

Mona E. Elsayed

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EDUCATION

January 2024

Rutgers University (RU), The State University of New Jersey, New Brunswick, NJ
Doctor of Philosophy – Psychology
Dissertation Advisor: Dr. Elizabeth Torres

October 2021

Rutgers University (RU), The State University of New Jersey, New Brunswick, NJ
Master of Science – Psychology
Certificate in Cognitive Science

May 2018

The College of New Jersey (TCNJ), Ewing, NJ
Bachelor of Science in Biology – Summa Cum Laude
Minor: Psychology

PUBLICATIONS

Elsayed M, Ryu J, Torres EB. Setting our Lab in a Box: Paving the Road Towards Widely Accessible Biophysical Data Collection. Manuscript in preparation.

Elsayed, M. (2024). *Framework of interpretable biometrics to assess internal Psychophysiological states of distress in autism and the general population* (Doctoral dissertation, Rutgers The State University of New Jersey, School of Graduate Studies).

Elsayed, M., & Torres, E. B. (2023). Exploring cardiac responses of pain and distress. *IntechOpen*.

Torres, E. B., Twerski, G., Varkey, H., Rai, R., Elsayed, M., Katz, M. T., & Tarlowe, J. (2023). The time is ripe for the renaissance of autism treatments: evidence from clinical practitioners. *Frontiers in Integrative Neuroscience*, 17.

Elsayed, M. (2021). *Characterization of Psychophysiological Responses to Pressure Pain* (Master's dissertation, Rutgers The State University of New Jersey, School of Graduate Studies).

CONFERENCE PRESENTATIONS

Elsayed M, Torres EB. Cardiac Responses to Pain as Biomarkers for Pain-Induced Stress in Autism. Rutgers Brain Health Institute Annual Symposium, Piscataway, NJ. December 2022

Elsayed M, Torres EB. Cardiac Responses to Pain as Biomarkers for Pain-Induced Stress in Autism. Society for Neuroscience, San Diego, CA. November 2022

Elsayed M, Torres EB. Characterizing cardiac responses to pressure pain during motor-cognitive tasks. New York Academy of Sciences, Manhattan, NY. May 2022

Elsayed M, Torres EB. Characterizing psychophysiological responses to pressure pain. American Psychosomatic Society 2020 Virtual Meeting. December 2020.

ACADEMIC AWARDS, CERTIFICATES, HONORS, AND SCHOLARSHIPS

| | |
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| Spring 2022 - 2023 | Improving Classroom Skills Certificate, <i>Rutgers University SGS</i> |
| Summer 2021 | Erdős Data Science Bootcamp Certificate, <i>The Erdős Institute</i> |
| Summer 2020 | Mentoring Undergraduates Micro-Badge, <i>Rutgers University</i> |
| Spring 2020 | Honorable Mention, <i>NSF Graduate Research Fellowship Program</i> |
| Fall 2014 – Spring 2018 | Dean’s List, <i>The College of New Jersey</i> |
| Spring 2018 | Biology Department Faculty Award, <i>The College of New Jersey</i> |
| Spring 2018 | Outstanding Academic Achievement, <i>EOF program</i> |
| Fall 2016 – 2017 | Junior & Senior Incentive Award, <i>Educational Opportunity Fund</i> |
| Fall 2016 – 2017 | PERSIST Scholarship (x2), <i>PERSIST 2.0 Scholars Program</i> |

LEADERSHIP/MENTORING EXPERIENCE

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| Fall 2020 – Present | <i>Program Administrator</i> , Rutgers University MIND Network |
| Fall 2020 – 2021 | <i>Student Rep</i> , Rutgers Psych Dept Diversity & Climate Committee |
| Spring 2019 – 2023 | <i>Mentor</i> , Mentoring to Improve Neuroscience Diversity Program |
| Fall 2017 – Spring 2018 | <i>Chapter Executive Board Student Representative</i> , Phi Beta Kappa |
| Fall 2015 – 2017 | <i>Peer Mentor</i> , Educational Opportunity Fund Program |
| Fall 2016 – 2017 | <i>Biology Freshman Peer Mentor</i> , Tri-Beta Biology Honor Society |
| Fall 2015 – 2016 | <i>PERSIST Peer Mentor</i> , PERSIST 2.0 Scholars Program |

PROFESSIONAL MEMBERSHIPS

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| 2022 – | <i>Member</i> , Society for Neuroscience (SfN) |
| 2021 – 2022 | <i>Member</i> , New York Academy of Sciences (NYAS) |
| 2021 – | <i>Member</i> , Psychonomic Society |
| 2020 – 2022 | <i>Associate</i> , Society for Neuroscience – Neuroscience Scholars Program |
| 2020 – 2021 | <i>Associate Member</i> , American Psycho-Somatic Society (APS) |
| 2018 – | <i>Member</i> , Phi Kappa Phi (ΦΚΦ) Honor Society |
| 2017 – | <i>Member</i> , Phi Beta Kappa (ΦBK) Honor Society |
| 2016 – | <i>Member</i> , Golden Key International Honor Society |
| 2014 – 2018 | <i>Member</i> , Tri-Beta Biological Honor Society |

RESEARCH EXPERIENCE

Fall 2018
– 2024

Rutgers University, New Brunswick, NJ

PhD Student

Principle Investigator: Dr. Elizabeth Torres, PhD

Investigated nervous system biorhythms (cardiac, motor, facial) through the use of wearable biosensors in neurotypical individuals and those with neurodevelopmental disorders such as autism.

- Laboratory Skills: Using ECG, EEG, and IMU sensors on human subjects (from various age groups, typically developing, and those with neurodevelopmental disorders), data and statistical analyses via use of MATLAB, SPSS, R, and Origin

Fall 2016
– 2017

The College of New Jersey, Ewing, NJ

Independent Student Researcher

Principal Investigator: Dr. Dennis Shevlin, PhD

Explored the parasitic life cycle, infection strategies, and genetic diversity present within and among different populations of a newly studied fungus, *Sporisorium ellisii*.

- Laboratory Skills: PCR, gel electrophoresis, ISSR fingerprinting, DNA extraction, spore plucking, hyphae staining, confocal microscopy, NanoDrop spectrophotometry, harvesting infected plants, genetic data analysis, statistical analysis using GenAIEx

Summer 2016

Princeton University Princeton Neuroscience Institute, Princeton, NJ

Summer Intern

Principal Investigator: Dr. Ilana Witten, PhD

Research Mentor: Dr. Courtney Cameron, PhD

Studied addiction/drug-seeking behavior via the corticolimbic neural projection from the infralimbic cortex (IL) to the nucleus accumbens (NAc) during cocaine self-administration and extinction behavioral paradigms.

- Laboratory training: Histology (sectioning brain tissue, immunofluorescent staining, imaging), Laboratory animals handling/IACUC training and performing behavioral experiments, motion/video data analysis via MATLAB

PROFESSIONAL EXPERIENCE

Fall 2018
– 2023

Rutgers University, New Brunswick, NJ

Teaching Assistant

- Administered and graded exams and assignments for Cognition (Fall 2018 & Spring 2019) and Abnormal Psychology (Spring 2019) courses
- Instructed Sensation and Perception Laboratory course (Fall 2019)
- Instructed two General Psychology Recitation courses (Fall 2020)

- Instructed Cognition Laboratory course (Spring 2021)
- Instructed Abnormal Psychology Laboratory course (Fall 2021)
- Instructed two Infant & Child Development Laboratory courses (Spring and Fall 2022)

Fall 2016
– Spring 2018

The College of New Jersey, Tutoring Center, Ewing, NJ
Math/Science Tutor and Humanities & Social Sciences Tutor

- Tutored 5-10 students per week in biology, genetics, general chemistry, organic chemistry, and Arabic

Summer 2017

PCG Public Partnerships, Hamilton, NJ
Personal Care Assistant

- Attended to the needs of adults with Intellectual Disability

July 2016
– May 2017

Self-Directed Services Fiscal Management, Elizabeth, NJ
Personal Care Assistant

- Attended to the needs of adults with neurodevelopmental disorders/mental and physical disabilities