

POSTDOCTORAL POSITIONS

Brain-Body Dynamics Lab at the University of Southern California

Research topics

Our Laboratory has open searches for applicants for NIH- and NSF-funded post-doctoral fellowships in research projects seeking to understand the neuromuscular control during manipulation, evolutionary computation, mathematical biology and neuroscience.

She/he will learn to execute research projects that combine behavioral neurophysiology, electromyography, mathematics, machine learning, robotics and biomechanical modeling. The research projects are designed to test hypotheses on the selection and execution of muscle coordination for effective manipulation, sensorimotor integration, and the nature of muscle redundancy (abundance), and the functional structure of complex anatomical systems.

Environment

Our laboratory consists of an interdisciplinary group of graduate and undergraduate students, post-doctoral fellows, clinicians, and faculty in engineering, computer science, mathematics and bioengineering.

Further information about our laboratory can be found at: <http://bme.usc.edu/valero>

Curriculum and training

The candidate should have a Ph.D. in engineering, bioengineering or neuroscience; and a strong interest in neuromuscular control. She/he must have experience in at least two of the following: behavioral neurophysiology, biomechanical modeling and electromyography. Preference will be given to applicants with experience in fine-wire electromyography. Expertise in computer languages (e.g., C++, MATLAB, etc) is necessary.

Applications process

Please apply electronically by submitting a PDF file including a statement of professional interests, a full CV, and names, addresses and phone numbers of three professional references to [Shuna Holmes](#) (tushunah (at) usc.edu).

Direct inquiries to [Prof. Valero-Cuevas](#) (valero (at) usc.edu).

The position is available immediately, and applications will be received until the position is filled. The University of Southern California offers competitive salary and benefits.