive Neuroscience Society
- Women in Cognitive Science
- Society for Affective Science
- Southeastern Psychology Association
- Southwest Cognition and Cognitive Neuroscience Society (Armadillo)