**Parallel Short Course 4**

# PERSPECTIVES ON THE PSYCHOLOGY OF MEDICAL DIAGNOSIS

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**Format Requirements:**
How does psychology explain clinicians' thinking as they make diagnoses? Can psychology help them improve diagnosis by reducing error, increasing speed, or reducing effort? Popular accounts have attributed diagnostic error to premature closure or to automatic use of intuitive responses. Though these metaphors seem to explain errors, after the fact, they may not predict errors. What does it take to diagnose accurately? A set of relevant concepts should provide guidance (e.g. probability, utility, information, discriminating features), yet teaching those concepts produces little measurable change.

**Description:**
The course will present psychology's insights regarding physicians' understanding of the principles of optimal diagnostic reasoning and their cognitive strategies for applying those principles in practice. We'll describe the ways practitioners have commonly been observed to reason diagnostically, highlight ways this may depart from the norm, and consider situational influences on this cognition. We'll give participants the opportunity to apply some unfamiliar concepts useful in diagnosis and reflect on why it is difficult to use them. We'll consider how psychology might assist in the effort to improve medical diagnosis and reduce diagnostic error. Course Objectives: To describe and evaluate clinicians' diagnostic cognition that uses the key concepts of acquisition of disease knowledge, activation of relevant diagnostic scripts, selection of useful questions regarding the cause of the patient's complaint, adjustment of diagnoses' probabilities, and decision to act on a diagnosis or diagnoses. To evaluate and compare approaches for improving diagnostic cognition, through education in diagnostic strategies, practice diagnosing patients, metacognitive training to increase consciousness of error-producing heuristic strategies, altering the information environment, task expectations, and institutional reward structures.

**Equipment:**
Participants need not bring a computer.