In the ever-growing research that uses virtual reality, Cognitive Psychology graduate student Lucia Cherep never saw her current trajectory to be where it is now. Working in Associate Professor Dr. Jonathan Kelly’s Navigation Lab, she has been able to leverage her newfound skills in programming to better understand basic and applied human spatial cognition, the neural mechanisms that underlie spatial navigation, and improvements in technology usability (e.g. distance underperception in immersive virtual reality). She recently defended her Master’s thesis this past January.

Lucia’s prospective visit to Iowa State University and Ames, Iowa, solidly cemented her desire to become a Cyclone. Going into her search for the perfect fit for her graduate education, Lucia’s research background before Iowa State consisted of working in a neuroscience and behavior lab helmed by Dr. Douglas Wallace at Northern Illinois University (NIU). During her time at NIU, she investigated the relationship between neural systems and navigational strategy use in animal models to gain an understanding of spatial disorientation observed in some neurodegenerative diseases. However, when it came time to pursue a Ph.D., Lucia felt conflicted as she faced several prospective choices for graduate study that ranged from programs housed in psychology to neuroscience.

“I did not want to leave any part [of my training] behind,” Lucia mentioned as she described her transition from working with animals to working with humans when she selected Iowa State’s Cognitive Psychology program. Not only did she love the vibes from the general environment across the board in terms of town, department, and school, but Lucia also found the right fit for research. Most of that is in thanks to Dr. Kelly, her adviser and mentor. The conversation during
her interview was “phenomenal… he told me [Lucia] I could co-major with Neuroscience, and I can’t do that anywhere else.”

The passion radiates off of Lucia as she talks about her work. Right now, she is investigating how binge drinking during emerging adulthood may impair self-movement cue processing which could result in spatial disorientation. She reinvigorates that passion when she is surrounded by her friends that bring her “back to center” and make her “ready to take on the world.” Currently, Lucia is in preparation for a talk titled “Boundaries plus landmarks mitigate limited self-motion in virtual reality” that she will be giving at the 91st annual Midwestern Psychological Association Conference mid-April in Chicago, Illinois.

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Annabelle Lolinco is a second-year chemistry student working in Theresa Windus’s group and is interested in careers at the interface of chemistry, communication, and policy.