

S. TAKEUCHI LAB.

Biohybrid Bipedal Robot



Department of Mechanical and Biofunctional Systems

MEMS, Biotechnology, Tissue engineering

Department of Mechano-Informatics, Graduate School of Information Science and Technology

Department of Multidisciplinary Sciences, Graduate School of Arts and Science

Department of Advanced Interdisciplinary Studies, Graduate School of Engineering

<http://www.hybrid.t.u-tokyo.ac.jp/>

Biohybrid Bipedal Robot

Biohybrid robots fabricated by integrating mechanical components with biological materials have recently attracted attention for the development of robots having advanced biomaterial functions. Conventional biohybrid robots excel in large turning movements. To address this limitation, we report a biohybrid robot equipped with two legs and cultured skeletal muscle tissue, emphasizing the replication of subtle turning movements observed in human bipedal locomotion.

