4. **Basilakos, A., Hula, W.D., Johnson, L., Kiran, S., Walker, G.M. & Fridriksson, J. (2021) Defining the Neurobiological Mechanisms of Action in Aphasia Therapies: Applying the Rehabilitation Treatment Specification System Framework to Research and Practice in Aphasia, *Archives of Physical Medicine and Rehabilitation*, https://doi.org/10.1016/j.apmr.2021.10.017**

The Rehabilitation Treatment Specification System (RTSS) was developed as a systematic way to describe rehabilitation treatments for the purpose of both research and practice. The RTSS groups treatments by type and describes them by 3 elements: the treatment (1) ingredients and (2) the mechanisms of action that yield changes in the (3) target behavior. Adopting the RTSS has the potential to improve consistency in research, allowing for better cross-study comparisons to strengthen the body of research supporting various treatments. Because it is still early in its development, the RTSS has not yet been widely implemented across different rehabilitation disciplines. In particular, aphasia recovery is one area of rehabilitation that could benefit from a unifying framework. Accordingly, this article is part of a series where we illustrate how the RTSS can be applied to aphasia treatment and research. This article more specifically focuses on examining the neurobiological mechanisms of action associated with experimental aphasia therapies, including brain stimulation and pharmacologic intervention, as well as more traditional behavioral therapy. Key elements of the RTSS are described, and 4 example studies are used to illustrate how the RTSS can be implemented. The benefits of a unifying framework for the future of aphasia treatment research and practice are discussed.