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THE TRANSLATIONAL LEARNING ECOSYSTEM

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ABSTRACT

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| Aim/Purpose | In this paper we propose an ecosystem for translational learning that combines core learning principles with a multilevel construct that embraces the tenets of translational research, namely, teaming, translating, and implementing. The goal of the paper is to argue that knowledge of learning sciences is essential at the individual, team, and organizational levels in the translational science enterprise. |
| Background | The two decades that we can now call the translational era of health and medicine have not been without challenges. Many inroads have been made in navigating how scientific teaming, translating knowledge across the health spectrum, and implementing change to our health systems, policies, and interventions can serve our changing global environment. These changes to the traditional health science enterprise require new ways of understanding knowledge, forging relationships, and managing this new tradition of science. Competency requirements that have become important to the enterprise are dependent on a deep understanding about how people learn as individuals, in teams, and within organizations and systems. |
| Methodology | An individual, team, and organizational conceptual framework for learning in translational ecosystems is developed drawing on the learning science literature, a synthesis of 9 key learning principles and integrated with core competencies for translational science. |
| Contribution / Findings | The translational learning ecosystem is a means by which to understand how translational science competencies can be reinforced by core learning principles as teaming, translating, and implementation intersect as part of the translational science enterprise. |

The full paper was previously published as the following and is being presented at this conference:

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| Recommendations for Practitioners | This paper connects learning science to tailored principles in a simplified way so that those working translational science with less knowledge of theories of learning and pedagogy may be able to access it in a clear and concise way. |
| Recommendations for Researchers | This paper provides a framework for researchers who engage in the education of translational scientists as well as those who are charged with training new scientists in an emerging field critical to health and medicine. |
| Impact on Society | This paper allows for greater inclusion of learning science as a critical aspect of the sciences that seek to help move discovery and research to policy and social impact. |
| Future Research | The translational ecosystem described can serve to expand how teaching and learning impact scientific advances. In addition, it serves as a means in which to understand the impact of learning on micro, meso, and macro levels. |
| Keywords | ecosystem, pedagogy, team science, implementation, translation, learning science |

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