Organizations increasingly turn to teams to address their most vexing problems based on their potential to synthesize diverse expertise and devise effective solutions. However, many studies document the ways that teams underperform despite the presence of adequate expertise. Much of this research has described the issues inhibiting teams from capitalizing on their expertise occurring during the processes of seeking or implementing a solution to a problem. However, the way teams formulate the problems that they face may also play an important role in how they leverage internal and external expertise to solve them. In this dissertation, I examine the processes through which teams understand the problems they address and how those processes influence teams’ ability to capitalize on their members’ expertise, and on the expertise of outside advisors, when solving problems.

“What is the problem?” Chapter 2 presents a quasi-experimental field study of research teams formulating a motivating problem for a grant proposal. I build on the conception of a problem as a gap between a current state and a desired state and manipulate teams’ attention to focus on either the problem’s current state or desired state. Analyses reveal a recursive, multi-level process where, during problem formulation, individual cognition influences team members’ interaction, which influences social norms, which further reinforce individual cognition. Teams that focused on the current state treated problem formulation as a diagnostic process, evaluated ideas thoroughly as they were presented, and formulated problems that accurately addressed the situation’s original concern, but that did not capitalize on their members’ expertise. In contrast, teams that first focused on the desired state treated problem formulation as a creative process, combining ideas rapidly as they were presented, and formulated problems that both accurately addressed the situation’s original concern, and that also drew more extensively on members’ expertise.

“How can we leverage internal expertise to understand and solve the problem?” Chapter 3 examines the conditions under which members’ expertise benefits team rapid adaptation and presents a multi-method study composed of an inductive qualitative phase and a field experimental phase with improv comedy teams. Observations and interviews suggest that members’ trait perspective-taking plays an important role in team rapid adaptation because it allows members to quickly provide opportunities for teammates to succeed based upon their skills and attributes. A subsequent field experiment that manipulated team composition revealed that teams with high perspective-taking members better translated their expertise into performance than teams with low perspective-taking members by developing a higher level of emergent interdependence in their work.

“How can we leverage external expertise to understand and solve the problem?” Chapter 4 examines the role of outside advisors in the tasks of helping people identify and solve problems, with a
particular focus on the impact of advisors’ expertise and framing on advice content, people’s perceptions of the advisor, and their performance. Across three experiments (one field and two lab studies), advisors with expertise in areas other than the domain of the focal task—complementary expertise advisors—were rated as less impactful, less enjoyable to work with, and less competent than advisors with expertise in the focal task’s domain—domain expertise advisors. They were also chosen over a domain expertise advisor just 9% of the time. Despite these differences, participants with complementary expertise advisors consistently performed just as well or better than those with domain expertise advisors. These findings highlight people’s tendency to avoid and dislike advisors who might identify new problems or suggest familiar ideas, at the expense of exposure to unique perspectives and, potentially, of creative performance over time.