Mentoring Statement, Dr. Aysegul Gunduz

My mentorship motto is to “inspire, empower, and advocate.” In my Brain Mapping Laboratory, we study precursors to behavior and aftereffects of stimulation in neural networks to understand this interaction through electrophysiology and bioimaging. We aim to translate this knowledge into clinical diagnostic and therapeutic systems to improve the quality of life of those suffering from neurological and psychiatric disorders. My students interact and work with 4-6 patients for their dissertations. Seeing the impact of their work on the patients’ lives is an inspiring, motivating, and rewarding experience for my trainees. My graduate students have weekly meetings on Mondays at 7 a.m. with our clinical collaborators at the Fixel Institute for Neurological Diseases, where they get to interact with clinicians at every rank, from residents to attendings. This empowers my students and leads to highly productive collaborations. During the pandemic, I interacted with the Vice President for Research and advocated for all my doctoral students performing clinical research to receive the COVID-19 vaccines for their health and our participants. Ours was the first lab to receive the vaccines in the HWCOE (in January 2021).

I attribute my academic success to having graduated from highly diverse post-graduate laboratories. I thus empower those from various backgrounds: Out of my five current doctoral students, one is a Ghanaian female, two are Latinas, and two are African Americans (one female, one male). As a past international student, I encourage my international students who are demoralized for not being able to apply for national scholarships/fellowships by reminding them that I, too, did not have these opportunities but still was able to be successful in academia. I am the 2019 recipient of the UF Graduate Education Diversity Champion Award, and in 2020 I was inducted into the UF Graduate School Bouchet Honor Society. The Bouchet Society, named for the first African American to earn a Ph.D. in the US (Yale University, 1876), promotes diversity in higher education.

I also hold Graduate Faculty Status in Electrical and Computer Engineering, and Neuroscience to diversify my lab to multiple disciplines. I have graduated two MD-PhD students, who have given my engineering students insight into what clinical problems are significant and could benefit from engineering methods.

I have inspired and empowered my trainees to apply for scholarships, fellowships, and awards. I have advocated for them in these fellowship applications with my mentoring plans. I have advocated for them by nominating them for many awards. Their achievements are listed below:

Trainee Fellowships
- NIH T32 Fellowship, Justin Rossi (PhD candidate), 2014.
- NIH T32 Fellowship, Jonathan Shute (PhD candidate), 2015.
- NIH TL1 Fellowship, Rene Molina (PhD candidate), 2015.
- NIH TL1 Fellowship, Robert Eisinger (PhD candidate), 2017.
- NIH T32 Fellowship, Stephanie Cernera (PhD candidate), 2018.
- NIH F30 Fellowship, Robert Eisinger (PhD candidate), 2019.
- De Luca Foundation Scholarship, Stephanie Cernera (PhD candidate), 2019.
- NIH F31 Fellowship, Stephanie Cernera (PhD candidate), 2020.
- NIH TL1 Fellowship, Sarah Long (PhD candidate), 2020.
- NIH T32 Fellowship, Brandon Parks (PhD candidate), 2021.
- McKnight Fellowship, Natalie Geigel (PhD student), 2021.
- NSF Graduate Research Fellowship, Ava Burgess (PhD student), 2023.

Trainee Awards
- UF BME Pruitt Research Day Best Oral Presentation Award, Jonathan Shute (PhD Candidate), 2015.
- Invitation to Dean’s Opening Ceremony to Graduate Student Appreciation Week, Jonathan Shute (PhD Candidate), 2015.
- HWCOE Outstanding Gator Engineer MS Scholar Award, Anirrudh Ravindran (MS Candidate), 2015.
• UF’s Selection to Present at Florida Statewide Graduate Student Research SYMPOSIUM, Jonathan Shute (PhD Candidate), 2016.
• National Science Foundation Award for Young Professionals, Jackson Cagle (MS Candidate), 2016.
• NIH National Center for Adaptive Neurotechnologies Summer School Scholarship, Jonathan Shute (PhD Candidate), 2016.
• HWCOE Outstanding Gator Engineer MS Scholar Award, Jackson Cagle (MS Candidate), 2017.
• UF International Center Outstanding International Student Award, Enrico Opri (PhD Candidate), 2017.
• Exceptional Poster Award, Robert Eisinger (PhD Candidate), at the 21st International Congress of Parkinson’s disease and Movement Disorders, Vancouver, BC, 2017.
• NIH National Center for Adaptive Neurotechnologies Summer School Scholarship, Robert Eisinger (PhD Candidate), 2017.
• NIH National Center for Adaptive Neurotechnologies Summer School Scholarship, Enrico Opri (PhD Candidate), 2017.
• HWCOE Outstanding Gator Engineer MS Scholar Award, Jackson Cagle (MS Candidate), 2017.
• NIH Model and Neurobiology Course Scholarship, Robert Eisinger (PhD Candidate), University of MISSOURI, 2018.
• UF BME Pruitt Research Day Best Poster Presentation Award, Enrico Opri (PhD candidate), 2018.
• NIH Image-Based Biomedical Modeling Course Scholarship, Stephanie Cernera (PhD candidate), University of Utah, 2018.
• Advancement to Candidacy Award, Robert Eisinger (PhD Candidate in Neuroscience), Awarded annually to 3 graduate students in the College of Medicine for academic and research performance, 2018.
• HWCOE Attributes of a Gator Engineer Award for Creativity, Enrico Opri (PhD candidate), 2019.
• UF BME Pruitt Research Day Best Poster Presentation Award, Stephanie Cernera (PhD candidate), 2019.
• BME Supervised Teaching Award, Jose Alcantara (PhD Candidate), 2019.
• McKnight Brain Institute Toffler Leadership Award, Robert Eisinger (PhD Candidate), Awarded for efforts to promote an inclusive and positive research educational environment for underrepresented minority students, 2019.
• Blue Ribbon Poster Presentation Award, Robert Eisinger (PhD Candidate), Association for Clinical and Translational Sciences Conference, Washington, DC, 2019.
• NIH National Center for Adaptive Neurotechnologies Summer School Scholarship, Sarah Long (PhD Candidate), 2019.
• NIH National Center for Adaptive Neurotechnologies Summer School Scholarship, Brandon Parks (PhD Candidate), 2019.
• UF Graduate School Diversity Enhancement Award, Julieth Gomez (PhD Candidate), 2020.
• UF BME Pruitt Research Day Best Poster Presentation Award, Brandon Parks (PhD candidate), 2021.
• Brain-Computer Interface (BCI) Society Student Award, Based on Abstract Submission to Annual Meeting, Stephanie Cernera (PhD candidate), 2021.
• UF BME Industry Partner Travel Award, Julieth Gomez (PhD Candidate), 2022.
• BCI Society Meeting Travel Award, Julieth Gomez (PhD Candidate), 2023.
• UF Center for European Studies, Travel Aware, Julieth Gomez (PhD Candidate), 2023.