

## Shelby Martell

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### Education

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**University of Illinois – Neuroscience Program** (August 2021-Present) **Champaign, IL**  
Predoctoral Student advised by Dr. Naiman Khan, PhD, RD GPA: 4.0

**Eastern Illinois University** (August 2018-May 2021) **Charleston, IL**  
Graduated with University Honors and Summa Cum Laude with a Bachelor of Science  
Major: Neuroscience Minor: Psychology GPA: 4.0

### Research Experience

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**Neurocognitive Health Behavior Lab Graduate Student (August 2021-Present) Champaign, IL**  
Conducting research under the mentorship of Dr. Naiman Khan at University of Illinois. I am investigating the effect of different dietary components on cognitive and visual impairment in persons with Multiple Sclerosis using clinical and EEG approaches.

**Undergraduate Independent Research** (Fall 2019-Spring 2021) **Charleston, IL**  
Completed undergraduate independent research under the mentorship of Dr. Jeffrey Stowell. I investigated the other-race effect in emotional face recognition of four basic emotions in a population of Caucasian and African American college students.

### Publications

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**Martell, S. G.**, Kim, J., Cannavale, C. N., Mehta, T. D., Erdman, J. W., Adamson, B., Motl, R. W., & Khan, N. A. (2023). Randomized, placebo-controlled, single-blind study of lutein supplementation on carotenoid status and cognition in persons with multiple sclerosis. *The Journal of Nutrition*. <https://doi.org/10.1016/j.tjnut.2023.06.027>

**Martell S**, Keye S, Kim J, Walk A, Erdman J, Adamson B, Motl R, Khan N. Understanding the neural underpinnings of motor impairment in persons with multiple sclerosis using the lateralized readiness potential (*In prep*).

Cerna J, Edwards C, **Martell S**, Anaraki N, Walk A, Adamson B, Flemming I, Labriola L, Motl R, Khan N. (2023). Neuroprotective influence of macular xanthophylls and retinal integrity on cognitive function among persons with Multiple Sclerosis.

Cannavale, C. N., Keye, S. A., Rosok, L. M., **Martell, S. G.**, Holthaus, T. A., Raine, L. R., Mullen, S. P., Holscher, H. D., Hillman, C. H., Kramer, A. F., Cohen, N. J., Hammond, B. R., Renzi-Hammond, L., & Khan, N. A. (2023). Macular pigment optical density and skin carotenoids in a childhood sample. *The Journal of Nutrition*. <https://doi.org/10.1016/j.tjnut.2023.06.006>

Cannavale C, Keye S, Rosok L, **Martell S**, Holthaus T, Reeser G, Raine L, Mullen S, Cohen N, Hillman C, Hammond B, Renzi-Hammond L, Khan N (2022). Enhancing childrens cognitive function and achievement through carotenoid consumption: the integrated

Childhood Ocular Nutrition Study (iCONS) protocol. *Contemporary Clinical Trials*, 122-128.

## Abstracts and Presentations

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**Martell S**, Keye S, Kim J, Walk A, Erdman J, Adamson B, Motl R, Khan N. Understanding the neural underpinnings of motor impairment in persons with multiple sclerosis using the lateralized readiness potential. *Open Topic Symposium*. Society of Psychophysiological Research (Upcoming September 2023; New Orleans, LA)

**Martell S**, Kim J, Keye S, Walk A, Erdman J, Adamson B, Motl R, Khan N. Effects of multiple sclerosis extend to intra-individual variability in the P3 ERP component. Poster Presentation. Society of Psychophysiological Research (Upcoming September 2023; New Orleans, LA)

**Martell, S. G.**, Kim, J., Cannavale, C. N., Mehta, T. D., Erdman, J. W., Adamson, B., Motl, R. W., & Khan, N. A.

Randomized, placebo-controlled, single-blind study of lutein supplementation on carotenoid status and cognition in persons with multiple sclerosis. *Poster Presentation*. American Society for Nutrition Conference and Carotenoids and Retinoids Interactive Group (CARIG) (July 2023; Boston, MA)

**Martell S**, Kim J, Mehta T, Rosok L, Erdman J, Adamson B, Motl R, Khan N. Effects of lutein consumption on carotenoid status and cognition among persons with multiple sclerosis. *Poster Presentation*. Society for Neuroscience Conference (November 2022; San Diego CA) and Personalized Nutrition Initiative (November 2022; Champaign-Urbana, IL).

**Martell S**, Stowell J, Other-Race Effect in Emotional Face Recognition in Four Emotions. *Poster Presentation*. National Conference on Undergraduate Research (Virtual Presentation April 2021), Eastern Illinois Research Symposium (Virtual 2020), and Mid-America Undergraduate Psychology Research Conference (Virtual 2020, 2021).

Spinner K, Nau C, **Martell S**, Keye S, Kim J, Khan N, Walk A (2023). Do ERPs correlate with behavioral response among those with and without MS? *Coauthor on Abstract*. Midwestern Psychological Association (April 2023).

Cannavale C, Keye S, Rosok L, **Martell S**, Holthaus T, Khan N (2022). Macular and skin carotenoids are negatively associated with body mass index in school aged children. *Poster Coauthor on Abstract*. Personalized Nutrition Initiative (November 2022; Champaign-Urbana, IL).

Cannavale C, Holthaus T, **Martell S**, Sarma R, Alvarado D, Holsher H, Khan N (2022) Hippocampal-dependent spatial reconstruction task performance is not affected by test-retest conditions. *Coauthor on Abstract*. Society for Neuroscience Conference (November 2022; San Diego, CA).

## Honors and Awards

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**Poster Session Award Winner at Carotenoids and Retinoids Interactive Group (CARIG) Symposium (July 2023)** **Boston, MA**

One of three presenters awarded for excellent research and presentation demonstrating significant advancements in the field of carotenoids.

**Distinguished Senior Award Eastern Illinois University (Spring 2021)** **Charleston, IL**

Awarded to 25 graduates who demonstrated outstanding character and leadership through academic achievement, campus, community involvement, and extracurricular honors.

**Eastern Illinois University Deans List (Fall 2018, 2019, 2020, 2021)** **Charleston, IL**

**Ohio Valley Conference Academic Medal of Honor (2019, 2020, 2021)** **Charleston, IL**

Awarded annually to student-athletes who earned a 4.0 GPA for both semesters of the academic year.

**Ohio Valley Conference Commissioner's Honor Roll (2019, 2020, 2021)** **Charleston, IL**

Awarded annually to eligible student-athletes that achieved at least a 3.25 GPA.

**Student Athlete of the Month (November 2020)** **Charleston, IL**

Honored for dedication to performance on the softball field as well as in the classroom by tutoring fellow student-athletes.

**Edson H. Taylor Memorial Scholarship (Fall 2020)** **Charleston, IL**

Awarded to one student annually based on excellence of scholarship in mathematics.

**Donald A. and Marie Rothschild Award (Spring 2020)** **Charleston, IL**

Awarded annually to a student who demonstrates the potential for making a significant contribution to psychology. Awarded as a sophomore for my research on the other-race effect.

**Fred Yaffe Award (Spring 2020)** **Charleston, IL**

Awarded to one student annually for outstanding achievement in research as an undergraduate Psychology student.

**Pine Honors College Leadership Award (November 2019)** **Charleston, IL**

**Undergraduate Research Scholarship and Creative Activity Grant (November 2019)** **Charleston, IL**

One of five undergraduate students to receive a research grant to support my undergraduate research project.

**Eastern Illinois General Chemistry Student of the Year (March 2019)** **Charleston, IL**

Awarded to one undergraduate student for excellence in the general chemistry course sequence.

**Eastern Illinois Presidential Scholar (Awarded February 2018-2021)** **Charleston, IL**

One of 12 students to receive an academic full ride to Eastern Illinois University based on excellence in the classroom and interview process.

## **Mentoring and Teaching Experience**

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**Undergraduate Research Symposium Mentor** (January 2023-Present) **Champaign, IL**  
Mentoring an undergraduate student one-on-one on conducting research and presenting a poster presentation at the University of Illinois undergraduate research symposium.

**AbbVie Mentorship** (February 2023-Present)  
One on one mentoring program with a medical science liaison at AbbVie to learn about the transition from academia to industry. Involves monthly meetings and a presentation at AbbVie at the end of the program.

**Honors College Mentor** (August 2019-Spring 2021) **Charleston, IL**  
Mentored incoming honors students at Eastern Illinois University. Assisted with class schedules, events to help get acclimated to campus, and helped with coursework.

**Tutor for EIU Athletic Department** (Spring 2019 – Spring 2021) **Charleston, IL**  
Tutored fellow student-athletes in a variety of subjects including mathematics, biology, chemistry, neuroscience, and psychology courses.

## **Service and Extracurricular Activities**

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**Student Advisory Committee for Graduate Education (SAGE) Member** **Champaign, IL**  
(August 2022-Present)  
Serve on a committee of 20 other graduate students across all departments to work with the Graduate College on enhancing the quality of academic, social, and professional experience for graduate students.

**Brain Awareness Volunteering** **Champaign, IL**  
(January 2023-Present)  
Taught neuroscience lessons to over a hundred fifth and sixth graders at different school districts in champaign county.

**Softball Instructor at The Cages, Champaign-Urbana** **Tuscola, IL**  
(February 2022-Present)  
Working with over 70 young girls in the community as a softball hitting and catching instructor where I teach the physical and mental aspects of softball.

**Read Across America Volunteering Event** (March 2022) **Champaign, IL**  
Volunteered at the Reading Across America event, meeting with about 100 children and teaching them about the research conducted in our laboratory and different aspects of health and nutrition.

**Eastern Illinois Division 1 Softball Team** (August 2018-May 2021) **Charleston, IL**

Was a member of the EIU softball team which involved practicing for 20 hours a week and playing about 50 games a season. Off the field we also had at least one community service event a semester such as volunteering at Special Olympics Events and cleaning up Camp New Hope.