ESSR Journal Club

Covered Article: “Amplified Neural Plasticity and Strength After Stroke”
Authors: Yao Sun and E. Paul Zehr
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1) Compared to training the more affected limb directly, what are the benefits of training the less affected limb after stroke?

2) What are the potential neural pathways that mediate cross-education training?

3) How do interlimb neural connections between the arms and legs regulate movement in the neurologically intact state?

4) How do arms give the legs “a helping hand” in walking for people with stroke?

5) What is the evidence showing neural plasticity is amplified in chronic stroke participants after cross-education strength training and arm and leg cycling training?

6) What is the evidence suggesting that humans use similar mechanisms as with other quadrupedal animals in regulating interlimb movement?

7) Discuss other training methods that can be used to activate interlimb neural networks and boost strength recovery in the more affected limb after stroke.

8) How could the training approaches using interlimb networks be applied to people with other neurological disorders while still being easily accessible for a community-based clinical population?