

Competencies for Translational Science Teams

Table 1 Domain Definitions

Domain	Definition
Facilitating Team Affect	Emotional bonds between team members that are grounded in expressions of genuine care and concern for the welfare of others including empathy, affiliation, and rapport on the basis of shared regard for the others.
Team Communication	Communication is essential to collective activities, factoring in participants' goals, ability to integrate knowledge, and expertise in interpersonal, relational, organizational, and pedagogical contexts.
Managing Team Research	Managing research and development organizations is, to a great degree the art of integrating the efforts of its many participants.
Collaborative Problem Solving	Collaborative problem solving (CPS) is an essential skill in the home, the workforce, and the community because many of the problems faced in the modern world require teams to integrate group achievements with team members' idiosyncratic knowledge.
Team Leadership	The cognitive, motivational, affective, and coordination processes associated with influencing organizational team performance.

Table 2 Competencies Mapped to Domains

TRANSLATIONAL TEAM SCIENCE COMPETENCIES	COMPETENCY DOMAINS				
	FACILITATING TEAM AFFECT (BONDING)	TEAM COMMUNICATION	MANAGING TEAM RESEARCH	COLLABORATIVE PROBLEM SOLVING	TEAM LEADERSHIP
INDIVIDUAL COMPETENCIES					
Facilitating Awareness & Exchange	++	+			++
Cognitive Openness & Intersubjectivity	+			++	++
Self-awareness	+			++	++
Interdisciplinary Research Management			+		++
Passion & Perseverance	++				+
TEAM COMPETENCIES					
Team Roles					+
Team-based Communication	++	+			
Shared Visioning			++		+
Understanding Complexity		++		++	+
Team Learning & Adaptive Behaviors	++	++	++	+	++
Meeting Management			++		+
Interdisciplinary Collaboration		++		+	++
Building Trust	+	++			

Competencies are categorized by primary (+) and secondary (++)

Table 3 Individual Competencies to Improve Translational Team Performance

Competency	Definition
Facilitating awareness and exchange	Sharing information and perspectives from a team members expertise. This includes inquiring and gaining insights from other disciplines, active probing for creating a common mental model, and reframing based on input from other team members.
Cognitive Openness and Intersubjectivity	Recognizing that individuals have different perspectives based on their world view. An ability to relate and incorporate other world views of team members. Creation of an interactive environment. A sense of belonging to a team. Esprit de corps. Critical awareness about one's own discipline and how that relates to differing disciplinary knowledge on related problems. Ability to innovate collaboratively.
Self-Awareness	Knowledge and understanding of personal styles, tendencies, strengths, and weaknesses. Understanding when one's preferred approach may need to change to better meet the needs of a team member.
Interdisciplinary Research Management	Ability to manage diverse and multi-team systems. Develop team skills to strengthen team structure and dynamics.
Passion and Perseverance	Long term commitment and perseverance. Ability to overcome barriers and be resilient when facing failures.

Table 4 Team Competencies to Improve Translational Team Performance

Competency	Definition
Team Roles	Identifying team members. Establishing role clarity through delineating responsibility and aligning responsibility with authority. Building and applying team agreements.
Team-based Communication	Paying attention to verbal and nonverbal cues, learning how to speak to the issue at hand, ensuring others understand what you are discussing and ensuring that you understand others. Committing to understanding and listening to other team members. Creating fear-free communication and information exchange. Focus is on delivery and active listening. Definition includes shared authorship,
Shared Visioning	Individual acceptance of vision and adherence to movement towards the shared vision.
Understanding Complexity	Leadership structure that supports complex problem solving.
Team Learning and Adaptive Behaviors	Collaborative construction and reconstruction. Having an openness to rearranging collaborative and knowledge arrangements. Engaging with those affected by the problem attempting to be solved. Adapting to the use of new approaches and tools to further team process and objectives. Planning for team transitions. Ability to improve, learn and grow. Adaptive learning and intentional facilitation of team learning/involvement during meetings and problem-solving sessions.
Meeting Management	Preparing, executing, and improving meetings effectiveness. Capacity to adapt flexibly and effectively to situational and intra-team challenges.
Inter-disciplinary Collaboration	Openness to using different methods of collaborative problem solving. Valuing Interdisciplinary or Transdisciplinary collaboration by engaging cross disciplines. Requires a cooperative spirit and mutual respect. Ability to measure individual needs against team goals. Demonstrate broad intellectual curiosity.
Building Trust	Ability to delegate/assume responsibility where team members are comfortable that work will be accomplished. Respect for others.

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