

Presenter: Charles Guan

Title: Digit movement representations in posterior parietal cortex

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Abstract: Paralyzed individuals can control prosthetics through brain-machine interfaces even after long-term deafferentation. Here, we ask whether this control is enabled through adaptive learning or biomimetic activation of preserved motor circuits. We demonstrate that the human posterior parietal cortex can control individual digit movements through a BMI. The neural representational structure matches models previously described in able-bodied subjects. These findings offer design insights for developing neural prosthetics.