

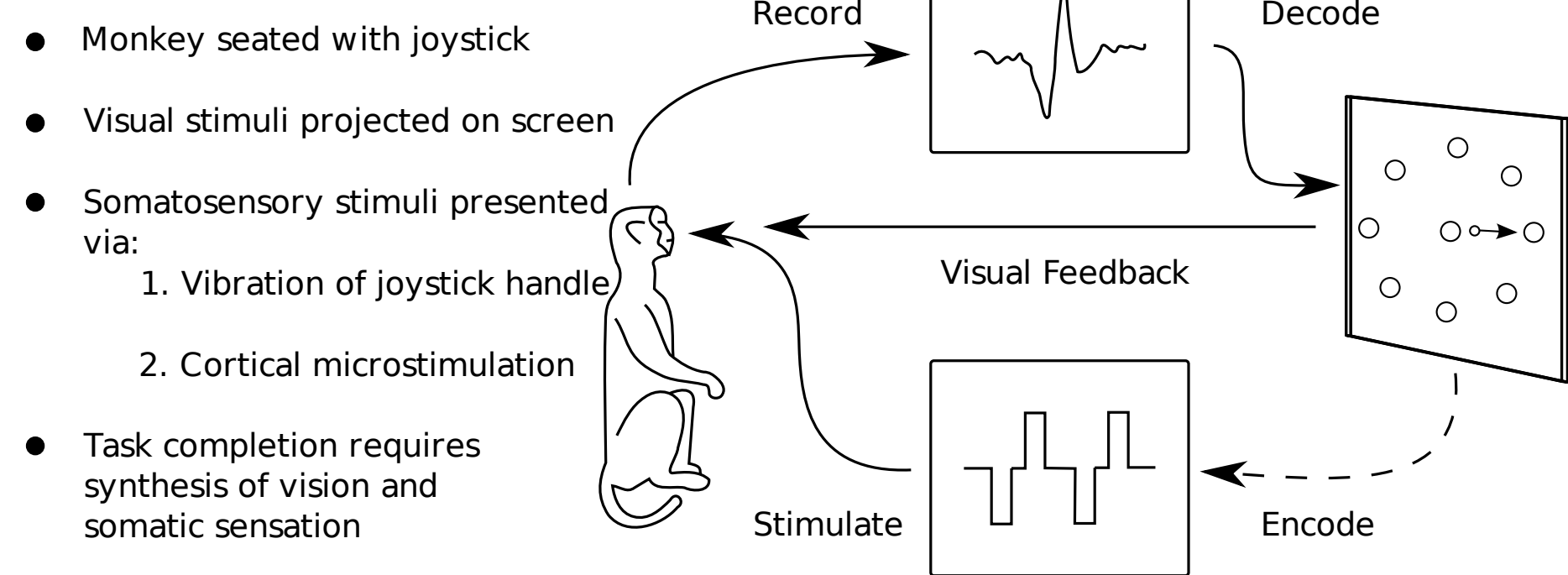
Closed-Loop Brain-Controlled Reaching Guided by Cortical Microstimulation

123

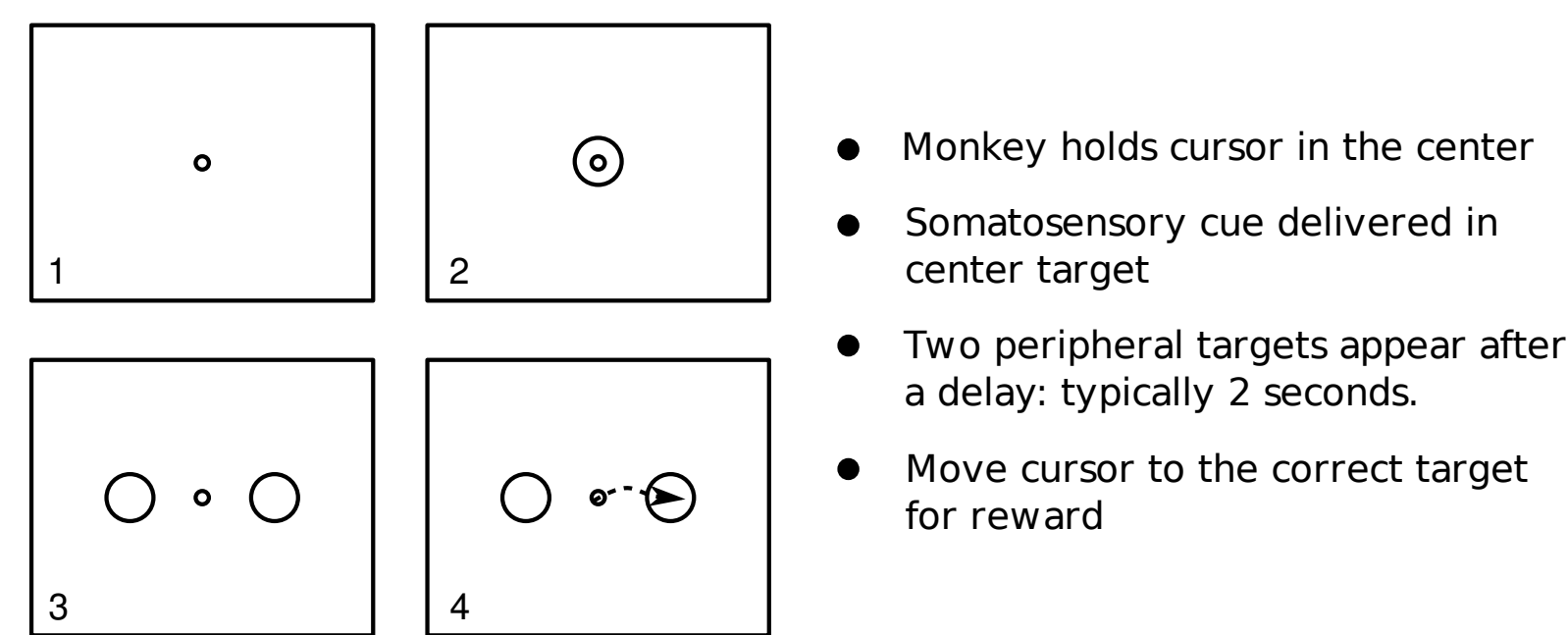
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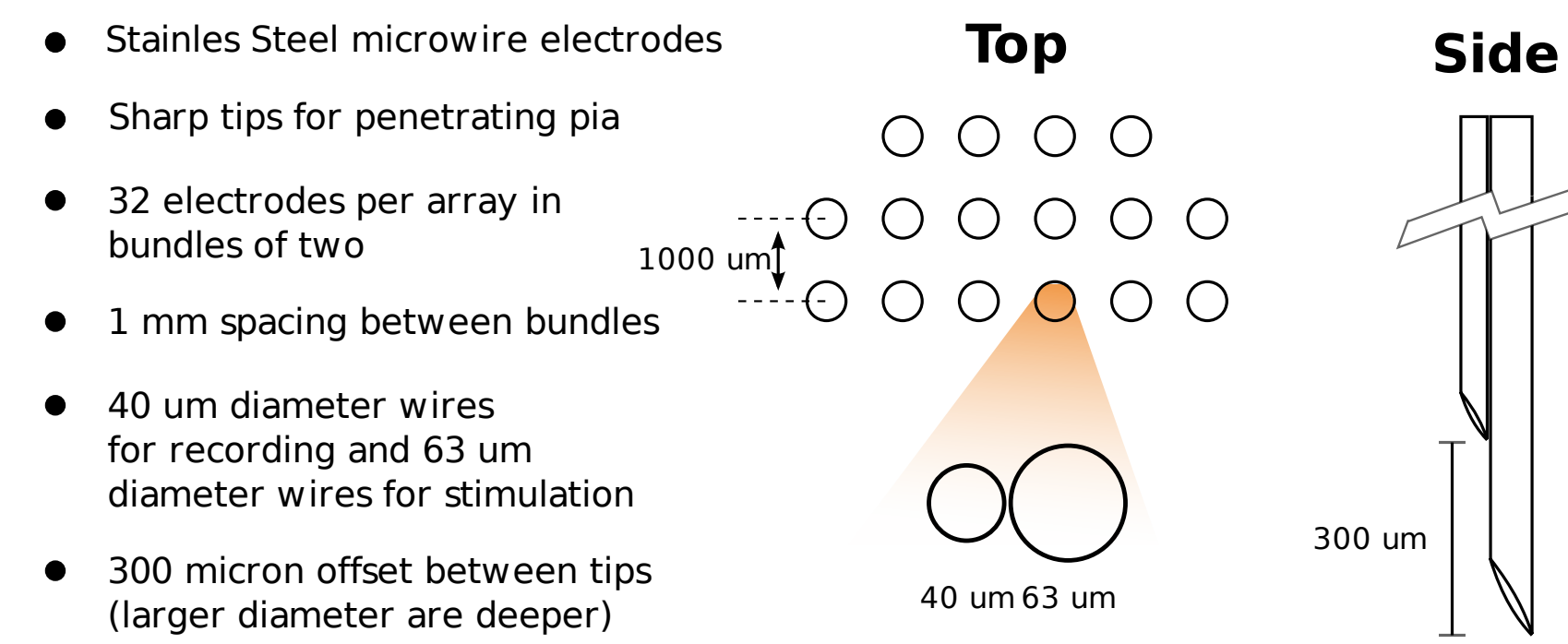
Background



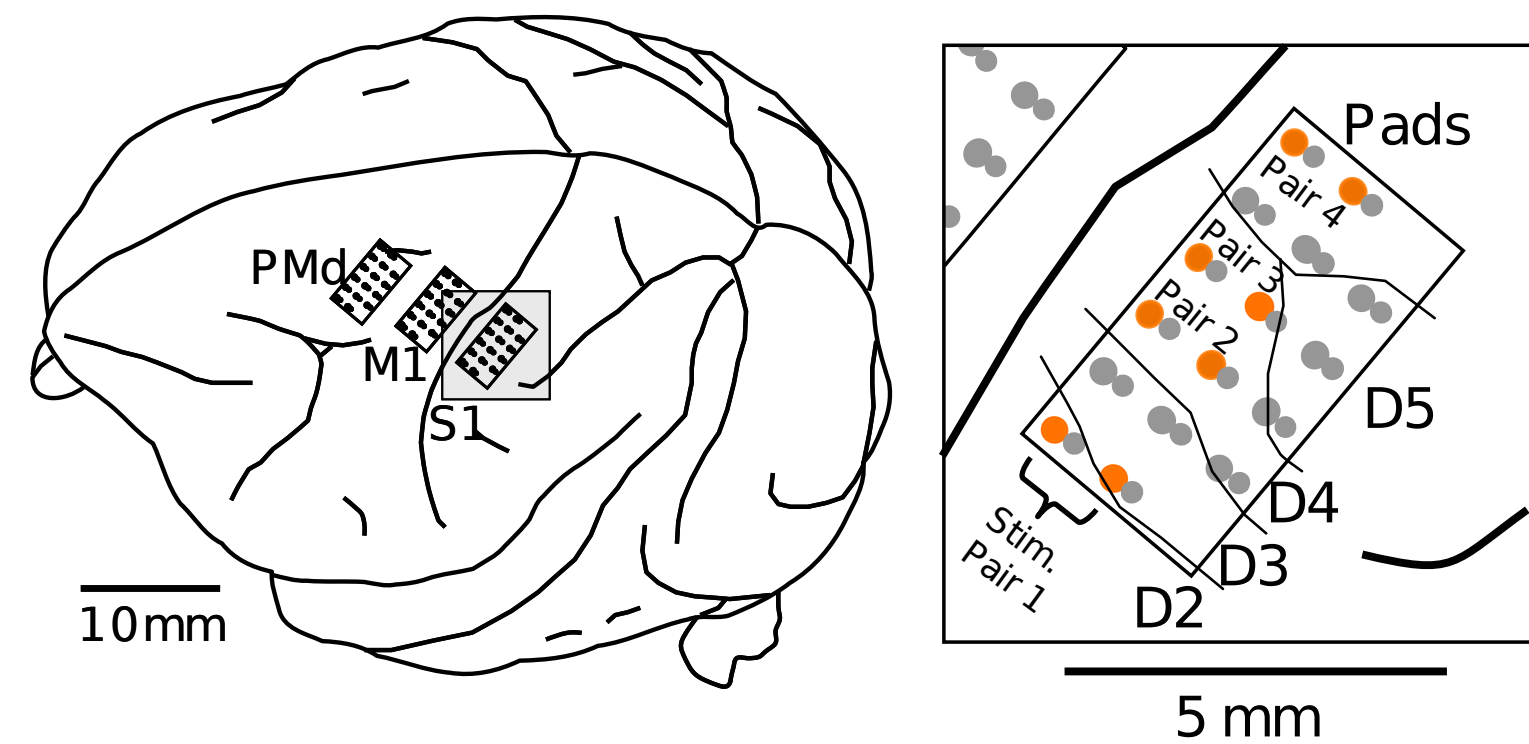
Task



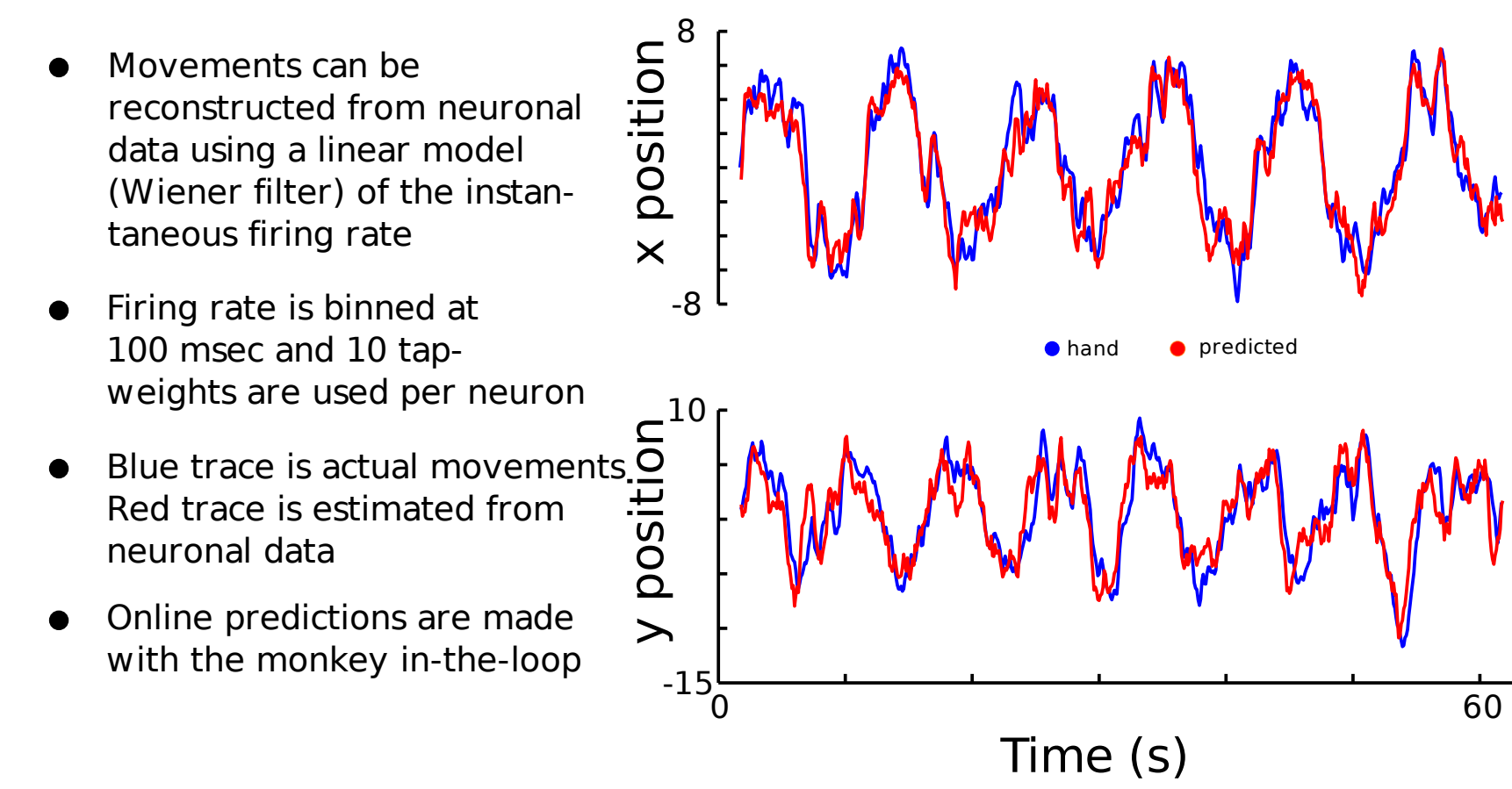
Electrodes



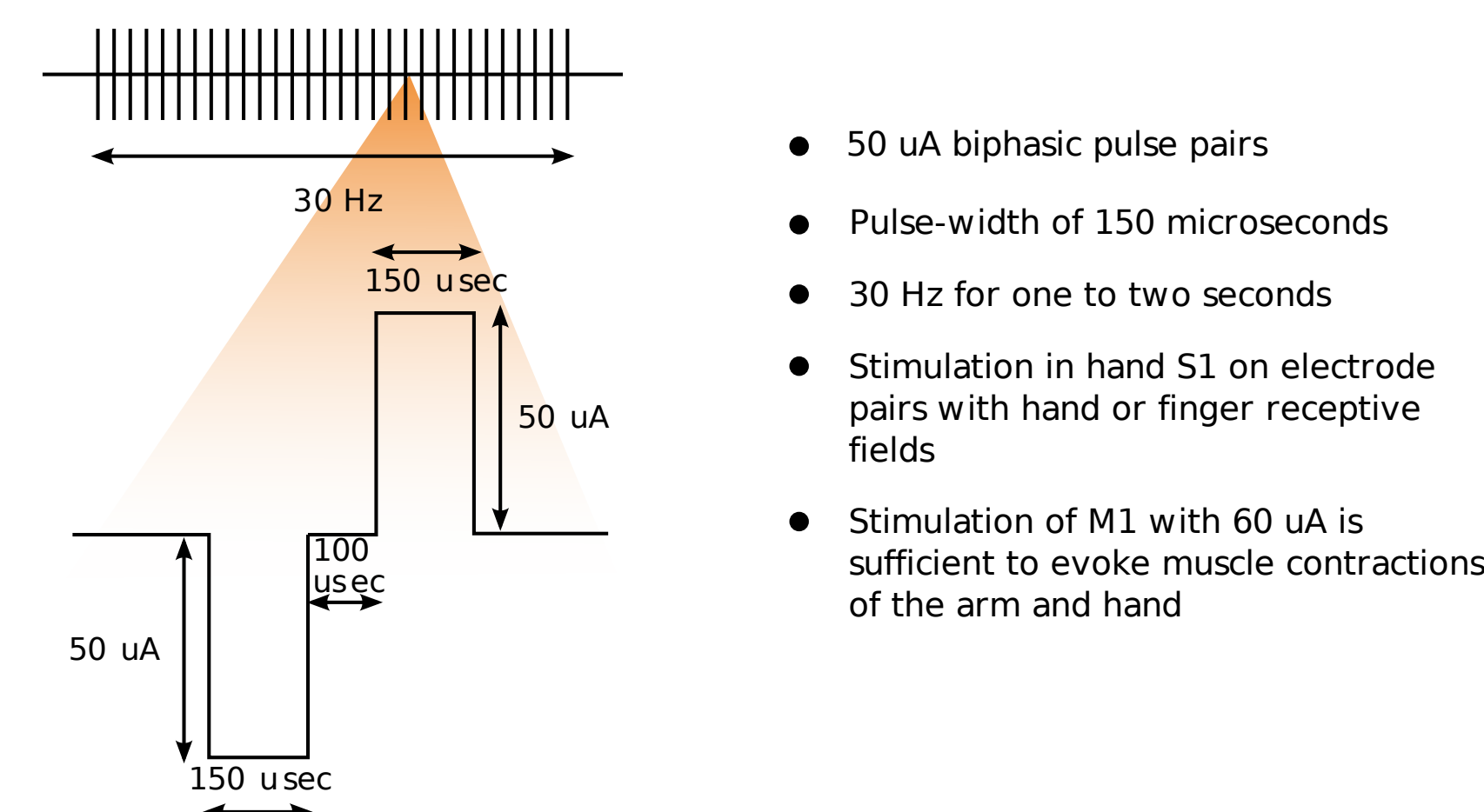
Implants



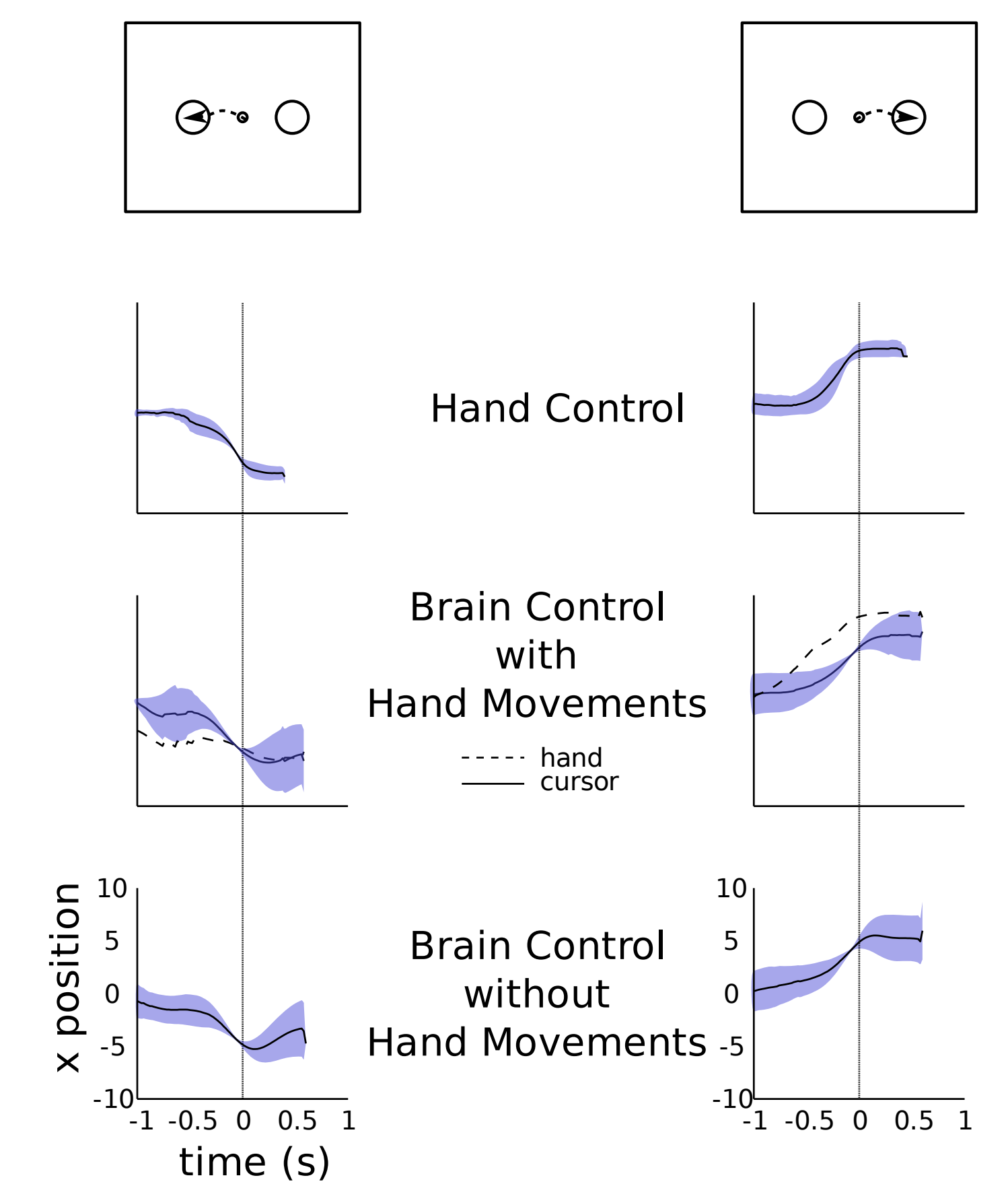
BMI Predictions



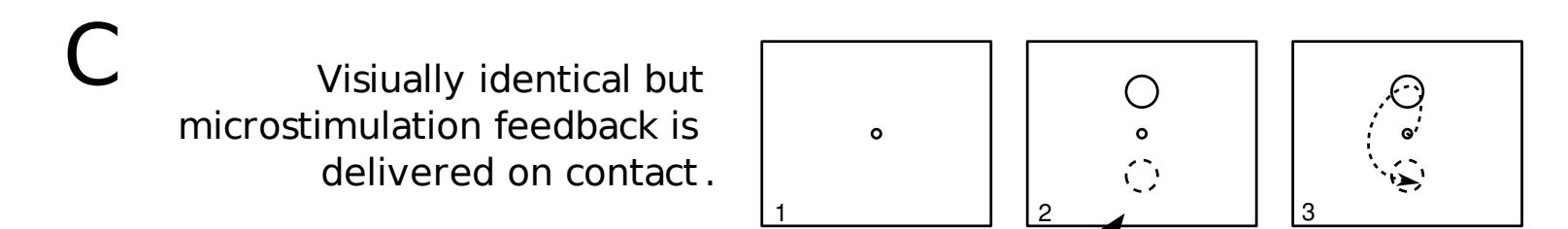
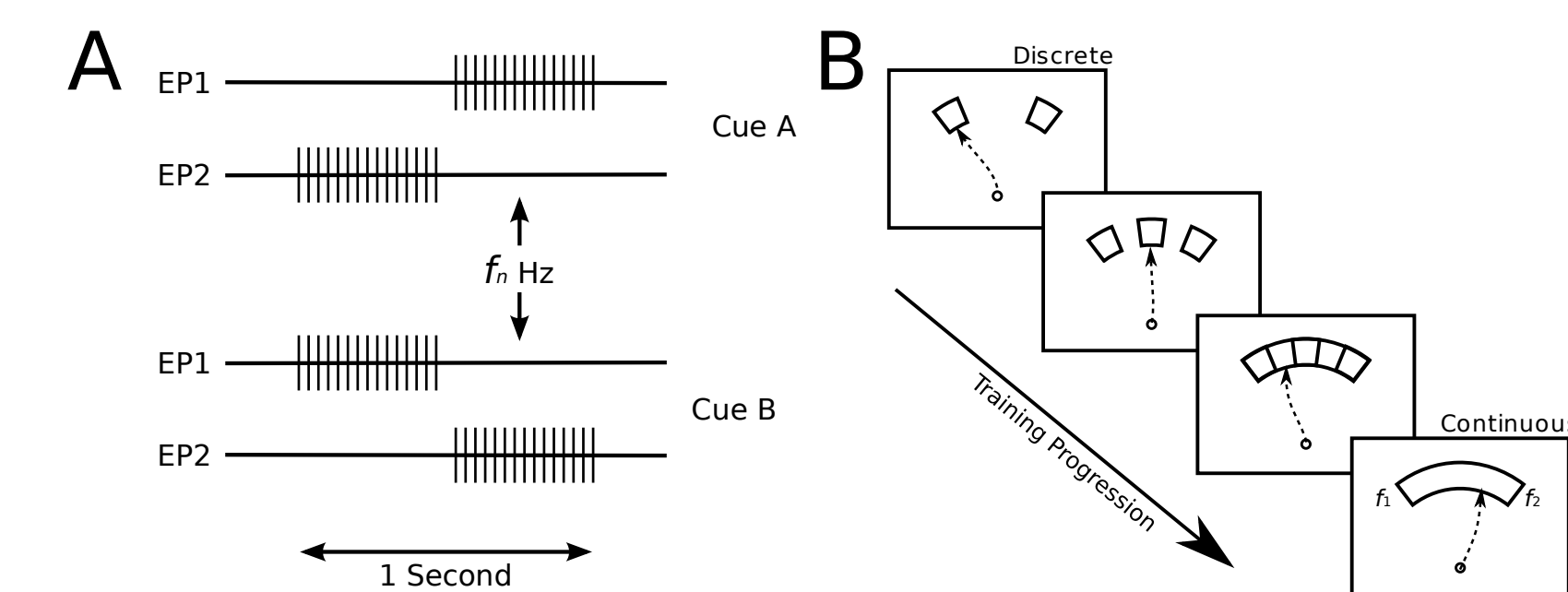
Microstimulation protocol



BMI with microstimulation



Future directions



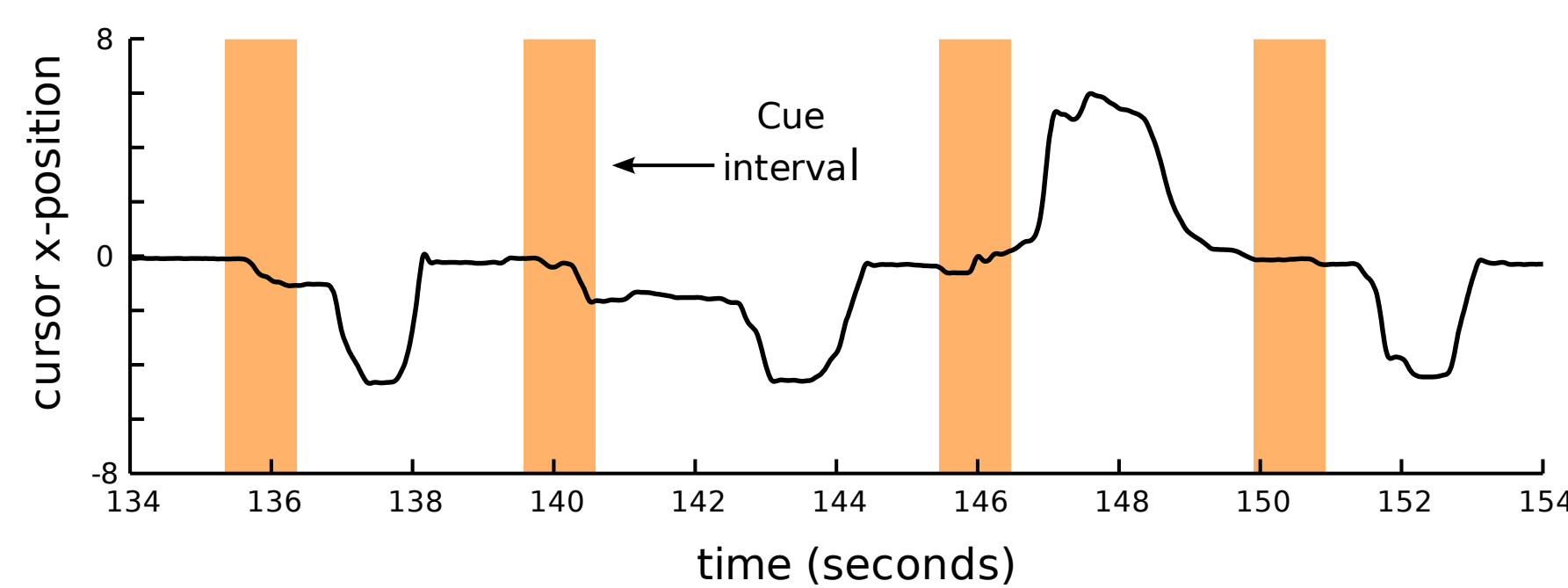
Acknowledgements and references

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- Nathan A. Fitzsimmons, et al. Primate reaching cued by multichannel spatiotemporal cortical microstimulation. *J. Neurosci.*, 27(21): 5593-5602. May 2007.

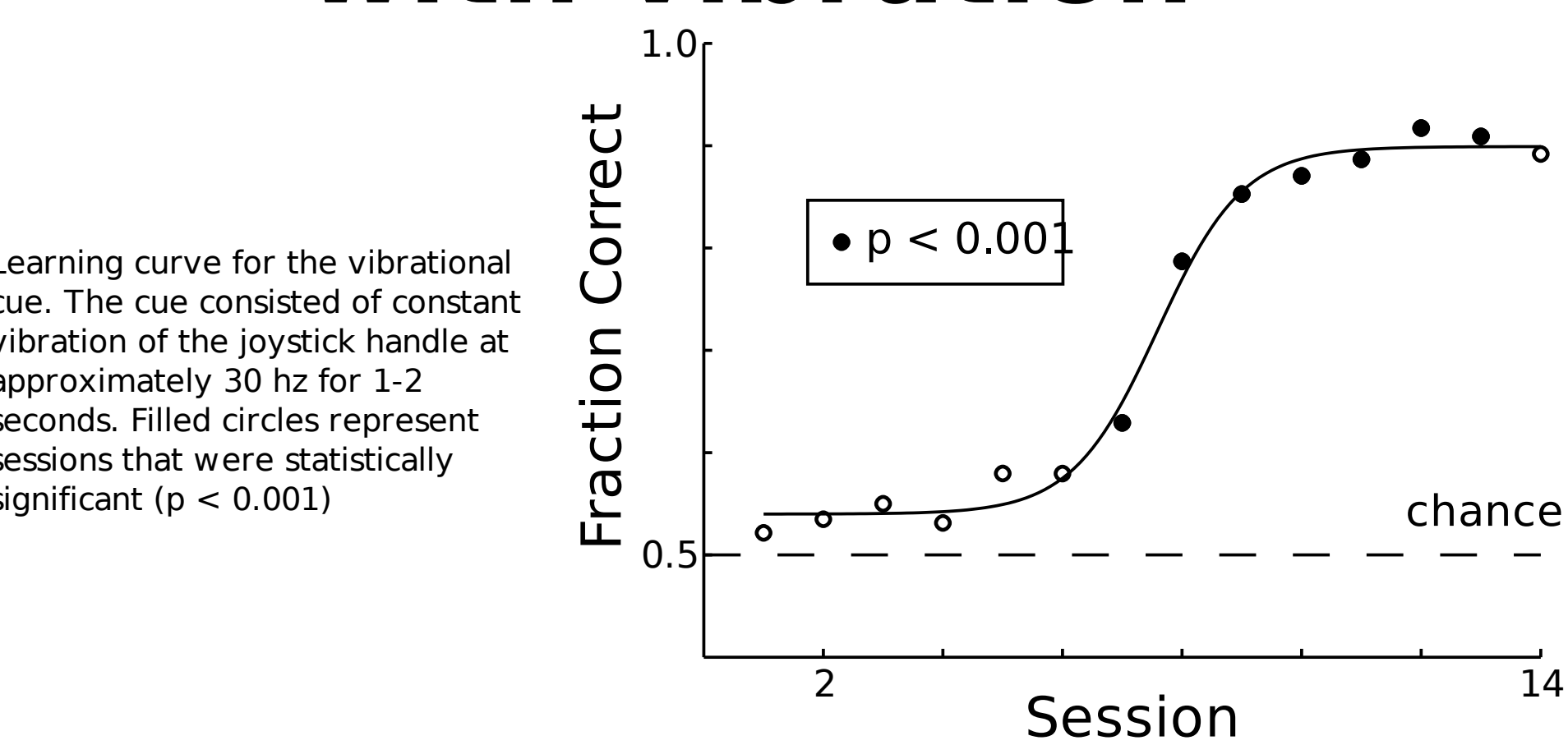


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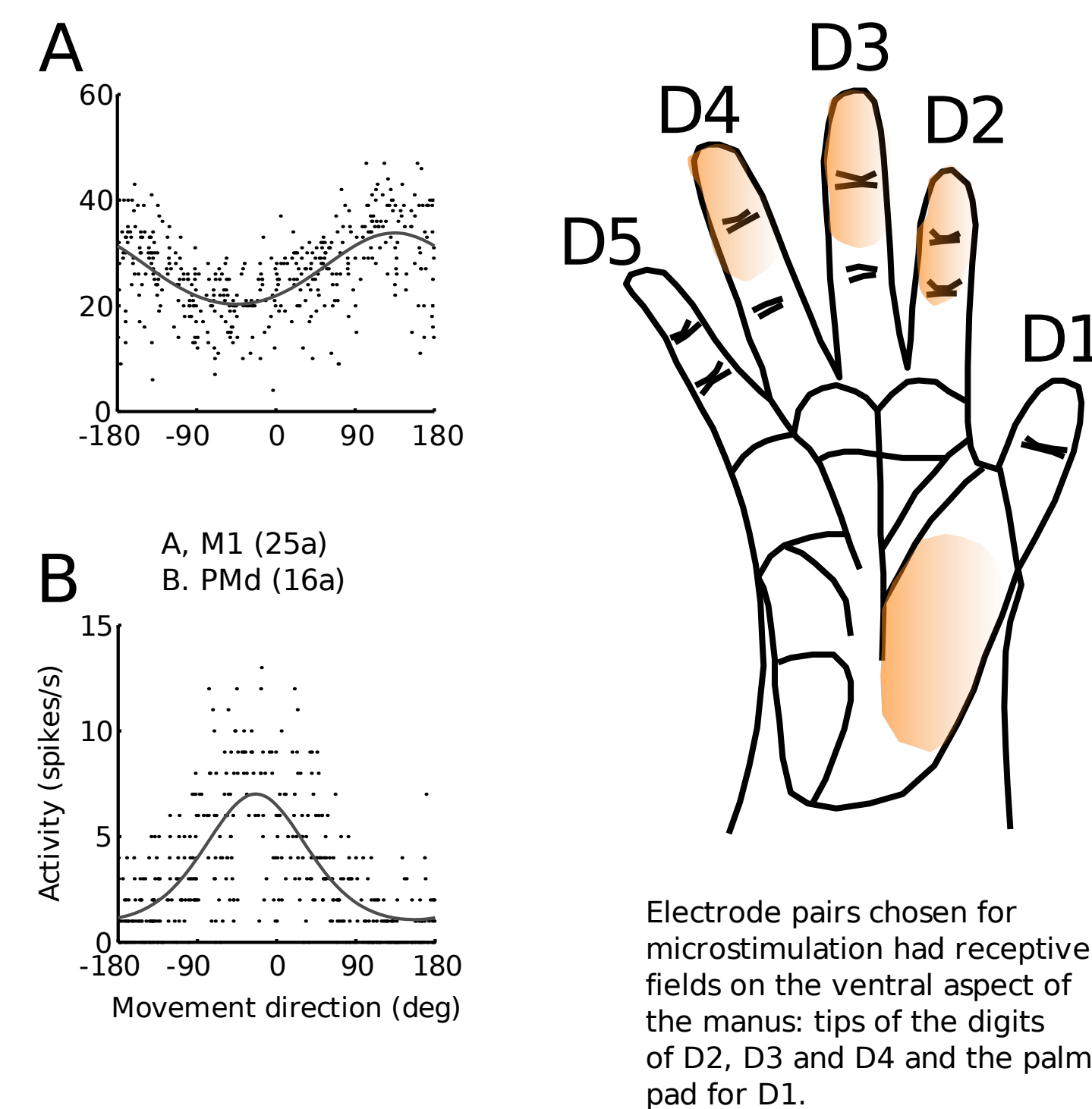
Time-course of movements



Behavior with vibration



Neuronal tuning & receptive fields



Behavior with microstimulation

