

You are cordially invited to attend a presentation by Dr. Isabel Gauthier on Thursday, November 30th at 4:00 PM

**Dr. Isabel Gauthier, David K. Wilson Professor of Psychology, Vanderbilt University**



**“Individual differences in domain-general object recognition”**

**Thursday, November 30, 2023**

**Robinson Hall, 409**

**4:00 – 5:00 PM**

<https://northeastern.zoom.us/j/4999138805>

Research in visual object recognition has largely focused on mechanisms common to most people, but there is increased interest in individual differences. This talk will summarize recent work on domain-general object recognition, offering support for a general ability we call *o*, which accounts for performance in a range of visual tasks and object categories, both familiar and novel. We found this ability is highly stable based on a one month test-retest, that it is distinct from general intelligence, perceptual speed, low-level vision and personality constructs. Across several studies, we found that *o* accounts for object recognition not only in the visual domain, but also in haptic and auditory tasks. We have measured associations between *o* and a neurometrically-sensitive measure of visual sensitivity to shape and found distributed neural correlates in ventral occipital cortex. I will demonstrate how *o* can contribute to a better understanding of individual differences in specific domains. For instance, we found that *o* accounts for even more variance than fluid intelligence when predicting how to recognize chest x-ray tumors. Using *o* to control for domain-general abilities led to the discovery of two domain-specific abilities to recognize food, only one of which depends on color. Still a nascent field of research, the study of domain-general object recognition opens a window into traditionally ignored differences between people, which are independent of those differences society most emphasizes. Its understanding has wide-ranging theoretical and applied implications.