Cognition and Medical Image Perception Think Tank

Overview

Medical image interpretation is central to the detection and diagnosis of many cancers. In an era of unprecedented technological advances in medical imaging and machine learning, it is critically important to understand the cognitive and perceptual functioning of the "human in the loop"—the medical image specialists (e.g., radiologists and pathologists) who make the final decisions on detecting and diagnosing cancer. However, medical image perception is a chronically understudied area of research. The Cognition and Medical Image Perception Think Tank will bring radiologists and pathologists together with researchers working in medical image perception and adjacent fields of cognition and perception to identify opportunities for advancing the study of medical image interpretation through constructive discourse, idea generation, and problem solving.

Objectives
1. Identify research gaps and critical unsolved problems in pathology and radiology from the perspective of clinicians.
2. Discuss ways to address these clinically informed questions through cognitive and perceptual research.
3. Identify barriers that hinder collaborations between researchers and clinicians, and identify potential solutions.
4. Identify and discuss ways to elevate psychology's profile within the medical image community.
5. Pinpoint resources needed to facilitate transdisciplinary research.
6. Identify future goals and strategies to evaluate progress.