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Assessing Muscle Stiffness in People with Cerebral Palsy

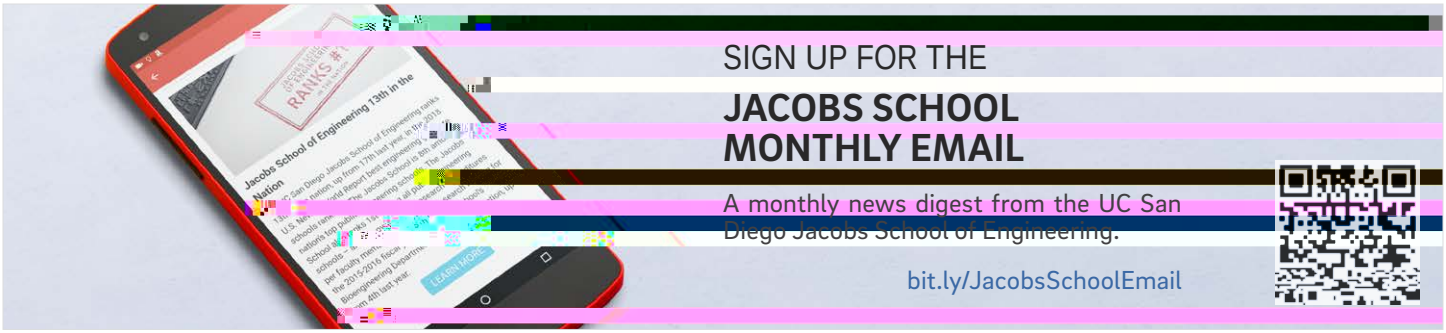
UC San Diego electrical engineers and colleagues are developing wearable sensing and robotics technologies to consistently and objectively rate muscle sti□ness. The work could eventually benefit people with cerebral palsy, stroke and multiple sclerosis who are often at risk of receiving doses of medication that are too low or too high due to lack of objectivity in assessing the level of muscle sti□ness, or spasticity. The device is built on a regular sports glove that a doctor can wear while holding and moving a patient's limb back and forth. On the palm are 300 pressure sensors that measure the amount of force required to move a patient's limb. A motion sensor on the back measures how fast the limb is being moved. Sensor data are processed in real time, yielding data on the actual power required to move a patient's limb. Videos from Reuters as well as the Jacobs School capture the glove in action.

Learn more: bit.ly/MuscleMeter

Engineers Investigate a Simple, No-bake Recipe to Make Bricks from Martian Soil

Explorers planning to settle on Mars might be able to turn the planet's red soil into bricks without needing to use an oven or additional ingredients. Instead, they would just need to apply pressure to compact the soil—the equivalent of a blow from a hammer. These are the findings of a new study published in Nature Scientific Reports by a UC San Diego team led by structural engineering professor Yu Qiao. Media coverage of this research project included the New York Times.

Learn more: bit.ly/MarsBricks



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