

# LIETSEL JONES, M.S.

- engineer-turned-scientist with a unique approach to problem-solving, research, teaching, and mentorship
- dedicated doctoral student committed to understanding the inner workings of the human brain, aging, and neurodegeneration
- strong advocate for inclusivity and equity in the sciences

## CONTACT

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Orlando, FL 32826  
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motherofneurons.com

## STRENGTHS & RELEVANT SKILLS

MS Office	Teamwork	Programming: R/RStudio,	Human subjects research	Electroencephalography (EEG)
Communication	Flexibility	MATLAB, Python	Human physiology	Epidemiology
Mentorship	Teaching	Statistical analysis: R/RStudio, SPSS	Cell/molecular biology	Interdisciplinary neuroscience

## EDUCATION

Aug 2021-current **University of Central Florida**  
Doctor of Philosophy, Biomedical Sciences  
*Anticipated completion: Dec 2023*

May 2012 **University of Central Florida**  
Master of Science, Biomedical Engineering  
*Track: Biomechanics*

Dec 2016 **University of Central Florida**  
Bachelor of Science, Mechanical Engineering  
*GPA: 3.42*

## RESEARCH EXPERIENCE

Jun 2022 - current **Graduate summer intern**, National Institute on Aging (NIA) at the NIH  
Mentor: Qu Tian, Ph.D., Longitudinal Studies Section, Translational Gerontology Branch  
*Studying the sex differences in the cross-sectional and longitudinal associations between white/gray matter volumes and muscle quality/age-related outcomes*

Aug 2021 - current **Graduate research assistant**, UCF BRAIN Lab  
Laboratory of Helen J. Huang, Ph.D.  
*Addressing systemic bias in electroencephalography (EEG) research through survey research and development of inclusive EEG preparation techniques*

Aug 2021 – May 2022 **Graduate teaching assistant**, Human Physiology Lab at UCF  
Burnett School of Biomedical Sciences  
*Assisted with instruction of several lab sections for the human physiology and honors physiology courses*

Aug 2017 – May 2019 **Master's thesis student**, Hybrid Sustainable Energy Systems Lab  
Mechanical & Aerospace Engineering  
*Designed, prototyped, and tested a soft-robotic device inspired by neutrophil actuation along blood vessel walls, then later wrote and defended a thesis on the mechanics of robotic actuation and potential applications*

## AWARDS

Aug 2022 – 2024 Neuroscience Scholars Program (NSP) Associate  
2021-2022 UCF College of Medicine Health Equity Scholar Award  
Aug 2021 Burnett School of Biomedical Sciences Fellowship  
2019 ORC Doctoral Fellowship

## ACADEMIC PUBLICATIONS

[Google Scholar](#) | [PubMed](#) | [ORCID](#)

Bradford, D. E., DeFalco, A., Perkins, E., Carbajal, I., Kwasa, J., Goodman, F. R., ... Joyner, K. (2022, May 27). Whose Signals Are We Amplifying? Towards a More Equitable Clinical Psychophysiology. <https://doi.org/10.31234/osf.io/c2naf>

Singleton, K. S., Murray, D.-S. R. K., Dukes, A. J., & Richardson, L. N. S. (2021). A year in review: Are diversity, equity, and inclusion initiatives fixing systemic barriers? *Neuron*. <https://doi.org/10.1016/j.neuron.2021.07.014>

Murray, D.-S., Richardson, L., Tesfaye, R., Nadin, D., Kelly, C., & Greenwood, P. (2021). Black In Neuro, Beyond One Week. *The Journal of Neuroscience: The Official Journal of the Society for Neuroscience*, 41(11), 2314–2317.

Richardson, Lietsel. 2019. “Conceptualization and Fabrication of a Bioinspired Mobile Robot Actuated by Shape Memory Alloy Springs.” University of Central Florida.

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## RESEARCH GRANTS

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Aug 2021 – current Inclusive EEG research	NIH R01AG054621	Graduate Research Assistant \$21,000.00
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## CONFERENCES

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Nov 2021	Society for Neuroscience (1) Stride-by-stride analyses of anterior cingulate cortex activity during perturbed recumbent stepping (2) Bias against historically excluded groups: the unintended consequence of neglecting hair preparation for EEG research
Mar 2022	UCF Student Scholar Symposium Neglecting hair diversity leads to participant misrepresentation in neuroscience
Jun 2022	Mobile Brain/Body Imaging Subject misrepresentation in EEG research for mobile brain/body imaging
Aug 2022	North American Congress on Biomechanics Hair considerations for equitable subject representation in neuromechanics

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## VOLUNTEER WORK

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Oct 2021 – current	Black In Neuro Co-founder, graduate student member
Jul 2020 – Oct 2021	Black In Neuro Co-founder, secretary
2020	DreamWakers Invited guest speaker
Jan 2018 – Dec 2018	Advent Health, Neuro ICU Volunteer service
Jan 2015 – Dec 2015	Coalition for the Homeless of Central Florida Daycare attendee