Author's Accepted Manuscript

The *MyoRobot*: a novel automated biomechatronics system to assess voltage/Ca²⁺ biosensors and active/passive biomechanics in muscle and biomaterials

M Haug, B Reischl, G Prölß, C Pollmann, T Buckert, C Keidel, S Schürmann, M Hock, S Rupitsch, M Heckel, T Pöschel, T Scheibel, C Haynl, L Kiriaev, SI Head, O Friedrich



vavav eksvier com/locate/bios

PII: S0956-5663(17)30803-5

DOI: https://doi.org/10.1016/j.bios.2017.12.003

Reference: BIOS10148

To appear in: Biosensors and Bioelectronic

Received date: 7 August 2017 Revised date: 11 November 2017 Accepted date: 5 December 2017

Cite this article as: M Haug, B Reischl, G Pröß, C Pollmann, T Buckert, C Keidel, S Schürmann, M Hock, S Rupitsch, M Heckel, T Pöschel, T Scheibel, C Haynl, L Kiriaev, SI Head and O Friedrich, The *MyoRobot*: a novel automated biomechatronics system to assess voltage/Ca²⁺ biosensors and active/passive biomechanics in muscle and biomaterials, *Biosensors and Bioelectronic*, https://doi.org/10.1016/j.bios.2017.12.003

This is a PDF file of an unedited manuscript that has been accepted for publication. As a service to our customers we are providing this early version of the manuscript. The manuscript will undergo copyediting, typesetting, and review of the resulting galley proof before it is published in its final citable form. Please note that during the production process errors may be discovered which could affect the content, and all legal disclaimers that apply to the journal pertain.

ACCEPTED MANUSCRIPT

The MyoRobot:

a novel automated biomechatronics system to assess voltage/Ca²⁺ biosensors and active/passive biomechanics in muscle and biomaterials

M Haug^{1,#}, B Reischl^{1,#}, G Prölß¹, C Pollmann¹, T Buckert^{1,2}, C Keidel^{1,2}, S Schürmann¹, M Hock¹, S Rupitsch², M Heckel³, T Pöschel³, T Scheibel^{4,5}, C Haynl⁴, L Kiriaev^{6,7}, SI Head^{6,7}, O Friedrich^{1,6,*}

- ¹ Institute of Medical Biotechnology, Friedrich-Alexander-University Erlangen-Nürnberg, Paul-Gordan-Str. 3, 91052 Erlangen, Germany
- ² Institute of Sensor Technology, Friedrich-Alexander-University Erlangen-Nürnberg
- Institute of Multi Scale Simulation of Particulate Systems, Friedrich-Alexander-University Erlangen-Nürnberg, Germany
- ⁴ Institute of Biomaterials, University of Bayreuth, 95440 Bayreuth, Germany
- 5 Bayerisches Polymerinstitut (BPI), 95440 Bayreuth, Germany
- School of Medical Sciences, Faculty of Medicine, University of New South Wales, Wallace Wurth Building, Sydney, NSW 2052 Australia
- Department of Physiology, School of Medicine, University of Western Sydney, Campbelltown Campus, Western Sydney, NSW, Australia
- * these authors contributed equally
- * Corresponding author, e-mail: oliver.friedrich@mbt.uni-erlangen.de

Running title: MyoRobot - an automated muscle/biopolymer biomechatronics system

Download English Version:

https://daneshyari.com/en/article/7229982

Download Persian Version:

https://daneshyari.com/article/7229982

<u>Daneshyari.com</u>